



2016

CARE Tanzania  
Pathways Project  
Endline Report



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## ACRONYMS

CSI	Coping strategy index
DAD	District Agriculture Department
FANTA-2	Food and Nutrition Technical Assistance II
FGD	Focus group discussions
GBV	Gender-based violence
HDSD	Household dietary diversity score
IFPRI	International Food Policy Research Institute
KII	Key informant interview
LOA	Life of activity
MRC	Market Research Committee
PPS	Probability proportionate to size
VICOBA	Village Community Bank
VSLA	Village savings and loan association
USAID	United State Agency for International Development
WEAI	Women's Empowerment in Agriculture Index
WEI	Women's empowerment index
WIFA	Women's intra-household food access

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The TANGO International Team

## EXECUTIVE SUMMARY

The CARE Pathways program is designed to overcome the constraints to women's productive and equitable engagement in agriculture. Utilizing a strong gender focus, the program seeks to improve household food security and resilience by empowering women to more fully engage in and benefit from agricultural activities. Funded by the Bill and Melinda Gates Foundation, Pathways is implemented in Bangladesh, Ghana, India, Malawi, Mali and Tanzania. In Tanzania, Pathways operates in the southern districts of Masasi and Nachingwea, which are characterized by entrenched gender discrimination, rural poverty, chronic food insecurity and unsustainable farming practices. They lie within the same agro-ecological zone and have similar traditional and cultural values and challenges. Within these two districts, the program targeted 16,484 households of married women in poor smallholder households, and women heads of household.

At the beginning of the Pathways initiative, CARE commissioned TANGO International, Inc. to design a global monitoring and evaluation framework and methodology and support its customization and implementation at country level. TANGO has conducted or provided support to the baseline and endline studies in all six countries. In Tanzania, TANGO conducted the baseline study in August – September of 2012 and the endline in July – August of 2015. The purpose of the studies is to provide quantitative and qualitative data on food and livelihood security, agricultural productivity and gender equality in CARE Tanzania's two impact groups: females residing in male-headed households who report per-capita household income less than \$2 per day, and female-headed households reporting per-capita household income less than \$2 per day. Both surveys were designed with reference to the key impact and outcome indicators described in the CARE Pathways Indicator Framework. The purpose of the current report is to assess the effect of project interventions, using data and analysis to describe and compare the status of beneficiaries at project start and at endline.

**Methodology.** The endline sample was drawn from a sampling frame composed of all households with a female member in a collective with which Pathways was working at the time of the endline survey. Sample size was designed to provide statistically representative results for household- and individual-level indicators at project level. The baseline sampling process entailed two-stage cluster sampling whereby 18 villages were randomly selected in the operational area using probability-proportionate-to-size method. In the second stage of sampling, female collective members were randomly selected from each sampled village. Data were collected from the same households for the endline and the baseline surveys. Due to a high attrition and non-response rate (41%), the endline sample was significantly smaller than baseline. The minimum sample size for the baseline was computed as 929; achieved sample size was 894. The minimum sample size at endline was calculated at 809; achieved sample size was 474. Point values for the baseline were recalculated for the current analysis to reflect the actual population of project participants. In some instances, the endline sample is too small to calculate significance and thus to draw conclusions from the data.

The data collection tools originate from a standardized set of global tools developed in collaboration with CARE-USA and CARE-Australia. CARE Tanzania helped to contextualize the standardized tools to the local context. The indicators emphasize women's empowerment across the five domains identified in Feed the Future's *Women's Empowerment in Agriculture Index*, including agricultural production, access to and ownership of resources, control over income and expenditures, leadership and community participation, and time allocation. The quantitative survey tool also draws on other sources such as CARE's *Strategic Impact Inquiry on Women's Empowerment* and IFPRI's *Engendering Agricultural Research, Development and Extension*; it was translated and administered in Swahili. The endline survey team was gender-balanced and comprised of 25 Tanzanian enumerators, one overall quantitative supervisor, and six qualitative facilitators. TANGO provided training to quantitative and qualitative teams, including training the quantitative team in the use of computer tablets for data collection and transfer. The overall survey supervisor was hired by CARE; CARE staff coordinated the regular collection of the electronic data sets from the field-based survey teams. TANGO – initially in Tanzania and later remotely – provided quality oversight for fieldwork. TANGO conducted all data analysis and prepared the report of survey findings.

**Results and Findings.** The Pathways theory of change, which applies to all six countries, defines pathways of change toward increased food security and empowerment along five “change levers”: women's capacity; access to productive assets and resources; productivity; influence over household decisions and assets; and enabling environments. Findings for each pathway are based on integrated quantitative and qualitative data.

**Household Characteristics:** As would be expected in a longitudinal study, the demographics of the survey population have remained stable during the project period. The average household size has increased slightly, from 4.1 household members to 4.3 household members, with all of the increase in children under 18 years of age. The percentage of female-headed households has increased; this is possibly due to the death of the husband, as the number of widows/widowers is higher than at baseline. The percentage of heads of household with no education has declined by nearly seven percentage points. There is a slight increase in educational attainment, with three-quarters of the respondents completing primary school, although educational attainment above primary level remains very low.

**Food security:** The mean dietary diversity for all households declined from 7.2 to 5.9 food groups. Women's access to diverse foods within their household has declined 1.5 food groups for all households since 2012. Women's access to diverse food groups is higher in female-headed households than male-headed households, though this reflects a greater decline in women's access to diverse foods within male-headed households, rather than any gain in food access by female-headed households. Consumption of protein-rich foods has declined sharply in all categories. The decline in dietary diversity can be attributed to a several causes, including a drought in 2015 that affected nearly 60% of Pathways households. In addition to the problems of food insecurity and inadequate rainfall, knowledge of adequate nutrition and child care practices is low and there is a high rate of chronic malnutrition in children under five years of age in southern Tanzania. Since female farmers report increased production of cash crops such as sesame under the project, the decline in dietary diversity is possibly related to lack

of knowledge on nutrition. The project includes a nutrition component, but it had not been implemented at the time of the endline survey, and the project did not have a nutrition person on staff.

**Livelihoods Resilience:** The number and type of shocks experienced by households at endline has risen substantially. All households experienced 3.4 of the shocks asked about in the survey, nearly two-and-a-half times higher than the average 1.4 shocks reported during the baseline. Female-headed households report a higher level of shocks (3.7) than male-headed households (3.2). The most commonly shocks affecting households are drought (60% of households), a decline in remittances (54%), and high food prices (48%). Pathways emphasizes adaptation strategies to reduce the impact of shocks on food security and livelihoods. There is a significant increase in the percentage of all households using one or more adaptation strategies to reduce the impact of future shocks (34.9% BL to 86.8% EL). In 2012, 75.2% of farmers did “nothing” to mitigate shocks: by 2015, this has dropped dramatically to 31.4% of farmers. The most common adaptation strategy is to diversify income generating activities, adopted by 64.0% of households, especially by female-headed households. The second most common strategy is to use drought tolerant crops. Consistent with the baseline findings, a higher percentage of male-headed households use adaptation strategies (88.7%) than do female-headed households, though the gap is narrower at the endline. There is a dramatic increase in the percent of households experiencing food and income shortages in the three months prior to the endline survey (10.6% BL to 61.0% EL). More female-headed households are affected (67.0%) than male-headed households (57.3%), though both are high. Asset ownership shows little statistical difference between baseline and endline, and for all households and for male-headed households, the mean asset index declined slightly from baseline, though male-headed households still hold slightly more assets than all households. There is a small increase in ownership of agricultural land among all households (0.6 acres); otherwise, increases in asset ownership is either negligible or is negative.

**Economic Poverty Reduction:** There is no statistical difference in mean per capita monthly household income between baseline and endline; therefore it is not possible to comment on what changes may have occurred. Mean per capita monthly household expenditures for all households is US \$ 38.01, more than double the mean expenditures reported at baseline. Reported expenditures appear to exceed income, which is not surprising as households are often reluctant to accurately report income. There is no statistical difference in the percent of households with savings between baseline and endline so the study is unable to draw any conclusions on savings. Pathways participants prefer to keep their savings at home (43.2%). This means money is readily available for basic needs, but also suggests that there is less money being set aside for investment. Over the past three years several mobile banking facilities have become available in the community (M-Pesa, Tigopesa, Airtel Money) but these are not available in villages, making it difficult for women with limited mobility to use the services so women prefer the VSLA.

**Women’s Empowerment:** Pathways has achieved a significant increase in women’s empowerment scores across all households. The percent of women achieving empowerment (.80 or greater score) is 42.8% at endline, more than double the baseline value of 20.0%. Nearly three-quarters (72.1%) of women in female-headed households achieved empowerment, an increase of 22.7 percentage points over baseline. While only one quarter (25.1%) of women in male-headed households achieved

empowerment, this represents a five-fold increase over the baseline value of 4.8%. Overall scores in the five domains of empowerment for women also rose between baseline and endline, from 59.9 to 72.3 for all women, marking progress towards the .80 threshold of CARE's criteria for empowerment. Women in female-headed households score highest in empowerment, while women in male-headed households, although lower on empowerment scores, gained nearly 15 percentage points. Women are near, or have crossed, the threshold of empowerment in eight of the 13 categories in the WEI.

**Change Lever 1: Capacity.** Change Lever 1 seeks to increase women's capacity, knowledge, skills, and relationships as well as their self-confidence and conviction of power. The endline shows that women have measurably increased their knowledge and skills in agricultural production and group leadership. These gains have produced positive results in increased income and status within the household. Greater capacity has led to greater household resilience, upon which the Pathways program places significant focus. The majority of Pathways households are now using positive adaptation strategies to reduce the impact of future shocks. This has been an especially appropriate emphasis, given the increase in the number and type of shocks experienced by households.

In qualitative interviews, Pathways participants rate the group formation and participation through VSLAs as among the most effective activities of the project. Women are more active than men in VSLAs and other collectives, and attribute the growth in membership to other women being motivated to join after observing that group members are empowered. VSLA and agricultural groups have benefitted women greatly through increased crop production, access to loans, the ability to pay school fees for their children, and the acquisition of knowledge on agriculture and entrepreneurship. Female collective members say that they now have the capacity to build new houses, buy furniture and other household items, and buy and sell crops using money generated from the VSLA, (though the survey data on household assets shows little growth, possibly because people are reluctant to report on assets). Husbands of female collective members count entrepreneurship education for women and help in addressing family income challenges among the benefits of their wives' participation in a collective. When community members were asked to rank project activities in order of impact at the household and community level, training on improved agronomic practices ranked second-highest. Since customarily a woman controls the income from her own production, increases in productive capacity that translate into greater income are serving as a foundation for greater participation in and influence over household decisions.

However, women's participation declined in agricultural/livestock producer's groups (71.4% BL to 59.0% EL), which is surprising since the survey respondents are Pathways group members. Maintaining group cohesion has been a challenge for some groups, as once people learn the improved agricultural techniques, they prefer to work on their own farm.

Pathways' emphasis on group participation is a source of confidence for women. Over half of Pathways female participants are holding leadership roles in groups (52.1%), particularly in groups that are predominantly of women. This is an important step as previously many officers in women's groups were men. Half of all women holding leadership positions are from male-headed households, which constitutes a growing constituency for greater joint decision-making at home in a male-dominated culture. Participation in credit or microfinance groups increased from 46.0% to 69.4%. More women are

participating in trade, business or cooperative associations (8.3% BL to 20.1% EL). Participation in civic groups or charitable groups nearly doubled (12.9% BL to 22.9% EL).

Pathways participants report increasing confidence to pursue greater gender equity within their households. A few group members have stood for public office for the first time, marking another milestone in these male-dominated societies and holding the promise that government institutions may, in time, become more responsive to the interests of women. The greater confidence engendered by participation and leadership in women's groups has not yet carried over to the public sphere for the majority of women, who say that women have a voice in their groups but not in the village meeting. Survey data on confidence in expressing opinions in public show no statistical difference between baseline and endline. It should be noted that the fundamental societal changes in attitudes about women, and greater acceptance of women's opinions supported by Pathways are gradual and long-term; the empowerment felt by Pathways participants within a male-dominated culture should be seen as helping to bring about these long-term changes in women's status.

**Change Lever 2: Access.** Change Lever 2 activities aim to increase access to productive resources, assets, markets, and appropriate and reliable services and inputs for poor women farmers. By facilitating access to agricultural training, inputs and markets, Pathways sends an important message to households and communities that women's production has value beyond growing food for household consumption.

Pathways has supported small gains in the percentage of households where women have access to and control over loans used for income-generating activities, particularly among female-headed households. Overall, the proportion of such households among project participants remains low, and women in focus groups confirmed that in most cases men still decide when loans are taken and for what purpose. Currently, most loans are being used either for production or business capital, or to meet household needs, which may be due to a reported increase in shocks by many households and stressed food security following a poor harvest in 2015. Nearly 40% of households are using loans to purchase food (8.7% BL to 39.4% EL). There are large increases in the percent of households taking a loan to pay for school expenses (16.3% BL to 27.3% EL), and for medical expenses. These loans indicate that households lack cash to meet critical needs for food, school and medical care, which is likely related to the increased shocks and reduced food security experienced in 2015. The second most common use of a loan is for investment, to buy agricultural inputs and seed (31.8%). While the percent of households taking business loans is comparable with other popular uses, it has fallen sharply (53.3% BL to 22.5% EL). Data indicate that taking loans for business capital remains important to households: nearly one-third of Pathways participants are reinvesting VSLA profits into agriculture.

In terms of loans, group members acknowledge that people who are too poor to purchase shares cannot join the Village Savings and Loan Associations (VSLAs). This limits the access of the poorest female farmers in the community, Pathways' target group. Using another organization's VSLAs as the initial entry point for the project was a challenge for the project due to different approaches to VSLA support, and may have had the unintended effect of preventing the poorest women farmers from participating.

Women's access to agricultural extension services has more than doubled under Pathways (29.7% BL to 66.2% EL). While access to agricultural financial services has remained high since baseline, this is complemented by newfound access to agricultural inputs from a variety of sources. Most women are obtaining inputs either through project-supported cooperatives or through arrangements with local input suppliers facilitated by Pathways. At baseline, women stated that better access to agricultural inputs was a priority, and the project has succeeded in helping the majority of women attain this. Equally important, women are now communicating directly with input suppliers. Satisfaction with agricultural extension services has declined due to delays in the delivery of project services early on due to management issues and possibly because expectations have risen.

The percentage of women accessing agricultural inputs over the previous 12 months has more than doubled (34.8% BL to 74.6% EL) to encompass three-quarters of female farmers. This is notable progress given the social and economic constraints faced by female farmers in southern Tanzania. Qualitative discussions indicated that successful households are serving as a model for those who are slower to adopt change; it is likely that more women will access these services as they see the benefits to participating households. Nearly all women had access to agricultural financial services at baseline, and access remains high (96%) at endline.

Women's access to output markets where they can sell their agricultural products has increased significantly (24.9% BL to 56.4% EL, along with the percent of women selling in bulk through their cooperative (5.8% BL to 35.7% EL). The increased access to inputs and to markets under Pathways addresses two major obstacles frequently faced by female farmers who want to improve their income. However, the main emphasis has been on increasing production, and the marketing component was adversely affected by the withdrawal of the partner organization that was to oversee it; consequently, value chain development for sesame and cassava is weak. Most female farmers continue to sell their agricultural products individually in local markets (62.1% BL to 71.4% EL). Training of Market Research Committees started only in Year 3 and the committees need strengthening in a number of communities.

**Change Lever 3: Productivity.** This change lever supports improvements in yield and income through the adoption of sustainable and intensified agriculture and value addition. Women's reported mean annual net income from agricultural production in all households has increased by 34%, from US \$206 to US \$276. The percent of women in Pathways who are earning income from agriculture has grown from two-thirds to 90.7%, and the mean annual net agricultural income of female-headed households has risen by nearly 70%. The increases in income are a very positive trend, although income gains to date are not sufficient to raise women above the poverty level.

There is a small increase in the mean number of crops grown by women from 2.3 to 2.6, with the largest gain taking place among female-headed households (0.5 crops). Pathways has concentrated on improving production along two crop value chains, cassava and sesame, that female farmers were already cultivating and thus familiar with, rather than introducing new crops. Most of the gain is the result of women adopting sesame as a cash crop, using the improved seed provided through Pathways. Sesame production has increased 57% from 191.9 kgs/hectare to 300.5 kgs/hectare. Women's yields for cashew, traditionally a cash crop for men, increased nearly 44% per hectare though fewer women are

cultivating cashew. Changes in the production of cassava, the other crop promoted by Pathways, were not statistically different between baseline and endline.

The percent of women adopting three or more improved agricultural (21.2% BL to 46.6% EL) and post-harvest practices (27.9% to 59.7%) has doubled. The two most common agricultural practices adopted are minimum tillage and mulching. The project has motivated a substantially higher percentage of women to adopt improved practices, and fewer than one percent are not using any improved practices. This shows good progress by participants in taking a critical step towards improving production. Additionally, given the increases in the percent of women farmers reporting that they are growing sesame and in sesame yields, it is apparent that more women are adopting some, if not all, of the practices promoted by Pathways. However, approximately half of the female participants are not adopting a cluster of improved practices, and only 60% are employing post-harvest practices. This is less than the uptake that could be expected after four years of promoting improved agricultural practices by Pathways.

The percent of female farmers adopting one or more improved livestock practices has increased from 33.1% to 42.7%. This is an improvement, though fewer than half of farmers have adopted improved livestock practices. Women have less incentive in this area, as most Pathways households do not own large numbers of livestock, primarily because they cannot afford them. Even for households that can afford livestock, women are responsible for caring for them but men retain control over the sale and proceeds from livestock.

Another factor influencing productivity is increasing ownership of land by women. Women's right to own land, either through purchase or direct inheritance, is recognized in all communities, but lack of income to buy land is cited as a barrier to ownership by many women. However, more women are acquiring the financial means to acquire land through their VSLA membership and are purchasing their own land, either individually or in groups. The acquisition of land motivates women to increase their productivity, as they control all the production. Land ownership also empowers women, as they often have limited say over land that is jointly owned with their husband. Though women traditionally own their own production, if they farm on their husband's land it increases the risk that the husband will take control of profitable crops, particularly as women's role expands beyond the production of staple food crops into cash crops.

**Change Lever 4: Household influence.** Pathways promotes greater gender equity for female farmers, which includes increasing their influence over household income and decision-making. Women in all households have made substantial gains in control of income and expenditures (67.5 BL to 81.6 EL) in sole or joint control over household income and expenditures. The endline data show a significant shift towards more gender-equitable decision-making in male-headed households, where the percent of women with sole or joint control over decisions over household income and expenditures is 74.5%, up from 56.5% at baseline. Most women in female-headed households (93.3%) are able to exercise control over their own assets. This is another important gain for women, as even women in female-headed households may be expected to obey male family members in matters of income, assets, and even mobility.

There is a shift towards more gender-equitable decision-making in male-headed households, with women reporting that they exercise greater sole or joint control over household income and expenditures. Women in male-headed households are exercising even greater control over decisions around agricultural income and expenditures (51.8% BL to 70.9% EL), and agricultural assets (68.1% BL to 86.1% EL) than in 2012. The greatest increase in gender equity is seen in decision-making over household assets among women in male-headed households, where the percent of women with decision-making power has increased to 80.9% over the baseline figure of 57.5%. Endline data show that women's empowerment scores have increased and Pathways participants are much closer to achieving empowerment as defined on the Women's Empowerment Index.

As a result of Pathways, women's productive and financial contribution has increased in many families, and this has increased women's influence and respect within the household. Many Pathways participants and their spouses stated that there is greater cooperation, harmony, and shared decision-making in their households and that men are listening to and consulting with their wives when making decisions that affect the household. Participants and key informants attribute this change to women's increased awareness about their rights through Pathways. Gender sensitivity training for couples, and dialogues to promote a shared understanding of how greater equity for women in the household benefits the husband and family, were reported as key factors in helping men recognize the unequal burdens in the household and that women have a right to participate in household decisions.

While participants give positive feedback about the benefits to their household, they acknowledge that these changes have occurred in a minority of households in the community and men retain most of the decision-making power. In addition, though men are helping their wives more at home, men still enjoy much more leisure time than women.

**Change Lever 5: Enabling environments.** Change Lever 5 seeks to strengthen the enabling environment by changing attitudes, perceptions and practices related to gender roles, household violence, women's mobility, and self-confidence. At endline, 42.5% of women support gender-equitable roles in family life; men's views lag considerably behind, with only one-third of men (34.6%) supporting greater equity in family life. Overall, less than half of the respondents express attitudes that support gender-equitable roles in family life, indicating that Pathways has not achieved gender transformation in attitudes about women. There is a greater change in attitudes about gender equity among female respondents than among males. Both women and men in focus group discussions confirmed that men are considered the head of household and the decision-makers in the society, though women sometimes express their frustration with the patriarchal culture. Increasing influence within the household based on a woman's ability to contribute financially has given many women greater voice within her family. This increasing confidence not yet carried over into the greater community for the average participant, and some women attribute their reluctance to speak out to their limited education.

Part of the reason that changes in attitudes supporting more gender-equitable roles is reported by less than half of Pathways participants is that more emphasis was given at the beginning to increasing agricultural production. Gender became the focus of the program much later. Given that many of the gains in gender have been made late in the project, it is reasonable to expect that the gains could have

been much greater if they had been thoroughly integrated with, and given equal emphasis with agriculture from the outset of the project. Pathways does deserve credit for addressing community resistance to changing gender norms by introducing volunteer male gender champions to serve as role models and to help persuade other men in the community of the importance of gender equity.

The majority of male and female respondents at endline reject gender-based violence (GBV). The percent of female respondents who reject GBV (29.0% BL to 74.8% EL) is slightly higher than the percentage of male respondents (22.9% BL to 70.0% EL) but both represent a significant change in attitudes over a relatively short period of time. The convergence of anti-domestic violence messages from multiple sources has been a factor in changing attitudes, and qualitative feedback indicates that GBV is reduced in households where the family is better off due to women's financial contributions.

Women's ability to move freely within and outside their community without the permission of their husbands has also increased among all households (42.4% BL to 65.8% EL). The greatest gain in mobility is among women in male-headed households, where more women are now able to decide for themselves to go to the market, to group and public meetings, and to a health care provider. The gains in mobility are offset by the fact that the majority of women in male-headed households still have to seek permission to travel outside the home.

**Conclusions.** The CARE Pathways Tanzania levers of change appropriately address some of the greatest barriers to economic and social equity for poor rural women farmers in Masasi and Nachingwea districts. Project designers, project participants, and other stakeholders state that Pathways identified the right activities, in part because CARE had adequate time to design the project. The project has improved access to services, income opportunities, and control of productive assets and resources for women in a traditional social and economic setting that favors men. Over the four years from 2012 to 2015, participating households have improved food access, resilience to shocks, and economic security. The project is also contributing to changes in women's empowerment, specifically within the domains of resources, leadership and community.

However, productivity is currently challenged by climatic conditions, women's inability to afford land, slow adoption of improved agricultural practices, and marketing skills and opportunities that are not fully developed. Changes in attitudes that promote gender-equitable cultural norms and roles, community receptiveness to women's views on gender, and access by women to formal and informal institutions, while showing significant improvement, still have to gain traction among approximately half of the participating households.

### **Recommendations.**

The Pathways concept provides a good model that should be carried forward, either as a continuation of this project or in future projects. Future activities should consider the following:

#### **1. Integrate gender sensitization and gender equity with agriculture and market training from the beginning.**

The strength of the Pathways concept is that it visualizes productivity and profitability, equity, and empowerment as complementary and mutually reinforcing outcomes that address the underlying

causes of poverty and women's exclusion in agriculture. Future projects should ensure that equity and empowerment are given equal weight with agricultural and market improvements from the outset.

**2. Expand men's sensitization to and involvement in gender equity and empowerment activities.**

The survey data show that changes in men's attitudes about gender equity lag behind those of women. A stronger focus on sensitizing men to gender inequities and the benefits of addressing those inequities, and supporting men to challenge social norms, would likely produce faster progress in changing attitudes.

**3. Strengthen marketing training and support to Market Research Committees**

Pathways should strengthen existing Market Research Committees in market identification, negotiation, and the requirements of competitive sales. Training for participants on how to identify markets and expand access to local and national markets should be addressed early in the project, as women are receiving training on improved agricultural skills.

**4. Expand training and follow up for entrepreneurial and business skills.**

Pathways needs to broaden its understanding of the markets for non-agricultural activities to ensure that women are reaching more markets with more diverse products, and are not competing within their small village markets to sell the same goods.

**5. Plan with partners for exit from the beginning of the project**

Pathways requires a detailed exit strategy that can focus on strengthening existing linkages between participant needs, private sector interests, and government service providers. This was undefined at the time of the endline. In particular, the project should address how to sustain support to the village paraprofessionals, who are highly valued by participants and are key to the success of Pathways. There are various proposals to do so, but those proposals need further development.

# 1. INTRODUCTION AND BACKGROUND

CARE's Pathways program focuses on improving poor smallholder women farmer's productivity by empowering women to more fully engage in equitable agriculture systems. Funded by the Bill and Melinda Gates Foundation and implemented in Tanzania, Malawi, Mali, Ghana, India, and Bangladesh, Pathways is designed to overcome the constraints to women's productive and equitable engagement in agriculture. Utilizing a strong gender focus, the Pathways program seeks to improve household food security and resilience by empowering women to more fully engage in and benefit from agricultural activities.

TANGO International designed and supported the implementation of an evaluation framework for CARE Pathways that involves:

1. A global monitoring and evaluation framework;
2. Identification of the most appropriate, rigorous and ethical impact assessment methodology to use across the different countries allowing for comparability between projects and countries;
3. Support to CARE country offices and their local partners in conducting the baseline and endline evaluations, ensuring quality data collection protocols and supporting data analysis;
4. Exploration of opportunities to integrate an outcome monitoring system in existing project monitoring systems in order to allow for better alignment and comparability within and between the program s (as needed and requested);
5. Producing publishable comparative and synthesis baseline and final reports.

## 1.1. Pathways Goals and Objectives

### Pathways Theory of Change

CARE's previous work on the Women's Empowerment Strategic Impact Inquiry provides the basis of the Pathways Theory of Change (TOC), which includes five domains of change, or change levers: 1) women's capacity (i.e., skills, knowledge self-confidence), 2) access to productive assets/resources (e.g., inputs, financial tools), 3) increased productivity, 4) increased influence over household decisions and assets, and 5) improved enabling environments (i.e., cultural and social norms and attitudes, gender-sensitive policies). Figure 1: Pathways Theory of ChangeFigure 1 represents the Pathways TOC.

Figure 1: Pathways Theory of Change



Thus, the program theorizes that marginalized, poor women farmers will be more productive, and their families more food secure when:

- women have increased capacity (skills, knowledge, resources), capabilities (confidence, bargaining power, collective voice), and support;
- local governance and institutions adopt and/or implement gender-sensitive policies and programming that are responsive to the rights and needs of poor women farmers;
- agricultural services, value chains, and market environments of relevance to women are more competitive, gender-inclusive and environmentally sustainable.

The Pathways results framework (Annex 1) illustrates the program's TOC approach. Objective 1 supports positive change towards increased food security and empowerment resulting from the five change levers: capacity, access, productivity, household influence and enabling environments. Objectives 2 and

3 of the results framework ensure lessons learned from the Pathways experience contribute to positive change in the global discourse on equitable agricultural programming at scale.

### **Baseline and Endline Comparison Data**

The Pathways program is implemented in the districts of Masasi and Nachingwea in southern Tanzania, which lie within the same agro-ecological zone and have similar traditional and cultural values and challenges. They were prioritized because they represent areas of entrenched gender discrimination, rural poverty, chronic food insecurity and unsustainable farming practices. Though rural, the area is undergoing rapid change in terms of improved roads to Dar es Salaam to the north and Mozambique to the south and greater connectivity with urban centers and coastal areas. The project targeted 16,484 households of married women in poor smallholder households and women heads of households in the two districts.

The main purpose of the baseline and endline studies is to provide quantitative and qualitative data on food and livelihood security, agricultural productivity and gender equality in CARE Tanzania's impact groups. The studies provide information necessary to characterize the status of beneficiaries at the project's start-up and again at endline, in order to assess the effect of project interventions. The purpose of both surveys is to estimate and analyze the status of key impact and outcome indicators described in the CARE Pathways Indicator Framework (Annex 2).

Baseline information was used for setting short- and long-term targets for tracking progress of Pathways activities. Findings were also used for refining and/or prioritizing project activities in the operational area. The methodology was explicitly designed to enable an evaluation of program performance through implementation of an endline survey directly comparable to the baseline. Results for all endline indicators for which information was collected are presented in Annex 3.

This report first describes the methodology used in the endline study, including data collection and data analysis, followed by presentation and analysis of results of the food security, income, and resilience status of CARE's targeted beneficiaries and their households. Sections 3.6 through 3.11 present survey data and feedback from qualitative interviews for Pathways outcome indicators. Section 4 addresses project management. Section 5 presents the conclusions of the evaluation team about the extent to which the elements of the Pathways theory of change have been realized. The report concludes with a few recommendations for a second phase of Pathways or for similar projects aiming to integrate agricultural productivity, profitability and gender equality.

## **2. METHODOLOGY**

The Pathways baseline and endline studies utilized a non-experimental design for pre-post comparison of results. The study was "beneficiary-based" in that the sample was drawn randomly from a sampling frame composed of all households with a female member in a collective with which Pathways is currently working. The sample size was designed to provide statistically representative results for household- and individual-level indicators at the project level. In a two-stage cluster sampling process at baseline, 18 villages were first randomly selected in the Pathways operational area using probability-proportionate-to-size (PPS) method, based on the number of female members in village collectives with

which Pathways was operating (e.g., Village Savings and Loan Association (VSLA) groups, farming/livestock groups). In the second stage of sampling, female collective members were randomly selected from each sampled village. Each village had at least one collective and often multiple collectives of different types. In the cases of large villages with many female collective members, multiple clusters were selected from that village. The number of female collective members drawn varies by village, depending on the total number of collective members in the village. Designed as a longitudinal study, the Pathways research collected data from the same households for both the endline and the baseline surveys. Due to a high attrition and non-response rate (41%), the endline sample size was significantly smaller than baseline. The high attrition is attributed to the inclusion in the baseline sample of households that registered for but did not participate in the project, and the high mobility of the local population, which meant that some participants had moved to other areas and stopped participating in the project. Point values for the baseline were recalculated for the current analysis to reflect the actual population of project participants.

## **2.1. Development of Indicators and Data Collection Tools**

Pathways impact and outcome indicators were developed based on discussions at the CARE M&E workshop held in Pondicherry, India, May 21-25m 2012 and subsequent comments from CARE-USA and CARE-Australia (CARE-AUS) management and staff. As a result of the May workshop, indicators were developed that allow for assessing the broader impact of CARE's work with systems that affect women's productive engagement in agriculture, and in particular with the CARE Australia WE-RISE program because of its strong gender focus, similar program approach and methodology, and overlapping countries of implementation. Thus, a set of "global" indicators was designed to align with better practices and has been validated by experts from the Food and Nutrition Technical Assistance II project (FANTA-2), the United States Agency for International Development (USAID), the International Food Policy Research Institute (IFPRI), and others. Detailed descriptions of indicators, along with direction-of-change targets, are summarized in the CARE Pathways Evaluation Plan.<sup>1</sup> Indicators included in the matrix represent those that are tracked at the impact and outcome levels; some are composite indicators that require the combination of two or more variables. Some indicators are disaggregated by sex or by sex of the household head; others target women beneficiaries only.

## **2.2. Quantitative Study**

### ***Sampling***

The baseline survey design was discussed at the workshop in Pondicherry and subsequently reviewed by CARE-USA and CARE-AUS before implementation of the survey. Tanzania (and the other Pathways countries) independently calculated required sample size based on household expenditures, with a targeted improvement of 30% ( $X_2$ ) over the life of the activity (LOA). A design effect of 2,  $Z_\alpha = 1.282$  (Z-value corresponding to a 90% significance level), and  $Z_\beta = .84$  (Z-value corresponding to 80% power) were used for all country-level calculations. In Tanzania, a non-response factor was set at 3%, attrition rate at 15%, and  $X_1$  at 1, based on input from CARE M&E staff and Country Office personnel.

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<sup>1</sup> TANGO International. 2012. CARE Pathways Evaluation Plan.

The minimum sample size required was computed using the formula for means provided in the FANTA Sampling Guide:

$$n = N * D [(Z_{\alpha} + Z_{\beta})^2 * (sd_1^2 + sd_2^2) / (X_2 - X_1)^2] * A$$

where:

n = required minimum sample size per survey round or comparison group

N = non-response factor

D = design effect

A = attrition factor (baseline to endline)

X<sub>1</sub> = the estimated mean of the indicator at the time of the first survey

X<sub>2</sub> = the *expected* mean of the indicator either at some future date or for the program area such that the quantity (X<sub>2</sub> - X<sub>1</sub>) is the size of the magnitude of change or comparison-group differences it is desired to be able to detect

Z<sub>α</sub> = the Z-score corresponding to the degree of confidence with which it is desired to be able to conclude that an observed change of size (X<sub>2</sub> - X<sub>1</sub>) would not have occurred by chance (α - the level of statistical significance)

Z<sub>β</sub> = the z-score corresponding to the degree of confidence with which it is desired to be certain of detecting a change of size (X<sub>2</sub> - X<sub>1</sub>) if one actually occurred (β - statistical power)

sd<sub>1</sub> = the expected standard deviation of the indicator the time of the first survey

sd<sub>2</sub> = the expected standard deviation of the indicator at some future date

Using these values, and using an adjustment for small population size, the minimum sample size (n) for the baseline was computed as 929. The achieved sample size was 894. The minimum sample size at endline was calculated at 809. The achieved sample size was 474 (Table 1). In some instances, the endline sample is too small to calculate significance and thus to draw conclusions from the data.

### **Survey Instrument**

The data collection tools originate from a standardized set of global tools developed in collaboration with CARE-USA and CARE-AUS. CARE Tanzania helped to contextualize the standardized tools to the local context. The quantitative survey instrument was designed to ensure that baseline information on project indicators is sufficiently captured. The indicators emphasize women's empowerment across the five domains identified in Feed the Future's *Women's Empowerment in Agriculture Index*<sup>2</sup> (WEAI), including agricultural production, access to and ownership of resources, control over income and expenditures, leadership and community participation, and allocation of time. TANGO and CARE also drew on other sources to develop the indicators, including CARE's Strategic Impact Inquiry on Women's Empowerment (SII)<sup>3</sup> and IFPRI's *Engendering Agricultural Research, Development and Extension*.<sup>4</sup> The

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<sup>2</sup> USAID. 2011. Women's Empowerment in Agriculture Index.

<sup>3</sup> CARE International. 2006. The Courage to Change: Confronting the limits and unleashing the potential of CARE's programming for women. Synthesis Report: Phase 2. CARE International Strategic Impact Inquiry on Women's Empowerment.

<sup>4</sup> IFPRI. 2011.

quantitative survey tool was translated into Swahili and the translation was verified during the training and field test.

### ***Survey Training and Logistics***

CARE Tanzania recruited 25 Tanzanian enumerators (50:50 male to female), one overall quantitative supervisor, and six qualitative facilitators (three male and three female) to conduct the endline. The enumerators were master's degree candidates (many in gender studies) or university graduates, and the qualitative team was composed of highly experienced facilitators. CARE Mtwara staff provided administrative and logistical support for the quantitative and qualitative teams throughout the survey.

TANGO International and CARE Tanzania trained all endline survey team members – household interviewers, qualitative facilitators, team supervisors, and monitoring and evaluation (M&E) staff responsible for coordinating data collection and aggregation. Quantitative training took place over six days (July 20-26, 2015), with one day for field testing. The field visit served as a pilot test of the survey and qualitative tools and provided interviewers with experience in interviewing households and conducting focus groups. Quantitative training covered the following topics:

1. Overview of CARE's Pathways program and Country Project
2. Review of the objectives of the endline survey
3. Detailed discussion of the survey tool (question-by-question)
4. Training on administering the questionnaire with computer tablets
5. Pilot testing of the survey tool
6. Modifications to the survey tool in response to the pilot test

Enumerators and supervisors received basic training on the use of computer tablets, including how to enter data, recharge batteries, and enter and use the Open Data Kit software. Supervisors also received training on how to transfer data files from tablets to the TANGO server via wireless connection. Training modules on tablets were based on similar materials developed by TANGO for quantitative surveys. The questionnaire was programmed into the tablets in both Swahili and English. During the course of training, several modifications were made to the Swahili translation and to specific questions to make them relevant to the local context. Enumerators practiced the questionnaire in Kiswahili to ensure that they understood the questions, and had practice in conducting interviews using the tablet.

The overall survey supervisor was hired by CARE, and CARE staff were responsible for coordinating the regular collection of the electronic data sets from the field-based survey teams. TANGO (initially in Tanzania and later remotely) provided quality oversight for the first several days of the fieldwork. Finally, TANGO is responsible for preparing the report of findings from the survey.

### ***Data Collection***

Survey data were collected 26 July - 8 August 2015 in Masasi and Nachingwea districts,<sup>5</sup> the operational area of CARE Tanzania's Pathways project. The quantitative enumeration team used tablets loaded with the questionnaire for recording information gathered during household interviews. Each enumerator

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<sup>5</sup> The Pathways baseline survey was conducted concurrently with the WE-RISE baseline survey such that both program surveys were implemented during this time frame.

received a tablet to record the interview, and used the Swahili version to record interview data. TANGO provided quality oversight for the quantitative teams for the first six days of fieldwork, and then accompanied the qualitative team for another nine days. CARE was responsible for coordinating the regular collection and uploading of electronic data sets from the field-based survey teams. For the first four days, TANGO provided comprehensive daily feedback to CARE and the quantitative survey supervisors, by enumerator, on the quality of data collection. The feedback highlighted issues with specific questions or enumerators in a way that enabled supervisors to work with individual enumerators to improve data collection efforts. Following initial data collection, this specific feedback was provided every three to four days.

The total number of households surveyed at baseline was 894. As shown in Table 1, at endline the targeted sample size was 809 households, and the achieved sample size was 474, with a 41.0% attrition and non-response rate. The high non-response rate was attributed to two factors. First, during the verification exercise for the endline, CARE verified that each household on the baseline list was present in the village, but did not verify that the household was still participating, or had ever participated, in the Pathways project. As a result, many households on the list of those to be surveyed were not program participants and should not have been on the final interview list, which decreased the achieved sample size. Secondly, residents of the area, which is very close to Mozambique, are quite mobile and it is not uncommon for a participant to move from the village.

Table 1: Baseline and endline sample sizes, attrition and non-response

	<i>Baseline Achieved Sample Size</i>	<i>Endline target sample size<sup>A</sup></i>	<i>Endline Achieved Sample Size</i>	<i>Attrition and Non-response rate<sup>B,C</sup></i>
All households	894	809	474	41.0%

<sup>A</sup> This list was based upon all households that completed the baseline survey, and was updated by project staff to exclude households no longer participating in the program or that had migrated from the program area.

<sup>B</sup> This figure includes non-response and attrition. Many households which remained on the endline target list were not program participants, and should have been omitted from the endline target list. This figure also includes households chosen during the random sample procedure that could not be located, households which were located but stated they were never a member of the program, and households that did not agree to participate.

<sup>C</sup> Any household that does not have both a valid baseline and endline survey was omitted from endline analysis. This includes households which never participated in the program, but were included in the baseline survey and were removed at the time of the endline from the baseline sample frame. Point values for the baseline are recalculated for the current analysis to reflect the actual population of project participants.

Of the 474 households used for baseline-endline comparison (Table 2), the majority were male-headed (315 or 66.5% at baseline; 295 or 62.2% at endline), and about one-third of respondents were female-headed households (159 households or 33.5% at baseline; 179 or 37.8% at endline).

Table 2: Endline analysis sample size

	<i>Baseline Sample Size</i>	<i>Endline Sample Size</i>
All households	474	474
Female HHHs	159	179
Male HHHs	315	295

### **2.3. Qualitative Study**

The qualitative study provides complementary information on norms that affect women's empowerment and power relationships, particularly as these factors relate to women's ability to actively engage in and have control over agricultural production and marketing activities. It focuses on specific issues identified in topical outlines that guided the research facilitators in collecting information from groups of women and men. Focus groups were structured to ensure representation of a range of views among project participants and non-participants in the community with respect to these issues.

The qualitative assessment explores contextual factors, including agency, structure and relations and their impact on poor smallholder women farmers. The qualitative data provide insights to better understand and interpret the quantitative indicators and help identify the key factors critical to the success of the program. The qualitative study utilized a combination of methodologies including focus group discussions and key informant interviews. Participatory methodology was used throughout the assessment to gather information from program participants, including their views of what is most valuable and relevant.

#### ***Qualitative Team and Training***

The qualitative data collection team was composed of the team leader from TANGO and a gender-balanced team of six Tanzanian researchers composed of three women and three men. All the Tanzanians speak Kiswahili and English. Focus group discussions were conducted in Kiswahili and responses translated into English during data entry. In addition to the joint training with the quantitative team, the qualitative team spent two days reviewing and adjusting the focus group topical outlines and agreeing on the phrasing of questions and the Swahili translation. Training also focused on use of the participatory tools. The team practiced probing for content and recording information in matrices developed for data collection. After the field test and each site visit, the qualitative research team reviewed their work and recorded the data from the previous day.

#### ***Site Selection and Tools for Qualitative Study***

The qualitative sample (six communities) was a subset of the quantitative sample, and involves three villages in each of the two districts of the Pathways area of operation in southern Tanzania. Villages were purposively selected based on their population size, distance from urban centers, road accessibility and hazards. Diversity of livelihood and agro-ecological zones was not a criterion for selection as Pathways operational areas are very similar in this regard. Villages were visited ahead of the survey to inform village leaders and the selected households about the survey.

Qualitative data collection was performed through three focus group discussions (FGDs) in each of the six communities visited. The three focus groups were with i) female VLSA members, ii) husbands of female VLSA members; iii) male non-members. The FGDs also used participatory tools including ranking of the perceived effectiveness of Pathways project activities, and a daily activity record for women and men. Key informant interviews were also carried out. In addition, the TANGO team leader conducted process interviews with key district-level partners, national partners, and CARE staff.

## 2.4. Data Analyses

**Quantitative analysis:** The quantitative data were collated and configured by TANGO International staff using SPSS v20.0 software. Analysis was consistent with the CARE Pathways Evaluation Plan. This included organization of the data to align with the Pathways indicator framework, calculation of secondary variables (asset indices, coping strategy index) from primary variables where appropriate, and formulation of tables and charts. Statistical differences between male- and female-headed households are determined with t-tests or non-parametric tests (e.g., Mann-Whitney U). Probability levels are reported for within-row statistically significant differences only (i.e., male- versus female-headed households, or females living in male- or female-headed households).

**Qualitative analysis:** The qualitative information was first reviewed by the qualitative team each day immediately following a field visit to both cross check information and its interpretation and to sharpen inquiry tools as necessary. The following day, notes were transcribed into informational matrices on computers for each focus group and key informant and reviewed by TANGO. Overall summaries for each village were developed for key informational categories. These summaries and the data were reviewed and the information integrated with the quantitative analysis by TANGO.

## 2.5. Factors affecting the survey

There were both positive and negative factors affecting the survey and potentially the quality and validity of the data. Below is a discussion of those factors:

1. **Accuracy of sampling frames:** CARE Tanzania's sample frames for Pathways beneficiaries contained errors that resulted in overestimation of the number of female collective members as well as difficulties in locating the selected respondent. The sources of these errors were: inclusion at baseline of women who had originally enrolled but never participated in project activities; and inclusion at endline of women who began as project participants but dropped out after some time; women no longer living in the community, of men's names, women belonging to more than one collective, and women who were no longer members of the collective. Some changes to the sample frame, resulting from attrition due to migration and women dropping out of collectives, are to be expected. Beneficiary lists were verified in advance by CARE to ensure that participants were present in their villages; however, it was not verified that the persons on the lists are currently, or have ever been, participants in the project. There are a number of instances where people who are listed as respondents at baseline state that they have never participated in the project. In some communities nearly half of the people listed from the baseline survey stated that they are no longer, or never have been participants, with the result that the total number of collective members available to be surveyed was less than the sampling target for that village. Due to management turnover within CARE since the beginning of the project, the current staff could not explain how the original lists were compiled or how the errors occurred.

Smaller sample sizes than those determined during the design phase can affect the validity of results if the reduced sample size violates underlying assumptions of the statistical tests being conducted. Another potential concern is the increased likelihood of non-random selection of households with an ever-decreasing sample frame and the uncertainty of whether sampling frame errors were

distributed evenly across the survey population. In the end, TANGO does not feel that data were compromised sufficiently to invalidate results.

2. **Length of survey:** The questionnaire is long by TANGO's standards (on average requiring two to three hours per household to conduct). This increases the likelihood of error and the quality of data being collected. An overly long questionnaire invites enumerator error; enumerators may feel pressure to complete a certain number of questionnaires per day and so may rush through or skip questions or sections. Participants may lose patience with the interview or decline to participate.
3. **Organization and logistics:** Implementing a large-scale survey with both quantitative and qualitative teams requires planning, organization, and adequate support to be successful. The CARE Mtwara office provided excellent support in all aspects of the survey. This included interviewing and hiring enumerators and qualitative interviewers; providing a training venue, training materials, transport, office support, IT support for the tablets; scheduling of village visits and notifications to local officials; coordination of field work; and numerous other tasks for a group of 32 team members. The preparations by the CARE Mtwara staff, and their oversight of the survey during training and fieldwork, ensured that the survey could be carried out with minimal disruption.
4. **Timing of the survey:** The baseline and endline surveys were carried out at approximately the same time and in the same season. However, due to a number of delays, the baseline study was conducted during Ramadan. This timing influences the interpretation of baseline results and may not reflect true conditions that are of importance to the Pathways program. Baseline data was collected from August 8 – September 10, 2012 and endline data was collected from July 26 –August 7, 2015. Thus, the main limitation resulting from the timing of the survey will be challenges in interpreting and comparing the changes effects of interventions from baseline to endline.

### 3. FINDINGS AND OUTCOMES

#### 3.1. Household Characteristics

This section summarizes the household characteristics of the sampled Pathways participants.

##### Core Impact Groups

CARE Tanzania defined two impact groups for the Pathways project: 1) females residing in male-headed households who report per-capita household income less than \$2 per day, and 2) female-headed households reporting per-capita household income less than \$2 per day. The endline data show a decrease in all categories in the percent of households meeting criteria for the Pathways impact group. The percent of eligible male-headed households has declined by 10.19 percentage points. The percent of eligible female-headed households has declined by 11.26 percentage points (Table 3).

Table 3: % of households meeting criteria for Pathways impact group (<\$0.70 USD per day)

Indicator	Point Estimate			Sample Size	
	BL	EL		BL	EL
IM 1.7: Mean per capita monthly household income (All sources)					
All households	82.49	71.94	***	474	474
Female HHHs	83.33	72.07	**	162	179
Male HHHs	82.05	71.86	***	312	295

Statistically different from baseline at the 10% (\*), 5% (\*\*) or 1% (\*\*\*) levels.

Overall, the demographics of the survey population have remained stable. Table 4 shows that, of the total sample of 474 households, the average household size between baseline and endline has increased slightly, from 4.1 household members to 4.3 household members. Children under 18 years of age appear to account for all of the increase in household size, showing a corresponding 0.2% increase between baseline and endline. The number of females in the household remains stable, as does the number of females involved in agriculture, with only a small decline since 2012 (0.1 percentage point). The age of the head of household has increased by nearly two years. Most significantly, the percentage of female-headed households has increased by 3.6 percentage points. One explanation for this increase may be death of a husband, as the number of widows/widowers is higher than at baseline.

The majority of household heads are married (65%) and most have been married more than two years. The percentage of long-married household heads has declined 3.7 percentage points since the baseline. This may be explained in part by an increase of 1.9 percentage points in widow/widower households since 2012, along with a drop in the number of newly-married household heads. The percentage of single households has declined slightly, by 0.7 percentage points. Overall, this suggests that marital status among the total sample of 474 households remains relatively stable. The number of households with a disabled member has increased, and at endline these account for nearly 20% of the sample.

Educational attainment, especially at the primary school level, has increased almost five percentage points, from 71.5% to 76.4% between 2012 and 2015. This likely reflects higher rates of primary school attendance among younger heads-of-household. Qualitative information obtained during focus group interviews reinforces the emphasis on education: payment of school fees is a priority in nearly all households, and project participants cite their ability to pay school fees as one of the benefits of the Pathways project.

The percentage of heads of household with no education has declined by nearly seven percentage points, to 14.6% of the surveyed respondents. There is a slight increase in educational attainment, with three-quarters of the respondents completing primary school, although educational attainment above primary level remains very low.

## 3.2. Food Security

Table 4: Household characteristics

Indicator	Point Estimate		Sample Size	
	BL	EL	BL	EL
Household size	4.1	4.3	474	474
Number of children (under 18)	1.8	2.0	474	474
Number of females in household	2.3	2.3	474	474
Number of females involved in Ag in HH	1.3	1.2	474	474
% of female headed households	34.2	37.8	474	474
Age of head of household	49.0	50.8	473	472
Education of head of household (%)			474	471
No education	21.5	14.6		
Primary*	71.5	76.4		
Secondary	4.6	5.5		
Tertiary (Technical or University)	1.1	0.8		
Adult Education	1.3	2.1		
Marital status of head of household (%)			474	468
Single	6.8	6.1		
Married (Less than or equal to two years)	4.6	3.2		
Married (More than two years)	64.1	61.8		
Divorced	15.2	16.5		
Widow/Widower	9.3	11.2		
% of households with a disabled member	17.1	19.4	474	474

\*Endline value includes 2.7 percent of "Started primary (not completed)"

The overall goal of the Pathways program is to increase the productivity and empowerment of women farmers in more equitable agriculture systems at scale. Critical to realizing this goal are improvements and increases in four key areas: household food security; household income and asset ownership; household resilience, as measured by household adaptation to shock and the use of coping strategies; and women's empowerment, as measured by a Women's Empowerment Index (WEI) that was developed as part of this study.

### 3.2.1 Dietary Diversity and Intra-Household Access

#### Food Security

The primary indicators used in this study to measure levels of food security are: 1) the household average dietary diversity score (HDDS), a proxy for food access, 2) a women's intra-household food access score and 3) the Coping Strategy Index (CSI), a measure of the different strategies households employ when they cannot access adequate or preferred foods. The first two methods for measurement and the survey results are explained below:

*Household Dietary Diversity Score:* The main food preparer is asked to report on 12 different food groups consumed by any household member over a typical 24-hour period. The responses produce a score between 0 and 12, with the higher score demonstrating higher access to diverse food groups.

Table 5 shows that in the endline survey, mean household dietary diversity scores among the 442 households in the sample have declined by 1.3 percentage points. Female-headed households, which are 37% of the households surveyed, are suffering a decline in dietary diversity but have a higher dietary diversity score (6.0) than male-headed households (5.8). However, this is the result of a greater decline in dietary diversity (-1.7 food groups), among male-headed households between baseline and endline, rather than an increase among female-headed households. Table 5 further suggests that differences in dietary diversity are declining between female and male-headed households (6.0 versus 5.8) but this is offset by the decline in dietary diversity for all respondents.

*Women’s intra-household food access (WIFA):* After determining whether any household member consumed each of the 12 food groups, the main food preparer is asked if all, some, or no female household members over the age of 15 consumed food from the stated categories. A response of consumption by “all women” or “some women” is valued at one, producing a total score between 0 and 12, with the higher score representing greater access to diverse food groups.

The mean HDDS for all households decreased from 7.2 to 5.9 food groups, meaning that households on average access 5.9 different types of food daily. The decline affects both female-headed and male-headed households. Women’s access to diverse foods within their household has declined 1.5 food groups for all households since 2012. As with the HDDS, women’s access to diverse food groups is higher in female-headed households (5.7) than male-headed households (5.3). Once again, this reflects a greater decline in women’s access to diverse foods within male-headed households, rather than any gain in food access by female-headed households.

Table 5: Household Dietary Diversity and Women's Intra-Household Food Access

Indicator	Point Estimate			Sample Size	
	BL	EL		BL	EL
IM 1.1: Mean household dietary diversity scores					
All households	7.2	5.9	***	459	442
Female HHHs	6.7	6.0	**	159	165
Male HHHs	7.5	5.8	***	300	277
IM 1.2: Mean women’s intra-household food access					
All households	7.0	5.5	***	459	442
Female HHHs	6.6	5.7	***	159	165
Male HHHs	7.2	5.3	***	300	277

Statistically different from baseline at the 10% (\*), 5% (\*\*) or 1% (\*\*\*) levels.

Figure 2 gives a detailed breakdown of changes in dietary diversity among survey respondents between baseline and endline, for each of the 12 food groups that make up the HDDS, and for women’s intra-household food consumption. Overall, dietary diversity has declined sharply, indicating that, at endline, many of the households surveyed are not consuming an adequately balanced and nutritious diet.

The decline in dietary diversity can be attributed to several reasons. Southern Tanzania experienced a poor rainy season during the main growing season in 2015 due to the El Nino phenomenon. Nearly 60% of Pathways households report major drought as a shock in 2015 (see section 3.3.1.). However, beyond

the poor 2015 rainy season, there is a high rate of chronic malnutrition in children under five years of age in southern Tanzania, reaching 44% and 54% of children under five in the regions of Mtwara and Lindi, respectively, where Pathways operates. In addition to the problems of food insecurity and inadequate rainfall, knowledge of adequate nutrition and child care practices is low.<sup>6</sup> Since female farmers report increased production of cash crops such as sesame under the project, the decline in dietary diversity is likely also related to lack of knowledge about the importance of a diverse diet to good health. The Pathways design incorporated a nutrition component, but it had not yet been implemented at the time of the endline survey, and the project did not have a nutrition person on staff.

Cereals are consumed by nearly all households, with almost no change between baseline and endline in the percentage of households consuming cereals. The second most commonly consumed food category is vegetables, which declined only slightly (2.4%) since the baseline, followed by tubers which are eaten by two-thirds (62.2%) of households.

Consumption of protein-rich foods has declined sharply in all categories. At baseline, over half (55.2%) of households were eating fish, which has fallen to one-third (33.3%) at endline. Meat consumption has declined by more than one-half; only 16.5% of households are eating meat at endline as compared to 38% at baseline. Households have also reduced their consumption of pulses and eggs. At endline, 58.5% of households are consuming pulses and 11.5% are eating eggs, a decline of 20.9 and 20.4 percentage points, respectively, since the baseline. Dairy consumption, another important source of protein, has remained largely unchanged, increasing from 12.4% of households at baseline to 13.8% at endline. At baseline, slightly over two-thirds (68.6%) of households were consuming fats; at endline this has slipped to only one-third (35.5%) of households. Fruit consumption also fell, from over half (56.6%) to one-third (34.4%) of households. Consumption of sugars increased slightly, and the percent of households consuming condiments rose by 15.8%; neither of these are nutritious items but they make a limited diet more palatable.

Women's intra-household dietary diversity shows similar patterns, though the percentage of households in the survey where women consume more nutritious foods including fruit, dairy, and meat is higher than for all households. At endline women in 92.5% of households are consuming tubers, a slight decline from 97.4% at baseline. The percent of households reporting that women in the household are consuming any particular food group has declined; hence the data indicate that women in the project households are overall consuming less food at endline than at baseline.

The percentage of households where women consume fruit has declined slightly from baseline (76.2%) to endline (70.8%) but is much higher than reported for all households. Women consume vegetables in over half (59.7%) of households, a decline of 13.7 percentage points over the baseline value of 71.6%. The percentage of households where women consume dairy has declined from 77.9% at baseline to 56.1% at endline, but is much higher than all households in general. Women in 30.3% of households surveyed at endline consume meat (versus 55% at baseline), which is considerably higher than the 16.5% of households in the general survey that report consuming meat at endline. The percentage of

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<sup>6</sup> Tanzania Food and Nutrition Centre, Tanzania Assessment for Scaling up Nutrition, 2012.

households at endline where women consume sugar (33.9%) and fish (9.5%) is much lower than that reported for the general household.

Figure 2: Household food categories consumed yesterday

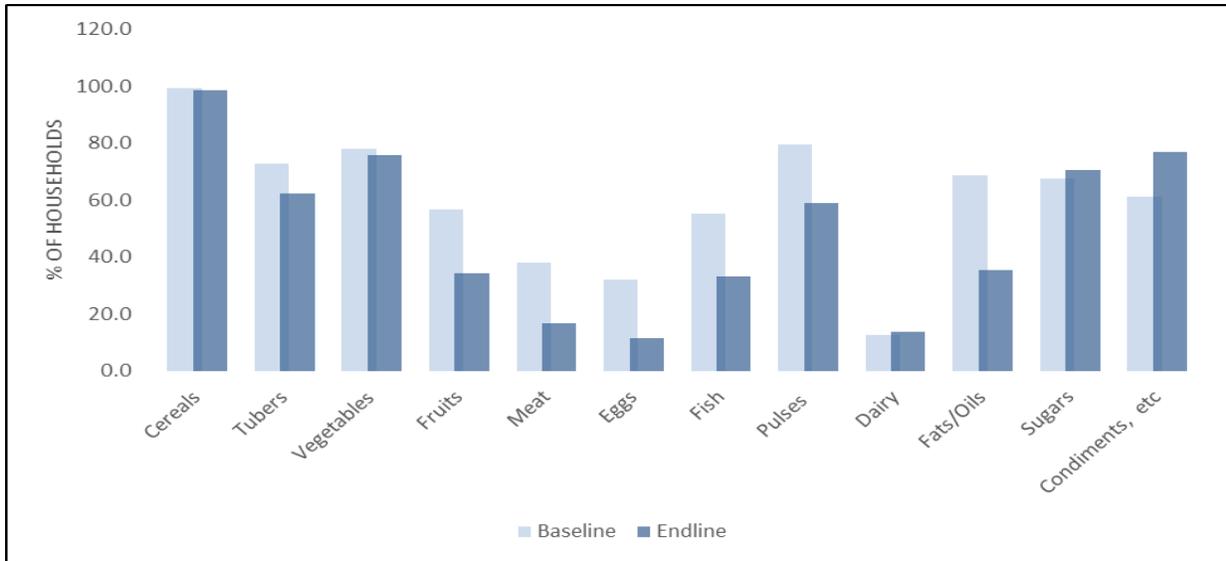
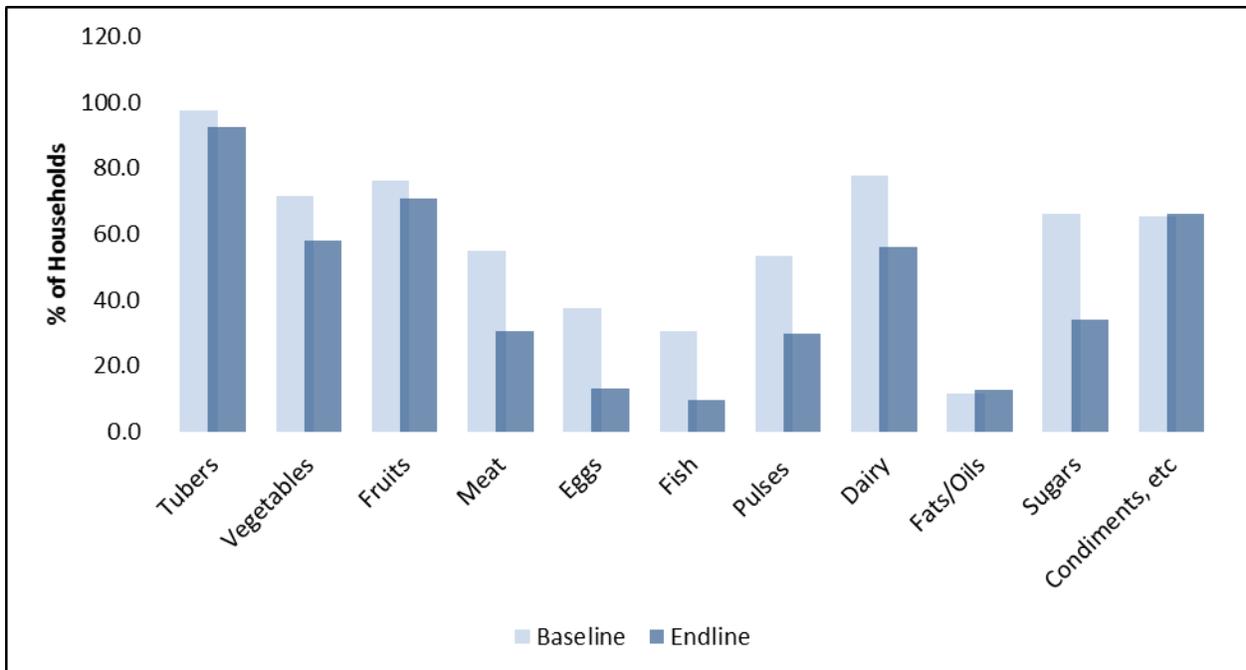


Figure 3: Women’s intra-household food categories consumed yesterday



### **3.3. Livelihoods Resilience**

#### **3.3.1 Shocks and Household Coping Strategies**

The Pathways program involves a significant focus on increasing household resilience. This section outlines the types of shocks experienced by households, the impact of different shocks on households, coping strategies used by households to manage the shock, and adaptation strategies implemented by households to buffer them from the impact of future shocks.

Households were asked whether or not they had experienced 12 different types of shocks in the five years prior to the interview. Table 6 shows that, on average, all households reported experiencing 3.4 of the shocks asked about in the survey, nearly two-and-a-half times higher than the average 1.4 shocks reported during the baseline. Female-headed households report a higher level of shocks (3.7) than male-headed households (3.2).

At endline an increased percentage of households are suffering shocks in 11 of the 12 categories investigated by the survey. Major drought is the most common shock reported by households (59.7%), as opposed to 32.5% at baseline. The second most common shock at endline is the dramatic decrease in regular remittances, affecting 53.8% of households at endline versus only 1.5% of households at baseline. This is significant as, during the baseline, focus group participants reported that migration and remittances play significant roles in a household's response to shocks. Men migrate in search of wage labor in order to provide support to their families. Though remittances typically fall short, they are considered important to the household in terms of filling basic needs.

During the baseline survey, the main shock reported was a large increase in food prices, experienced by 44.9% of households. This is now the third most common shock, though food prices remain a challenge for nearly half of the households surveyed at endline (48.3%).

Another widespread shock is epidemic disease among humans, animals, and crops, reported by 45.6% of households at endline, again showing a dramatic increase from the 13.5% of households that described this as a shock during the baseline. Chronic illness or severe accident of household member has also reportedly risen from 10.5% at baseline to 40.5% at endline; similarly, deaths among income-earning members of the household have risen from 9.9% at baseline to 24.5% over the five years preceding the endline. Divorce and abandonment has increased. It should be noted that at baseline, over three times as many female-headed households (20%) reported death of an income earner as did male-headed households (7%). More households also report being affected by thefts and businesses that have failed since the baseline survey (see Table 6).

Table 6: Shocks

Indicator	Point Estimate			Sample Size	
	BL	EL		BL	EL
Number of shocks experienced per household over five years					
All households	1.4	3.4	***	474	474
Female HHHs	1.6	3.7	***	162	179
Male HHHs	1.3	3.2	***	312	295
Percentage of Households to experience each shock over five years:					
Major drought	32.5	59.7	***	474	474
Decreased or cut off regular remittances	1.5	53.8	***	474	474
Sudden or dramatic increase in food prices	44.9	48.3		474	474
Epidemic disease (crop, livestock, human)	13.5	45.6	***	474	474
Chronic illness or severe accident of HH member	10.5	40.5	***	474	474
Death of HH income earning members	9.9	24.5	***	474	474
Theft	8.4	21.5	***	474	474
Divorce or abandonment	11.2	17.9	***	474	474
Failure or bankruptcy of business	2.7	12.4	***	474	474
Major conflicts	1.3	7.2	***	474	474
Issues with division of father's property	1.7	4.2	**	474	474
Loss of a regular job of a HH member	1.1	1.1	***	474	474

Statistically different from baseline at the 10% (\*), 5% (\*\*), or 1% (\*\*\*) levels.

### 3.3.2 Coping Strategies

The *Coping Strategy Index (CSI)* is a tool used to measure behavior change in households when they cannot access adequate or preferred foods.<sup>7</sup> It can be used as a food security and early warning indicator, and as an indicator of longer-term changes in food security status<sup>8</sup>. The CSI attempts to answer the following question: “What do you do when you don’t have enough food, and don’t have enough money to buy food?” The various answers to this question comprise the basis of the CSI score.

Table 7 shows that the mean CSI is 15.8 (out of a possible 100) among all households at endline versus 2.6 at baseline. While the CSI has increased from baseline to endline, the low endline mean suggests that households are not drastically altering their food consumption patterns in order to deal with temporary food shortages. However, this should be viewed in conjunction with data in section 3.4.2 that shows a decline in savings and in section 3.8.1 below which shows that women are taking loans to purchase food, which can be considered a negative coping strategy. The CSI score for all female-headed households remains higher than for all male-headed households, at 18.5 and 14.1, respectively.

<sup>7</sup> Maxwell, D., Watkins, B., Wheeler, R., and G. Collins. 2003. The Coping Strategies Index: A tool for rapid measurement of household food security and the impact of food aid programs in humanitarian emergencies. Field Methods Manual.

<sup>8</sup> Developed by CARE and field tested by WFP and CARE, the CSI has been used for early warning and food security monitoring in African and Asian countries, in addition to several Middle Eastern countries.

Indicator	Point Estimate			Sample Size	
	BL	EL		BL	EL
IM 1.3: Coping strategies index					
All households	2.6	15.8	***	474	474
Female HHHs	4.0	18.5	***	162	179
Male HHHs	1.9	14.1	***	312	295

Statistically different from baseline at the 10% (\*), 5% (\*\*) or 1% (\*\*\*) levels.

The CSI is computed using the entire population, even those households that did not experience a food shortage. When computed for only those households that were experiencing a food shortage at the time of the endline survey, the CSI quadruples.

Table 8 shows a dramatic increase in the percent of households experiencing food and income shortages in the three months prior to the endline survey in July-August 2015 (10.6% BL to 61.0% EL). A greater percentage of female-headed households are affected (67.0%) than male-headed households (57.3%) though both are very high.

Indicator	Point Estimate			Sample Size	
	BL	EL		BL	EL
Households who did not have enough food or money to buy food in past 3 months					
All households	10.6	61.0	***	474	474
Female HHHs	13.6	67.0	***	162	179
Male HHHs	9.0	57.3	***	312	295

Statistically different from baseline at the 10% (\*), 5% (\*\*) or 1% (\*\*\*) levels.

Several factors help to explain the dramatic increase in food insecure households during the endline survey. Staple food prices have been above average since May 2015, attributed to a shortfall of 18% in average production for 2014/15.<sup>9</sup> The underproduction reduced demand for agricultural labor, and thus migration and labor opportunities for poor families. Staple crops in the Pathways project area of Tanzania are maize, millet, cassava, groundnuts and rice, and are harvested primarily in May-June. The Lindi and Mtwara regions were affected by a prolonged dry spell in March-April 2015 which also reduced crop production.

Table 9 compares the baseline and endline results for the percentage of households using eight common behaviors for coping with food shortages one or more times per week during the 30 days preceding each survey. It indicates that households are focusing primarily on restricting food consumption as their major coping strategy.

At the baseline in 2012, over 90% of households reported that they were not using any of the listed coping strategies. However, endline survey data shows that many households are altering their behavior

<sup>9</sup> <http://www.fews.net/east-africa/tanzania/remote-monitoring-report/august-2015>

to deal with a lack of access to adequate or preferred foods. Nearly one-half of households (46.4%) are reducing the number or quantity of meals eaten per day, as opposed to 8.2% of households at baseline, and 41.4% of households are skipping eating for an entire day due to lack of money or food, versus only 6.1% of households at baseline. At endline, over one-third of households are coping by borrowing money or food (39.7%), eating seed stock (35%), or relying on less preferred or less expensive foods (34.2%). Each of these categories has increased dramatically over the baseline percentages. At endline, 24.5% of households report that they are begging or scavenging versus 3.8% at baseline. Consuming wild foods and restricting consumption of some family members are being used by a smaller percentage of households.

Indicator	Point Estimate			Sample Size	
	BL	EL		BL	EL
% of HHs to use consumption coping strategy 1 or more times each week					
Borrowed food or borrowed money to buy food	7.2	39.7	***	474	474
Relied on less preferred or less expensive foods	8.0	34.2	***	474	474
Reduced the number of meals or the quantity eaten per day	8.2	46.4	***	474	474
Skipped eating due to lack of money or food for entire day	6.1	41.4	***	474	474
Consumed taboo food, wild food, famine foods which are normally not eaten	4.0	16.2	***	474	474
Restricted consumption of some family members so that others could eat normally or more	3.6	13.9	***	474	474
Eat seed stock held for next season	6.1	35.0	***	474	474
Beg or scavenge	3.8	24.5	***	474	474
Statistically different from baseline at the 10% (*), 5% (**) or 1% (***) levels.					

A negative coping strategy is one that sacrifices productive assets to meet immediate needs, often with long-term consequences to the household that ultimately undermines its ability to deal with adversity. An example is selling seed stock needed for the next season’s planting, which reduces a households’ ability to produce future food stocks without incurring debt or more food shortages. Households were asked to report on the use of non-consumption “negative” coping strategies that are more likely to contribute to long-term irreversible effects, such as the sale of productive assets, sale of land, or the sale of seed needed for the next season, and how often these strategies have been used in the past three months to cope with food or income scarcity.

Table 10 shows that one-half of households (49.6%) responding to the endline survey report adopting “negative” coping strategies during the three months prior to the survey. This is characteristic of slightly more than half of female-headed households (52.5%) and slightly less than half of male-headed households (47.8%). These high percentages contrast sharply to baseline conditions, when the number of households adopting negative coping strategies was very low.

Table 10: Percent of Households adopting negative coping strategies

Indicator	Point Estimate			Sample Size	
	BL	EL		BL	EL
IM 1.4: % households adopting negative coping strategies in past 3 months					
All households	5.3	49.6	***	474	474
Female HHHs	7.4	52.5	***	162	179
Male HHHs	4.2	47.8	***	312	295

Statistically different from baseline at the 10% (\*), 5% (\*\*) or 1% (\*\*\*) levels.

Table 11 provides details on specific types of non-consumption coping strategies used by households to deal with food or income shortages. The percent of households using negative coping strategies has increased in twelve of the fifteen categories investigated by the endline survey. The only exception is migration, which has decreased. This could be due to lack of opportunities or an absence of resources.

Among the households who employed at least one coping strategy at baseline, the two most common approaches used were to “receive remittances from friends or family” (3%) and to “migrate” (2%). Receiving remittances remains the most common coping strategy at endline, with 24% of households depending at least in part on remittances, an increase of 21 percentage points.

The most common negative coping strategies are taking a loan with interest to cope with food insecurity (21.9%) and selling seed stock for the next season (16.5%). These are issues for concern, as borrowing money to buy food can get a household into debt if the 2016 agricultural season fails to yield a good harvest. Selling seed stock undercuts a household’s future ability to recover from a poor harvest season. Fewer households are using savings (12.9%) or reducing expenditures on critical needs such as health care and education (12.0). Few households report adopting other “negative” coping strategies (selling labor/crops/livestock in advance, sale of assets, taking children out of school) that are likely to contribute to longer-term irreversible effects.

Migration is reportedly lower than at baseline. It should be noted, however, that qualitative information indicates that migration within the region, which includes northern Mozambique, is common.

Quantitative enumerators were unable to interview a number of households during the endline because the entire household had relocated to another village or had moved to Mozambique. Since the entire household had moved, the absence of information may influence the lower percentage for migration.

Table 11: Non-Consumption Coping Strategies adopted by households

Indicator	Point Estimate			Sample Size	
	BL	EL		BL	EL
Percentage of households to utilize non-consumption coping strategies:					
Receive remittances (food or cash) from relatives, friends	2.7	23.6	***	474	474
Take a loan with interest	0.8	21.9	***	474	474
Sell seed stock for next season	0.6	16.5	***	474	474
Use own savings	1.1	12.9	***	474	474
Reduce expenditures (e.g., health care, education)	0.4	12.0	***	474	474
Pledge or sell labor/crops/livestock in advance	0.8	7.6	***	474	474
Reduce expenditure on livestock and agricultural inputs	0.2	6.3	***	474	474
Sell a higher number of livestock than usual	0.0	6.3	***	474	474
Unusual sales (e.g., household assets, firewood, charcoal, etc.)	0.8	4.0	***	474	474
Send children away to better-off relatives and friends	0.2	3.6	***	474	474
Slaughter more animals than normal	0.6	3.2		474	474
Lower school attendance or drop out from school	0.0	3.0	***	474	474
Request local government for assistance	0.0	2.5	***	474	474
Participate in food or cash for work programs	0.8	1.7		474	474
Migrate	1.9	0.8		474	474

Statistically different from baseline at the 10% (\*), 5% (\*\*) or 1% (\*\*\*) levels.

### 3.3.3 Adaptation Strategies to Reduce the Impact of Future Shocks

Table 12 shows a significant change between the baseline and endline in the percent of all households using one or more adaptation strategies to reduce the impact of future shocks (34.9% BL to 86.8% EL). Consistent with the baseline findings, a higher percentage of male-headed households use adaptation strategies (88.7%) than do female-headed households, though the gap is narrower at the endline.

Table 12: Livelihoods Resilience: Adaptation strategies used to reduce the impact of future shocks, by sex of household head

Indicator	Point Estimate			Sample Size	
	BL	EL		BL	EL
IM 1.5: % households using adaptation strategies to reduce the impact of future shocks					
All households	34.9	86.8	***	318	456
Female HHHs	29.1	83.8	***	117	173
Male HHHs	38.3	88.7	***	201	283

Statistically different from baseline at the 10% (\*), 5% (\*\*) or 1% (\*\*\*) levels.

Pathways agricultural training has emphasized using adaptation strategies to reduce the impact of shocks on food security and livelihoods. Table 13 shows that the most common adaptation strategy is the diversification of income generating activities, adopted by two-thirds (64.0%) of all households have diversified income generating activities, especially among female-headed households. The other most common adaptation strategy employed by farmers is using drought tolerant crops. Both activities are promoted by the Pathways project.

The proportion of farmers who do “nothing” to mitigate shocks is inverted from the baseline. In 2012, 75.2% of farmers did “nothing” to mitigate shocks; by 2015, this has dropped to only 31.4% of farmers. This is a significant improvement in farmers’ ability to withstand shocks and stresses, and an indication that farmers have strengthened their resilience.

Table 13: Adaptation strategies to reduce impact of future shocks, by sex of HHH

Indicator	All HHHs		Female HHHs		Male HHHs				
	BL	EL	BL	EL	BL	EL			
Adaption Strategies used (% of HHHs):									
Diversified income generating activities	9.4	64.0	***	7.7	67.6	***	10.4	61.8	***
Use of drought tolerant crops	12.3	43.2	***	10.3	41.0	***	13.4	44.5	***
Nothing	75.2	31.4	***	75.2	31.2	***	75.1	31.4	***
Invested in savings	16.0	29.4	***	14.5	32.4	***	16.9	27.6	***
Purchased additional livestock	3.5	20.6	***	0.9	18.5	***	5.0	21.9	***
Accessed additional land	12.6	13.6		12.0	15.6		12.9	12.4	
Other	7.5	8.1		7.7	9.2		7.5	7.4	
Invested in irrigation infrastructure	0.0	3.1	***	0.0	3.5	**	0.0	2.8	**
n	318	456		117	173		201	283	

Statistically different from baseline at the 10% (\*), 5% (\*\*) or 1% (\*\*\*) levels.

### 3.3.4 Household assets

The mean asset index is a proxy for household wealth and measures the number and weighted value of animal and other productive and household assets. This index is computed by multiplying the number of each type of household asset by the index value for that particular asset type. Index values of household assets used for construction of the asset index are presented in Annex 4. A higher value of the asset index indicates that households have been able to accumulate assets over time. Households are able to accumulate assets if income is greater than expenditures necessary to meet household subsistence requirements. Assets also provide households with a cushion to adjust to shortfalls in incomes, or sudden increases in required expenditures. Thus, households with a higher asset index are less vulnerable than households with lower asset index values.

The asset index is key to understanding changes in the resilience of Pathways households over the life of the project. Knowledge about the resources that individuals and households can draw upon to reduce vulnerability provides CARE with greater insight into household capacities to strengthen resilience to a range of risks.

Most values in the mean asset index (Table 14) are not statistically different between baseline and endline. The only values which can be commented on are those for all households when agricultural land is subtracted: for all households and for male-headed households, the mean asset index declined slightly from baseline, though male-headed households still hold slightly more assets than all households.

Table 14: Livelihoods Resilience: Mean Asset Index, by sex of household head

Indicator	Point Estimate		Sample Size	
	BL	EL	BL	EL
IM 1.6: Mean asset index (w/ ag land)				
All households	399.3	418.9	472	473
Female HHHs	321.8	334.8	162	179
Male HHHs	439.8	470.1	310	294
IM 1.6: Mean asset index (w/o ag land)				
All households	114.3	103.9	472	473
Female HHHs	92.6	91.7	162	179
Male HHHs	125.6	111.4	310	294

Statistically different from baseline at the 10% (\*), 5% (\*\*) or 1% (\*\*\*) levels.

Table 15 offers detail on selected assets that are statistically different from baseline to endline, providing insight on what type of assets households have been investing in over the past three years. There is a small increase in ownership of agricultural land among all households (0.6 acres); otherwise, increases in asset ownership is either negligible or is negative. Cell phone ownership is one area that has seen a small increase but only among male-headed households. This is important in that mobile phones are an important source of information for prices and markets in rural areas.

Table 15: Mean number of assets owned, by sex of HHH

Indicator	All HHHs		Female HHHs		Male HHHs				
	BL	EL	BL	EL	BL	EL			
Assets (% of HHHs to own):									
Chickens, ducks, turkeys, pigeons	8.6	7.5	6.5	6.8	9.7	7.9	*		
Agricultural land (acres)	5.7	6.3	*	4.6	4.9	6.3	7.2	*	
Farm equipment (non-mechanized)	5.3	4.9	**	4.3	4.0	5.8	5.5		
Small livestock (goats, sheep)	1.2	1.3		0.9	1.1	1.3	1.4		
Cell phone	0.8	1.2	***	0.7	0.8	0.9	1.5	***	
Small consumer durables	3.3	1.1	***	2.8	0.9	***	3.6	1.3	***
House (and other structures)	1.2	1.1	**	1.2	1.1	**	1.3	1.2	
Means of transportation (bicycle, motorcycle, car)	1.0	1.1		0.6	0.7	**	1.3	1.4	
Other land not used for agricultural purposes	1.9	0.9	***	1.5	0.9	***	2.1	0.9	***
Nonfarm business equipment	0.1	0.7	***	0.1	0.9	***	0.2	0.6	***
Large livestock (oxen, cattle)	0.2	0.3		0.2	0.3		0.3	0.3	
Large consumer durables	1.0	0.3	***	1.4	0.3	***	0.9	0.3	***
Farm equipment (mechanized)	0.0	0.1	***	0.0	0.1		0.0	0.1	**
Fishing equipment	0.0	0.0		0.0	0.0		0.0	0.0	
n	472	473		117	173		201	283	

Statistically different from baseline at the 10% (\*), 5% (\*\*) or 1% (\*\*\*) levels.

### 3.4. Economic Poverty Reduction

#### 3.4.1 Household Income and Expenditures

Monthly per capita income<sup>10</sup> is presented in Table 16.<sup>11</sup> Overall, there is no statistical difference in mean per capita monthly household income between baseline and endline; therefore it is not possible to comment on what changes may have occurred.

Indicator	Point Estimate		Sample Size	
	BL	EL	BL	EL
IM 1.7: Mean per capita monthly household income (All sources)				
All households	22.45	22.74	474	474
Female HHHs	19.60	25.73	162	179
Male HHHs	23.93	20.92	312	295
IM 1.7: Mean per capita monthly household income (farm)				
All households	6.49	7.85	474	474
Female HHHs	5.72	7.48	162	179
Male HHHs	6.89	8.07	312	295
IM 1.7: Mean per capita monthly household income (non-farm)				
All households	15.96	14.89	474	474
Female HHHs	13.88	18.25	162	179
Male HHHs	17.04	12.85	312	295
IM 1.7: Median per capita monthly household income (All sources)				
All households	4.76	9.05	474	474
Female HHHs	4.29	8.45	162	179
Male HHHs	5.55	9.91	312	295
IM 1.7: Median per capita monthly household income (farm)				
All households	1.31	3.64	474	474
Female HHHs	1.16	3.36	162	179
Male HHHs	1.50	3.93	312	295
IM 1.7: Median per capita monthly household income (non-farm)				
All households	0.95	3.54	474	474
Female HHHs	0.98	3.83	162	179
Male HHHs	0.95	3.14	312	295
Statistically different from baseline at the 10% (*) , 5% (**) or 1% (***) levels. Independent t-test only conducted on means. No statistical tests were conducted on median values.				

Mean per capita monthly household expenditures (Table 17) at endline for all households is US \$ 38.01, more than double the mean expenditures reported at baseline (US \$16.35). There is little difference in expenditures between types of households.

<sup>10</sup> Average amount of household income from all income sources/earners earned per month, divided by the total number of individuals living in the household.

<sup>11</sup> Income tends to be highly skewed (i.e., not normally distributed), and thus violates the underlying assumptions of normally distributed data required for conducting parametric tests of significance (e.g., t-tests). Thus, the median monthly per capita income is also presented and tested using a non-parametric test (e.g., Mann-Whitney U).

The reported mean monthly per capita expenditure appears to exceed income, as it did in the baseline survey. It should be noted that the self-reporting of household income is usually less reliable than reporting of expenditures. The basis for reporting income is challenging in and of itself, and households are often reluctant to accurately report income. The survey includes income as an impact indicator at CARE's request, though TANGO recommends using expenditures as a better measure. If households do spend more than they earn in income, this could create an accumulation of debt, which would contribute to increased household vulnerability and food insecurity. If it is assumed that income is understated and expenditures are more accurate, households appear to be better off at endline than at baseline.

*"I was also of the perception that, women are weak and we men are strong but now I think they are equal. Women now are engaging in different income generating activities which increased the income in the family". - Male FGD respondent, Nachingwea district*

Qualitative interviews revealed that there are traditionally many barriers to women getting access to employment in the project area. Men can access a variety of jobs as casual laborers but few casual jobs are open to women due to strength requirements, men's greater mobility and access to information, a perception by employers that women are not competent or reliable at work, and traditional husbands who do not allow their wives to work. Women may also have lower educational attainment which bars them from certain types of jobs. Many women are food vendors or sell vegetables, occupations that are not in competition with men but which provide a much lower income compared to men's employment opportunities. On the positive side, many women are now employed by shopkeepers, because women can be trusted.

There is evidence that the Pathways project is having an impact in changing perceptions of women's abilities to work and contribute income to the family. One respondent in Nachingwea district responded that his perception towards women has been changed by education and trainings from CARE and from the media on women's rights to own land; he realizes that men and women are supposed to build the family together so there is no use of keeping his wife at home and making her dependent. Men and community leaders are more positive about a wider range of employment opportunities being open to women than are the female project participants themselves. Female project participants in all the areas surveyed say that employment opportunities still generally favor men, particularly in the face of strong competition for limited jobs in rural areas, many of which require physical strength. However, women project participants in all districts also note that opportunities for employment are improving even though women still face barriers to higher-paying jobs.

Women in one village in Masasi district voiced a strong interest in small business training. They said that they have little or no knowledge on small business, such as soap making and tie-dyeing clothes. As they have little knowledge, it limits their ability to engage in income-generating activities and they must put more efforts in agriculture. They would like to have at least three days of training so they can engage in small business. Given the vagaries of climate and the effect on the women's rain-fed farming activities, their desire to diversify their livelihoods with small businesses is very practical, and will help reduce their risk to future shocks and strengthen their household resilience.

Table 17: Expenditures (Current 2015 USD)

Indicator	Point Estimate			Sample Size	
	BL	EL		BL	EL
IM 1.8: Mean per capita monthly household expenditures					
All households	16.35	38.01	***	473	472
Female HHHs	17.48	38.97	***	161	177
Male HHHs	15.77	37.44	***	312	295
IM 1.8: Median per capita monthly household expenditures					
All households	10.10	27.88		473	472
Female HHHs	10.00	28.26		161	177
Male HHHs	10.14	27.31		312	295

Statistically different from baseline at the 10% (\*), 5%(\*\*) or 1%(\*\*\*) levels. Independent t-test only conducted on means. No statistical tests were conducted on median values.

### 3.4.2 Savings

Household resilience may depend, in part, on a households' capacity to save and to use savings to smooth consumption during shocks, and to recover more quickly after a shock. Thus, the survey sought to understand current household savings dynamics. However, there is no statistical difference in the percent of households with savings between baseline and endline (Table 18) so we are unable to draw any conclusions from the data. This could be due to the reduced sample size at endline.

Table 18: Household Savings (in formal or informal institution)

Indicator	Point Estimate			Sample Size	
	BL	EL		BL	EL
IM 1.9: % households with savings					
All households	28.9	25.7		474	474
Female HHHs	22.8	24.6		162	179
Male HHHs	32.1	26.4		312	295
IM 1.10: % women with savings					
All households	27.3	24.1		472	473
Female HHHs	22.8	24.6		162	179
Male HHHs	29.7	23.8		310	294

Statistically different from baseline at the 10% (\*), 5% (\*\*) or 1% (\*\*\*) levels. Independent t-test only conducted on means. No statistical tests were conducted on median values.

Survey respondents show a continuing preference to keep savings at home (43.2%), presumably in cash (Table 19). Savings kept at home are more readily accessible for basic needs, but also suggest that there is less money being set aside for investment. Female FGD participants in the qualitative study stated that over the past three years several mobile banking facilities have become available in the community (M-Pesa, Tigopesa, Airtel Money) which make it easy to access, deposit and withdraw cash. Some female FGD members feel that it is difficult to use mobile banking services because they are not available in the village or the fees will reduce their savings so they keep their money in the VSLA kit.

According to female focus group members, the VSLAs are not linked with any other financial institutions and the VSLA kit acts as their bank.

Table 19: Household saving locations

Indicator	Point Estimate			Sample Size	
	BL	EL		BL	EL
Location of savings					
Home <sup>A</sup>	38.0	43.2	*	474	474
Village savings and loans	23.4	22.4		474	474
Bank/MFI	5.9	4.9		474	474
Other	0.6	1.9		474	474
NGO	0.0	0.6	*	474	474
Friends/Relatives <sup>A</sup>	2.3	0.6	**	474	474
SACCO	0.4	0.4		474	474
Agricultural Cooperative	0.6	0.0	*	474	474

Statistically different from baseline at the 10% (\*), 5% (\*\*) or 1% (\*\*\*) levels. Independent t-test only conducted on means. No statistical tests were conducted on median values.

<sup>A</sup> Not categorized as a formal or informal institution

### 3.5. Women’s Empowerment

TANGO constructed a Women’s Empowerment Index (WEI) for CARE that was modelled after the Women’s Empowerment in Agriculture Index (WEAI).<sup>12</sup> Similar to the WEAI, the WEI includes the Five Domains of Empowerment (5DE) index, which reflects the percentage of women who are considered empowered, based on their empowerment score. This score is calculated from 13 weighted indicators within five domains: production, resources, income, leadership, and autonomy. Annex 5 presents the domains, their total weight within the index, and the weight of each indicator. The WEI includes nine of the 10 indicators that comprise the WEAI,<sup>13</sup> as well as indicators for political participation, mobility, self-confidence, and attitudes on gender. A woman who achieves an empowerment score of .80 or greater is considered to be empowered.

The WEAI also involves a Gender Parity Index (GPI), which measures differences in empowerment between men and women in various domains. Due to differences in how certain questions were presented to men and women, the WEI used in this analysis does not include the GPI per se, but rather examines men’s and women’s empowerment in each domain (see Annex 5 for more details). Gender parity measurements are based only on households in which a man and a woman answered questionnaire modules respective to their sex. Thus, no female-only households are included, and no households where a man was unavailable to respond to Modules H through Q in the questionnaire are included (see the Supplementary Annexes accompanying this report). Empowerment scores are constructed for all men and women, although not for the Gender Parity Index (GPI).

<sup>12</sup> International Food Policy Research Institute. 2012. Women’s Empowerment in Agriculture Index. Feed the Future.

<sup>13</sup> The WEI does not include the indicator for workload, however this topic was explored by the qualitative team.

The 5DE index is calculated using the following formula.

$$5DE = H_e + H_d A_e = (1 - H_d A)$$

Where:

$H_e$  is the percentage of empowered women

$H_d$  is the percentage of disempowered women

$A_e$  is the average absolute empowerment score among the disempowered

### 3.5.1 Women's Empowerment Index

Endline data presented in Table 20 show a statistically significant increase in women's empowerment scores across all households. The percent of women achieving empowerment (.80 or greater score) is 42.8% at endline, more than double the baseline value of 20.0%. Nearly three-quarters (72.1%) of women in female-headed households achieved empowerment, an increase of 22.7 percentage points over baseline. While only one quarter (25.1%) of women in male-headed households achieved empowerment, this represents a five-fold increase over the baseline value of 4.8%.

Overall scores in the five domains of empowerment for women also rose between baseline and endline, from 59.9 to 72.3 for all women, reflecting progress towards the .80 threshold of CARE's criteria for empowerment. Women in female-headed households score highest in empowerment, and it should be noted that women in male-headed households, while lower on empowerment scores, gained nearly 15 percentage points since the baseline survey. Women are near, or have crossed, the threshold of empowerment in eight of the 13 categories in the WEI.

Among all women, project participants have shown the greatest gains in Resources and in Leadership and Community. In Resources, women attained the .80 threshold for empowerment in sole or joint ownership of 75% of household assets (74.2 BL to 86.3 EL), and in sole or joint control over purchase or sale of 75% household assets (73.9 BL to 90.7 EL), and after having made large gains in decisions on access to and control of credit are close to achieving empowerment (28.9 BL to 77.2 EL). In Leadership and Community, political participation remains high, and women who express self-confidence in 5 of 7 statements rose 82.9 at endline, crossing the empowerment threshold. Women are on the threshold of empowerment in decision-making input for all household productive decision domains (64.0 BL to 79.2 EL) in the Production category. WEI scores for Autonomy and confidence in speaking about gender issues at the community level remain well below threshold levels.

Indicator	Point Estimate			Sample Size	
	BL	EL		BL	EL
Women's 5 domains of empowerment score					
All women	59.9	72.3	***	474	474
Women in female HHHs	76.7	83.6	***	162	179
Women in male HHHs	51.1	65.5	***	312	295
% of women achieving empowerment (.80 or greater)					
All women	20.0	42.8	***	474	474
Women in female HHHs	49.4	72.1	***	162	179
Women in male HHHs	4.8	25.1	***	312	295
Statistically different from baseline at the 10% (*), 5% (**) or 1%(***) levels.					

Table 21 disaggregates women's achievements in the 5DE and provides a more detailed picture of where women participating in Pathways have realized empowerment gains and where they have not.

Within the domain of production, women have nearly achieved empowerment (79.2) in terms of decision-making input for all household productive decisions. There is no statistical difference in autonomy of women in one or more household production domains since baseline.

Women's control in the domain of resources has risen in every category. The most significant gain is in access to and decisions on credit, where the 5DE score for women has risen from 28.9 at baseline to 77.2 at endline, nearly at the empowerment threshold. The other two indicators of empowerment in Resources show that women's scores are at empowerment level in the sole or joint ownership of 75% of household assets (86.3) and in the control over purchase or sale of 75% of household assets (90.7). Both of the latter categories show that women have attained empowerment in these areas since the baseline. In the third domain of Income, women participating in Pathways achieved a score of 78.4 in control over household income and expenditures in 60% of household decision-making domains, versus a score of 63.5 at baseline.

With regard to women's role in community leadership and community issues, the most significant change is in the score for women who express self-confidence, rising from 51.5 at baseline to 82.9 at endline. Other scores for community participation are less robust, with a decline for women demonstrating political participation. Participation in formal and informal groups is nearly 100% and has changed little, reflecting the Pathways strategy of drawing its participant base from existing groups.

Pathways' female participants show a significant gain in mobility, one aspect in the domain of autonomy. Mobility for women participating in Pathways has increased from less than half of women having autonomy in decisions about their own mobility to two-thirds (42.4 BL to 65.8 EL). Other aspects of autonomy show fewer gains; more women are comfortable expressing attitudes that support gender equitable roles in family life but the percentage is still fewer than half (31.2 BL to 42.4 EL).

Table 21: Domains of empowerment

Domain	Indicator	Point Estimate			Sample Size	
		BL	EL		BL	EL
Production	With decision-making input for all HH productive decision domains	64.0	79.2	***	470	471
	With autonomy in one or more HH production domains	52.6	48.6		470	471
Resources	With sole or joint ownership of 75% of household assets	74.2	86.3	***	472	473
	With sole or joint control over purchase or sale of 75% household assets	73.9	90.7	***	472	473
	With access to and decisions on credit	28.9	77.2	***	280	355
Income	With control over household income and expenditures in 60% of HH decision-making domains	63.5	78.4	***	471	473
Leadership & community	Participating in formal and informal groups	96.0	98.1	*	472	468
	Confident speaking about gender and other community issues at the local level	66.5	61.9		472	473
	Demonstrating political participation	93.2	88.8	**	472	473
	Who express self-confidence in 5 of 7 statements	51.5	82.9	***	474	474
Autonomy	Satisfied with the amount of time available for leisure activities	68.0	69.3		472	473
	Achieving a mobility score of 16 or greater	42.4	65.8	***	472	473
	Expressing attitudes that support gender equitable roles in family life	31.2	42.4	***	474	474

Statistically different from baseline at the 10% (\*), 5% (\*\*) or 1% (\*\*\*) levels.

The WEI also examines men's and women's parity in each empowerment domain. Gender parity measurements are based only on households in which a man and a woman answered questionnaire modules respective to their sex. Thus, no female-only households are included, and no households where a man was unavailable to respond to the male portion of the questionnaire are included. Empowerment scores are constructed (as defined above) for all men and women.

Table 22 compares gender parity between baseline and endline in individual domains. While women are not at parity with men in most domains, female Pathways participants have achieved a significant narrowing of the gender parity gap in the domains of Production and Resources, and in aspects of Leadership and Community and Autonomy.

In the domain of Production, the gender parity gap has narrowed considerably between men and women in decision-making input for all household productive decision domains, from 35.8 points at baseline to 17.2 points at endline. Women's autonomy in one or more household production domains has made the greatest strides towards gender parity, closing the gap between men and women by 22

points between baseline and endline. Women have also made gains in the domain of Resources. The gender parity gap has narrowed from 21.7 points to 7.1 points between 2012 and 2015 in sole or joint ownership of 75% of household assets, and shows similar results in sole or joint control over the purchase or sale of household assets.

In Leadership and Community, women are closer to achieving parity with men in expressing self-confidence in five of seven statements, reducing the gap between men and women to 10.9 points from 25.7 points at the beginning of the Pathways project. Women continue to show a higher degree of participation in formal and informal groups, but greater male participation in groups has lessened the gap. In the qualitative survey, one focus group of Pathways participants in Naipanga ward cited an example of a big change - one of their group members stood for Ward Counsellor in the recent election.

Among focus group participants in the qualitative survey, Pathways participants variously define empowerment and “women’s rights” as:

- Having confidence to speak in front of men at the meeting
- A women to participate in election
- To work together with men in the household
- To have the chance to do what you want to do
- Women to be listened to at the meeting
- Women to be loved and not to be discriminated
- The situation of respecting women dignity
- Women to have confidence in what they are doing
- Women who have vision and think about the future
- Women who are ready to provide assistance to other women at any time
- Women who are creative and can plan for different activities and share with friends
- A woman who has a plan
- A woman who is confident to speak in front of people and particularly men, with strong arguments
- A woman who is a role model

Female focus groups state that CARE has empowered them through knowledge about saving money through the VSLA, through improved agricultural knowledge which they use to cultivate sesame and other agricultural products, and through Farmer Field Schools which have helped women understand the new ways of cultivating their farms and products. Women pointed out that they do their own small business, unlike in the past, and that “we are looking good and participate in different social activities.”

In Masasi district, Pathways participants stated that empowered women “*look good, cultivate their own farms and join agricultural groups*” and make positive changes in their life.

Some female focus groups gave reasons why women are not empowered: because they are not involved in groups and as a result they don’t cultivate sesame (“*So where do you think these women will get money*”, they ask); such women have little knowledge on different issues regarding development and don’t work the same or cooperate with others, they have lost hope and finally, their children are not in school. Other focus groups named some of the barriers to empowerment and rights faced by women,

including fear to try new things, a low level of knowledge on the importance of development to their household and community, lack of education, male dominancy.

Male focus groups comprised of the husbands of Pathways participants stated that in the past women were considered inferior, not sent to school, and not given a chance to become successful. They say that attitudes have changed amongst men and traditional leaders, for example, they believe that women can play a big role in supporting the households because they know how to manage money and they act as a bank for household. The men stated that women are now given the opportunity to join the Police Force whereas before such positions were considered suitable only for men, and are given access education.

*Nowadays, we accept women's advice when they attend CARE training on how to cultivate sesame and how to apply pesticides in our farms – husbands of Pathways participants*

They said that the changes in attitudes towards women have been brought about by civic education and education through collectives from CARE and CHIP because it emphasizes bringing change to the entire household through men and women working together. Pathways project staff noted that the project strategy of identifying “male champions” in each village has been successful in changing men’s attitudes so that even attitudes among non-group members are changing.

Agricultural extension agents in Naipanga ward, who deliver and participate in the Pathways training, verify that there are changes in women’s status, because they see women have the confidence to speak in front of people during meetings, the number of women attending meetings has increased, the number of women claiming their rights before the legal offices has increased, and they see an increasing trend among women to make decisions at household level, which means women can make their own decision in some issues, whereas before they did not have such opportunities.

The women’s views on empowerment is echoed by village leaders in Naipanga ward, who see an empowered woman as one who is independent, innovative, has the ability to do something productive, and is able to make important decisions for her family for the benefit and development of the family without depriving her husband. Several community leaders and male key informants stated that the men were appreciative of their wife’s new ability to contribute to the household income, thereby relieving men

*Earning money changed the relationship between husbands and wives. Previously, the man was responsible for everything but now because the woman has money from the VSLA she can contribute by buying things for the household. This encourages the man to cooperate to produce more money for the household.*  
– Ward Agricultural Officer

of some of the pressure of providing for the family. Women’s contributions to household expenses have contributed to improved relations in the household, reduced conflicts between husbands and wives, and strengthened women’s status within the household. However, another view voiced by male FGDs, though less frequently, reveals insecurity among men regarding their role as women become more empowered. One view is that empowered women challenge the power relations in the household, and look down on their men and find other men who have the same status or income, so that men fear losing their place as head of household to women.

*“In the past, women were very dependent on men, they thought that they could do nothing without men; for instance, they left the marketing to men. Men were responsible to find buyers for the crops and take them to the warehouse, but nowadays women can do it themselves without the men. Moreover, women were not considered to be breadwinners, they were remaining at home and waiting for their husband to bring something to eat. Nowadays women can work and bring food for the family. Moreover, men can trust women to spend money and they can give them some money to spend for family issues. Before, men believed that women were not capable of using money; women would use money to buy luxury things like jewels, clothes and are like. But nowadays, men can trust women.” – Village leader, Masasi district*

Several sources cited the gender dialogues that Pathways facilitated in villages as a key intervention. The dialogues included a 24-hour schedule for women and men and the analysis helped women to explain to their husbands that they worked all day long and that the husband needed to help. As a result, women’s workload has lessened. Key informants state that non-group members are now helping their wives after seeing the economic and social benefits realized by the group members. There are still social barriers as this change in behavior challenges existing social norms; men who are not sensitized see the change as a sign that the wife has taken over as head of the household (thereby diminishing the man’s status).

CARE project staff observed that, at the beginning of the project, men went to market to sell cashew and sesame and women had no idea how much they earned. Now women sit with their husbands and discuss the amount they received and how to allocate the money. CARE also observes many more women in the market now; and states that women are more confident to express their opinions, are participating in leadership positions, and are able to travel without getting their husband’s permission.

Table 22: Gender Parity (of households that had a female *and* male respondent)

Domain	Indicator	Baseline			BL Sample Size		Endline			EL Sample Size		
		Females	Males		Females	Males	Females	Males	Females	Males		
Production	With decision-making input for all HH productive decision domains	43.0	78.8	+++	100	99	68.9	***	86.1	*	238	238
	With autonomy in one or more HH production domains	28.0	62.6	+++	100	99	18.5	*	31.1	+++	238	238
Resources	With sole or joint ownership of 75% of household assets	64.4	86.1	+++	101	101	79.9	***	87.0	++	239	239
	With sole or joint control over purchase or sale of 75% household assets	66.3	90.1	+++	101	101	84.9	***	93.7	+++	239	239
	With access to and decisions on credit <sup>A</sup>	26.2	15.2		65	46	76.0	***	52.9	***	171	119
Income	With control over household income and expenditures in 60% of HH decision-making domains	50.5	80.2	+++	101	101	65.3	**	91.6	+++	239	239
Leadership & community	Participating in formal and informal groups	99.0	83.5	+++	101	97	97.9		88.1	+++	239	235
	Confident speaking about gender and other community issues at the local level	69.3	94.1	+++	101	101	61.5		92.5	+++	239	239
	Demonstrating political participation	90.1	94.1		101	101	90.8		92.9		239	239
	Who express self-confidence in 5 of 7 statements	53.5	79.2	+++	101	101	82.4	***	93.3	+++	239	239
Autonomy	Satisfied with the amount of time available for leisure activities	72.3	77.2		101	101	68.6		72.4		239	239
	Achieving a mobility score of 16 or greater	21.8	n/a		101	n/a	49.8	***	69.5	+++	239	239
	Expressing attitudes that support gender equitable roles in family life	16.8	24.8	+	101	101	38.5	***	34.7	**	239	239

Statistically different from baseline at the 10% (\*), 5% (\*\*) or 1% (\*\*\*) levels.

Males statistically different (pairwise) from Females (during same time period) at the 10% (+), 5% (++) or 1% (+++)

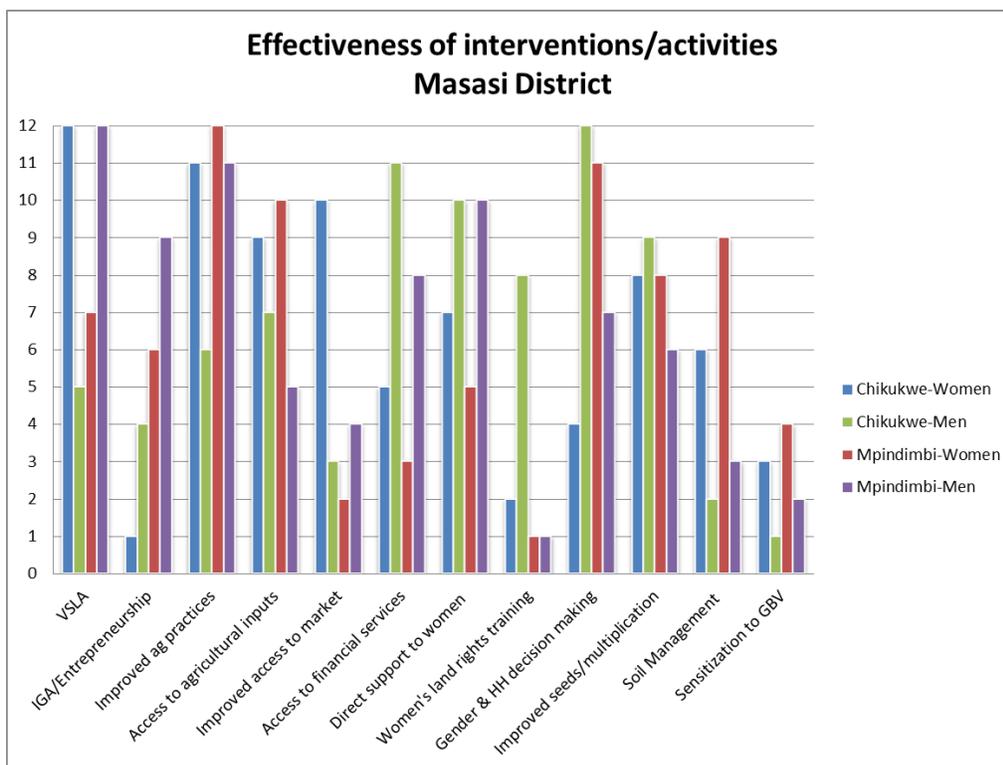
<sup>A</sup> Pairwise statistical test not completed due to a difference in credit access between males and females in households with a male and female respondent.

### 3.6. Project Participant Perceptions of Impact

To understand saturation of project activities and participant’s perceived impact on the household, the qualitative interviews used a ranking tool that provides some insight into participant perceptions of impact. The Pathways participants and the husbands of Pathways participants were asked in separate FGDs to do a forced ranking of the effectiveness of different interventions identified by CARE staff.<sup>14</sup> The ranking tool and the full description of each activity are in Annex 6. The results of the rankings are presented in the graphs below.

Opinions on the effectiveness of various interventions varied by community and by gender. Figure 4 shows the combined rankings of female and male focus group participants in Masasi district. Among those participants, VSLA group formation and participation, and improved agricultural practices received the highest ranking. Sensitization on gender issues and household decision-making was well rated, except by women in Chikukwe who talked about the challenges they face in equal treatment in the household. Training on women’s rights to land, and sensitization to GBV, ranked among the least effective activities, mainly because participants said they received limited, or no, training in these areas.

Figure 4: Participant perceptions of effectiveness of interventions, Masasi district



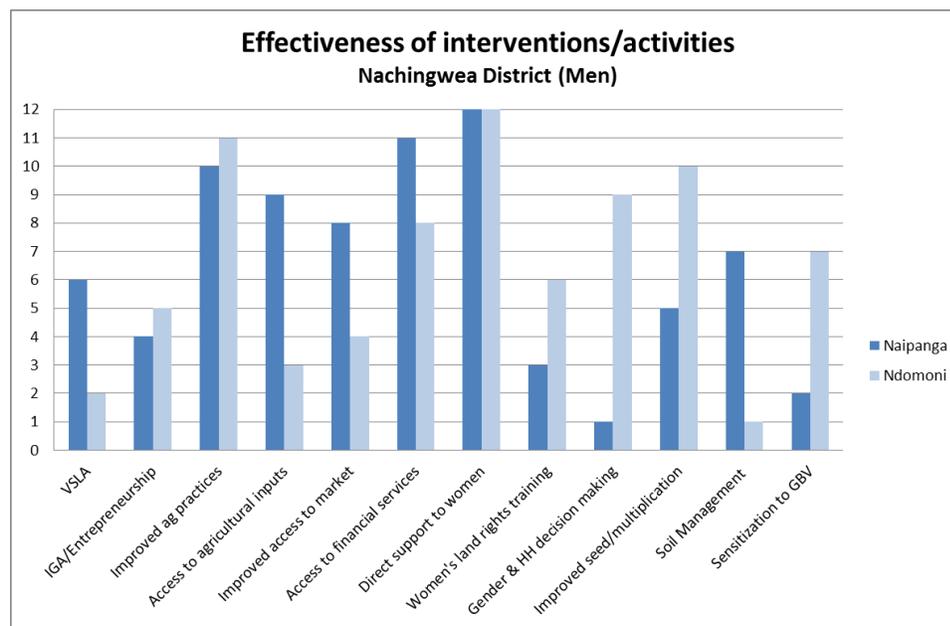
<sup>14</sup> In other countries a section was added to the quantitative endline survey that requested male and female respondents to list who within the household was participating in each type of activity. However, this addition was agreed upon after CARE Tanzania was already engaged in data collection and the quantitative data section was not added.

Virtually all of the focus groups and key informants interviewed feel that the Pathways activities fit the needs of the communities and are appropriate to the local context. Focus group participants related how agricultural production and incomes have increased as a result of the training, how a few women are starting small businesses in tie dye, food vending, and soap-making, that women are now holding leadership positions and earning respect among men and in the community in general, and that people are more aware of their rights, especially women.

In Nachingwea district, Pathways participants ranked the VSLA group formation and participation, improved agricultural practices, direct support to women, and improved seed and seed multiplication as the most effective activities.<sup>15</sup> Women in Ndomoni ward consider IGA activities, women’s land rights training, and sensitization to GBV the least effective, stating that the project had not addressed these areas (the men’s responses were more positive about the effectiveness of these areas). In Naipanga ward, women ranked access to agricultural inputs low, saying that there is a shortage of pesticides and that fertilizer does not come on time, and that the seed provided to groups is sometimes not enough. They also gave a very low ranking to sensitization on gender awareness and strengthening household decision-making, and sensitization to GBV, saying that the project has not addressed these areas.

The husbands of Pathways participants rated the project’s direct support to women mostly highly, followed by improved agricultural practices and access to financial services. Men in Naipanga ward also rated sensitization on gender awareness and strengthening household decision-making very low, though they acknowledge that it helps the household to understand ownership of assets and decision-making dynamics. Sensitization on GBV was ranked low in effectiveness because the police and the police gender desk are very far from the community and not easy to access.

Figure 5: Participant Perceptions of effectiveness of interventions, Nachingwea district



<sup>15</sup> Due to a facilitator error, Pathways participants in Nachingwea district were not asked to do a forced ranking, but instead ranked each activity on a scale between 12 (most effective) and 1 (least effective). Thus the graph is not presented here.

### 3.7. Change Lever 1 - Capacity

Pathways Outcome 1 focuses on improved knowledge, skills, relationships, self-confidence and conviction of poor women farmers. To understand whether changes have occurred in these areas, the endline survey explored women’s participation and representation in formal and informal groups; women’s leadership within these groups; women’s comfort level with speaking up in public about important issues; and women’s self-confidence.

#### 3.7.1 Women’s Participation in Formal and Informal Groups

To understand the status of women’s participation and representation in groups, the survey first collected data whether 10 different types of groups were active in the community. If these groups existed, women were asked about their active participation, reasons for not participating, amount of decision-making input they contribute, and whether they hold a leadership position. This section presents the results.

At endline, nearly all women (98.1%) participate in at least one formal or informal group in their community (Table 23). This is an expected result, as the Pathways methodology uses a group approach and draws project participants from existing groups, usually savings and loan groups. Among women who belong to a group, 52.1% have held a leadership position. This is an increase over the baseline figure of 43.5% but shows that, by endline, only half of the females holding membership in a group have held leadership positions. More women from male-headed households are also holding leadership positions and their percentage has risen comparable to women from all households.

Indicator	Point Estimate			Sample Size	
	BL	EL		BL	EL
OC 1.1: % women participating in formal and informal groups					
All households	96.0	98.1	*	472	468
Female HHHs	93.8	97.7	*	162	174
Male HHHs	97.1	98.3		310	294
OC 1.2: % women holding leadership positions in formal and informal groups (of active members)					
All households	43.5	52.1	***	451	459
Female HHHs	46.0	54.7		150	170
Male HHHs	42.2	50.5	**	301	289

Statistically different from baseline at the 10% (\*), 5% (\*\*) or 1% (\*\*\*) levels.

Table 24 shows that women’s participation in groups has increased in nearly every category investigated by the survey. Since the percent of women participating in groups increased by only 2.1 percentage points between baseline and endline, Table 22 suggests that a similar number of women are now participating in more groups than they did at the baseline. Participation in credit or microfinance groups increased from 46.0% to 69.4%. There is also a large increase in the percent of women participating in trade, business or cooperative associations, from 8.3% at baseline to 20.1% at endline. Participation in civic groups or charitable groups nearly doubled (12.9% BL to 22.9% EL). The categories in which women’s participation declined are agricultural/livestock producer’s groups (71.4% BL to 59.0% EL),

which is surprising since the survey respondents are Pathways group members. In Masasi district, female VSLA focus group members discussed the challenges of maintaining group cohesion. One FGD noted that the number of women in groups is decreasing because people prefer to work on their own farm rather than collectively on the demonstration plot in the Farmer Field School. In addition, some women feel that once they acquire the knowledge on agriculture there is no reason to continue in the group when they can work on their own farm. Male FGDs offered the view that membership in collectives is decreasing because during farming activities the members move from their village to farms and so cannot meet the requirements of the collective that a member is dropped if they don't attend five consecutive meetings. The men also stated that in 2014, the price for sesame and cashew nuts were very low, which affected people's participation. In 2014 and 2015, some women dropped out from collectives and opted to become casual laborers on farms instead because of hunger in their household.

Some members are dismissed from the groups due to poor participation or bad behavior. Overall, the women expressed the opinion that it is better to have fewer people who work hard rather than have more people who bring challenges to the group. Membership in non-women's groups (6.1% BL to 0.4% EL) has also declined, which may indicate a preference for or greater ease in joining women's groups.

Table 24: Women's participation in groups

Indicator	Point Estimate		
	BL	EL	
Percentage of women who is an active member in each group type:			
Credit or microfinance group	46.0	69.4	***
Agricultural / livestock producer's group	71.4	59.0	***
Religious group	29.9	55.8	***
Other women's group	16.9	53.0	***
Mutual help or insurance group	15.3	45.1	***
Local government	35.8	35.0	
Civic groups or charitable group	12.9	22.9	***
Trade, business, or cooperatives association	8.3	20.1	***
Water users' group	1.1	13.2	***
Forest users' group	0.6	5.8	***
Other non-women's group	6.1	0.4	***
n	472	468	

Statistically different from baseline at the 10% (\*), 5% (\*\*) or 1% (\*\*\*) levels.

During the qualitative interviews, Pathways female participants described how more women have become members of VSLAs and other collectives in the community, especially in comparison to men. The women attribute the growth in membership to other women observing that group members are empowered and are "shining/looking good" which then motivates other women to join a collective. Women also talked about the tangible benefits of being a collective member. VSLA and agricultural groups have benefitted women greatly through increased crop production, easy access to loans, enabling female VSLA members to pay school fees for their children, and providing training and knowledge on agriculture and entrepreneurship which has enabled most women to start their own

business. Female collective members are able to build new houses, buy furniture and other household items, and buy and sell crops using money generated from the VSLA. Husbands of female collective members count entrepreneurship education for women and help in addressing family income challenges among the benefits of their wives' participation in a collective.

Every adult has the right to join a collective/VSLA, though FGDs noted that there are barriers to joining for those who cannot afford to buy shares, and for people who drink too much alcohol, and those who are mentally disturbed. Male focus group members said that those who join collectives should be cooperative, honest, of sound mind, and trusted in the community.

*“Nowadays women are empowered; they have become leaders and they hold different position in VSLAs. For example, in Faraja Group all leadership positions are held by women: chairman, secretary, treasurer. It is not only this group but also other groups where you can meet one man out of three women who hold leadership positions. The women are not only leaders but also decision makers in the group. This is because CARE has empowered us through different training; before some of us were not even a member of any group, and for those who were in groups they were managed by men.” – Female FGD, Nachingwea district.*

In contrast to the high level of women's participation in groups, Table 25 shows that women's leadership of those groups has shown much more modest growth. The largest increase in the percent of women holding leadership positions has occurred in credit or microfinance groups (14.3% BL to 22.0% EL) and other women's groups (3.1% BL to 13.9% EL) where women are the majority of members, and in religious groups. It has declined in civic groups or charitable groups despite the increase in women's participation. Women's leadership in agricultural/livestock producer groups declined along with their membership, as well as in local government groups.

Table 25: Women's leadership in groups

Indicator	Point Estimate		
	BL	EL	
Percentage of active members who hold a leadership role by group type:			
Credit or microfinance group	14.3	22.0	***
Religious group	9.3	16.6	***
Agricultural / livestock producer's group	22.7	13.9	***
Other women's group	3.1	13.9	***
Local government	10.8	9.2	
Mutual help or insurance group	2.9	5.0	***
Civic groups or charitable group	3.3	2.8	***
Water users' group	0.7	2.4	***
Trade, business, or cooperatives association	1.3	2.2	***
Forest users' group	0.4	0.9	***
Other non-women's group	0.0	0.4	***
n	451	459	

Statistically different from baseline at the 10% (\*), 5% (\*\*) or 1% (\*\*\*) levels.

In qualitative FGDs in Mpindimbi ward (Masasi district), women were positive about changes related to leadership, stating that women hold positions not only in collectives but also in the government and parliament because they are aware of their rights, and are decision makers in families and community. Female focus group participants in Nachingwea said that more women hold leadership positions in collectives and in the community than before, and proudly mentioned that one of their group members contested for Ward Counsellor in a local election, which marks a milestone for village women. In Naipanga ward (Nachingwea district), the husbands of Pathways participants say that their perspective has changed because in the past they perceived women as inferior due to the patriarchy, but now realize that women have the same ability as men to voice their opinion, lead groups, and own of assets such as land and crops. They also stated that the education provided by CARE International Tanzania on sesame, groundnuts, and cassava as well gender and human rights has contributed to a change in the men's perceptions.

*“Women hold positions not only in collectives but also in the government and parliament because they are aware of their rights, and they are decision makers in families and in the community. Awareness has resulted in men respecting women’s decisions through training and intervention.”* – Female FGD, Masasi district

### **3.7.2 Women’s Self-Confidence**

One indicator of women’s empowerment is their level of confidence and comfort in expressing their opinions in community forums. Gauging women’s confidence in speaking up also contributes to better understanding of women’s potential for leadership and influence in their communities. To do so the surveys asked men and women about their comfort level in speaking up about three topics (gender issues, infrastructure decisions, and the misbehavior of authority figures) and whether they had expressed their opinion in a public meeting (other than VSLA or producer group meetings) any time in the last 12 months. Respondents who responded positively to three of the four questions are considered to have achieved CARE Pathways Outcome Indicator: *% respondents confident speaking about gender and other community issues at the local level.*

Survey data on confidence in expressing opinions in public show no statistical difference between baseline and endline; therefore it is not possible to comment on any changes that may have occurred (Table 26). During the qualitative survey, female collective members in Chikukwe ward agree that the formation of groups has enabled some women to hold leadership positions, due to the Pathways project. The women say that the changes to the groups do not carry over to the community, as women can have a voice in their groups but not in the village meetings. Women also said that they lack confidence in speaking up about community issues due to their limited formal education.

Table 26: Expressing opinions in community affairs

Indicator	Point Estimate		Sample Size	
	BL	EL	BL	EL
OC 1.3: % respondents confident speaking in public about gender and other community issues at the local level				
Female respondents	66.5	61.9	472	473
Male respondents	94.2	92.1	103	240

Statistically different from baseline at the 10% (\*), 5% (\*\*) or 1% (\*\*\*) levels.

However, the opportunities for women’s leadership also build the confidence and skills that can lead to longer-term changes in attitudes about women, and greater acceptance of women’s opinions, in the broader culture. Social change of this nature usually occurs slowly and the Pathways project can be viewed as contributing to this process.

### 3.8. Change Lever 2 - Access

Under Outcome 2 in the Pathways program, poor smallholder women farmers will achieve increased access to productive resources, assets, markets, and appropriate and reliable services and inputs. The Pathways program focuses on VSLAs as a way to improve the linkages between service providers (private sector, institutions, government) and women farmers. Through VSLAs and farmer producer groups and cooperatives, the project facilitates linkages between District Agriculture and Livestock Development Offices (DALDOs), research institutes (e.g., Naliendele Agriculture Research Institute), wholesalers, input suppliers, community extension agents, and retailers to develop input and extension service supply models that are affordable and meet small farmer needs.

To better understand linkages between farmers and service providers, the endline survey included a range of questions related to men’s and women’s access to and satisfaction with agricultural extension; the sex of the extension worker with whom the farmer last had contact; access to financial services to support agricultural production; and types of output markets used for sale of agricultural products. The results are presented below.

#### 3.8.1 Women’s Access to Financial Services

Control over loans is defined as having sole determination to take out the loan *and* sole determination regarding how the borrowed capital will be used. Income generating activities may include investments in a business enterprise, the purchase of agricultural inputs or production assets, or the lease or purchase of land for agricultural purposes. The percent of women with control over loans for income generating activities has increased only slightly to one-quarter, or 24.8%, in all households (Table 27). Female focus group members (Pathways participants and non-participants) say that borrowing or taking a loan from the group is still primarily the man’s decision.

Table 27: Access to and control over loans for IGA

Indicator	Point Estimate			Sample Size	
	BL	EL		BL	EL
OC 2.1: % women with access to and control over loans for IGA (of women who take loan or want to take a loan)					
All households	18.2	24.8	**	280	355
Female HHHs	29.3	38.8		92	139
Male HHHs	12.8	15.7		188	216

Statistically different from baseline at the 10% (\*), 5% (\*\*) or 1% (\*\*\*) levels.

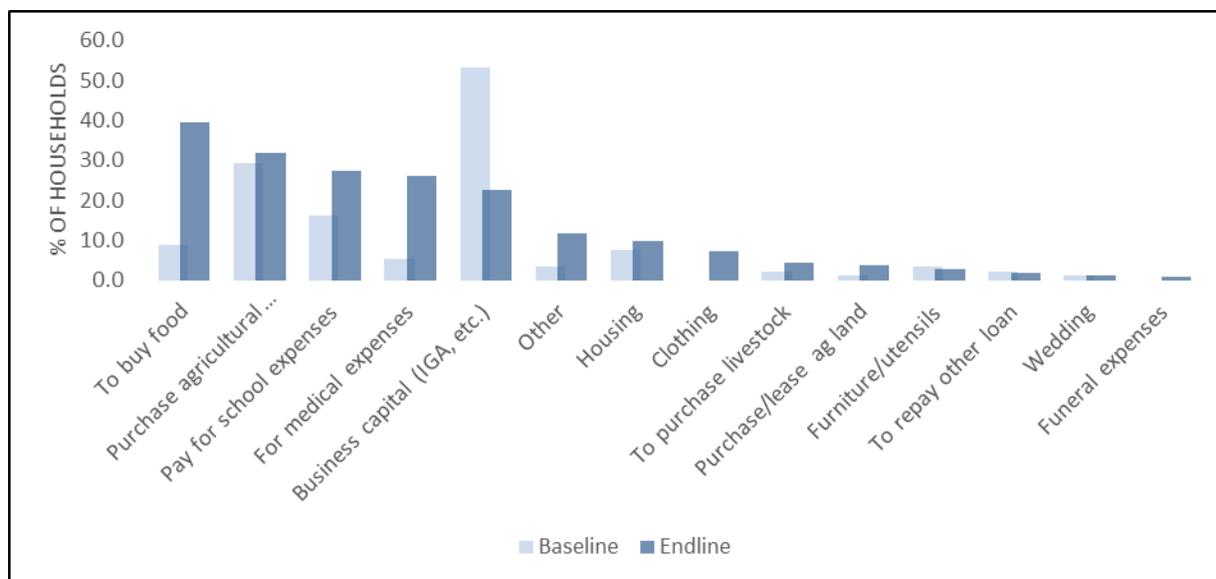
VSLAs or Village Community Banks (VICOBA) are still the primary source of credit for both men and women. Most people access credit from the within the community and the criteria are not difficult to meet compared to the banks. Both men and women see increased access to finance from the VSLA over the past four years; Pathways members in Ndomoni ward said that this is an improvement, as before women were not trusted and had no place to go to borrow money. The women said that imposing the condition of having to repay the loan on time has resulted in women working hard in order to start their own businesses and increase the family income, and that the responsibility of members to participate in the group farm has resulted in women working together and having common goals to improve their income, production, and livelihoods. Focus group discussions confirmed that access to formal banking institutions is still very limited, banks are located in the main towns so cost of transport for small deposits is a barrier, and only a few businessmen and big farmers have accounts. The husbands of Pathways participants say that they lack collateral and do not know the procedures or see the benefits of dealing with banks. Most women do not have bank accounts. Non-members borrow from neighbors and relatives.

Among those women who take a loan, there has been a shift since baseline in how that capital is used (Table 28). The largest percentage of households currently is using loans to purchase food (39.4%), a large increase from 8.7% at baseline. The next most common use of a loan is to buy agricultural inputs and seed (31.8%). The percent of households taking a loan to pay for school expenses has risen from 16.3% to 27.3%, and there is an increase of over 20 percentage points in the households using loans for medical expenses. These expenditures, with the possible exception of agricultural inputs, suggest that households lack cash to meet critical needs for food, school and medical care, which again is likely related to the poor harvests and reduced food security and income in 2015. While the percent of households currently using loans for business capital is comparable with other popular uses, it has fallen sharply since the beginning of the project, from 53.3% in 2012 to 22.5% in 2015. While taking loans for business capital remains important to households, and nearly one-third of Pathways participants are reinvesting VSLA profits into agriculture, loan money is currently used by a substantial number of households to pay for basic needs. Pathways participants stated that they use their share-outs from the VSLAs and VICOBA to pay school fees, purchase school uniforms, build houses, and for small business capital.

Table 28: Women's use of loans

Indicator	Point Estimate	
	BL	EL
Loan use (% of HHs):		
To buy food	8.7	39.4
Purchase agricultural inputs/seed	29.3	31.8
Pay for school expenses	16.3	27.3
For medical expenses	5.4	26.0
Business capital (IGA, etc.)	53.3	22.5
Other	3.3	11.8
Housing	7.6	9.7
Clothing	0.0	7.3
To purchase livestock	2.2	4.5
Purchase/lease of land for agriculture	1.1	3.8
Furniture/utensils	3.3	2.8
To repay other loan	2.2	1.7
Wedding	1.1	1.0
Funeral expenses	0.0	0.7
n	92	289

Figure 6: Women's Use of Loans



### 3.8.2 Women's Access to Productive Services

To assess how much access women farmers have to agricultural extension services, female farmers were asked whether they had met with an agricultural extension worker or a livestock/fisheries worker in the last 12 months (Table 29). At endline, the percentage of female farmers reporting that they had met with an extension worker within the last 12 months has more than doubled (29.7% BL to 66.2% EL). However, satisfaction with agricultural extension services has declined substantially.

Focus groups with Pathways participants confirm that access to information and technical services has improved. Women farmers say that their production has increased to a large extent due to the increased availability of both CARE and the district agriculture officers. Female farmers confirmed that the training in agriculture is done regularly and is practical training. The training starts during the season of farm preparation and goes through to harvesting. At each step the group works together with the extension officers, then after the practical training they go back to their farms to implement what they have learned. Qualitative feedback on the paraprofessionals is very positive. In qualitative interviews, Pathways participants said that paraprofessionals have good teaching skills and distribute materials fairly and on time, and that they are good at sharing information, even to the extent of going from house to house at night. The husbands of Pathways participants confirmed that the paraprofessionals have increased access to information, provide education on good cultivation practices (planting in rows, how to use fertilizers, crop storage), convey information about meetings, and provide good services to collectives and to individuals. Conversely, satisfaction with agricultural extension services has declined despite the acknowledgement that agricultural officers are more available than before. Some of the dissatisfaction with the extension agents arises from high expectations; husbands in both districts said that one extension officer for four villages in one ward was not enough to meet their needs (though this is the government standard). They also criticize the government extension workers for not providing sprayers, for failing to deliver fertilizer on time, and for selling seeds (rather than providing them at no cost) , which is likely a factor in the increase in dissatisfaction with the agricultural extension services. The issue of selling seeds appears to arise from a misunderstanding. The project provided free seeds to farmers for the first two years, after which some of the extension agents and paraprofessionals legitimately obtained seeds to sell to the groups. Quite a few farmers are still under the impression that they are entitled to free seeds, or are unhappy that only groups, and not individuals, can purchase the seeds. The improved sesame seed had to be obtained from government research stations, and CARE managers said that they faced challenges in procuring sufficient quantities of sesame seed in a timely manner to farmers. Pathways is promoting seed multiplication activities, which have specific technical demands and requires government certification, to help ensure that future supplies are easier to obtain.

*“The modern farm training has been very useful to us, we have increased amount of sesame we harvested last year. In the past we were not serious about sesame products, so we did not grow much, but now we are proud of it. We use a modern farming approach, though it was very difficult in the beginning to follow the process in planting sesame in lines, we thought this was something very impossible.”* – Female FGD, Masasi district

Table 29: Women's access to agricultural extension services

Indicator	Point Estimate			Sample Size	
	BL	EL		BL	EL
OC 2.2: % women with access to agricultural extension services in last 12 months	29.7	66.2	***	474	474
OC 2.3: % women reporting satisfaction with agricultural extension services	74.1	55.5	***	147	317

Statistically different from baseline at the 10% (\*), 5% (\*\*) or 1% (\*\*\*) levels.

### 3.8.3 Women's Access to Agricultural Inputs and Financial Services

CARE Tanzania's Pathways program identifies collectives (e.g., VSLAs, producer groups) as an entry point for improving access to appropriate agricultural inputs such as seeds and fertilizer by women farmers. The theory is that group procurement will increase the ability of the poorest to participate by pooling their limited resources. The program seeks to enable capable VSLA groups and/or individual members to operate as input suppliers, to also link the groups with relevant input suppliers, and to link community-based extension agents to information sources and input suppliers.

Table 30 shows that, by endline, the percentage of women in Pathways accessing agricultural inputs over the previous 12 months has more than doubled (34.8% BL to 74.6% EL) and encompasses three-quarters of female farmers. Nearly all women farmers have access to agricultural financial services.

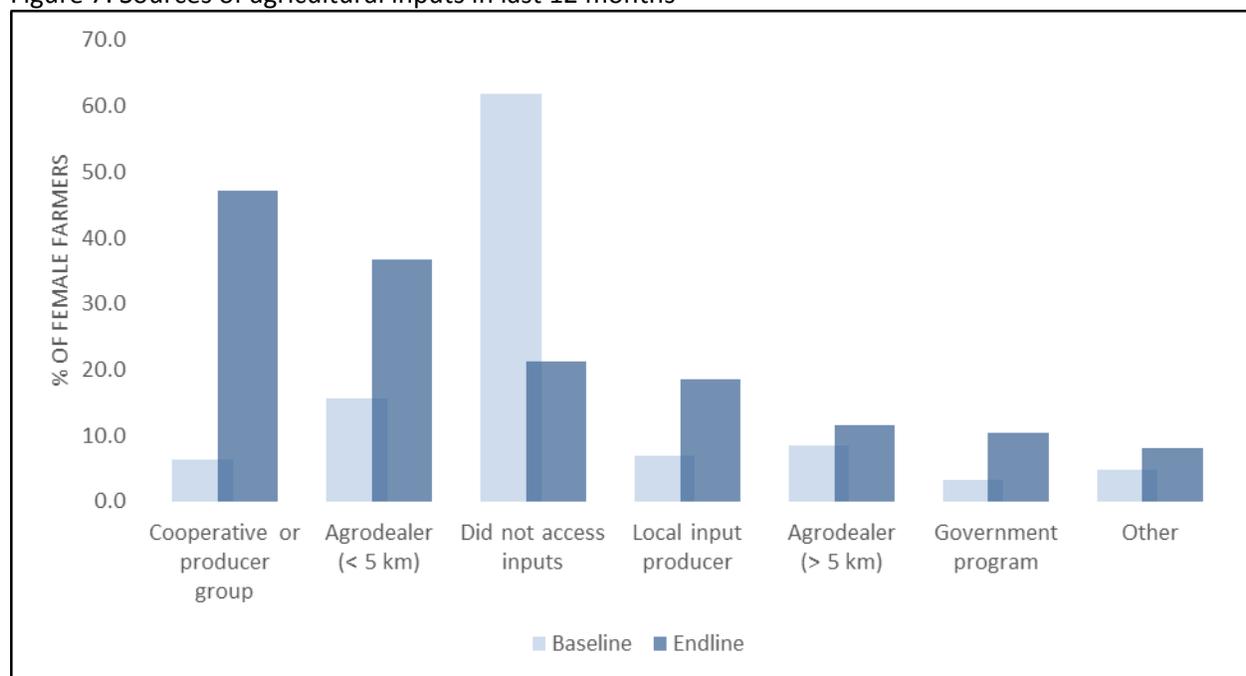
Table 30: Women's access to agricultural inputs and financial services

Indicator	Point Estimate			Sample Size	
	BL	EL		BL	EL
OC 2.4: % women accessing agricultural financial services (loans, savings, crop insurance) in last 12 months	97.6	95.7	*	462	461
OC 2.5: % women accessing agricultural inputs (seeds, fertilizers, etc.) over the last 12 months	34.8	74.6	***	462	461

Statistically different from baseline at the 10% (\*), 5% (\*\*) or 1% (\*\*\*) levels.

An examination of the sources of agricultural inputs in Figure 7 underscores the importance of Pathways' programming emphasis on collectives as entry points for improving female farmers' access to appropriate agricultural inputs. Cooperatives or producer groups account for nearly half (47.1%) of agricultural input sources, versus 6.3% in 2012. Local agro-dealers and input suppliers, also promoted by Pathways, are a source of agricultural inputs to 36.7% of the farmers, more than double the percent at baseline (15.6%). These two sources are used by 83.8% of respondents. In addition, at the beginning of the Pathways project, only 38.1% of female farmers were accessing agricultural inputs; by 2015, there is a dramatic reversal of that number with 78.7% of participants accessing inputs. According to project staff, groups are now communicating directly with input suppliers. In qualitative interviews, some groups said that they find it a challenge to afford fertilizers and pesticides.

Figure 7: Sources of agricultural inputs in last 12 months



### 3.8.4 Women’s Access to Output Markets

Lack of market information on prices is a common constraint to farm profitability. Through the development of clusters and networks of producer groups, CARE Pathways seeks to improve purchasing for poor smallholder women farmers, as well as to strengthen their marketing and negotiation power.

At endline, the percentage of female farmers selling their agricultural products through output markets (excluding their local market) has more than doubled (24.9% BL to 56.4% EL), indicating that over half of the Pathways participants now have expanded access to output markets. While the data indicate good progress on connecting female farmers and markets, they also show that after four years, 44% of women are not selling to output markets.

Table 31: Women's access to output markets

Indicator	Point Estimate		***	Sample Size	
	BL	EL		BL	EL
OC 2.6: % women accessing output markets to sell agricultural production over the last 12 months	24.9	56.4		462	461

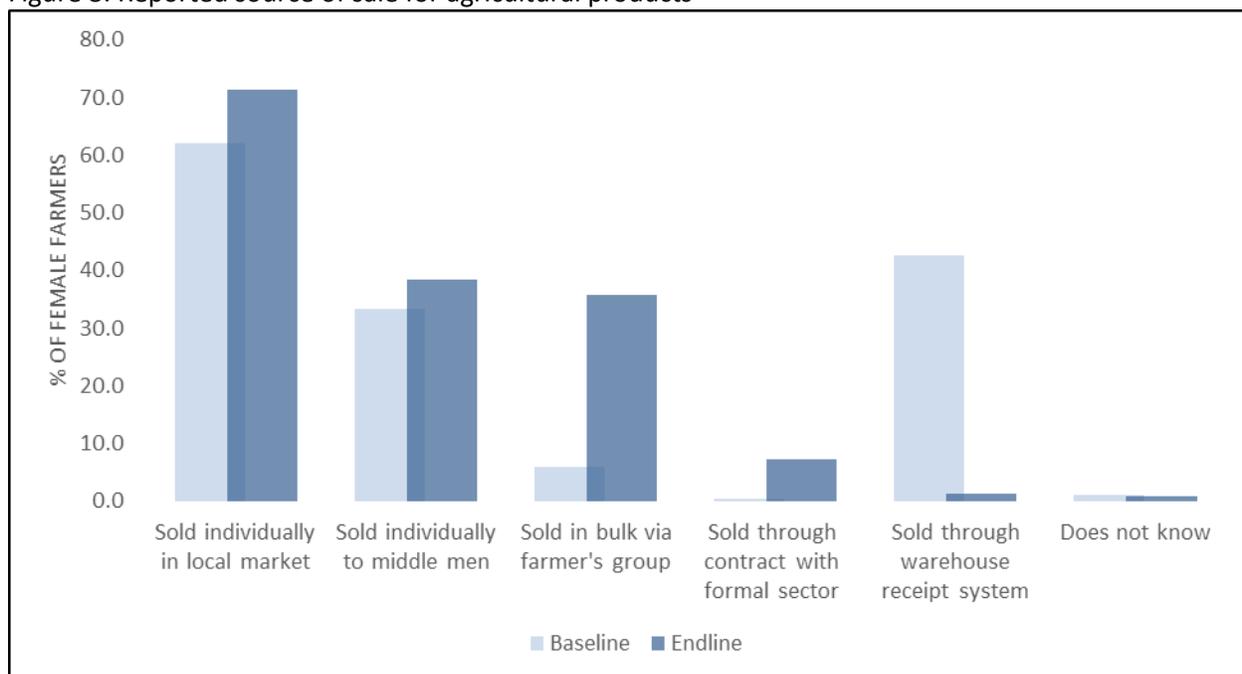
Statistically different from baseline at the 10% (\*), 5% (\*\*) or 1% (\*\*\*) levels.

The women who are selling in output markets are quite positive about the benefits. In qualitative focus group interviews, female farmers discussed how their access to markets has improved under Pathways. Before the Pathways training, women said that they believed that growing cash crops like sesame was very difficult, especially the marketing, and that only men could do it. Now, through the project their groups are assured of getting a market for their products, especially sesame.

*“Before the training we were not good in marketing, the way we used to sell our crops was very local. We were just taking our crops to the market where we used to sell regular stuff. At that place we were selling at a low price, we had no skills to bargain, and then it took time to finish selling the products. After this training, we have formed a group which is specific for marketing. The group members are hunting different buyers at a good price. The buyers are coming directly to us to buy the crops, especially sesame.” – Female FGD, Masasi district*

Most female farmers continue to sell their agricultural products individually in local markets (62.1% BL to 71.4% EL) or to middle men (33.2% BL to 38.4% EL). However, the percent of women selling in bulk via producer groups, which helps to ensure a better price, has risen to 35.7% from 5.8% at baseline. Sales through the warehouse receipt system have dropped dramatically. During the baseline, focus group participants indicated that one of the main limiting factors to their ability to increase sales was the domination of the warehouse system and reliance on the government as sole purchaser of their goods. A permanent local market in which they could freely sell their products (without government control of prices) was one of the main recommendations to come from the focus groups. This recommendation from the project participants has been met, as MRCs are now enabling women to sell their products to alternative markets at a higher price.

Figure 8: Reported source of sale for agricultural products



To facilitate better access to markets, Pathways established Market Research Committees (MRCs) composed of project participants in each village, 28 in all. The committees are responsible for evaluating buyers and identifying markets for group members, negotiating with buyers, collecting information on the amount of crops available in the village, informing collectives about markets and prices, and

mobilizing collectives to collect their sesame crops. Pathways trains the MRCs and then links them with buyers, after which the project expects the committee to function on its own. Pathways has also linked market committees with the government Cooperative Officer in each district, who has information on demand, prices, and buyers. In addition, CARE is working to link MRCs with the government Cooperative Department in each district in order to improve the MRCs' access to information on demand, buyers, and prices. As part of this process, CARE has formed an MRC Association (MRCA) in each ward (there are four MRCs in each ward) and registered the MRCAs with the Cooperative Department. This will make it easier for MRCs to approach a buyer, as they can show an official government registration number and can open a bank account.

Project management acknowledged that the development of MRCs was begun late in the project (in Year 3 of project implementation) because the project underestimated how much time is needed to develop the MRCs, and paraprofessionals interviewed in Masasi district agreed that MRCs require more training about how to cope with the competition in the markets around selling agricultural produce. Since then, according to managers, the project has had some measurable marketing successes, especially in Masasi and Nachingwea. Effectiveness of the MRCs varies between villages; for example, a female focus group in Chikukwe ward said that, as a result of the project, the group is now able to hunt for buyers and is assured of getting a market, selling their sesame for Tsh 2000 – 2400/kg. They consider this to be a good price, and it is above the Tsh 1700-1800/kg that individual sellers received previously. However, in Mpindimbi ward, women complain that their MRC members have not helped them find markets despite having received training. The groups are also learning that marketing is a continual challenge; this group reported that in 2014 they sold their sesame for a good price, Tsh 2400/kg, but that in 2015 there was a delay in contacting the buyer so they only received Tsh 1800/kg. Another example, given by CARE from a successful MRC in Masasi is that individually people receive TSh 1800/kg for sesame and TSh 1700/kg for pigeon pea, whereas through collective sales they receive TSh 2400/kg for sesame (improved variety) and TSh 2000/kg. for pigeon pea. Project staff stated that during the 2014/15 season, four out of 28 Pathways villages sold sesame at the maximum price, 17 sold at TSh 1900/kg and seven sold at a lower price because they sold individually and locally within their villages. Data supplied by the Pathways project show an 18% increase in income from sesame in 2015, despite less rain.

MRC members pointed out that collective marketing strengthens trust and cooperation, and that buyers come to the village to purchase crops, while individual sellers must take crops to town. There is a spillover effect in that non-group members have learned about the price differences and are interested in either joining the collectives or starting their own marketing groups. Some of the challenges faced in collective marketing are establishing trust among members that committees will not cheat them, persuading people who harvest early to wait until the rest of the group is ready to sell (thereby risking getting a lower price), and tracking the fluctuating prices among different buyers.

The District Agriculture Department (DAD) staff noted that market training needs to be strengthened, particularly in linking farmers with buyers and communicating with buyers. In addition, there is a demand for processed cassava flour from buyers in Dar es Salaam but according to the DAD, cassava

marketing has not been successful to date, and one district agricultural extension officer noted that cassava processing, training, and identification of markets is not yet completed. He believes that farmers, having seen the higher yields from the *Kiloba* variety, will be more motivated to grow cassava once a market is identified for processed cassava. In Masasi, CARE has provided 2 cassava processing machines to make flour, which is much more marketable and more profitable as a value-added activity (e.g., according to Pathways data, the project sold 500 kgs of raw cassava for TSh 120 per kg and cassava flour for TSh 200-2500 per kg). DAD staff acknowledged that CARE influenced its practices as it did not have a program on local seed multiplication using farmers, but has learned that it is possible. DAD currently uses government research institutions for seed multiplication but the centers are few and far away and the seeds must be transported.

At the time of the endline, 15 villages are doing group marketing. Pathways is assisting market committees to form marketing associations at the zonal level. This will enable market committees to register with the Cooperative Department, find buyers, and open a bank account.

### **3.9. Change Lever 3 - Productivity**

Outcome 3 of the Pathways program seeks to improve yield and income of poor smallholder women farmers through their adoption of sustainable and intensified agriculture and value addition. To determine changes in the status of agricultural productivity for poor smallholder women farmers over the life of the program, the survey measured women's net income from agricultural production and/or related processing activities; the number, types and yields of crops grown by female farmers; and agricultural, livestock, storage, and post-harvest practices which promote sustainable production and value addition.

Women who engaged in any agricultural activity, including primary production, processing, or marketing of food, fiber, or fuel crops, large and small livestock, bees, fish, horticultural crops such as vegetables, fruit, nuts, berries, herbs or natural products (non-timber forest products and wild fisheries) were interviewed to understand numerous aspects of their involvement in and experiences with production. Women whose only involvement in agriculture was wage labor were not interviewed about these topics.

#### **3.9.1 Women's Income from Agriculture**

Since 2012, the percentage of all households with a woman earning farm income has increased by over 24 percentage points, from 66.5% at baseline to 90.7% at endline. This is true for both female- and male-headed households (Table 32).

Women's reported mean annual net income from agricultural production<sup>16</sup> in all households has increased by 34%, from US \$206 to US \$276, since 2012; female-headed households have increased their mean annual net agricultural income by nearly 70% over the same period. The increases in income are a very positive trend. Although income gains to date are not sufficient to raise women above the poverty level, continued increases in agricultural production, market access, and incomes will contribute to the greater well-being of their households (Table 32).

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<sup>16</sup> Women's reported mean annual net agricultural income is calculated from estimated women's estimated sole and/or joint earnings from agricultural sources, minus estimated annual costs of inputs for each income source.

Table 32: Women's net annual income from agricultural production

Indicator	Point Estimate			Sample Size	
	BL	EL		BL	EL
% of women earning agriculture income					
All households	66.5	90.7	***	474	474
Female HHHs	63.6	91.1	***	162	179
Male HHHs	67.9	90.5	***	312	295
OC 3.1 Mean annual net income of women from agricultural production and/or related processing activities (Current USD 2015 )					
All households	205.92	275.61	**	309	426
Female HHHs	124.56	210.58	**	102	160
Male HHHs	246.02	314.73		207	266
Median annual net income of women from agricultural production and/or related processing activities (Current USD 2015 )					
All households	88.57	134.43		309	426
Female HHHs	56.86	96.46		102	160
Male HHHs	108.57	145.05		207	266
OC 3.1 Mean annual net income of women from agricultural production and/or related processing activities (Current TSH 2015 )					
All households	436,558.83	584,297.35	**	309	426
Female HHHs	264,069.31	446,434.79	**	102	160
Male HHHs	521,553.67	667,222.20		207	266
Median annual net income of women from agricultural production and/or related processing activities (Current TSH 2015 )					
All households	187,775.95	285,000.00		309	426
Female HHHs	120,540.05	204,500.00		102	160
Male HHHs	230,176.98	307,500.00		207	266

Statistically different from baseline at the 10% (\*), 5% (\*\*) or 1% (\*\*\*) levels. Independent t-test only conducted on means. No statistical tests were conducted on median values.

In qualitative FGDs, Pathways female farmers talked about the advantages of belonging to the cooperative groups. They stated that through group membership their production has increased and they received seeds and training on modern agriculture. The training helped them to improve their agricultural knowledge and income so that their production has doubled and they earn more money, unlike that of women who are not members of the cooperatives. The women also note that they can now access improved seeds, which they could not do four years ago before the project started. Women in Nachingwea district said that, due to the Pathways project and their knowledge on improved agriculture, women's income has increased so that now women can buy their own small portion of land and cultivate on their own.

“Women who do not participate in groups do not grow much, because they do not use a modern farming system. They still use old methods and they do not cultivate the large portion of land compared to women in groups.” - Female FGD, Masasi district

### 3.9.2 Crop Diversification

There is a small increase in the mean number of crops grown by women from 2.3 to 2.6 (Table 33) with the largest gain taking place among female-headed households (0.5 crops). Pathways has concentrated on improving production along two crop value chains, cassava and sesame, that female farmers were already cultivating and thus familiar with, rather than introducing new crops. Pathways seeks to improve production through training in improved agricultural techniques and the introduction of improved seed for sesame (*Lindi white*, *Lindi 2000*) and cassava (*Kiloba* variety).

Table 33: Number of different crops grown

Indicator	Point Estimate			Sample Size	
	BL	EL		BL	EL
OC 3.3: Number of different crops grown					
All households	2.3	2.6	***	464	465
Female headed households	1.9	2.4	***	158	174
Male headed households	2.5	2.7	*	306	291

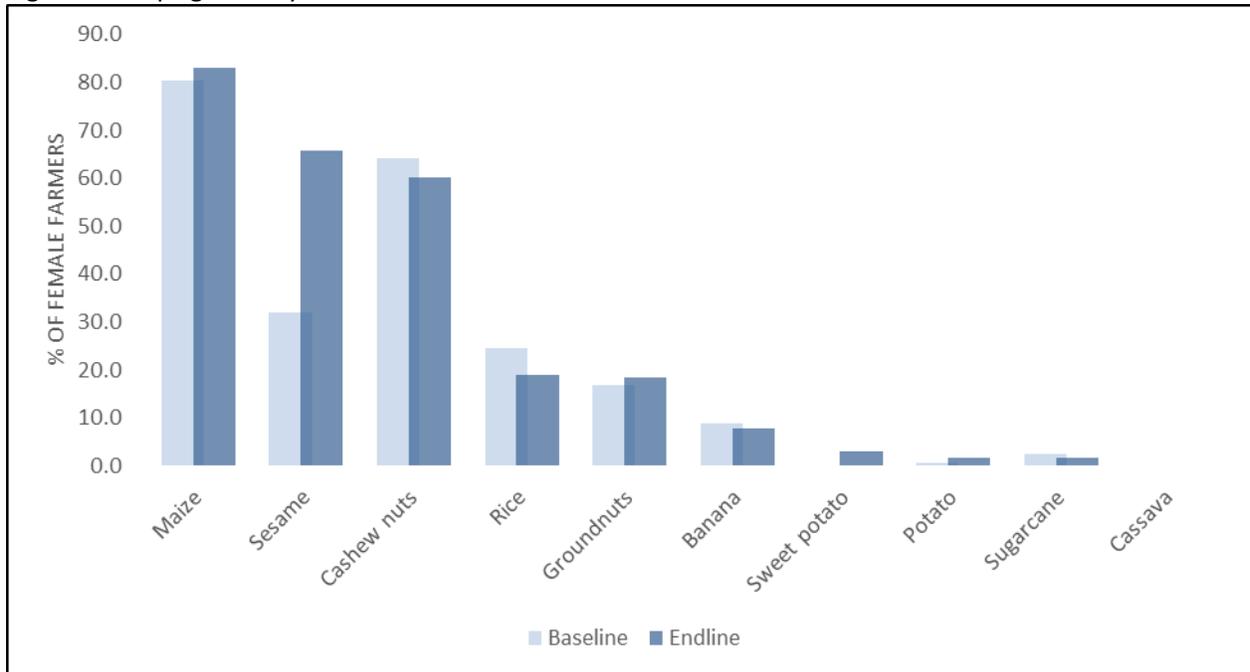
Statistically different from baseline at the 10% (\*), 5% (\*\*) or 1% (\*\*\*) levels.

The percent of women farmers adopting sesame cultivation has risen from 32.0% at baseline to 65.7% at endline, while other crops have remained near their baseline levels (Figure 9). A female focus group in Chikukwe ward said that Pathways gave them the confidence to grow sesame as a cash crop, whereas before they believed that growing cash crops was very difficult, especially the marketing, and therefore only for men.

Unlike sesame, production of the improved cassava variety has not been widely adopted. Pathways staff stated that the cassava value chain was selected because it is viewed as a woman’s crop and was widely consumed in 2012 (during a drought period), but it was subsequently learned that cassava is not a preferred food. An improved variety of cassava was also selected because as a food crop, it is a priority of the District Agriculture Department but is not necessarily a priority for communities. Pathways introduced a higher-yielding variety of cassava but found initially there was little market demand as most families already grow their own. As a lesson learned, CARE management stated that it should have added another product more desired by communities (cowpeas or another legume) as a balance to cassava.

Pathways is collaborating with the MEDA Economic Development Associates Seed Distribution System project, which seeks to commercialize improved cassava seed in southern Tanzania. MEDA is training Pathways farmers in seed multiplication as an income-generating activity, and is working with CARE to get certification from the Ministry of Agriculture to sell seed. Farmer demand for the *Kiloba* variety of improved cassava seed is increasing due to Pathways training. At the time of the endline, MEDA had trained more than 15 seed multipliers from CARE, and four CARE farmers were producing seed.

Figure 9: Crops grown by female farmers



### 3.9.3 Women's Agricultural Yields

Information on crop yields collected during the survey (Table 34) shows that sesame yields (using the improved variety) per hectare increased by nearly 57%. Women's yields for cashew, traditionally a crop grown by men, increased nearly 44% per hectare even though a smaller percentage of women report growing it, indicating that women who are cultivating cashew nuts are achieving higher production increases. Cassava production is not statistically different between baseline and endline so it is not possible to comment on changes in yields.

Table 34: Women’s agricultural yields (kilograms per hectare)

Indicator	Point Estimate			Sample Size	
	BL	EL		BL	EL
OC 3.2: Agricultural yield in crops <sup>A</sup>					
Maize	605.5	537.9		369	371
Sesame <sup>A</sup>	191.9	300.5	**	148	294
Cashew	353.7	508.7	***	293	269
Cassava <sup>A</sup>	1007.9	798.3		277	189
Rice	910.3	1184.2		113	87
Groundnuts	773.4	330.7	***	74	82
Banana	341.4	170.3		41	34
Mean size of land (hector) used for each crop					
Maize	0.9	0.8		370	382
Sesame <sup>A</sup>	0.6	0.7		149	297
Cashew	1.4	1.5		296	276
Cassava <sup>A</sup>	0.6	0.6		287	199
Rice	0.4	0.5	*	114	87
Groundnuts	0.3	0.5		80	84
Banana	0.2	0.3		42	35

Statistically different from baseline at the 10% (\*), 5% (\*\*) or 1% (\*\*\*) levels.

<sup>A</sup> Crops supported by project

### 3.9.4 Women’s Agricultural and Post-Harvest Practices

The Pathways approach emphasizes technical training in improved agricultural production for female farmers through varied means. Table 35 shows that the percentage of female farmers adopting three or more improved agricultural practices has more than doubled since 2012 (21.2% BL to 46.6% EL) but is still less than one-half of all female farmers. The percentage of women farmers adopting two or more post-harvest processes has more than doubled and is nearly 60%. Only one-quarter of women are adopting improved storage practices, fewer than at baseline. Paraprofessionals also noted that non-group members are adopting improved methods of farming such as planting in rows, and are learning from group members.

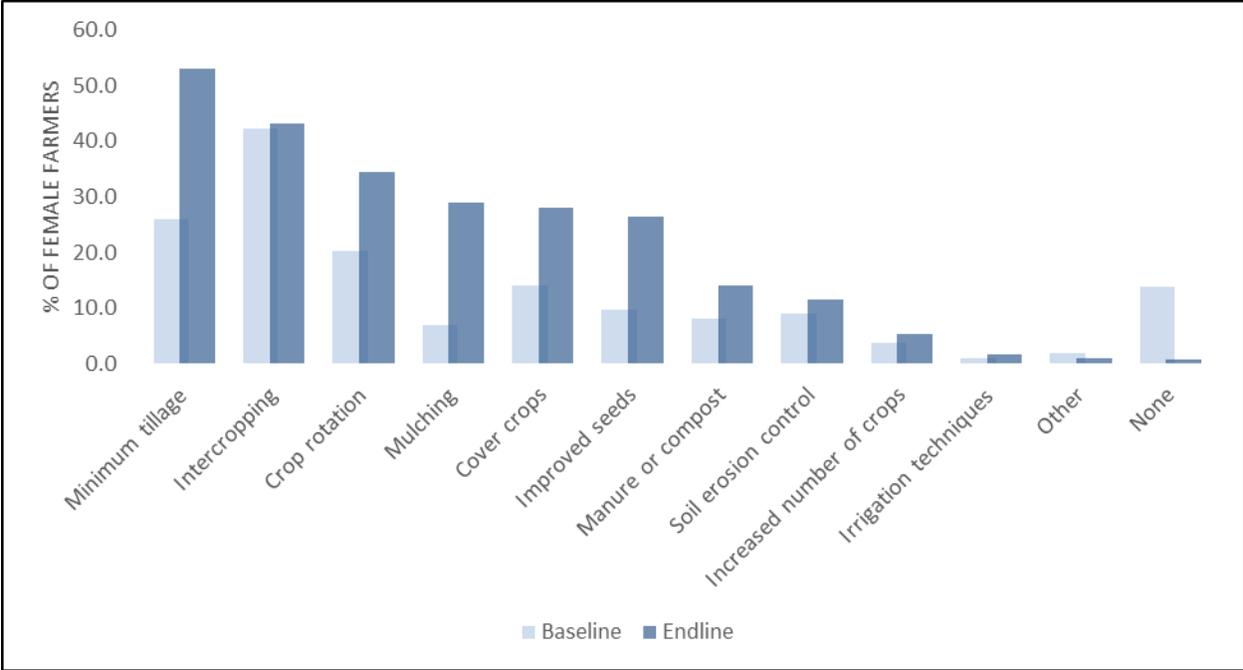
Table 35: Improved agricultural, harvest, storage and livestock practices

Indicator	Point Estimate			Sample Size	
	BL	EL		BL	EL
OC 3.4: % women adopting 3 or more improved agricultural practices	21.2	46.6	***	462	461
OC 3.5: % women farmers adopting 2 or more post-harvest processes	27.5	59.7	***	462	461
OC 3.6: % women adopting improved storage practices	31.0	25.6	*	462	461

Statistically different from baseline at the 10% (\*), 5% (\*\*) or 1% (\*\*\*) levels.

Pathways training has emphasized training in improved agricultural practices through Farmer Field and Business Schools established with the collectives. Training on specific topics is timed to coincide with the demands of the agricultural season, from farm preparation to harvesting, so that farmers can apply the training when they receive it. In qualitative interviews, farmers consider the practice of timing training to coincide with the agricultural calendar as a very useful approach. They contrasted the Pathways approach with the previous practice by agricultural extension agents, who would often not provide guidance ahead of the season, but would tell farmers what they did wrong afterwards, when it was too late to correct a problem. Endline data show that the highest percentage – over half - of households has adopted minimum tillage, an increase of 27.1 percentage points since baseline. The second most common practice adopted by households is mulching (an increase of 22 percentage points). The percent of women using improved seeds nearly tripled (10% BL to 27% EL) while those adopting cover crops doubled (14% BL to 28% EL). The percent of farmers using manure or compost has grown from 8% to 14% of households. Less than 1% of households report using no improved agricultural practices at all, compared to 14% of households at baseline. This shows slow progress, in that almost all households are using some improved practice, but with the exception of minimum tillage, fewer than half of Pathways households are using improved agricultural practices.

Figure 10: Adoption of improved agricultural practices



### 3.9.5 Women’s Livestock Practices

The percent of female farmers adopting one or more improved livestock practices has increased to 42.7%. This is a positive development, though improved practices have been adopted by fewer than one-half of all women farmers in the program (Table 36). As several female focus groups noted, most households in the Pathways operational area do not own or do not maintain large numbers of livestock,

primarily because they cannot afford them. Even for households that can afford livestock, all the responsibility of care falls to women while men own the animals and often decide independently when to sell them. Pathways participants in the Nachingwea area said that now more women own goats and pigs, but they are still among the minority of female project participants. As the income of Pathways farmers increases, more women will be able to use their own money to invest in livestock, which will also allow them to have control over it. Female farmers in Masasi district expressed an interest in training on livestock so that they can keep goats, cows, and pigs; this is evidence that women who are now earning higher incomes are thinking of assets to invest in and ways to diversify their incomes.

Table 36: Improved livestock practices

Indicator	Point Estimate			Sample Size	
	BL	EL		BL	EL
OC 3.7: % women using one or more improved livestock practice	33.1	42.7	***	462	461

Statistically different from baseline at the 10% (\*), 5% (\*\*) or 1% (\*\*\*) levels.

Another factor influencing productivity is increasing ownership of land by women. The acquisition of land motivates women to increase their productivity, as they control all the production. Land ownership also empowers women, as they often have limited say over land that is jointly owned with their husband. Though women traditionally own their own production, if they farm on their husband’s land it increases the risk that the husband will take control of profitable crops, particularly as women’s role expands beyond the production of staple food crops into cash crops.

### 3.10. Change Lever 4 - Household Influence

Pathways Outcome 4 seeks to increase contributions to and influence over household income and decision-making among poor female farmers. To determine this, the survey measured women’s control of household income and expenditures; women’s control of household assets; women’s decision-making related to health care and reproductive health; and the amount of, and satisfaction with, the leisure time women have available each day. Each of these indicators also contributes to the WEI.

#### 3.10.1 Women’s Control of Household Income, Expenditure and Asset Decisions

Women in all households have made substantial gains in control of income and expenditures, gaining 14.1 percentage points since 2012 (67.5 BL to 81.6 EL) in sole or joint control over household income and expenditures.<sup>17, 18</sup> The endline data show a significant shift towards more gender-equitable

<sup>17</sup> Women’s control of household income and expenditures is defined as: *women who have sole or joint decision-making in decisions relative to a household domain AND have input into most or all decisions regarding the use of income from the activity (if it is an income-generating activity)*. For CARE Tanzania’s Pathways, this indicator is computed as the percentage of women who have control in 60% or more of the domains in which the household reports that decisions are made, excluding minor household expenditures.

<sup>18</sup> Women’s control of household assets is defined as women who state they are a sole or joint decision maker regarding the sale or purchase of various household and agricultural assets. For CARE Tanzania’s Pathways, the outcome indicator is computed as the percentage of women who have control in 80% or more of the domains in which the household reports they hold assets.

decision-making in male-headed households, where the percent of women with sole or joint control over decisions over household income and expenditures is 74.5%, up from 56.5% at baseline (Table 37). Nearly all women in female-headed households (93.3%) are able to exercise control over their assets. This represents another important gain for women, as even women in female-headed households may be expected to obey male family members in matters of income, assets, and even mobility.

Women in male-headed households are exercising even greater control over decisions around agricultural income and expenditures (51.8% BL to 70.9% EL), and agricultural assets (68.1% BL to 86.1% EL) than in 2012. The greatest increase in gender equity is seen in decision-making over household assets among women in male-headed households, where the percent of women with decision-making power has increased to 80.9% over the baseline figure of 57.5%.

Table 37: Gender equitable decision making for income, expenditures, and assets

Indicator	Point Estimate			Sample Size	
	BL	EL		BL	EL
OC 4.1: % women with sole or joint control over household income and expenditures					
All households	67.5	81.6	***	468	473
Female HHHs	88.8	93.3		160	179
Male HHHs	56.5	74.5	***	308	294
OC 4.2: % women with sole or joint control over agricultural income and expenditures					
All households	64.0	77.9	***	470	471
Female HHHs	87.6	89.4		161	179
Male HHHs	51.8	70.9	***	309	292
OC 4.3: % women with sole or joint decision-making and control over household assets					
All households	68.3	87.4	***	470	470
Female HHHs	88.9	98.3	***	162	177
Male HHHs	57.5	80.9	***	308	293
OC 4.4: % women with sole or joint decision-making and control over agricultural assets					
All households	76.5	90.1	***	472	473
Female HHHs	92.6	96.6	*	162	179
Male HHHs	68.1	86.1	***	310	294

Statistically different from baseline at the 10% (\*), 5% (\*\*), or 1% (\*\*\*) levels.

As noted under section 3.9, access to good agricultural land has been a challenge for women. Women’s right to own land, either through purchase or direct inheritance, is recognized in all communities, but women noted that their financial ability to purchase land is much less than that of men, who have greater access to better-paying work. However, female focus groups also report that an increasing number of women are acquiring the financial means to purchase land through their VSLA membership, either individually or in groups. Focus groups in the various locations confirmed that women have better access to land under Pathways, though the degree of access varies.

*“Females deserve respect; we need to uphold this by involving them in important decisions.” – Focus group, husbands of Pathways participants*

Male focus groups confirmed that women have gained more ability to purchase land, and have greater awareness of their rights to land due to the Pathways project. A focus group of agricultural extension officers reported that they see positive changes in land access for women; after receiving education on women’s rights provided by CARE, women can own and decide themselves whether to buy their own land and build houses. The agents also said that they see wives and husbands with joint ownership of land, houses, and other assets who decide together if they want to sell something. The group also stated that the situation on the inherited properties has not changed. Whoever inherits land retains control over it until they die, after which the owner’s family can claim it.

There is evidence that attitudes are changing and that there is greater cooperation between husbands and wives. Pathways training encouraged this change by using different gender models to complement seasonal activities; for example, the project integrated a gender module on workload-sharing during training on planting, and after the harvest, gave a training module on household decision-making and money decisions. From discussions with key informants, there appears to be greater belief within the general community that women can and should participate in household decision-making. Female focus groups of non-Pathways participants stated that there are changes in their household decision-making over the past four years because they see that Pathways households where spouses decide together are better off economically, and that men respond positively when the women generate income from their activities. They also stated that women in polygamous households do not participate in decision-making.

Thus the gains reported in Table 37 likely reflect women’s greater participation in male-headed households in joint decision-making. Most female and male focus groups agree that men are still considered the head of the household and thus are the ultimate decision-makers; most of the change has occurred around men listening to and consulting with their wives when making decisions that affect the household. Men who are sympathetic to project messages also face pressure from their communities to conform to traditional social norms and are seen as weak if they are too supportive of their wives, so it takes some courage for husbands of Pathways participants to model new behaviors to their peers. Men also state that women in the household who are involved in small business have strong influence because they have income. Women can decide themselves how they want to spend the money they earn from the VSLA group or from an income-

*“If you have money or something even men will listen to your opinion, nowadays they have started to respect us and listen to us knowing that CARE has empowered us and we can have something to offer them compared to the past when we were depending on them.” – Pathways participants female focus group, Nachingwea*

generating activity. According to female focus group participants, women are using their increased income to buy small plots of land, to pay school fees for their children, to start their own businesses, and to improve their homes with metal roofs and solar panels.

### **3.10.2 Women’s Control of Reproductive and Health Care Decisions**

The percentage of women in all households who make sole or joint decisions about health care was high at baseline (86.0%) and has grown further over the course of the project to encompass the majority of women (93.9%) in the survey. The percent of women in male-headed households with decision-making

power about health care has also increased to 91.7%. This is consistent with focus group feedback which indicated that decisions about health care are usually made jointly (Table 38).

Nearly all women (98.6%) report making their own or joint decisions regarding family planning, including contraception, to space or limit births. This represents a small gain over the baseline figures.

**Table 38: Gender-equitable decision-making for health care and reproductive health**

Indicator	Point Estimate			Sample Size	
	BL	EL		BL	EL
<b>OC 4.5: % women making sole or joint decisions about health care</b>					
All households	86.0	93.9	***	458	461
Female HHHs	96.2	97.7		156	172
Male HHHs	80.8	91.7	***	302	289
<b>OC 4.6: % women reporting sole or joint decision-making over reproductive health decisions (family planning; spacing of children)</b>					
All households	95.5	98.6	**	289	351
Female HHHs	92.3	100.0	***	52	100
Male HHHs	96.2	98.0		237	251

Statistically different from baseline at the 10% (\*) , 5% (\*\*) or 1% (\*\*\*) levels.

### 3.11. Change Lever 5 – Enabling Environment

Pathways Outcome 5 focuses on facilitating enabling attitudes, behaviors, social norms, policies and institutional changes necessary to promote women’s rights. The VSLA is the key entry point for women to discuss gender equality issues, challenging traditional gender and cultural barriers in social and economic activities. To understand changes in men’s and women’s current attitudes toward gender-equity since 2012, primary male and female decision-makers were asked questions about their attitudes, perceptions, and practices related to gender roles, household violence, women’s mobility, and self-confidence.

#### 3.11.1 Attitudes on Gender Equity in Family Life

Respondents were asked whether they agreed or disagreed with four statements that reflect men’s and women’s roles in family life.<sup>19</sup> Table 39 shows that there are gains in attitudes about gender equity in family life among both women and men between 2012 and 2015. The change is greater among female respondents, where 42.5% of women support gender-equitable roles in family life; men’s views lag considerably behind, with only one-third of men (34.6%) supporting greater equity in family life. Overall, fewer than half of the people surveyed voice support for greater gender equity in family life. This is echoed in focus group discussions among both men and women, where most participants still hold patriarchal attitudes about family life and the distinct roles of men and women in the household. It is

<sup>19</sup> Male and female respondents were asked to agree or disagree with four statements: 1) Most household decisions should be made by the man; 2) There is men’s work and women’s work and the one shouldn’t ever do the work of the other; 3) If a woman works outside the home, her husband should help with child care and household chores; and 4) A husband should spend his free time with his wife and children. Disagreeing with the first two statements and agreeing with statements 3 and 4 qualifies as support for gender equity in household roles and serves as the underlying measurement for the outcome indicator.

also interesting to note that qualitative groups rated the effectiveness of sensitization on gender awareness lower than agricultural activities, indicating that participant priorities also focused more on agriculture.

A paraprofessional in Masasi district talked about the strategy to engage men and women on gender issues through workshops. Women and men worked in separate groups to determine the different roles of women and men during the day, then met in the plenary so that each group could present their findings for discussion. The paraprofessional noted that this method was very effective as women and men discussed and described their different roles, who is doing what and who has the greater workload. In the process men were able to recognize the hardship their wives are facing by citing actual examples. Gradually, some men are now assisting their wives in household chores. According to the paraprofessional, almost half of the men in his village have changed, involving women in decision-making and assisting in household chores.

Changes in gender relations and roles in the home and community can be expected to occur slowly, as they challenge social and cultural norms that, though inequitable, are seen to contribute to the stability of community life. Many women also accept the idea that the man is the head of the household and that to have a woman to dominate household decisions is not desirable or socially acceptable. It is also a sensitive area for men to negotiate, because if they are seen by the community as too supportive of their wives, they are perceived as weak, which can affect their relationships and social status in the community. Part of Pathways’ work in the future entails helping men, in particular, to disentangle beliefs around control and social status from their role within the household.

Table 39: Attitudes about gender-equitable roles in family life

Indicator	Point Estimate			Sample Size	
	BL	EL		BL	EL
OC 5.1: % of respondents expressing attitudes that support gender-equitable roles in family life					
Female respondents	31.4	42.5	***	472	473
Male respondents	22.9	34.6	**	109	240

Statistically different from baseline at the 10% (\*), 5% (\*\*) or 1% (\*\*\*) levels.

It should be noted that the four project districts are religiously conservative and have traditionally been isolated with little exposure to outside information or ideas until recently, and is not an area where CARE had a presence, so the organization had to establish itself with communities. CARE management also acknowledged that more emphasis was placed on increasing agricultural production and gender was only emphasized in the later stages of the project. While a little progress in attitudes about gender equity has been made, less than half of project participants and their spouses have changed their attitudes about gender-equitable roles in family life.

*“Both men and women were involved equally [in gender sensitization training]. Awareness was provided to all and women helped to provide more awareness to their household – especially to those whose husbands were not members – and influenced them to join groups. The project managed to improve women’s lives; nowadays women are more independent compared to the old days. Through agricultural*

*groups, women and men were able to form groups which they used to study gender issues and women’s empowerment. Moreover, women were good facilitators at family level: they have been teaching their husbands about women equality. Women are most powerful; they can convince men to change.” – Village leader, Masasi district*

### 3.11.2 Attitudes on Household Gender-Based Violence

The percent of men and women who report that they reject gender-based violence (GBV) has increased greatly from 2012 to 2015.<sup>20</sup> The percent of female respondents who reject GBV (74.8%) is slightly higher than the percentage of male respondents (70.0%) but both represent a significant change in attitudes over a relatively short period of time (Table 40). Given the massive media sensitization against GBV, it should also be considered that people know that GBV is wrong and would be reluctant to say that it is acceptable under any circumstances. This could possibly influence people’s responses to the survey questions.

Women in the qualitative survey report that GBV is declining because education through government, media, and other organizations has made women more aware of their rights and how to defend them, including the ability to file complaints with the police that has had a deterrent effect on household violence. Husbands of Pathways participants stated that one of the project’s contributions to the community is that violence against women is reduced, implying that this is because households are better off financially and not suffering from the high levels of economic stress that can contribute to domestic violence.

*“In the past women were perceived as inferior but nowadays there is awareness and there are changes in economic status and education. There is no gender discrimination, men and women are all equal. Women are able to run the household even if their man has passed away. Women have the ability to run a business, while taking care of the children. Previously, women have been denied to engage in economic activities because of men’s fear to be overthrown and for women to become head of household.” – Marketing committee members, Masasi district*

Table 40: Attitudes about gender-based violence

Indicator	Point Estimate			Sample Size	
	BL	EL		BL	EL
OC 5.2: % of respondents expressing attitudes that reject household gender-based violence					
Female respondents	29.0	74.8	***	472	473
Male respondents	22.9	70.0	***	109	240

Statistically different from baseline at the 10% (\*), 5% (\*\*) or 1% (\*\*\*) levels.

<sup>20</sup> To assess changes in attitudes about gender-based violence, male and female respondents were asked to agree or disagree with the statements: 1) “There are times women deserve to be hit,” and 2) “a woman should tolerate violence in order to maintain stability in the family.” For this study, disagreeing with both qualifies as a rejection of household gender-based violence and serves as the underlying measurement for attitudes regarding gender-based violence.

### 3.11.3 Women's Mobility

Female members of collectives were asked if they had to ask permission from their spouse or another family member to go to ten different locations. Four responses were possible: 'Yes, always' 'Yes, most often' 'Yes, but only now and then', and 'No, never'. Table 41 presents the data as a mean score of women's individual answers, which are calculated by taking the mean across women's individual scores.<sup>21</sup>

Women's mobility has increased among all households (42.4% BL to 65.8% EL). The greatest degree of change is among women in male-headed households, where the percentage of women who are mobile rose more than doubled between 2012 and 2015. This is a significant change in cultural norms among Pathways participants. However, even with this doubling, barely half of women in male-headed households have freedom of movement (26.8% BL to 52.4% EL), indicating that the project has much work yet to do in promoting greater independence of movement for women. The percentage of women in female-headed households who are mobile is significantly higher than women living in male-headed households, reflecting the need for female-headed households to be mobile in order to earn income, take care of household needs and manage livelihoods.

Indicator	Point Estimate			Sample Size	
	BL	EL		BL	EL
OC 5.3: % Women achieving a score of 16 or greater					
All households	42.4	65.8	***	472	473
Female HHHs	72.2	87.7	***	162	179
Male HHHs	26.8	52.4	***	310	294

Statistically different from baseline at the 10% (\*), 5% (\*\*) or 1% (\*\*\*) levels.

In order to determine if women's mobility is increasing in meaningful ways, Table 42 looks at the percent of female respondents who state that they never have to seek permission from their husband or family member to go to various destinations. For females in male-headed households, there are large increases in the percent of women who are more mobile in all categories. More women are going to the market without permission (5.5% BL to 43.5% EL), to a group meeting (2.6% BL to 34.0% EL) or public meeting (2.9% BL to 34.7% EL). About one-quarter of women in male-headed households can undertake revenue-generating activities without permission versus 2.3% at baseline. The data indicate that women are enjoying a significantly higher degree of mobility since 2012 within their village, but that the majority of women in male-headed households still have to seek permission to travel outside the home. Since male FGDs indicated that restricting women's mobility is in part due to distrust by the husband as to his wife's actions, the increased mobility suggests that there is greater trust between husbands and

<sup>21</sup> The mean scores are calculated using the following categories and score values from 4 (most mobile) to 0 (least mobile): "Never" (4), "Yes, but only now and then" (3), and "most often" (1) and 'always' (0). The maximum score is 32. Women with a score of 16 or greater are considered to be mobile.

wives. Women’s ability to leave their villages without their husband’s permission is still highly restricted and only 12.2% of women are able to do so.

Qualitative interviews indicate that many women require the permission of their husband to leave the house or the village, even during the day and for seemingly innocuous reasons such as visiting friends or family members. This is the cultural norm associated with men’s status as the head of household who is responsible for both supporting and controlling the members of his household. Controlling women’s mobility is important to men being perceived as in control of the household and is related to their standing in the community. Some of the male FGDs also admitted that men fear that allowing women freedom of movement will result in their wives having extramarital affairs.

Table 42: Women’s mobility by sex of head of household

Indicator	All HHs		Female HHHs				Male HHHs		
	BL	EL	BL	EL	BL	EL	BL	EL	
% of female respondents to state they <i>never</i> have to seek permission from husband or family member to go to the following locations:									
To the church or mosque	29.9	65.8	***	55.6	83.8	***	16.5	54.8	***
To the market	22.2	57.3	***	54.3	79.9	***	5.5	43.5	***
To a female friend’s house	22.2	54.5	***	55.6	81.6	***	4.8	38.1	***
To the house of a family	18.9	54.1	***	50.0	79.3	***	2.6	38.8	***
To a group meeting	19.5	51.6	***	51.9	80.4	***	2.6	34.0	***
To a public village meeting	19.9	51.0	***	52.5	77.7	***	2.9	34.7	***
To health care provider	17.6	47.4	***	47.5	74.3	***	1.9	31.0	***
To undertake revenue generating activities	18.0	43.1	***	48.1	73.7	***	2.3	24.5	***
To a local social event	18.4	40.2	***	48.1	73.2	***	2.9	20.1	***
To go outside the village	13.3	30.4	***	37.7	60.3	***	0.6	12.2	***
n	472	473		162	179		310	294	

Statistically different from baseline at the 10% (\*), 5% (\*\*) or 1% (\*\*\*) levels.

## 4. Project Management

Pathways is a multifaceted project that seeks to make technical improvements to agricultural production and marketing while it promotes fundamental attitudinal and behavior change in traditionally conservative, patriarchal societies in southern Tanzania. The project has a mixed record of achievement in its focal areas, and CARE staff and local government stakeholders identify management changes as the biggest obstacle to achieving project goals. There have been four Program Coordinators between 2012 and 2015, with a fifth Program Coordinator in charge of the project at the end of 2015. The quality of these individual managers has varied greatly, and implementation was further complicated with the departure of many CARE Mtwara staff in October 2014. The frequent change of managers and of management style has been confusing for the team and partners, and has slowed

implementation. The manager in place during the endline survey was reviewed positively by staff, partners and government stakeholders.

Project designers, project participants, and other stakeholders state that Pathways identified the right activities, in part because CARE had adequate time to design the project. The innovative approach of Pathways has been recognized by government at national and district level for its accomplishments with women in agriculture in southern Tanzania. CARE was invited by the Ministry of Agriculture to mount an exhibit at Nane Nane, the regional agricultural fair, in August 2015. The Pathways program coordinator has co-hosted and been invited to government forums on gender; for example, one presentation given by the program coordinator to the Agricultural Stakeholders Forum in 2014 was the sole presentation on gender. The Ministry of Agriculture also referred Irish Aid to CARE when Irish Aid was conducting its assessment of involvement of women in oil seeds in 2015.

However, project managers acknowledge that more emphasis was given at the beginning to increasing agricultural production and that gender only became the focus of the program much later. Why this happened is not clear, as many former staff had departed. This provides a critical lesson for a program that is entirely focused on women's empowerment. CARE needs to ensure that the staff responsible for implementing the project is thoroughly grounded in, and comfortable with, the gender equity goals of the project as well as the more technical aspects of agricultural production. The project deserves credit for addressing community resistance to changing gender norms by introducing male gender champions as volunteers. Given that many of the gains in gender have been made late in the project, and that there was some unanticipated community backlash to working only with women, it is reasonable to expect that the gains could have been much greater if they had been given equal emphasis with agriculture from the beginning.

Challenges with partners have arisen that were not anticipated during the design stage that occupied management time and slowed implementation. Initially, Pathways intended to use VSLA groups formed by the Aga Khan Foundation, which would have allowed CARE to focus on its key technical areas. However, differences in approach between the two organizations led CARE to look at forming its own VSLA groups. This slowed implementation of the technical aspects of Pathways, as CARE had to wait for people to obtain capital from the VSLAs to invest in agricultural inputs. The issues with Aga Khan Foundation were eventually resolved but CARE has continued to form VSLAs, partly due to donor requirements and partly to ensure that the project is reaching its target population of poor female farmers.

Relations with the District Commissioner and the district agricultural staff are good and the current manager has done much to improve relations and ensure timely implementation, which is appreciated by DAD staff. CARE staff experienced some challenges with partnership with DAD because Pathways did not channel its resources through the department, but both sides report that cooperation has improved, as the project has shown results. CARE management felt that it could have made a more deliberate effort to involve government from the beginning, and the project management in place at the time of the endline survey had worked to improve communications and to keep government informed about project activities.

However, the project has operated largely on its own, and the proposed integration with government, and thus the sustainability of project activities, has not realistically taken local government resources and constraints into account. For example, a key strategy in sustainability is to integrate the community paraprofessionals, who are responsible for organizing and training participants, into the DAD. However, DAD staff says that they currently lack the financial resources to absorb the paraprofessionals, even though it recognizes the benefits of doing so. Another strategy is to have people pay paraprofessionals for their services, but that requires that paraprofessionals have continuing access to additional training and new knowledge. Paraprofessionals are valued by community members but it remains to be seen if community financial support is a viable option. The loss of the paraprofessionals would be a loss to female farmers as government agricultural strategies tend to be gender-blind. Local agricultural officials stated that they appreciate the approach emphasizing women in agriculture, but do not have a lot of capacity to integrate a gender-sensitive approach into their own programs. In short, the project needs a detailed exit strategy that can focus on strengthening existing linkages between participant needs, private sector interests, and government service providers.

## **5. Conclusions**

The CARE Pathways Tanzania levers of change appropriately address some of the greatest barriers to economic and social equity for poor rural women farmers in Masasi and Nachingwea districts. The project has improved access to services, income opportunities, and control of productive assets and resources for women in a traditional social and economic setting that favors men. Over the four years from 2012 to 2015, participating households in the Pathways program have improved food access, resilience to shocks, and economic security. The project is also contributing to changes in women's empowerment, specifically within the domains of resources, leadership and community.

However, productivity is currently challenged by climatic conditions (including an anticipated drought in 2016 resulting from El Nino), women's inability to afford land, slow adoption of improved agricultural practices, and marketing skills and opportunities that are not fully developed. Changes in attitudes that promote gender-equitable cultural norms and roles, community receptiveness to women's views on gender, and access by women to formal and informal institutions, while showing significant improvement, still have to gain traction among approximately half of the participating households.

### **5.1 Change Lever 1 - Capacity**

According to the Pathways Theory of Change, Change Lever 1 aims to increase the capacity, knowledge, skills, and relationships of women as well as their self-confidence and conviction of power. The endline survey shows that women have measurably increased their knowledge and skills in agricultural production and group leadership. These gains have produced positive results in increased income and status within the household, but many women still lack the confidence and the broader community support to express their opinions in village meetings. Greater capacity has led to greater resilience as the majority of Pathways households are using positive adaptation strategies to reduce the impact of future shocks.

One women's group defined empowerment as a capacity-building process, including the process of receiving knowledge and training on agriculture, and being able to borrow money for business. Women report that group participation has improved their access to improved seed, provided them training on

modern agriculture, and increased their agricultural production and income. Pathways provided training on diverse agricultural methods that are being used for crops such as maize and millet, with good results, and female farmers appreciate learning new skills appropriate to the agricultural season that they can apply immediately on their own farms. When community members were asked to rank project activities in order of impact at the household and community level, improved agronomic practices (e.g., planting in rows, intercropping) ranked second-highest among all activities. Since traditionally a woman controls the income from her own production, increases in productive capacity which translate into greater income are serving as a foundation for greater participation in and influence over household decisions.

Pathways' emphasis on group participation is also a source of confidence for women, who include "not belonging to a group" in their definition of un-empowered women. Over half of Pathways female participants are holding leadership roles in groups, particularly in groups that are predominantly composed of women where higher positions may previously have been held by men. Half of all women holding leadership positions are from male-headed households, which constitutes a growing constituency for greater joint decision-making at home in a male-dominated culture. Qualitative feedback shows increasing confidence among Pathways participants to pursue greater gender equity within their households, and a few women have stood for public office for the first time. However, the greater confidence engendered by participation and leadership in women's groups has not carried over to the public sphere for the majority of women, who say that women have a voice in their groups but not in the village meeting. Societal changes in attitudes about women, and greater acceptance of women's opinions tend to be long-term in nature, and the empowerment felt by Pathways participants within a male-dominated culture should be seen as helping to bring about these long-term changes in women's status.

## **5.2 Change Lever 2 – Access**

Pathways activities under Change Lever 2 seek to increase access to productive resources, assets, markets, and appropriate and reliable services and inputs for poor women farmers. By facilitating access to agricultural training, inputs and markets, Pathways send an important message to households and communities that women's production has value beyond growing food for household consumption.

Women's access to agricultural extension services is greatly expanded under the project. While access to agricultural financial services has remained high since baseline, this is complemented by newfound access to agricultural inputs (e.g., improved seed and fertilizer) from a variety of sources. Most women are obtaining inputs either through project-supported cooperatives or through arrangements with local input suppliers facilitated by Pathways. During the baseline, women stated that better access to agricultural inputs was a priority, and the project has succeeded in helping the majority of women attain this. Equally important, women are now communicating directly with input suppliers. Satisfaction with agricultural extension services has declined. This is due to delays in the delivery of project services early on due to management issues and possibly because expectations have risen.

Women's access to output markets where they can sell their agricultural products has increased significantly, along with the percent of women selling in bulk through their cooperative, which helps women to obtain better prices. The increased access to inputs and to markets under Pathways

addresses two major obstacles frequently faced by female farmers who want to improve their income. However, the main emphasis has been on increasing production and the marketing component was adversely affected by the withdrawal of the partner organization that was to oversee it; consequently, value chain development for sesame and cassava is weak. Training of Market Research Committees started only in Year 3 and the MRCs need strengthening in a number of communities, particularly with regard to linking farmers with buyers and communicating with buyers.

The Pathways project has supported small gains in the percentage of households where women have access to and control over loans used for IGAs, particularly among female-headed households. Overall, the proportion of such households among project participants remains low, and women in focus groups confirmed that in most cases men still decide when loans are taken and for what purpose. Currently, most loans are being used either for production or business capital, or to meet household needs. The latter may be due to the stressed food security situation faced by families and communities following a poor harvest season in 2015. In terms of loans, group members acknowledge that people who are too poor to purchase shares cannot join the VSLAs. This limits the access of the poorest female farmers in the community, who are the target group for Pathways. Using another organization's VSLAs as the initial entry point for the project may have had the unintended effect of preventing the poorest women farmers from participating.

The percentage of women gaining access to essential agricultural services and markets has doubled over the four years of the project. This is notable progress given the social and economic constraints faced by female farmers in southern Tanzania. At endline, the percentage of female farmers selling their agricultural products through output markets (excluding their local market) has more than doubled, demonstrating that Pathways participants now have expanded access to output markets. While there is good progress on connecting female farmers and markets, after four years 44% of Pathways women are not selling to output markets. This is possibly due to weak Market Research Committees and women's limited mobility. Qualitative discussions indicated that successful households are serving as a model for those who are slower to adopt change (and those outside of the project), and it is likely that more women will access these services as they see the benefits to participating households.

### **5.3 Change Lever 3 – Productivity**

Change Lever 3 supports improvements in yield and income through the adoption of sustainable and intensified agriculture and value addition. The percent of women in Pathways who are earning income from agriculture has grown from two-thirds of participants to nearly all, and the mean annual net agricultural income of female-headed households has risen by nearly 70%. Most of the gain is the result of women adopting sesame as a cash crop, using the improved seed provided through Pathways. Notably, women's yields for cashews, traditionally a cash crop for men, also increased though fewer women are cultivating cashew. Changes in the production of cassava, the other crop promoted by Pathways, were not statistically different between baseline and endline.

The percent of women adopting three or more improved agricultural and post-harvest practices (from a group of recommended practices) has nearly doubled from baseline. The two most common practices adopted by female farmers are minimum tillage and mulching. As with Access under Change Lever 2, the project has motivated a substantially higher percentage of women to adopt improved practices, and

fewer than one percent are not using any improved practices. This shows good progress by participants in taking a critical step towards improving production. Additionally, given the increases in the percent of women farmers reporting that they are growing sesame and obtaining higher sesame yields, it is apparent that more women are adopting some, if not all, of the practices promoted by Pathways. However, approximately half of the female participants are not adopting a cluster of improved practices. This is less than the uptake that could be expected after four years of promoting improved agricultural practices by Pathways.

Women's right to own land, either through purchase or direct inheritance, is recognized in all communities, but lack of income to buy land is cited as a barrier to ownership by many women. However, more women are acquiring the financial means to buy land through their VSLA membership and are purchasing their own land, either individually or in groups. The acquisition of land motivates women to increase their productivity, as they control all the production. Land ownership also empowers women, as they often have limited say over land that is jointly owned with their husband. Though women traditionally own their own production, if they farm on their husband's land it increases the risk that the husband will take control of profitable crops, particularly as women's role expands beyond the production of staple food crops into cash crops.

#### **5.4 Change Lever 4 – Household Influence**

Pathways promotes greater gender equity for female farmers, which includes increasing their contributions to and influence over household income and decision-making. Women in all households have made substantial gains in control of income and expenditures, and control of assets. There is a shift towards more gender-equitable decision-making in male-headed households, with women reporting that they exercise greater sole or joint control over household income and expenditures. Women's empowerment scores have increased and Pathways participants are much closer to achieving empowerment as defined on the WEI scale than at the beginning of the project.

Women's productive and financial contribution has increased in many families, and this has increased women's influence and respect within the household. Women's status within the household can be expected to grow as women's incomes increase. Many Pathways participants and their spouses stated that there is greater cooperation, harmony, and shared decision-making in their households and that men are listening to and consulting with their wives when making decisions that affect the household. Participants and key informants attribute this change to women's increased awareness about their rights through Pathways, other organizations, and the media. Gender sensitivity training for couples, and dialogues to promote a shared understanding of how greater equity for women in the household benefits the husband and family, were reported as key factors in increasing respect for women and their right to participate in household decisions.

While participants give positive feedback about the benefits to their household, they acknowledge that these changes have occurred in a minority of households in the community and men retain most of the decision-making power. In addition, men still enjoy much more leisure time than women, even though they are helping out more at home. There is some qualitative evidence of a spill-over effect where some non-participating households have adopted more shared household responsibilities (e.g., husbands

helping out with domestic chores and child care) after observing the interpersonal and financial benefits enjoyed by Pathways households.

## **5.5 Change Lever 5 – Enabling Environment**

The path to women’s empowerment requires more positive and enabling attitudes, behaviors, social norms, policies and institutions in the household and the community. Change Lever 5 has sought to strengthen the enabling environment by changing attitudes, perceptions and practices related to gender roles, household violence, women’s mobility, and self-confidence.

The majority of male and female respondents reject gender-based violence, reflecting a large shift in societal attitudes over a relatively short period of time. The convergence of anti-domestic violence messages from multiple sources has been a factor in changing attitudes; respondents also attribute the change to messages from the project, government, and the media that have informed women about their legal rights to protect themselves while condemning male violence against women. Such messages also make people aware that GBV is not socially acceptable and so they are less likely to acknowledge that it occurs; qualitative feedback indicates that GBV is reduced in households where the family is better off due to women’s financial contributions.

Women’s ability to move freely about their community, and outside their community, without the permission of their husbands has also increased. The greatest gain in mobility is among women in male-headed households, where compared to baseline, more women are now able to decide for themselves to go to the market, to group and public meetings, and to a health care provider. As with other gains under Pathways, the gains in mobility are offset by the fact that the majority of women in male-headed households still have to seek permission to travel outside the home.

At endline, increasing influence within the household based on a woman’s ability to contribute financially has given many women greater voice within their families. Leadership of VSLAs has engendered greater respect for women’s capacities among men and from the larger community. However, less than half of the respondents express attitudes that support gender-equitable roles in family life, indicating that Pathways has not achieved gender transformation in attitudes about women among either women or men. There is a greater change in attitudes about gender equity among female respondents than among males. Both women and men in FGDs confirm that men are considered the head of household and the decision-makers in the society, though many women also express their frustration with the patriarchal culture. Admittedly, the fundamental changes in attitudes that Pathways supports occur slowly, over time, and are evolutionary in nature. It cannot be determined at this point if changes in attitudes among men who support greater gender equity are permanent. What is encouraging is that greater economic benefits for the household and greater control for women within the household over assets and decision-making tend to reinforce one another, so that continued success for female farmers will be a key factor in sustaining women’s progress towards gender equity.

Project managers acknowledge that more emphasis was given at the beginning to increasing agricultural production and that gender became the focus of the program much later. The project deserves credit

for addressing community resistance to changing gender norms by introducing male gender champions as volunteers. Given that many of the gains in gender have been made late in the project, and that there was some unanticipated community backlash to working only with women, it is reasonable to expect that the gains could have been much greater if they had been given equal emphasis with agriculture from the beginning.

## **6. Recommendations**

The Pathways concept provides a good model that should be carried forward, either as a continuation of this project or in future projects. Based on the findings of the final evaluation, this section provides recommendations for either an extension of the current project or new projects based on the Pathways model.

### **1. Integrate gender sensitization and gender equity with agriculture and market training from the beginning.**

Pathways managers acknowledge that the initial focus of the project was on improving agricultural productivity, and that gender equity was emphasized much later in the project. This provides a critical lesson for a program that is entirely focused on women's empowerment. The gains in women's empowerment are likely to have been much greater if the two approaches were implemented in tandem, as intended in the design. Several critical training activities, such as those on women's rights to land and GBV, were not made available to all communities and were only one-day events that participants did not feel were sufficient. The strength of the Pathways concept is that it visualizes productivity and profitability, equity, and empowerment as complementary and mutually reinforcing outcomes that address the underlying causes of poverty and women's exclusion in agriculture. CARE needs to ensure that the staff responsible for implementing the project is thoroughly grounded in, and comfortable with, the gender equity goals of the project as well as the more technical aspects of agricultural production. Future projects should ensure that equity and empowerment are given equal weight with agricultural and market improvements.

### **2. Expand men's sensitization to and involvement in gender equity and empowerment activities.**

The survey data show that changes in men's attitudes about gender equity lag behind those of women, particularly around control of assets and income, decision-making in the household, and on the mobility of women. In addition to emphasizing gender equity from the outset of the project, Pathways should focus more on sensitizing men to the negative impact of gender inequities on women, on men, and on their family life.

### **3. Strengthen marketing training and support to Market Research Committees**

Pathways started training on marketing late in the project, in year 3. Market research committees are weak in a number of communities. As a result, some members are frustrated that they are not able to obtain better prices for their production and other group members continue to sell on their own. Training for participants on how to identify markets and expand access to local and national markets should be addressed early in the project, as women are receiving training on improved agricultural skills.

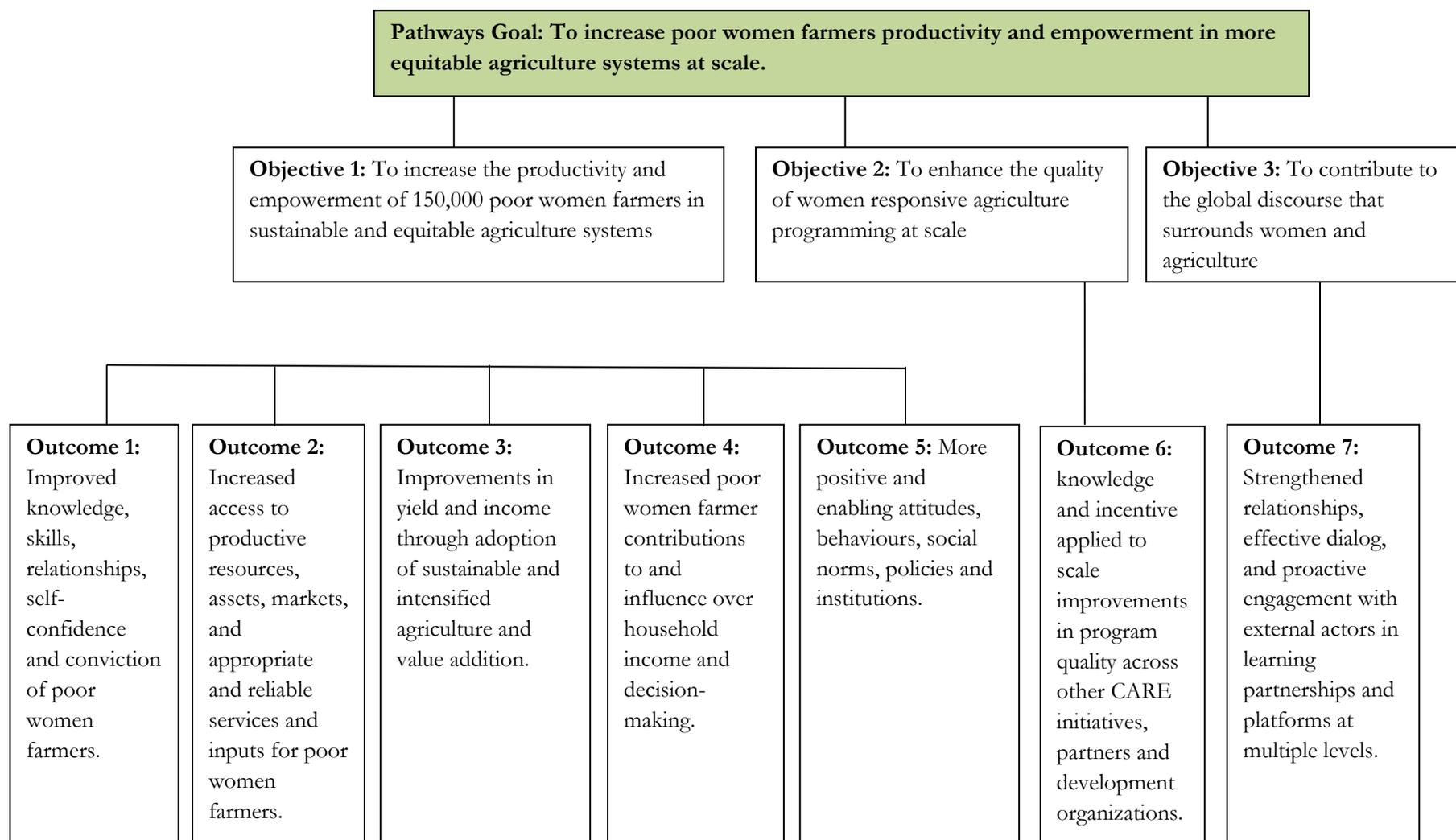
#### **4. Expand training and follow up for entrepreneurial and business skills.**

There is significant interest in and demand for more training in entrepreneurship voiced by female focus group members. Given the frequent droughts and increased shocks in the districts, expansion of small business opportunities would help households to diversify their livelihoods and increase their resilience to future shocks. In order to make small business training more effective, Pathways needs to broaden its understanding of the markets for non-agricultural activities beyond tie dye, soap making and similar activities to ensure that women are reaching more markets and are not competing within their small village markets with the same products.

#### **5. Plan with partners for exit from the beginning of the project**

Pathways requires a detailed exit strategy that can focus on strengthening existing linkages between participant needs, private sector interests, and government service providers. This was undefined at the time of the endline. In particular, the project should address how to sustain support to the village paraprofessionals, who are highly valued by participants and are key to the success of Pathways. There are various proposals to do so, but those proposals need further development.

## Annex 1: Pathways Results Framework



## Annex 2: Pathways Common Indicator Framework

Results	Performance Indicators	Frequency	Source	Responsible
<b>Pathways Goal: To increase poor women farmers' productivity and empowerment in more equitable agriculture systems at scale.</b>				
Long-term impact: More secure and resilient livelihoods for households of particular segments of poor women farmers impacted through the goal.	<p><b>Food Security</b></p> <ul style="list-style-type: none"> <li>IM 1.1: Mean household dietary diversity scores</li> <li>IM 1.2: Mean women's intra-household food access</li> </ul> <p><b>Livelihoods Resilience</b></p> <ul style="list-style-type: none"> <li>IM 1.3: Coping strategies index</li> <li>IM 1.4: % households adopting negative coping strategies in past 3 months</li> <li>IM 1.5: % households using adaptation strategies to reduce the impact of future shocks</li> <li>IM 1.6: Mean asset index</li> </ul> <p><b>Economic Poverty Reduction</b></p> <ul style="list-style-type: none"> <li>IM 1.7: Per capita monthly household income (farm and non-farm)</li> <li>IM 1.8: Per capita monthly household expenditures</li> <li>IM 1.9: % households with savings</li> <li>IM 1.10: % women with savings</li> </ul> <p><b>Women's Empowerment</b></p> <ul style="list-style-type: none"> <li>IM 1.11: Women's empowerment index</li> </ul>	Baseline/ end-line; annual monitoring	Quantitative / qualitative surveys; producer group records; annual HH tracer study	External consultant
<b>Objective 1: To increase the productivity and empowerment of 150,000 poor women farmers in sustainable and equitable agriculture systems.</b>				
Outcome 1: Improved knowledge, skills, relationships, self-confidence and conviction of poor women farmers.	<ul style="list-style-type: none"> <li>OC 1.1: % women participating in formal and informal groups</li> <li>OC 1.2: % women holding leadership positions in formal and informal groups</li> <li>OC 1.3: % respondents confident speaking about gender and other community issues at the local level</li> </ul>	Baseline/ end-line; annual monitoring	Quantitative/ qualitative surveys; producer group records; post- harvest surveys of tracer HHs	External consultant; M&E unit

<p>Outcome 2: Increased access to productive resources, assets, markets, and appropriate and reliable services and inputs for poor women farmers.</p>	<ul style="list-style-type: none"> <li>• OC 2.1: % women with access to and control over loans for IGA</li> <li>• OC 2.2: % women with access to agricultural extension services in last 12 months</li> <li>• OC 2.3: % women reporting satisfaction with agricultural extension services</li> <li>• OC 2.4: % women accessing agricultural financial services (loans, savings, crop insurance) in last 12 months</li> <li>• OC 2.5: % women accessing agricultural inputs (seeds, fertilizers, etc.) over the last 12 months</li> <li>• OC 2.6: % women accessing output markets to sell agricultural production over the last 12 months</li> </ul>	<p>Baseline/ end-line; annual monitoring</p>	<p>Quantitative/ qualitative surveys; producer group records; annual HH tracer study</p>	<p>External consultant; M&amp;E Unit</p>
<p>Outcome 3: Improvements in yield and income through adoption of sustainable and intensified agriculture and value addition.</p>	<ul style="list-style-type: none"> <li>• OC 3.1: Net income of women from agricultural production and/or related processing activities</li> <li>• OC 3.2: Agricultural yield in crops supported by Pathways</li> <li>• OC 3.3: Number of different crops grown</li> <li>• OC 3.4: % women adopting (project defined) minimum number of improved agricultural practices (list of improved practices TBD by country)</li> <li>• OC 3.5: % women farmers adopting (project defined) minimum number of post-harvest processing (list of improved practices TBD by country)</li> <li>• OC 3.6: % women adopting (project defined) improved storage practices (list of improved practices TBD by country)</li> <li>• OC 3.7: % women using [project defined] minimum number of improved livestock practices (list of improved practices TBD by country)</li> </ul>	<p>Baseline/ end-line; annual monitoring</p>	<p>Quantitative/ qualitative surveys; annual reports</p>	<p>External consultant; M&amp;E Unit</p>
<p>Outcome 4: Increased poor women farmer contributions to and influence over household income and decision making.</p>	<ul style="list-style-type: none"> <li>• OC 4.1: % women with sole or joint control over household income and expenditures</li> <li>• OC 4.2: % women with sole or joint control over agricultural income and expenditures</li> <li>• OC 4.3: % women with sole or joint decision-</li> </ul>	<p>Baseline/ end-line; annual monitoring</p>	<p>Quantitative/ qualitative surveys; annual reports</p>	<p>External consultant; M&amp;E Unit</p>

	<ul style="list-style-type: none"> <li>making and control over household assets</li> <li>• OC 4.4: % women with sole or joint decision-making and control over agricultural assets</li> <li>• OC 4.5: % women making sole or joint decisions about health care</li> <li>• OC 4.6: % women reporting sole or joint decision-making over reproductive health decisions (family planning; spacing of children)</li> </ul>			
Outcome 5: More positive and enabling attitudes, behaviors, social norms, policies and institutions.	<ul style="list-style-type: none"> <li>• OC 5.1: % of the project's groups that have developed a gender policy</li> <li>• OC 5.2: % of respondents expressing attitudes that support gender-equitable roles in family life</li> <li>• OC 5.3: % of respondents expressing attitudes that reject household gender-based violence</li> <li>• OC 5.4: Women's mobility</li> <li>• OC 5.5: % of women reporting their sex as a barrier to participation in local groups / forums</li> </ul>	Baseline/ end-line; annual monitoring	Quantitative/ qualitative surveys; annual reports	External consultant; M&E Unit

## Annex 3: Pathways Baseline to Endline results

Table 47: Pathways Baseline to Endline results (Impact Indicators)

**Pathways Goal: To increase poor women farmers' productivity and empowerment in more equitable agriculture systems at scale.**

Impact Indicators <sup>A</sup>	Point Estimate		
	BL	EL	
<b>Food &amp; Nutrition Security</b>			
IM 1.1: Mean household dietary diversity scores	7.2	5.9	***
IM 1.2: Mean women's intra-household food access	7.0	5.5	***
<b>Livelihoods Resilience</b>			
IM 1.3: Coping strategies index	2.6	15.8	***
IM 1.4: % households adopting negative coping strategies in past 3 months	5.3	49.6	***
IM 1.5: % households using adaptation strategies to reduce the impact of future shocks	34.9	86.8	***
IM 1.6: Mean asset index (w/ ag land)	399.3	418.9	
<b>Economic Poverty Reduction</b>			
IM 1.7: Mean per capita monthly household income (All sources)	22.45	22.74	
IM 1.8: Mean per capita monthly household expenditures	16.35	38.01	***
IM 1.9: % households with savings	28.9	25.7	
IM 1.10: % women with savings	27.3	24.1	
<b>Women's Empowerment</b>			
IM 1.11: Women's 5 domains of empowerment score	59.9	72.3	***

Statistically different from baseline at the 10% (\*), 5% (\*\*) or 1% (\*\*\*) levels.

<sup>A</sup>Detailed sample size and disaggregation provided in indicator specific tables

Table 43: Pathways Baseline to Endline results (Outcome Indicators 1 - 3)

Outcome Indicators <sup>A</sup>		Point Estimate		
		BL	EL	
<b>Outcome 1: Improved knowledge, skills, relationships, self-confidence and conviction of poor women farmers</b>				
CAPACITY	OC 1.1: % women participating in formal and informal groups	96.0	98.1	*
	OC 1.2: % women holding leadership positions in formal and informal groups (of active members)	43.5	52.1	***
	OC 1.3: % respondents confident speaking in public about gender and other community issues at the local level			
	Female respondents	66.5	61.9	
	Male respondents	94.2	92.1	
<b>Outcome 2: Increased access to productive resources, assets, markets, and appropriate and reliable services and inputs for poor women farmers</b>				
ACCESS	OC 2.1: % women with access to and control over loans for IGA (of women to take loan or want to take a loan)	18.2	24.8	**
	OC 2.2: % women with access to agricultural extension services in last 12 months	29.7	66.2	***
	OC 2.3: % women reporting satisfaction with agricultural extension services	74.1	55.5	***
	OC 2.4: % women accessing agricultural financial services (loans, savings, crop insurance) in last 12 months	97.6	95.7	*
	OC 2.5: % women accessing agricultural inputs (seeds, fertilizers, etc.) over the last 12 months	34.8	74.6	***
	OC 2.6: % women accessing output markets to sell agricultural production over the last 12 months	24.9	56.4	***
<b>Outcome 3: Improvements in yield and income through adoption of sustainable and intensified agriculture and value addition</b>				
PRODUCTIVITY	OC 3.1 Mean annual net income of women from agricultural production and/or related processing activities (Current USD 2015 )	205.92	275.61	**
	OC 3.2: Agricultural yield in crops (kilograms per hectore)			
	Cassava	1007.9	798.3	
	Sesame	191.9	300.5	**
	OC 3.3: Number of different crops grown	2.3	2.6	***
	OC 3.4: % women adopting 3 or more improved agricultural practices	21.2	46.6	***
	OC 3.5: % women farmers adopting 2 or more post-harvest processes	27.5	59.7	***
	OC 3.6: % women adopting improved storage practices	31.0	25.6	*
OC 3.7: % women using one or more improved livestock practice	33.1	42.7	***	

Statistically different from baseline at the 10% (\*) , 5%(\*\*) or 1%(\*\*\*) levels.

<sup>A</sup> Detailed sample size and disaggregation provided in indicator specific tables

Table 44: Pathways Baseline to Endline results (Outcome Indicators 4 - 5)

Outcome Indicators <sup>A</sup>		Point Estimate		
		BL	EL	
<b>Outcome 4: Increased poor women farmer contributions to and influence over household income and decision making</b>				
HOUSEHOLD INFLUENCE	OC 4.1: % women with sole or joint control over household income and expenditures	67.5	81.6	***
	OC 4.2: % women with sole or joint control over agricultural income and expenditures	64.0	77.9	***
	OC 4.3: % women with sole or joint decision-making and control over household assets	68.3	87.4	***
	OC 4.4: % women with sole or joint decision-making and control over agricultural assets	76.5	90.1	***
	OC 4.5: % women making sole or joint decisions about health care	86.0	93.9	***
	OC 4.6: % women reporting sole or joint decision-making over reproductive health decisions (family planning; spacing of children)	95.5	98.6	**
<b>Outcome 5: More positive and enabling attitudes, behaviors, social norms, policies and institutions</b>				
ENABLING ENVIRONMENT	OC 5.1: % of respondents expressing attitudes that support gender-equitable roles in family life			
	Female respondents	31.4	42.5	***
	Male respondents	22.9	34.6	**
	OC 5.2: % of respondents expressing attitudes that reject household gender-based violence			
	Female respondents	29.0	74.8	***
	Male respondents	22.9	70.0	***
	OC 5.3: Women's mobility	42.4	65.8	***
OC 5.4: % of women reporting their sex as a barrier to participation in local groups / forums	0.4	1.2		

Statistically different from baseline at the 10% (\*), 5%(\*\*) or 1%(\*\*\*) levels.

<sup>A</sup> Detailed sample size and disaggregation provided in indicator specific tables

## Annex 4: Quantitative Survey Instrument

### CARE Pathways TANZANIA

Endline Questionnaire

July-August, 2015

#### Module A: Identification

FILL IN . A1 – A7B BEFORE CONTACTING SAMPLED COLLECTIVE MEMBER.

No.	Question		Response		Skips
A1	Date of interview		DD / MM  _ _ / _ _		
A2	Enumerator Code		_   _		
A3	Which CARE project is the household being interviewed for?		Pathways.....1 WERISE.....2		
A4	District		Lindi Rural (WERISE).....1 Mtwara Rural (WERISE).....2 Masasi (Pathways).....3 Nachingwea (Pathways).....4		
A5	<b>Village (Lindi)</b>	<b>Village (Mtwara)</b>	<b>Village (Masasi)</b>	<b>Village (Nachingwea)</b>	
	1 Hingawali 2 Kilimahewa 'a' 3 Kilimahewa 'b' 4 Mahumbika 5 Mkwajuni 6 Mnimbila 7 Mnolela 8 Njonjo 9 Pangatena 10 Ruhokwe 11 Simana	1 Changarawe 2 Kawawa 3 Likonde 4 Mbuo 5 Mkunwa 6 Mwatehi 7 Namahyakata 8 Nanyati 9 Ndumbwe	1. Chikukwe/Mwambao 2. Chilimba 3. Chiungutwa 4. Kalangwale 5. Misechela 6. Mkungu 7. Mpindimbi 8. Nanganga	1. Chiwindi 2. Kilimahewa 3. Mkotokuyana 4. Mpiluka 5. Mwandila 6. Naipanga 7. Namapwia 8. Ndomoni 9. Rahaleo 10. Ruponda	
A6	Full name of sampled collective member <i>e.g., Fakia Mariam Chikaja</i>				
A7a	Household Number [From Household List]		_   _ _		
A7b	Re-enter Household Number [From Household List]		_   _ _		

A8	<p>Introduction</p> <p>Hello. My name is _____ and I work for [WE-RISE / PATHWAYS] project. We are conducting a baseline survey. The information we collect will be used for planning, implementation and evaluation of the project.</p>		
A9	<p>Is the sampled collective member available to be interviewed?</p>	<p>Yes...1 No...2</p>	<p><b>If No, end of Survey</b></p>
A10	<p>Introduction and consent</p> <p>You have been selected at random to participate in this survey. Your participation is completely voluntary and you may choose not to participate. Your responses will be kept confidential.</p> <p>We will be asking you questions about members of your household, agricultural practices, food security, and gender.</p> <p>Do you have any questions for me about the survey?</p> <p><b>Do you agree to participate in the survey?</b></p>	<p>Consent ....1 Does NOT consent .....2</p>	<p><b>If No, end of survey</b></p>

## Module B: Household roster

ASK THE HEAD OF HOUSEHOLD. IF NOT AVAILABLE, ASK THE MAIN FEMALE DECISION-MAKER OR OTHER RESPONSIBLE ADULT MEMBER OF THE HOUSEHOLD.

### DEFINITION OF HOUSEHOLD

A household is a group of people who live together and take food from the “same pot,” even if not blood relatives. In our survey, a household member is someone who has lived in the household at least 6 months, and at least half of the week in each week in those months.

Even those persons who are not blood relations (such as servants, lodgers, or agricultural laborers) are members of the household if they have stayed in the household at least 6 months and take food from the “same pot.” If someone stays in the same household but does not bear any costs for food or does not take food from the same pot, they are not considered household members. For example, if two brothers stay in the same house with their families but they do not share food costs and they cook separately, then they are considered two separate households.

Generally, if one person stays more than 3 months out of the last 6 months outside the household, they are not considered household members. We do not include them even if other household members consider them as household members.

Exceptions to these rules should be made for:

Consider as HOUSEHOLD member

- A NEWBORN child less than 3 months old.
- Someone who has joined the household through marriage less than 3 months ago.
  - Servants, lodgers, and agricultural laborers currently in the household and will be staying in the household for a longer period but arrived less than 3 months ago.

Do not consider as HOUSEHOLD member

- A person who died very recently though stayed more than 3 months in last 6 months.
- Someone who has left the household through marriage less than 3 months ago.
  - Servants, lodgers, and agricultural laborers who stayed more than 3 months in last 6 months but left permanently.

**This definition of the household is very important.** The criteria could be different from other studies you may be familiar with, but you should keep in mind that you should not include those people who do not meet these criteria. Please discuss any questions with your supervisor.

**The HEAD OF HOUSEHOLD is the the primary decision-maker for the household**

**SAY TO RESPONDENT** “Please tell me the name and sex of each person who lives here, starting with the head of the household. Let me tell you a little bit about what we mean by ‘household.’ For our purposes today, members of a household are those that live together and eat from the “same pot.” Each person contributes to and benefits from the household. It should include anyone who has lived in your house for 6 of the last 12 months, but it does not include anyone who lives here but eats separately.”

**LIST THE HEAD OF HOUSEHOLD FIRST and fill in all information in the household listing. THEN ASK: “Does anyone else live here even if they are not at home now. These may include children in school or household members at work.” IF YES, COMPLETE THE LISTING. THEN, COLLECT THE REMAINING COLUMNS OF INFORMATION FOR EACH MEMBER, ONE PERSON AT A TIME.**

Line No	B1 Name List full name for HH head.	B2 Relationship to head of HH  see codes	B3 Sex 1 = Male 2=Female	B4 Please tell me how old [NAME] is. How old was [NAME] on his/her last birthday?  (if less than one year, enter “0”)  <b>If &lt;= 5 go to next HH member</b>	B5 Marital status  see codes	B6 Highest level of education achieved	B7 Can [NAME] read and write?  Yes = 1 No = 2	B8 <b>Eligible for Module C</b> Is this <b>female</b> engaged in agriculture or livestock activities? If yes, put a checkmark  Yes = 1 No = 2	B9 <b>Eligibility for Modules D-M</b>  Is this <b>female</b> the collective member?  Yes = 1 No = 2
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									

Source codes:

Column B5: Marital status	Column B2: Relationship to Head of HH	Column B6: Highest level of education received
Single .....1 Married <=2 years).....2 Married > 2 years .....3 Divorced.....4 Widow/er.....5	1 = Head of household 2 = Spouse 3 = Child (step/in-laws) 4 = Grandchild 5 = Parent/grandparent (step/in-laws) 6 = Sibling (including step/in-laws) 7 = Cousin 8 = Nephew/niece 9 = Aunt/uncle 10 = Other	0 = No education 1= started primary (not completed) 2 = Primary 3 = Secondary 4= Tertiary (Technical or University) 5= Adult Education
B10 Is any member of the Household disabled?		1 Yes 2 No
B11 What type of disability? (Select up to four)		Vision Impaired Hearing impaired Speech and Language Upper Limbs Lower limbs Mobility Mentally Impaired Other

### Module C. Expanded Coping Strategies Index (CSI)

ASK THE HEAD OF HOUSEHOLD. IF NOT AVAILABLE, ASK THE FEMALE DECISION-MAKER OR OTHER RESPONSIBLE ADULT MEMBER OF THE HOUSEHOLD.

Question		For frequency, write number: 0 = never 1= 1 day each week 2= 2-3 days each week 3= 4-6 day each week 4= daily				
<b>O1. In the past 3 months, were there times when you did not have food or enough money to buy food?</b>  Yes = 1 No = 2  <input type="checkbox"/>		<b>Frequency (tick one)</b>				
<b>If No End Module</b>		<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>If yes, what are the main coping strategies used by the household in the past 30 days?</b>						
<b>C2</b>	Borrowed food or borrowed money to buy food					
<b>C3</b>	Relied on less preferred or less expensive foods					
<b>C4</b>	Reduced the number of meals or the quantity eaten per day					
<b>C5</b>	Skipped eating due to lack of money or food for entire day					
<b>C6</b>	Consumed taboo food, wild food, famine foods which are normally not eaten					
<b>C7</b>	Restricted consumption of some family members so that others could eat normally or more					
<b>C8</b>	Eat seed stock held for next season					
<b>C9</b>	Beg or scavenge					

**C10. Did the household use any of the following strategies over the last 3 months to cope with food or income scarcity? Read all responses and SELECT ALL THAT APPLY**

*Pledge or sell labour/crops/livestock in advance..... 1*  
*Receive remittances (food or cash) from relatives, friends .....2*

<i>Take a loan with interest</i> .....	3
<i>Slaughter more animals than normal</i> .....	4
<i>Request local government for assistance</i> .....	5
<i>Lower school attendance or drop out from school</i> .....	6
<i>Reduce expenditures (e.g., health care, education)</i> .....	7
<i>Reduce expenditure on livestock and agricultural inputs</i> .....	8
<i>Sell a higher number of livestock than usual</i> .....	9
<i>Unusual sales (e.g., household assets, firewood, charcoal, etc.)</i> .....	10
<i>Migrate</i> .....	11
<i>Send children away to better-off relatives and friends</i> .....	12
<i>Rely on own savings</i> .....	13
<i>Participate in food for work/ cash for work programs</i> .....	14
<i>Sell Seed stock held for next season</i> .....	15
<i>None listed</i> .....	16

## Module D. Shocks

ASK THE HEAD OF HOUSEHOLD. IF NOT AVAILABLE, ASK THE FEMALE DECISION-MAKER OR OTHER RESPONSIBLE ADULT MEMBER OF THE HOUSEHOLD.

Code	Shocks	D1. Over the last 5 years, has the HH experienced any of the following unexpected shocks?  No.....2 Yes.....1  [READ ALL RESPONSES] [SELECT ALL THAT APPLY]  If no, go to next shock	D2. How many years ago was the most recent occurrence?  (This year=0)	D3. How did this shock impact the HH ?  <i>Do not read responses (See codes below)</i>  Select up to 5 responses  If response 1, skip to next shock	D4. What did you do to cope with its effect?  <i>Do not read responses (See codes below)</i>  Select up to 5 responses	D5. What is the HH's current condition after the shock?  <i>Worse than before=1 Better than before=2 Same as before = 3</i>  If 3, skip to D7	D6. Who in HH is the most affected?  <i>All in HH =1 Adult Women = 2 Adult Men = 3 Children =4 Women &amp; children = 5</i>	D7. What have you done to protect your HH from the impact of [shock] in the future?  (See codes below)  Select all that apply
			D2	D3	D4	D5	D6	D7
A	Death of HH income earning members							
B	Chronic illness or severe accident of HH member							
C	Loss of a regular job of a HH member							
D	Divorce or abandonment							
E	Theft							
F	Major drought							
G	Issues with division of father's property							
H	Failure or bankruptcy of business							
I	decreased or cut off regular remittances							
J	Major conflicts							

<b>K</b>	Epidemic disease (crop, livestock, human)							
<b>L</b>	Sudden or dramatic increase in food prices							
<b>D3. Impacts</b>								
No impact	1		Lost land.....	5		Lost equipment/materials.....	9	
House destroyed/damaged	2		Loss of Income .....	6		Displaced HH.....	10	
Increased illness in HH	.....3		Loss of crops.....	7		Forced to change occupation.....	11	
HH more indebted	.....4		Lost livestock.....	8		Other .....	12	
<b>D4. Coping strategies</b>								
Nothing .....	1		Ate less/lower quality food.....	6		Got assistance from gov't, NGO, friends).....	11	
Sold/mortgaged/leased land .....	2		Took children out of school.....	7		Spent savings.....	12	
Sold/mortgaged productive asset (land, bicycle, oxcarts)...	3		Sent children to work.....	8		Sold luxury items/ jewelry.....	13	
Took loan from NGO/institution.....	4		Sent children to live with others.....	9		Other .....	14	
Took loan from moneylender .....	5		Migration of HH member for work..	10				
<b>D7. Adaptation strategies</b>								
Nothing .....	1		Diversified income generating activities .....					
Accessed additional land .....	2		Purchased additional livestock.....					
Use of drought tolerant crops .....	3		Invested in savings .....					
Invested in irrigation infrastructure.....	4		Other (specify.....)	8				

## Module E. Major Sources of Cash Income

ASK THE HEAD OF HOUSEHOLD. IF NOT AVAILABLE, ASK THE FEMALE DECISION-MAKER OR OTHER RESPONSIBLE ADULT MEMBER OF THE HOUSEHOLD.

Enumerator: Read each source and record answers before moving to next source.

	Sources	E1. Who earned income from this [activity] over the last 12 months?  Men=1 Women=2 Both Men and Women =3 Children = 4 All HH Members =5 No one = 6  If 6, skip to next Source	E2. How many months in the last 12 months did this [activity] generate income?	E3. How much does the household earn from [activity] each month?  (TSH)	E4. Who was primarily responsible for decisions on how this income was spent?  Men=1 Women=2 Both Men and Women =3
<b>A</b>	Agriculture wage labour				
<b>B</b>	Non-agriculture: wage labour				
<b>C</b>	Skilled labor				
<b>D</b>	Small business activities (street vending, shopkeeping)				
<b>E</b>	Formal Employee Gov't, NGO, private)				
<b>F</b>	Handicrafts				
<b>G</b>	Remittances (foreign, domestic)				
<b>H</b>	Firewood / charcoal sales				

	<b>Sources</b>	<b>E5. Who earned income from this [activity] over the <u>last 12 months?</u></b>  Men=1 Women=2 Both men and women =3 Children = 4 No one = 5 <b>If 5, skip to next source</b>	<b>E6. Estimated <u>annual</u> earnings from [activity]</b>  (TSH)	<b>E7. Estimated <u>annual</u> cost of inputs</b>  (TSH)	<b>E8. Who was primarily responsible for decisions regarding this income?</b>  Men=1 Women=2 Both =3
<b>A</b>	<i>Crop sales (own production, Household gardening)</i>				
<b>B</b>	<i>Sales of livestock and livestock products(milk, meat,</i>				
<b>C</b>	<i>Nursery products (vegetable, fruits/ forest products, seedling)</i>				
<b>D</b>	<i>Seed selling (cereals, vegetables, herbs)</i>				
<b>E</b>	<i>Beekeeping</i>				
<b>F</b>	<i>Aquaculture</i>				
<b>G</b>	<i>Fishing</i>				
<b>H</b>	<i>Other</i>				

## Module F. Household Expenditures

ASK THE HEAD OF HOUSEHOLD. IF NOT AVAILABLE, ASK THE FEMALE DECISION-MAKER OR OTHER RESPONSIBLE ADULT MEMBER OF THE HOUSEHOLD.

	Type of expenditure  (Ask separately about each item and take detail)	F2. How much was spent on [item] (TSH) DNK = -9 Enter 0 if no expenditure If 0 skip to next item.	F3. Who typically makes decisions about spending for [item]?  Primarily men=1 Primarily women=2 Both equally=3
<b>Recall period : Last 7 days</b>			
	<b>Food</b>		
a	<i>Cereals</i>		
b	<i>Beans, peas, lentils, groundnuts</i>		
c	<i>Meat/fish</i>		
d	<i>Vegetables</i>		
e	<i>Milk/dairy products</i>		
f	<i>Other</i>		
	<b>Other</b>		
g	<i>Firewood/ Charcoal, Kerosene/Petrol</i>		
h	<i>Mobile phone</i>		
<b>Recall period : Last 30 days</b>			
J	<b>House rent or mortgage</b>		
	<b>Treatment cost</b>		
K	<i>Fees for doctors/clinics /traditional practices</i>		
L	<i>Medicines (traditional and modern)</i>		
	<b>Utilities</b>		
M	<i>Rental of solar panels</i>		
	<b>Personal hygiene items and personal cosmetics</b>		
N	Personal hygiene items and personal cosmetics (soap etc)		
	<b>Transport</b>		
O	<i>Bus fares/ bicycle hire/bajaj/motorcycle</i>		
	<b>Others</b>		
p	<i>Money given to relatives and friends</i>		
Q	<i>Repayment of loan</i>		
R	<i>Other</i>		
<b>Recall period : 12 months</b>			
	<b>Livestock/agriculture</b>		

	<b>Type of expenditure</b>  (Ask separately about each item and take detail)	<b>F2. How much was spent on [item]</b> (TSH)  DNK = -9  Enter 0 if no expenditure  If 0 skip to next item.	<b>F3. Who typically makes decisions about spending for [item]?</b>  Primarily men=1 Primarily women=2 Both equally=3
S	<i>Animal purchases</i>		
T	<i>Veterinary fees</i>		
U	<i>Fertilizers/seeds/pesticides/herbicides</i>		
V	<i>Irrigation pump/tubing</i>		
W	<i>Farming equipment/tools</i>		
X	<i>Transportation of agricultural production</i>		
<b>Household items</b>			
Y	<i>Utensils/cooking items</i>		
Z	<i>Household Furniture (bed sheets, chair, table etc)</i>		
AA	<i>Household small appliances (TV, , iron, radio, etc)</i>		
AB	<i>Clothing and footwear</i>		
AC	<i>Bicycle/motorbike purchase</i>		
AD	<i>Solar panel purchase</i>		
AE	<i>Other</i>		
<b>Taxes</b>			
AF	<i>Tax (income, holding, land)</i>		
<b>Others Costs</b>			
AG	<i>Repair costs (HH items, house, care)</i>		
<b>Household event</b>			
AH	<i>Wedding costs/marriage day</i>		
AI	<i>Funeral</i>		
AJ	<i>Other religious/traditional/ social ceremonies (circumcision etc.)</i>		
<b>Education</b>			
AK	<i>School fees</i>		
AL	<i>Book/ exercise book/ pen/ pencil</i>		
AM	<i>Other education expenses (boarding, etc)</i>		
<b>Other Annual Expenses</b>			
AN	<i>Jewelry</i>		
AO	<i>House/Latrine construction</i>		
AP	<i>Water well construction</i>		

	<b>Type of expenditure</b>  (Ask separately about each item and take detail)	<b>F2. How much was spent on [item]</b> (TSH) DNK = -9 Enter 0 if no expenditure If 0 skip to next item.	<b>F3. Who typically makes decisions about spending for [item]?</b>  Primarily men=1 Primarily women=2 Both equally=3
AQ	<i>Land purchase</i>		
AR	<i>Postal charges</i>		
AS	<i>Other Annual Expenses</i>		

**Enumerators: the next section is for female collective members involved in agriculture.**

### **Module G. Agriculture**

**For this module, the woman who was interviewed at baseline should be interviewed. Confirm they are engaged in any agricultural activities, including as primary producers, laborers, processors or marketers of food, fiber, or fuel crops, large and small livestock, bees, fish, horticultural crops such as vegetables, fruit, nuts, berries, herbs or natural products (non-timber forest products and wild fisheries).**

No.	Question	Response codes	Responses/skips
G1	Is the women engaged in agricultural activities of the household available to be interviewed?	Yes = 1 No = 2	2= skip to H1
G2	What is her full name?		
G3	What is her relationship to the head of the household?	<ul style="list-style-type: none"> <li>Head of household</li> <li>Spouse</li> <li>Child (including step in-laws)</li> <li>Grandchild</li> <li>Parent/grandparent (step/in-laws)</li> <li>Sibling (including step/in-laws)</li> <li>Cousin</li> <li>Nephew/niece</li> <li>Aunt/uncle</li> <li>Other</li> </ul>	
G4	Has the respondent for this section already been interviewed for a previous section?	Yes > G6 No = 2	

G5	<p>Hello. My name is _____ and I work for Pathways/WERISE project. We are conducting a baseline survey for [WE-RISE / Pathways ] project. The information we collect will be used for planning, implementation and evaluation of the project.</p> <p>You have been selected at random to participate in this survey. Your participation is completely voluntary and you may choose not to participate. Your responses will be kept confidential.</p> <p>We will be asking you questions about your agricultural (crop/livestock) practices, value chain activities, improved storage techniques and access to financial services.</p> <p>Do you have any questions for me about the survey?</p> <p><b>Do you agree to participate in the survey?</b></p>	<p>Yes.....1 No.....2</p>	<p><b>If no, skip to H1</b> <input type="checkbox"/></p>
G6	<p>How were you (singular) engaged in agricultural or livestock/ aquaculture activities over the last 12 months?</p> <p><b>(select all that apply)</b> <b>Cannot select 6 and any other answer.</b></p>	<p>1=Make decisions about type of crops/livestock 2=Grow crops 3=Tend livestock 4=Sales and marketing 5=Post harvest processing 6= Provide paid labor only 7=Other</p>	<p><b>If 6 ONLY, skip to H1</b> <input type="checkbox"/></p>
<b>ACCESS TO INPUTS AND SERVICES</b>			
G7	<p>Did you (singular) access inputs from any of the following sources related to your agricultural activities during the last 12 months?</p> <p><b>Select all that apply</b> <b>Cannot select 7 and any other answer.</b></p>	<p>Cooperative or producer group.....1 Government program.....2 Agrodealer / input supplier within 5 km.....3 Agrodealer / input supplier farther than 5 km .....4 Local input producer (feed, seed multiplier, etc).....5 Other.....6 Did not access inputs.....7</p>	

<p><b>G8</b></p>	<p>Did you (singular) access market or extension information from any of the following sources during the last 12 months? <b>Select all that apply</b> <b>Cannot select 10 and any other answer.</b></p>	<p>Cell phone/SMS update.....1 Radio .....2 Television.....3 Government extension agents.....4 Other producers.....5 Collectors/traders (i.e. middlemen).....6 Input suppliers/agrodealer...7 NGOs.....8 Other.....9 No information received..10</p>	
<p><b>G9</b></p>	<p>How did you (singular) finance your agricultural activities during the last 12 months? <b>Select all that apply</b></p>	<p>Own income/savings.....1 MFI loan.....2 Agricultural cooperative.....3 Agricultural insurance.....4 VSLA.....5 Other.....6</p>	
<b>SUSTAINABLE AGRICULTURE PRACTICES/TECHNOLOGIES</b>			
<p><b>G10</b></p>	<p>Did you (singular) produce or sell any agricultural or homestead garden crops during the last 12 months?</p>	<p>Yes.....1 No.....2</p>	<p><b>If no, skip to G19</b>  <input type="checkbox"/></p>
<p><b>G11</b></p>	<p>Did you (singular) use any of the following sustainable agriculture practices/technologies for any of your crops in the last 12 months? <b>Select all that apply</b> <b>Cannot select 'none' and any other answer.</b></p>	<p>Minimum tillage.....1 Mulching.....2 Crop rotation.....3 Cover crops.....4 Manure or compost.....5 Alley cropping/intercropping..6 Improved seeds.....7 Increased number of crops (increased diversity)...8 Irrigation technologies...9 Soil erosion control (terraces, contours, grass strips).....10 Other.....11 None ...12</p>	

		<b>G12</b>	<b>G13</b>	<b>G14</b>	<b>G15</b>	<b>G16</b>	<b>G17</b>	<b>G18</b>
	Major crops grown in the most recent agricultural year	<b>Did you (singular) grow [crop] in the last 12 months</b>  Yes.....1 No.....2 If no, go to next crop	<b>Area Cultivated (Acres)</b>	<b>Annual Production (Kilograms)</b>  Mkungu for bananas	<b>Who primarily cultivates these crops?</b>  1=Men 2=Women 3=Both Men and Women 4 = Children 5 = All	<b>How has your harvest of [crop] changed over the last 5 years?</b>  Increased....1 No change...2 Decreased...3  <b>For each crop:</b> <b>If 1 <del>G17</del></b> <b>If 2 next crop</b> <b>If 3 <del>G18</del></b>	<b>Why has it been increasing?</b>  Fewer pests and/or diseases...1 Improved tools (farm implements) .....2 More Labour.....3 Good rains.....4 No floods/disaster...5 Cultivated more land.....6 Increased use of Fertilizers.....7 Use of pesticides....8 Improved seeds.....9 Use of improved practices.....10 Improved irrigation..11 Other.....12 <b>(Select all that apply)</b>	<b>Why has it been decreasing?</b>  Increased Pests/disease.....1 No inputs/tools.....2 Less labour.....3 No/bad rains.....4 Floods/disaster....5 Cultivated less land.....6 Market fluctuations..7 Decreasing soil fertility.....8 Other.....9  <b>(Select all that apply)</b>
A	Sugar Cane							
B	Cassava							
C	Maize							
D	Rice							
E	Sesame							
F	Groundnuts							
G	Banana							
H	Potato							
I	Cashew nuts							
J	Sweet Potato							

G19	In the last 12 months, did you (singular) use any natural resource management practices/techniques that are not directly related to on-farm production, such as [e.g., afforestation and reforestation, biodiversity conservation]?	Yes.....1 No.....2	If 2, skip to G21  <input type="checkbox"/>
G20	Which of the following natural resource management practices/techniques did you use during the last 12 months?  <b>Select all that apply</b>	Agroforestry.....1 Assisted natural regeneration.....2 Soil conservation.....3 Revegetation (planting of crop cover, etc.).....4 Gabions/Check Dam (protection of river embankments).....5 Biodiversity conservation.....6 Reforestation.....7 Afforestation.....8 Other-----9	
<b>SUSTAINABLE AGRICULTURE PRACTICES – LIVESTOCK</b>			
G21	Did you (singular) own or produce products from any livestock in the last 12 months?	Yes.....1 No.....2	if no, skip to G24
G22	Did you (singular) practice any of the following livestock management practices directly related to your <b>animals</b> during the last 12 months?  <b>Select all that apply</b>	Food complementation. ....1 De-worming.....2 Habitat construction.....3 Vaccination.....4 Artificial insemination.....5 Other services provided by a veterinary official.....6 Forage management.....7 Improved breeds.....8 Other.....9 None .....10	

		<b>C23</b>
		How many [ANIMAL] do you currently own? <i>Enter 0 for none.</i>
a	Cattle	
c	Donkeys	
d	Goats/sheep	
e	Poultry/chickens/rabbits/ducks	
f	Beehives (# of hives)	
g	Other livestock	

		<b>IMPROVED STORAGE TECHNIQUES</b>	
<b>G24</b>	During the last post-harvest period, did you store any crops that you grew?	Yes.....1 No.....2	<b>If 2 , skip to G27</b>
<b>G25</b>	What was the main method of storage that you (singular) used for this crop over the last 12 months?  <b>Select all that apply</b>	Improved locally made structure/granary.....1 Modern storage structure like cribs or silos.....2 Sealed/airtight containers...3 Improved cereal banks.....4 Improved community storing facilities.....5 Traditional storage .....6 Other.....7	
<b>G26</b>	What is the purpose of the crop being stored?  <b>Select all that apply</b>	Food for household consumption.....1 To sell for higher price.....2 Seed for planting.....3 Other .....4	
		<b>POST-HARVEST PROCESSING PRACTICES</b>	
<b>G27</b>	Did you (singular) practice any post-harvest processing practices with the production from your <b>[plot of land, animals]</b> during the last 12 months?  <b>Select all that apply</b>	Sorting.....1 Grading.....2 Processing (flour, etc.).....3 Packaging.....4 Bulk transport through farmers' groups.....6 Other 7 Wasn't involved with post-harvest processing.....8	
		<b>MARKETING PRACTICES</b>	
<b>G28</b>	Did you or anyone in your household sell any of the products from your [plot of land, animals,] during the last 12 months?	Self.....1 Husband.....2 Both jointly.....3 Nothing was sold.....4	<b>If 4, go to G31</b>

<b>G29</b>	Which of the following practices were used to sell the produce from your <b>[plot of land, animals]</b> during the last 12 months?  Select all that apply	Sold individually in local market.....1 Sold individually to middle men....2 Sold in bulk via farmer's / producer group.....3 Sold through contract with formal sector buyer.....4 Sold through the warehouse receipt system (Cashew nuts).....5 I don't know. ....6	
<b>RECORDKEEPING</b>			
<b>G30</b>	Did you (singular) practice any of the following <b>record keeping</b> practices to help you manage your <b>[plot of land, animals]</b> during the last 12 months?  Select all that apply	Kept track of expenses related to inputs, services, etc.....1 Kept track of production volumes.....2 Kept track of sales values.....3 Calculated profitability of my productive activities .....4 Did not practice any recordkeeping....5	
No.	Question	Response	Response options
<b>G31</b>	Have you (yourself) ever met with an agricultural extension worker or livestock/fisheries extension worker during the last 12 months?		Yes.....1 No .....2, <b>if no, end module</b>
<b>G32</b>	How many times did you meet with the agricultural extension worker or livestock/fisheries worker during the last 12 months?		
<b>G33</b>	What type of extension services have you received?  Select all that apply		None.....1 Improved agriculture practices...2 Improved livestock practices.....3 Agricultural Tools.....4 Improved seeds.....5 Inputs (fertilizer, pesticide, etc.) ...6 Veterinary services.....7 Other.....8
<b>G34</b>	The last time you met with an extension worker(s), were they a male or female?		Male.....1 Female.....2 Both male and female....3
<b>G35</b>	How satisfied were you with the extension services provided?		Not at all.....1 Somewhat...2 Mostly.....3 Very much.....4
<b>G36</b>	Who provided the extension services?  SELECT ALL THAT APPLY		Government (District agricultural and livestock development department).....1 NGO Staff.....2 Community based extension workers.....3 Other.....4

## Module H. Women’s Background Information

This module provides the background information for the CARE group member. This should be the female interviewed at the time of the baseline. This women will respond to Modules H through Module R.

<b>H1</b>	Is [FEMALE MEMBER FROM BASELINE] available to be interviewed at this time?	Yes = 1 No = 2	<b>2= SKIP TO MODULE R</b>
<b>H2</b>	Re-enter Household Number [From Household List]	_ _ _ _ _	<b>Validate from A7a</b>
<b>H3</b>	What is her relationship to the head of household?	Head of household Spouse Child (including step in-laws) Grandchild Parent/grandparent (step/in-laws) Sibling (including step/in-laws) Cousin Nephew/niece Aunt/uncle Other	
<b>H4</b>	Has the respondent for this section already been interviewed for a previous section?	Yes > H6 No = 2	

**H5.** Hello. My name is \_\_\_\_\_ and I work for WE-RISE / Pathways project. We are conducting a baseline survey. The information we collect will be used for planning, implementation and evaluation of the project.

You have been selected at random to participate in this survey. Your participation is completely voluntary and you may choose not to participate. Your responses will be kept confidential.

We will be asking you questions about members of your household, agricultural practices, food security, and gender roles and responsibilities.

Do you have any questions for me about the survey?

**Do you agree to participate in the survey?**

Yes = 1

No = 2 If no, Skip to Module R

**H6.** Is [NAME] able to be interviewed alone (see codes): |\_|\_|  
**(Up to two responses)**

**H7.** What is your PRIMARY occupation?

Code H6: Ability to be interviewed alone	
Alone .....	1
With adult females present .....	2
With adult males present .....	3
With adults mixed sex present .....	4
With children present .....	5

Code H7: Occupation	
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Self.....1	Self and other household member(s).....5	Self and other outside people.....8
Partner/Spouse.....2	Partner/Spouse and other household member(s).....6	Partner/Spouse and other outside people.....9
Self and partner/spouse jointly..3	Someone (or group of people) outside the	Self, partner/spouse and other outside people.....10
Other household member.....4	household.....7	

## Module J. Access to Credit

Enumerator: The purpose of this module is to get an idea about the respondents access to credit. **Record each loan taken out by by the RESPONDENT (female collective member).**

**J1** Have you taken out any loans the last 12 months for more than Tsh 20,000?  Yes ....1  
 No.....2

If yes, skip to **J4**

**J2** Did you want to borrow or get a loan in the last 12 months?  Yes ....1 No.....2

If no, skip to J11

**J3** Why were you not able to borrow? (see **CODE** below, enter up to 3 responses; then skip to **J11** )

Have enough money.....1  
 Afraid of losing collateral.....2  
 Do not have enough collateral/did not qualify for the loan....3  
 Afraid cannot pay back the money.....4  
 Interest rate/other costs too high.....5  
 Not allowed to borrow/family dispute in borrowing decision....6

Place of lender is too far.....7  
 Process is too long.....8  
 Provides few loans to women.....9  
 Doesn't provide service to women.....10  
 Other.....11

	Was the loan in cash or in-kind?  1=cash 2= in kind	Who made the decision to take out the loan?  <b>CODE 1</b>	Who made the decision about what to do with the money?  <b>CODE 1</b>	What was the loan mainly used for?  (List 3 most important uses)  <b>CODE 2</b>	What was the source of the loan?  <b>CODE 3</b>	What was the value of the loan? (Tsh)	Has this loan been paid off?  Yes = 1 No = 2	Did you take out any other loan in the last 12 months?
	<b>J4</b>	<b>J5</b>	<b>J6</b>	<b>J7</b>	<b>J8</b>	<b>J9</b>	<b>J10</b>	<b>J10_a</b>
<b>1<sup>st</sup> loan</b>								
<b>2<sup>nd</sup> loan</b>								
<b>CODE 1 (for J4/J5): Access to credit</b>			<b>CODE 2 (J7a,b,c): Uses</b>			<b>CODE 3 (J8): Loan source</b>		

Self.....1	Business capital (IGA, etc.) ..... 1	Friend/relative ..... 1
Partner/Spouse..... 2	Purchase agricultural inputs/seed .....2	Village savings and loans associations (VICOBA/VSLA).....2
Self and partner/spouse jointly ..... 3	Purchase/lease of land for agriculture 3	NGO.....3
Other household member..... 4	To purchase livestock .....4	Formal lender (bank, financial institution, MFI).....4
Self and other household member(s)..5	Pay for school expenses.....5	Informal lender/moneylender.....5
Partner/Spouse and other household member(s).....6	For medical expenses.....6	Other community group (SACCO).....6
Someone (or group of people) outside the household.....7	To buy food .....7	Government.....7
Self and other outside .....8	Clothing.....8	Shop/merchant .....8
Partner/Spouse and other outside people.....9	Housing.....9	Other.....9
Self, partner/spouse and other outside people.....10	To repay other loan..... 10	
	Furniture/utensils ..... 1	
	1	
	Funeral expenses.....12	
	Wedding.....13	
	Other (specify) ..... 1	
	4	

	QUESTION	ANSWER	SKIP
<b>J11</b>	Do you have any cash savings?	Yes ..... 1 No .....2	<b>If no, end module</b>
<b>J12</b>	Who has access to the savings?	Self only..... 1 Self and spouse.....2 Spouse only.....3	
<b>J13</b>	What is the current level of your savings? (Enter 0 if none) (if DNK = 9)	_ _ _ _ _ _ _ _ _  (TSH)	
<b>J14</b>	Where do you currently have savings?  <b>Select all that apply</b>	Home ..... 1 Friends/relatives .....2 Village savings and loans associations (VICOBA/VSLA) .....3 /SACCO, etc.....4 Bank/MFI .....5 Agricultural Cooperatives .....6 NGO .....7 Insurance Company.....8 Post office.....9 Other..... 10	
<b>J15</b>	What are your reasons for saving?  <b>Select all that apply</b>	In case of emergency.....1 Facing “seasonal hunger”.....2 Household asset purchase.....3 Productive asset purchase.....4 Education.....5 Healthcare/medicine.....6 Social event (wedding, etc.).....7 Invest in small business.....8 Other...(specify).....9	

## Module L. Individual leadership and influence in the community

Enumerator: The purpose of this module is to get an idea about women’s potential for leadership and influence in the communities where they live.

No.	Question	Response	Response options/Instructions
L1	Do you feel comfortable speaking up in public to help decide on infrastructure (like small wells, roads, water supplies) to be built in your community?		No, not at all comfortable ..... 1 Yes, but with a little difficulty ..... 2 Yes, very comfortable 3
L2	Do you feel comfortable speaking up in public to regarding gender issues (e.g., women’s rights, access to common resources, etc.)?		
L3	Do you feel comfortable speaking up in public to protest the misbehavior of authorities or elected officials?		

Group membership		Is there a [GROUP] in your community?  Yes ... 1 No .... 2 <b>If no, skip to next group</b>	Are you an active member of this [GROUP]?  Yes ... 1 No .... 2 <b>If Yes, go to H7</b>	Why are you not a member of this [GROUP]?  <b>Code 2 (up to 3 responses)</b>  <b>Go to next Group</b>	Do you hold a leadership position in this [GROUP]?  Yes... 1 No ... 2	
	Group Categories	L4	L5	L6	L7	
<b>A</b>	Agricultural / livestock/ fisheries producer's group (including marketing groups)					<b>CODE L6: Why not member of group</b>  Not interested.....1 No time.....2 Unable to raise entrance fees..3 Unable to raise reoccurring fees.....4 Group meeting location not convenient. ....5 Family dispute/unable to join...6 Not allowed because I am female....7 Not allowed because of other reason.....8
<b>B</b>	Water users' group					
<b>C</b>	Forest users' group (preservation groups)					
<b>D</b>	Credit or microfinance group (including SACCOs/ vicuba)					
<b>E</b>	Mutual help or insurance group (including burial societies,					
<b>F</b>	Trade,business, or cooperatives association					
<b>G</b>	Civic groups (improving community) or charitable group (helping others)					
<b>H</b>	Local government, Community Elders, village council					
<b>I</b>	Religious group					
<b>J</b>	Other women's group (only if it does not fit into one of the other categories)					
<b>K</b>	Other					
<b>L</b>	No groups exist					

## Module M. Women’s Decision making

Enumerator: The purpose of this module is to get an idea about men’s and women’s ability to make decisions.

<b>ENUMERATOR:</b>  If household does not engage in that particular activity, enter code for “Decision not made” and proceed to next activity.		M1. When decisions are made regarding [ACTIVITY], who normally makes the decision?  <b>CODE M1↓</b>  <b>If 8 “Decision not made” skip to next decision.</b>	M2. How much input do you have in making decisions about [ACTIVITY]?  <b>CODE M2↓</b>  <b>Avoid if M1=2</b>	M3. Did you (singular) participate in [ACTIVITY] in the last 12 months?  Yes.....1 No.....2	M4. How much input did you have in decisions on the use of income generated from [ACTIVITY]?  <b>CODE M4↓</b>
		<b>M1</b>	<b>M2</b>	<b>M3</b>	<b>M4</b>
<b>A</b>	Crops that are grown primarily for household food consumption				
<b>B</b>	Cash crop farming: crops that are grown primarily for sale in market				
<b>C</b>	Livestock raising?				
<b>D</b>	When or who would take products to the market?				
<b>E</b>	Non-farm business activity?				
<b>F</b>	What inputs to buy for agricultural production?				
<b>G</b>	Major household expenditures? (large appliances, etc.)				
<b>H</b>	Minor household expenditures? (such food for daily consumption or other household needs)				
<b>I</b>	Negotiate with buyers?				
<b>J</b>	Buying clothes for yourself?				
<b>K</b>	Spending money that you have earned?				

<b>L</b>	Spending money that your spouse has earned?				
<b>M</b>	Children's education				
<b>N</b>	Seeking medical treatment for your children or yourself in case of illness				
<b>O</b>	Whether or not to use family planning (including contraception) to space or limit births?				

<b>CODE M1: Decision making</b>	<b>CODE: M2/M4 Input into decision making</b>
Main male or husband.....1	No input .....1
Main female or wife.....2	Input into some decisions....2
Husband and wife jointly.....3	Input into most decisions.....3
Someone else in the household...4	Input into all decisions.....4
Jointly with someone else inside the household.....5	
Jointly with someone else outside the household.....6	
Someone outside the household/other.....7	
Decision not made.....8	

## Module N. Women’s Mobility

Enumerator: The purpose of this module is to get an idea about women’s mobility.

	Do you have to seek permission of your husband or other family member to go:	Yes, always 1	Yes, most often 2	Yes, but only now and then 3	No, Never have to 4
<b>N1</b>	To the market?				
<b>N2</b>	To a female friend’s house?				
<b>N3</b>	To the house of a member of your family?				
<b>N4</b>	To the church or mosque?				
<b>N5</b>	To a public village meeting?				
<b>N6</b>	To a meeting of any association of which you are a member?				
<b>N7</b>	Outside your village?				
<b>N8</b>	And undertake revenue generating activities?				
<b>N9</b>	Local social event (fair, festivals, etc.)?				
<b>N10</b>	To health care provider?				

## Module O. Women’s Political Participation

Enumerator: The purpose of this module is to get an idea about women’s political participation.

<b>O1</b>	Did you vote in the last parliamentary election/local election?	Yes = 1 No = 2 If no, skip to O3
<b>O2</b>	Who decided who you should vote for in the last election?	Myself ..... 1 My spouse ..... 2 Traditional elders..... 3 The Party..... 4 Other ..... 5
<b>O3</b>	What was the main reason you did not vote?	Disagreement with spouse.....1 I wasn’t aware.....2 No electoral card..... 3 Lack of time .....4 Does not concern me.....5 Other.....6
<b>O4</b>	Were you a candidate in the last parliamentary or local elections?	Yes = 1 No = 2
<b>O5</b>	In the last 12 months, have you expressed your opinion in a public meeting (other than VICOBA, or producer group regular meetings)?	Yes = 1 No = 2
<b>O6</b>	During the past 12 months, have you been a member of an advisory team for any community conflict resolution or in local government meetings?	Yes = 1 No = 2

## Module P. Women’s Perceptions on Gender Roles

Ask respondent whether she agrees or disagrees with the following statements.

	<b>Gender roles</b>	<b>Response</b> Agree = 1 Disagree = 2
P1	Personally, I think that most household decisions should be made by the man	
P2	Personally, I think that there is men's work and women's work and the one shouldn't ever do the work of the other	
P3	Personally, I think that if a woman works outside the home, her husband should help with child care and household chores.	
P4	Personally, I think that a husband should spend his free time with his wife and children.	
P5	Personally, I think a husband and wife should decide together about what kind of family planning to use	
P6	Personally, I think there are times when a women deserves to be hit	
P7	Personally, I think a woman must tolerate violence in order to maintain stability in the family	
P8	How many hours do you have available for leisure activity each day? (visiting neighbors, listening to the radio, playing sports or games etc)	_   _  Less than one hour enter 0.
P9	Are you satisfied that you have enough time for leisure activities like visiting neighbors, watching TV, listening to the radio or doing sports?	

### Module Q. Women's Self Image/confidence

Use the response codes to rate the following statements:

<b>No.</b>	<b>Statement</b>	<b>Response (see codes)</b>
Q1	I can always resolve household problems if I try hard enough	
Q2	If somebody opposes me, usually I can find a way to get what I want	
Q3	I always find some way to deal with problems that confront me	
Q4	I have the skills and information I need to improve my agricultural production	
Q5	I have access to the resources and services I need to improve my agricultural productivity	
Q6	I can take action to improve my life	
Q7	I can influence important decisions in my community	

<b>Response Codes</b>	
Strongly disagree (never agree).....	1
Somewhat disagree .....	2
Neither agree or disagree .....	3

Mostly agree .....	4
Strongly agree (always).....	5

**Enumerator: The next module is for the person in the household who is responsible for or knowledgeable about food preparation**

## Module R. Food Security (HDDS/Women’s consumption)

ASK THE PERSON RESPONSIBLE (OR KNOWLEDGABLE) FOR HOUSEHOLD FOOD PREPARATION.

No.	Question	Response codes	Responses
R1	"Is this women responsible for, <b>and/or knowledgeable about</b> , household food preparation?" If	Yes.....1 No.....0	<b>If yes skip to R4</b>
R2	"Locate person responsible for, <b>and/or knowledgeable about</b> , household food preparation. Has this person already been interviewed for a previous section?"	Yes.....1 No.....0 No person available = 3	<b>If yes, skip to R4</b> <input type="checkbox"/> <b>If No → end module</b>
R3	<p>Hello. My name is _____ and I work for X project. We are conducting a baseline survey for WE-RISE/Pathways project. The information we collect will be used for planning, implementation and evaluation of the project.</p> <p>You have been selected to participate in this survey because you are the primary person responsible for household food preparation. Your participation is completely voluntary and you may choose not to participate. Your responses will be kept confidential.</p> <p>We will be asking you questions about I would like to ask you about the types of foods that you or anyone else in your household ate yesterday during the day and at night.</p> <p>Do you have any questions for me about the survey?</p> <p><b>Do you agree to participate in the survey?</b></p>	Yes.....1 No.....0	<b>If No, end module</b>

<p><b>Household Dietary Diversity</b></p> <p>THE FOODS LISTED SHOULD BE THOSE PREPARED IN THE HOUSEHOLD AND EATEN IN THE HOUSEHOLD OR TAKEN ELSEWHERE TO EAT. DO NOT INCLUDE FOODS CONSUMED OUTSIDE THE HOME THAT WERE PREPARED ELSEWHERE.</p>	<b>Women’s intra-household access to food</b>
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<b>R5 During previous 24 hour period, did you or any household member eat [ insert food groups below]?</b>	<b>Yes.....1 No... 0  (if no Skip to next food group)</b>	<b>R6 Did any women over the age of 15 in this household eat this food item during the last 24 hours?</b>  All Women = 1 Some Women= 2 No Women=3  If 1 skip to next food group	<b>R7 Why did only some (or none) of the women eat this food?</b>  (Select all that apply)  Sick..... 1 Only enough for men..... 2 Only enough for children.....3 Cultural reasons ..... Dislike of food.....5 Women were absent...6
a Any <i>chapati, ugali, wali</i> , bread, rice, spaghetti, biscuits, or other foods made from millet, sorghum, maize, rice, or wheat?			
b Any tubers [e.g., potatoes, yams, cassava, or any other foods made from roots or tubers (e.g. Chipsi)?			
c Any vegetables (mchicha, kismvu, matembele, etc...)?			
d Any fruits?			
e Any meat?			
f Any eggs?			
g Any fish?			
h Any foods made from beans, peas, lentils, or nuts (e.g.)?			
i Any cheese, yogurt, milk, or other milk products?			
j Any foods made with oil,fat, or butter (ghee)?			
k Any sugar or honey?			
l Any other foods, such as condiments, coffee, tea?			

**This ends the women’s sections of the survey. Thank you for your time!**

## Men’s Questionnaire

**Modules S – BB are for the male that responded at baseline. If no male responded at baseline, interview another primary male decision-maker.  
If no adult male in household, end survey.**

### Module S. Men’s Background Information

<b>S1</b>	Is [three names from baseline sample ] available be interviewed at this time?	Yes = 1 No = 2 > skip to S4
<b>S2</b>	Respondent Number [From Respondent List]	_   _ _
<b>S3</b>	Is another adult male available be interviewed at this time?	Yes = 1 No = 2 > end survey
<b>S4</b>	What is the males relationship to the female group member respondent?	Spouse Child (including step in-laws) Grandchild Parent/grandparent (step/in-laws) Sibling (including step/in-laws) Cousin Nephew Uncle Other
<b>S5</b>	Enter the three names of MALE respondent: _____	<b>Avoid if S1=1</b>
<b>S6</b>	Has the respondent for this section already been interviewed for a previous section?	Yes > S8 No = 0

**S7.** Hello. My name is \_\_\_\_\_ and I work for WE-RISE/Pathways project. We are conducting a baseline survey. The information we collect will be used for planning, implementation and evaluation of the project.

You have been selected at random to participate in this survey. Your participation is completely voluntary and you may choose not to participate. Your responses will be kept confidential.

We will be asking you questions about members of your household, agricultural practices, food security, and gender roles and responsibilities.

Do you have any questions for me about the survey?

**Do you agree to participate in the survey?**

Yes = 1

No = 0 If no, end survey

<b>S8</b>	Is [NAME] able to be interviewed alone (see codes):  _   _ _  <b>(Up to two responses)</b>	Alone.....1 With adult females present.....2 With adult males present.....3 With adults mixed sex present.....4 With children present.....5
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S9	What is your PRIMARY occupation?	Crop sales (own production).....1 Livestock (milk, meat, sales, etc.)....2 Fish sales.....3 Wage labor (agr).....4 Wage labor (non-agr).....5 Small business activities.....6 Skilled labor (self-employed) ...7 Salaried worker (gov't, office, factory, etc.)....8 Nursery stock/seeds.....9 Firewood/charcoal sales.....10 Other .....11 None of the above.....12
S10	Are you in a polygamous marriage? <input type="checkbox"/>	Yes = 1 No = 0 > end module
S11	How many wives do you have? <input type="checkbox"/> <input type="checkbox"/>	

## Module T. Men’s Access to Credit

Enumerator: The purpose of this module is to get an idea about the respondents access to credit. **Record each loan taken out by the RESPONDENT.**

T1 Have you taken out any loans in the last 12 months for more than Tsh 20,000?   
Yes ....1  
No.....2  
If yes, skip to T4

T2 Did you want to borrow or get a loan in the last 12 months?  Yes ....1  
No.....2  
If no, Skip to T11

T3 Why were you not able to borrow? (see **CODE below, enter up to 3 responses; Skip to T11**)

- Have enough money.....1
- Afraid of losing collateral.....2
- Do not have enough collateral/did not qualify for the loan....3
- Afraid cannot pay back the money.....4
- Interest rate/other costs too high.....5
- Not allowed to borrow/family dispute in borrowing decision...6
- Place of lender is too far.....7
- Process is too lengthy .....8
- Provides few loans to men.....9
- Doesn't provide service to men.....10
- Other.....11

	Was the loan in cash or in-kind?	Who made the decision to take out the loan?	Who makes the decision about what to do with the Loan?	What was the loan mainly used for? (List 3 most important uses)			What was the source of the loan?	What was the value of the loan? (Tsh)	Has this loan been paid off?
	1=cash 2= in kind	CODE 1	CODE 1	CODE 2			CODE 3		Yes = 1 No = 2
	T4	T5	T6	T7a	T7b	T7c	T8	T9	T10
1									
2									

CODE 1 (for T5/T6): Access to credit	CODE 2 (T7a,b,c): Uses	CODE 3 (T8): Loan source
Self.....1 Partner/Spouse.....2 Self and partner/spouse jointly .....3 Other household member .....4 Self and other household member(s)..5 Partner/Spouse and other household member(s).....6 Someone (or group of people) outside the household.....7 Self and other outside .....8 Partner/Spouse and other outside people.....9 Self, partner/spouse and other outside people.....10	Business capital (IGA, etc.) ..... 1 agricultural inputs/seed.....2 Buy/lease of land for agriculture .....3 livestock .....4 Pay for school expenses .....5 For medical expenses .....6 To buy food.....7 To Repay Other Loan.....8 Clothing.....9 Housing.....10 Furniture/utensils .....11 Funeral expenses.....12 Wedding/Dowry.....13 Other (specify) ..... 14	Friend/relative ..... 1 Village savings and loans associations (VICOBA/VSLA).....2 NGO.....3 Formal lender (bank, financial institution, MFI)...4 Informal lender/moneylender.....5 Other community group (SACCO/IDIR).....6 Government.....7 Shop/merchant .....8 Other.....9

	QUESTION	ANSWER	SKIP
T11	Do you have any cash savings?	Yes ..... 1 No .....2	If no, end module
T12	Who has access to the savings?	Self ..... 1 Self and Spouse..... 2 Spouse Only ..... 3	
T13	What is the current level of your savings? (Enter 0 if none) (if DNK = 9)	_ _ _ _ _ _ _ _ _  (TSH)	
T14	Where do you currently have savings?  <b>Select all that apply</b>	Home ..... 1 Friends/relatives..... 2 Village savings and loans associations (VICOBA/VSLA)..... 3 SACCO, etc.....4 Bank/MFI..... 5 Agricultural Cooperatives..... 6	

		NGO.....7 Insurance Company.....8 Post office.....9 Other.....10	
<b>T15</b>	What are your reasons for saving? <b>Select all that apply</b>	In case of emergency.....1 Facing “seasonal hunger”.....2 Household asset purchase.....3 Productive asset purchase.....4 Education.....5 Healthcare/medicine.....6 Social event (wedding, etc.).....7 Invest in small business.....8 Other...(specify).....9	

## Module U. Men’s Access to Agriculture/livestock/fisheries extension

Enumerator: The purpose of this module is to get an idea about men’s access to extension services.

No.	Question	Response	Response options
<b>U1</b>	Have you (yourself) ever met with an agricultural extension worker or livestock/fisheries extension worker during the last 12 months?		Yes.....1 No .....2, <b>if no, end module</b>
<b>U2</b>	How many times did you meet with the agricultural extension worker or livestock/fisheries worker during the last 12 months?		
<b>U3</b>	What type of extension services have you received? <b>Select all that apply</b>		None.....1 Improved agriculture practices...2 Improved livestock practices.....3 Agricultural Tools.....4 Improved seeds.....5 Inputs (fertilizer, pesticide, etc.) ...6 Veterinary services.....7 Other.....8
<b>U4</b>	The last time you met with an extension worker, were they a male or female?		Male.....1 Female.....2 Both male and female.....3 (two extension workers)
<b>U5</b>	How satisfied were you with the extension services provided?		Not at all.....1 Somewhat...2 Mostly.....3 Very much.....4
<b>U6</b>	Who provided the extension services? <b>SELECT ALL THAT APPLY</b>		Government (District agricultural and livestock development department).....1 NGO Staff.....2 Community based extension workers.....3 Other.....4

## Module V. Men’s Individual leadership and influence in the community

Enumerator: The purpose of this module is to get an idea about men’s leadership and influence in the communities where they live.

No.	Question	Response	Read Respons options
V1	Do you feel comfortable speaking up in public to help decide on infrastructure (like small wells, roads, water supplies) to be built in your community?		No, not at all comfortable 1 Yes, but with a little difficulty 2 Yes, very comfortable.....3
V2	Do you feel comfortable speaking up in public regarding gender issues (e.g., women’s rights, access to common resources, etc.)?		
V3	Do you feel comfortable speaking up in public to protest the misbehavior of authorities or elected officials?		

<b>Group membership</b>		Is there a [GROUP] in your community?  Yes ... 1 No ....2 <b>If no, skip to next group</b>	Are you an active member of this [GROUP]?  Yes ... 1 No ....2 <b>If Yes, go to V7</b>	Why are you not a member of this [GROUP]?  <b>Code 2 (up to 3 responses)</b>  <b>Go to next Group</b>	Do you hold a leadership position in this [GROUP]?  Yes... 1 No .... 2	
	Group Categories	V4	V5	V6	V7	
<b>A</b>	Agricultural / livestock/ fisheries producer's group (including marketing groups)					<b>CODE 2: (V6) Why not member of group</b>  Not interested.....1 No time.....2 Unable to raise entrance fees..3 Unable to raise reoccurring fees...4 Group meeting location not convenient. ....5 Family dispute/unable to join...6 Not allowed because I am male....7 Not allowed because of other reason.....8
<b>B</b>	Water users' group					
<b>C</b>	Forest users' group (Preservation groups)					
<b>D</b>	Credit or microfinance group (including SACCOs/ VSLA/vicoba)					
<b>E</b>	Mutual help or insurance group (including burial societies)					
<b>F</b>	Trade,business, or cooperatives association					
<b>G</b>	Civic groups (improving community) or charitable group (helping others)					
<b>H</b>	Local government, Community elders, village council					
<b>I</b>	Religious group					
<b>J</b>	Other (specify)					

## Module W. Men's Decision making

Enumerator: The purpose of this module is to get an idea about men’s contributions to household decision making

<p><b>ENUMERATOR:</b> If household does not engage in that particular activity, enter code for “Decision not made” and proceed to next activity.</p>		<p>W1. When decisions are made regarding the following aspects of household life, who normally makes the [decision]?</p> <p><b>CODE 1</b> If W1 = 8, Skip to next item↓</p>	<p>W2. How much input do you have in making decisions about [ACTIVITY]?</p> <p><b>CODE 2↓</b></p>	<p>W4. Did you (singular) participate in [ACTIVITY] in the last 12 months?</p> <p>Yes.....1 No.....2</p> <p><b>If NO, skip to X1</b></p>	<p>W6. How much input did you have in decisions on the use of income generated from [ACTIVITY]?</p> <p><b>CODE 2↓</b></p>
		<b>W1</b>	<b>W2</b>	<b>W3</b>	<b>W4</b>
<b>A</b>	Food crop farming: crops that are grown primarily for household food consumption				
<b>B</b>	Cash crop farming: crops that are grown primarily for sale in market				
<b>C</b>	Livestock raising?				
<b>D</b>	When or who would take products to the market?				
<b>E</b>	Non-farm business activity?				
<b>F</b>	What inputs to buy for agricultural production?				
<b>G</b>	Major household expenditures? (large appliances, etc.)				
<b>H</b>	Minor household expenditures? (such food for daily consumption or other household needs)				
<b>I</b>	Negotiate with buyers?				

<b>J</b>	Buying clothes for yourself?				
<b>K</b>	Spending money that you have earned?				
<b>L</b>	Spending money that your spouse has earned?				
<b>M</b>	Children's education				
<b>N</b>	Seeking medical treatment for your children or yourself in case of illness				
<b>O</b>	Whether or not to use family planning (including contraception) to space or limit births?				

<b>CODE 1: W1 Decision making</b>	<b>CODE 2: W2/W4 Input into decision making</b>
Main male or husband.....1	No input .....1
Main female or wife.....2	Input into some decisions....2
Husband and wife jointly.....3	Input into most decisions....3
Someone else in the household....4	Input into all decisions.....4
Jointly with someone else inside the household.....5	
Jointly with someone else outside the household.....6	
Someone outside the household/other.....7	
Decision not made.....8	

## Module X. Men's attitudes about women's mobility and men's mobility

Enumerator: The purpose of this module is to get an idea about men's attitudes about women's mobility AND men's own mobility. **ONLY ONE RESPONSE** per question.

	Does your spouse have to seek your permission or other family member's permission to go:	Yes, always 1	Yes, most often 2	Yes, but only now and then 3	No, Never have to 4
<b>X1</b>	To the market?				
<b>X2</b>	To a friend's house?				
<b>X3</b>	To the house of a member of her family?				
<b>X4</b>	To the church or mosque?				
<b>X5</b>	To a public village meeting?				
<b>X6</b>	To a meeting of any association of which she is member?				
<b>X7</b>	Outside your village?				
<b>X8</b>	To undertake revenue generating activities?				
<b>X9</b>	To a local social event (fair, festival, etc.)?				
<b>X10</b>	To health care provider?				
	Do YOU have to seek permission from your spouse or other family member's permission to go:	Yes, always 1	Yes, most often 2	Yes, but only now and then 3	No, Never have to 4
<b>X11</b>	To the market?				
<b>X12</b>	To a friend's house?				
<b>X13</b>	To the house of a member of her family?				
<b>X14</b>	To the church or mosque?				
<b>X15</b>	To a public village meeting?				
<b>X16</b>	To a meeting of any association of which she is member?				
<b>X17</b>	Outside your village?				
<b>X18</b>	To undertake revenue generating activities?				
<b>X19</b>	To a local social event (fair, festival, etc.)?				
<b>X20</b>	To health care provider?				

## Module Y. Men's Political Participation

Enumerator: The purpose of this module is to get an idea about men's political participation.

<b>Y1</b>	Did you vote in the last parliamentary election?	Yes = 1 No = 2 If no, skip to Y3
<b>Y2</b>	Who decided who you should vote for in the last election?	Myself ..... 1 My spouse ..... 2 Traditional elders..... 3 The party..... 4 Other .....5
<b>Y3</b>	What was the main reason you did not vote?	Disagreement with spouse .....1 I wasn't aware.....2 No electoral card..... 3 Lack of time .....4 Does not concern me.....5 Other.....6
<b>Y4</b>	Were you a candidate in the last parliamentary or local elections?	Yes = 1 No = 2
<b>Y5</b>	In the last 12 months, have you expressed your opinion in a public meeting (other than VICOBA, or producer group regular meetings)?	Yes = 1 No = 2
<b>Y6</b>	During the past 12 months, have you been a member of an advisory team for any community conflict resolution or in local government meetings?	Yes = 1 No = 2

## Module Z. Men's Perceptions on Gender Roles

ASK RESPONDENT whether he agrees or disagrees with the following statements.

	Gender roles	Response Agree = 1 Disagree = 2
Z1	Personally, I think that most household decisions should be made by the man	
Z2	Personally, I think that there is men's work and women's work and the one shouldn't ever do the work of the other	
Z3	Personally, I think that if a woman works outside the home, her husband should help with child care and household chores.	
Z4	Personally, I think that a husband should spend his free time with his wife and children.	
Z5	A husband and wife should decide together about what kind of contraception to use	
Z6	There are times when a woman deserves to be hit	
Z7	A woman must tolerate violence in order to maintain stability in the family	
Z8	How many hours do you have available for leisure activity each day? (visiting neighbors, listening to the radio, playing sports or games?)	_   _
Z9	Are you satisfied with the amount of time available for leisure activities?	Yes = 1 No = 2

## Module AA. Self Image/confidence

No.	ASK RESPONDENT to rate the following statements:	Response Codes Strongly disagree (never agree).....1 Somewhat disagree .....2 Neither agree or disagree .....3 Mostly agree .....4 Strongly agree (always).....5
AA1	I can always resolve household problems if I try hard enough	
AA2	If somebody opposes me, usually I can find a way to get what I want	
AA3	I always find some way to deal with problems that confront me	
AA4	I have the skills and information I need to improve my agricultural production	
AA5	I have access to the resources and services I need to improve my agricultural productivity	
AA6	I can take action to improve my life	
AA7	I can influence important decisions in my community	

**This ends the man's participation in the survey. Thank you...**

## Annex 5: Qualitative Survey Instruments

### PATHWAYS ENDLINE SURVEY

#### Focus Group: Female VSLA members

Date:

Facilitator:

Site:

Recorder:

#### Introduction

- Who we are; why we are here; how long the process will take;
- What will be done with the results of our work

#### Decision-making

1. Who in a household makes important household decisions? (*Probe for which decisions are considered “important.”*) Why?
2. What types of decisions **should** women make and men make? Which decisions should they make separately; which should they make together?
3. Please describe any changes to decision-making by men & women. Why and when have these changes taken place?
4. Are there certain types of households where women have a very strong influence in decision-making? *Probe for details.* Types of households where women have very little influence? *Probe for details.*

#### Gender equity & Women’s Empowerment

5. What is your definition of “women’s empowerment?” Describe a woman whom you would consider to be “empowered”. *Probe to understand why women are not empowered.*
6. What is your definition of “women’s rights”? *Probe to understand perceived limitations.*
7. Has your perspective on women’s empowerment or rights changed over the last four years? How?
8. Has land access, distribution and ownership between men and women changed in the last four years? Why or why not?

#### Collectives/groups

9. What types of collectives exist in the community? What are the benefits of belonging to a collective? Describe. Has this changed over the last four years?
10. Can anyone join a collective? Describe who can and can NOT join. Why or why not?

11. How has women's membership in collectives changed over the last four years? Increased? Decreased? Why/why not?
12. Do women hold leadership positions within collectives? Has this changed over the last four years? Are they involved with decision-making for the collective? Has this changed?
13. What are the collective by-laws? How do the by-laws encourage women's empowerment?
14. How does the collective respond to women's needs and priorities? Describe.
  - How do women provide input on their needs to the collective?

### Training

15. What, if any, types of training have you received? Describe type, frequency, how information was conveyed, etc. Who provided the training?
16. How have you used the training? Has the training you received changed the way you:
  - Cultivate crops/manage livestock
  - Manage money/business transactions
  - Market your product(s)
  - Engage with your community (e.g., participate in community activities, seek leadership roles, voice your opinion in public)

### Economic Change

17. What are the differences between men and women in accessing work, types of work, wages, and income generating activities? How has this changed over the last four years? Are there obstacles to women wanting to earn income? Probe.
18. What types of financial services are available to support the economic activities of community members? How are they accessed? Has this changed over the last four years?
19. Has the VSLA or other collective linked up with other financial institutions? What has been the effect of such linkages?
20. Do the financial institutions meet the needs of the community? Describe the terms of borrowing and repayment. Has this changed in the last four years? Probe for how, why, why not.
21. What, if any, restrictions/limitations do women face accessing these services? Has this changed over the last four years?
  - To what extent are women joint holders of collective-linked bank accounts?
  - To what extent are women accessing credit? Why/why not?

### Agriculture/value chains

22. What kinds of crops or livestock do women own or manage? Has this changed in the last four years?

- Any differences in crops/livestock owned/managed between women participating in the collective and those who are not?
23. Has women's access to markets changed over the last four years? How? Why/why not? Probe.
24. Has access to information/services from DAs and other agriculture extension agents changed over the last 4 years? In what way? How can it be improved?
25. Has access (available locally, affordable) to agricultural inputs (e.g., fertilizers, seeds, tools) changed over the last 4 years? How? Why/why not? What has changed? How could it be better?
- Are there differences in men and women's ability to access these inputs? Probe.
26. What, if any, roles are available for women in crop value chains? Are more women engaged in these value chains? Do other IG opportunities exist that women are missing out on? Are the crops the most relevant/best value chains to be pursuing

### **THIS IS A GOOD TIME/PLACE TO CONDUCT THE RANKING EXERCISE**

#### **Overall impression**

27. How has the project contributed to your community? How is this changed for your household? Do you feel your household livelihood has improved or worsened or stayed the same over the last 4 years? *Why better or worse or the same?*
28. How would you recommend improving the project? Probe

#### **Closing**

- Any questions for us; important information we are missing?
- Repeat main objective of study and what will be done with shared information.
- Thanks to all for their time and active/honest participation

## **PATHWAYS ENDLINE SURVEY**

### **Focus Group: male related to female members**

Date:

Facilitator:

Site:

Recorder:

#### **Introduction**

- Who we are; why we are here; how long the process will take;
- What will be done with the results of our work

#### **Decision-making**

29. Who in a household makes important household decisions? (*Probe for which decisions are considered "important."*) Why?

30. What types of decisions **should** women make and men make? Which decisions should they make separately; which should they make together?
31. Please describe any changes to decision-making by men & women. Why and when have these changes taken place?
32. Are there certain types of households where women have a very strong influence in decision-making? *Probe for details.* Types of households where women have very little influence? *Probe for details.*

### Gender equity & Women's Empowerment

33. What is your definition of "women's empowerment?" Describe a woman whom you would consider to be "empowered". *Probe to understand why women are not empowered.*
34. What is your definition of "women's rights"? *Probe to understand perceived limitations.*
35. Has your perspective on women's empowerment or rights changed over the last four years? How?
36. Have attitudes changed amongst men or traditional leaders? How? What kinds of changes? Why did these changes occur?
37. Has land access, distribution and ownership between men and women changed in the last four years? Why or why not?

### Collectives/groups

38. What types of collectives exist in the community? What are the benefits of belonging to a collective? Describe. Has this changed over the last four years?
39. Can anyone join a collective? Describe who can and can NOT join. Why or why not?
40. How has women's membership in collectives changed over the last four years? Increased? Decreased? Why/why not?
41. Do women hold leadership positions within collectives? Has this changed over the last four years? Are they involved with decision-making for the collective? Has this changed?

### Training

42. What, if any, types of training have you received? *Describe type, frequency, how information was conveyed, etc.* Who provided the training?
43. How have you used the training? Has the training you received changed the way you:
  - Cultivate crops/manage livestock
  - Manage money/business transactions
  - Market your product(s)

- Engage with your community (e.g., participate in community activities, seek leadership roles, voice your opinion in public)

### Economic Change

44. What are the differences between men and women in accessing work, types of work, wages, and income generating activities? How has this changed over the last four years? Are there obstacles to women wanting to earn income? Probe.
45. What types of financial services are available to support the economic activities of community members? How are they accessed? Has this changed over the last four years?
46. Has the VSLA or other collective linked up with other financial institutions? What has been the effect of such linkages?
47. Do the financial institutions meet the needs of the community? Describe the terms of borrowing and repayment. Has this changed in the last four years? Probe for how, why, why not.
48. What, if any, restrictions/limitations do you face accessing these services? Has this changed over the last four years?
  - To what extent are men/women joint holders of collective-linked bank accounts?
  - To what extent are men/women accessing credit? Why/why not?

### Socio-cultural

49. How have the needs of the most vulnerable (disabled, PLWHIV) been addressed?
  - Who are the most vulnerable groups of people in the community?
  - Have they received support from the project? Why or why not?

### Agriculture/value chains

50. What kinds of crops or livestock do women own or manage? Has this changed in the last four years?
  - Any differences in crops/livestock owned/managed between women participating in the collective and those who are not?
51. Has access to markets changed over the last four years? How? Why/why not? Probe.
52. Has access to information/services from DAs and other agriculture extension agents changed over the last 4 years? In what way? How can it be improved?
53. Has access (available locally, affordable) to agricultural inputs (e.g., fertilizers, seeds, tools) changed over the last 4 years? How? Why/why not? What has changed? How could it be better?
  - Are there differences in men and women's ability to access these inputs? Probe.
54. What, if any, roles are available for women in crop value chains? Are more women engaged in these value chains? Do other IG opportunities exist that women are missing out on? Are the crops the most relevant/best value chains to be pursuing

## THIS IS A GOOD TIME/PLACE TO CONDUCT THE RANKING EXERCISE

### Overall impression

55. How has the project contributed to your community? How is this changed for your household? Do you feel your household livelihood has improved or worsened or stayed the same over the last 4 years? *Why better or worse or the same?*
56. How would you recommend improving the project? Probe

### Closing

- Any questions for us; important information we are missing?
- Repeat main objective of study and what will be done with shared information.
- Thanks to all for their time and active/honest participation

## PATHWAYS ENDLINE SURVEY

### Focus Group: Female non-members

Date:

Facilitator:

Site:

Recorder:

### Introduction

- Who we are; why we are here; how long the process will take;
- What will be done with the results of our work

### Decision-making

57. Who in a household makes important household decisions? (*Probe for which decisions are considered “important.”*) Why?
58. What types of decisions **should** women make and men make? Which decisions should they make separately; which should they make together?
59. Please describe any changes to decision-making by men & women. Why and when have these changes taken place?
60. Are there certain types of households where women have a very strong influence in decision-making? *Probe for details.* Types of households where women have very little influence? *Probe for details.*

### Gender equity & Women’s Empowerment

61. What is your definition of “women’s empowerment?” Describe a woman whom you would consider to be “empowered”. *Probe to understand why women are not empowered.*
62. What is your definition of “women’s rights”? *Probe to understand perceived limitations.*

63. Has your perspective on women's empowerment or rights changed over the last four years? How?
64. Has it changed amongst men or traditional leaders? How? What kinds of changes? Why did these changes occur?
65. Has land access, distribution and ownership between men and women changed in the last four years? Why or why not?

### **Collectives/groups**

66. What types of collectives exist in the community? What are the benefits of belonging to a collective? Describe. Has this changed over the last four years?
67. Can anyone join a collective? Describe who can and can NOT join. Why or why not?
68. How has women's membership in collectives changed over the last four years? Increased? Decreased? Why/why not?
69. Do women hold leadership positions within collectives? Has this changed over the last four years? Are they involved with decision-making for the collective? Has this changed?

### **Economic Change**

70. What are the differences between men and women in accessing work, types of work, wages, and income generating activities? How has this changed over the last four years? Are there obstacles to women wanting to earn income? Probe.
71. What types of financial services are available to support the economic activities of community members? How are they accessed? Has this changed over the last four years?
72. Do the financial institutions meet the needs of the community? Describe the terms of borrowing and repayment. Has this changed in the last four years? *Probe for how, why, why not.*
73. What, if any, restrictions/limitations do women face accessing these services? Has this changed over the last four years?
  - To what extent are women joint holders of collective-linked bank accounts?
  - To what extent are women accessing credit? Why/why not?

### **Agriculture/value chains**

74. What kinds of crops or livestock do women own or manage? Has this changed in the last four years?
  - Any differences in crops/livestock owned/managed between women participating in the collective and those who are not?

75. Has women's access to markets changed over the last four years? How? Why/why not?  
*Probe.*

76. Has access to information/services from DAs and other agriculture extension agents changed over the last 4 years? In what way? How can it be improved?

77. Has access (available locally, affordable) to agricultural inputs (e.g., fertilizers, seeds, tools) changed over the last 4 years? How? Why/why not? What has changed? How could it be better?

- Are there differences in men and women's ability to access these inputs? *Probe.*

78. What, if any, roles are available for women in crop value chains? Are more women engaged in these value chains? Do other IG opportunities exist that women are missing out on? Are the crops the most relevant/best value chains to be pursuing

## **THIS IS A GOOD TIME/PLACE TO CONDUCT THE RANKING EXERCISE**

### **Overall impression**

79. How has the project contributed to your community? How is this changed for your household? Do you feel your household livelihood has improved or worsened or stayed the same over the last 4 years? *Why better or worse or the same?*

80. How would you recommend improving the project? *Probe*

### **Closing**

- Any questions for us; important information we are missing?
- Repeat main objective of study and what will be done with shared information.
- Thanks to all for their time and active/honest participation

## **PATHWAYS ENDLINE SURVEY**

### **Focus Group or KI: community leaders**

Date:

Facilitator:

Site:

Recorder:

### **Introduction**

- Who we are; why we are here; how long the process will take;
- What will be done with the results of our work

### **Decision-making**

81. Who in a household makes important household decisions? (*Probe for which decisions are considered "important."*) Why?

82. What types of decisions **should** women make and men make? Which decisions should they make separately; which should they make together?

83. Please describe any changes to decision-making by men & women. Why and when have these changes taken place?
84. Are there certain types of households where women have a very strong influence in decision-making? *Probe for details.* Types of households where women have very little influence? *Probe for details.*

### **Gender equity & Women's Empowerment**

85. What is your definition of “women’s empowerment?” Describe a woman whom you would consider to be “empowered”. *Probe to understand why women are not empowered.*
86. What is your definition of “women’s rights”? *Probe to understand perceived limitations.*
87. Has your perspective on women’s empowerment or rights changed over the last four years? How?
88. Have attitudes changed amongst men or traditional leaders? How? What kinds of changes? Why did these changes occur?
89. Has land access, distribution and ownership between men and women changed in the last four years? Why or why not?

### **Collectives/groups**

90. What types of collectives exist in the community? What are the benefits of belonging to a collective? Describe. Has this changed over the last four years?
91. Can anyone join a collective? Describe who can and can NOT join. Why or why not?
92. How has women’s membership in collectives changed over the last four years? Increased? Decreased? Why/why not?
93. Do women hold leadership positions within collectives? Has this changed over the last four years? Are they involved with decision-making for the collective? Has this changed?

### **Training**

94. What, if any, types of training have you received? *Describe type, frequency, how information was conveyed, etc.* Who provided the training?
95. How have you used the training? Has the training you received changed the way you:
- Cultivate crops/manage livestock
  - Manage money/business transactions
  - Market your product(s)
  - Engage with your community (e.g., participate in community activities, seek leadership roles, voice your opinion in public)

### **Economic Change**

96. What are the differences between men and women in accessing work, types of work, wages, and income generating activities? How has this changed over the last four years? Are there obstacles to women wanting to earn income? Probe.
97. What types of financial services are available to support the economic activities of community members? How are they accessed? Has this changed over the last four years?
98. Has the VSLA or other collective linked up with other financial institutions? What has been the effect of such linkages?
99. Do the financial institutions meet the needs of the community? Describe the terms of borrowing and repayment. Has this changed in the last four years? *Probe for how, why, why not.*
100. What, if any, restrictions/limitations do you face accessing these services? Has this changed over the last four years?

- To what extent are men/women joint holders of collective-linked bank accounts?
- To what extent are men/women accessing credit? Why/why not?

### **Socio-cultural**

101. How have the needs of the most vulnerable (disabled, PLWHIV) been addressed?
- Who are the most vulnerable groups of people in the community?
  - Have they received support from the project? Why or why not?

### **Agriculture/value chains**

102. What kinds of crops or livestock do women own or manage? Has this changed in the last four years?
- Any differences in crops/livestock owned/managed between women participating in the collective and those who are not?
103. Has access to markets changed over the last four years? How? Why/why not? *Probe.*
104. Has access to information/services from DAs and other agriculture extension agents changed over the last 4 years? In what way? How can it be improved?
105. Has access (available locally, affordable) to agricultural inputs (e.g., fertilizers, seeds, tools) changed over the last 4 years? How? Why/why not? What has changed? How could it be better?
- Are there differences in men and women's ability to access these inputs? Probe.
106. What, if any, roles are available for women in crop value chains? Are more women engaged in these value chains? Do other IG opportunities exist that women are missing out on? Are the crops the most relevant/best value chains to be pursuing

### **THIS IS A GOOD TIME/PLACE TO CONDUCT THE RANKING EXERCISE**

### **Overall impression**

107. How has the project contributed to your community? How is this changed for your household? Do you feel your household livelihood has improved or worsened or stayed the same over the last 4 years? *Why better or worse or the same?*

108. How would you recommend improving the project? Probe

### Closing

- Any questions for us; important information we are missing?
- Repeat main objective of study and what will be done with shared information.
- Thanks to all for their time and active/honest participation

## CARE Pathways

### ENDLINE EVALUATION

## CARE & Partner KI/FGD Topical Outline

These questions will be asked of CARE and partner managers and staff and Local Government officials who know the project at the national and local levels. The questions are open-ended to encourage discussion.

### I. General Background

- A. What is your current position? What is your association with the Pathways project? How long have you worked with Pathways?
- B. What activities are you engaged in?

### II. Activities

#### A. Project Design and Implementation

1. Were the right activities identified? Have the activities fit the needs of the communities? Are the activities appropriate to the local context? Why or why not?
2. What Project activities were missing?

#### B. Project Implementation

1. Was the program implemented effectively? Please elaborate.
2. Which activities have proved to be the most successful? Why?
3. Which activities have not been successful? Why?
4. Which areas of programme implementation could have been improved?

5. Do you think there were any unanticipated positive or negative consequences of the project?  
Please explain.

C. Collaboration with Government Extension Offices & Partners

1. Has Pathways successfully integrated programme activities within the local development plans? What is the collaboration with other programs or projects?
2. Please describe the Pathways training. What types of training? How were farmers or collective members selected to participate? What were the most successful training activities? What were less successful training activities? Why?
3. Please discuss collaboration with partners. Have there been any problems with collaboration? Describe.
4. Describe partner or CARE performance. (Ask CARE about partner performance; ask partners about CARE performance) Has the partner been a good partner? Why or why not?

D. Gender

1. What was the project's strategy to engage men or women on gender issues? Has that strategy been effective? Why or why not?
2. Has the project brought about any changes in attitudes about women's economic or social empowerment? How? If not, why not?

E. VSLA/Pathways Collective Formation

1. Describe the process of forming groups. Did Pathways form new groups or were the groups already formed? How was that an advantage or disadvantage?
2. Describe any problems that were faced in the group formation process.
3. Describe any problems faced in cooperation within the groups
4. What have the groups accomplished? What more would you have liked to have seen accomplished?

F. Pathways Sustainability

1. Does the Program have an appropriate phase-out plan or exit strategy? What is the phase-out plan or strategy?
2. Were local government and partners involved in the phase out plan? If so how?
3. How successful were the capacity building components of the project?

4. Are partners and counterparts ready to take on the implementation of this project? Has CARE and partners built in adequate training and phase-out to ensure sustainability?

G. Monitoring and Evaluation System

1. Please describe the monitoring system. Please describe the tools used (we need to obtain examples). What is the purpose of the M&E system? Probe
2. How does the project assess progress toward attaining goals? How does the project use M&E for reporting? How does the project use M&E for learning?
3. Has the project efficiently utilized resources? Probe. How do you know?
4. What is the burn rate of project financing? Look at cost/beneficiary (direct beneficiary and indirect beneficiary)
5. How has learning been used to influence other programs? What kinds of efforts have been made to publish or advertise the program approach or successes? To what extent is Pathways known in the NGO/Gov't community?

H. Impact

1. What activities of the program have had the most significant impacts? Why?
2. What activities of the program have had the least significant impacts? Why?
3. What were the lessons learned?

I. Recommendations for change

1. Recommended changes for future project activities/strategy.

## Annex 6: Interventions Ranking

### CARE Tanzania Pathways ENDLINE EVALUATION Interventions Ranking & Impact Scorecard

**Sample Groups:** Selected representatives of VSLA or cooperative  
2 FGD PRA sessions/village: Women’s group; men’s group

**Objectives:** Capture the perception of stakeholders regarding the levels of perceived effectiveness and impact of specific Pathways interventions. Ask FGD participants to rank the following aspects or activities of Pathways according to its impact on household livelihoods. The list of activities should be adjusted and contextualized by the country office Pathways project staff. This exercise will require flip chart paper and pens.

Evaluate the Impact of these activities on household livelihoods.

Effectiveness of Interventions/Activities	Rank 12=Highest 1=Lowest	Reasons for ranking in this position
1. VSLA producer group formation and participation		
2. IGA income earning activities/ entrepreneurship eg., soap making		
3. Improved agronomic practices eg., planting in rows, intercropping		
4. Access to agricultural inputs- improved seed, pesticides eg; Ninja and Karate)		
5. Improved access to market (selling as a group or at cooperative union)		
6. Increased Access to financial services- VICOBA/VSLA		
7. Direct support to women, training on entrepreneurship, agriculture practices and VSLA (Product selling)		
8. Paralegals (women land rights training)		
9. Sensitization on gender awareness and strengthening household decision making		
10. Improved Agriculture-Seed and planting Multiplication		
11. Soil Management eg. Cover crops, mulching		
12. Sensitization of Gender Based Violence (GBV) in collaboration with policy Gender Desk		

## Annex 7: Asset Index Values

The weighted asset index is computed by multiplying the number of each type of household asset by the index value for that particular asset type. Index values of household assets used in the construction of the asset index are presented in the table below.

Asset type	Weighted value
Agricultural land (pieces/plots)	50
Large livestock (oxen, cattle)	25
Small livestock (goats, pigs, sheep)	10
Chickens, ducks, turkeys, pigeons	3
Fish pond or fishing equipment	5
Non- mechanized farm equipment (sickle)	1
Farm equipment (mechanized)	10
Nonfarm business equipment	10
House (and other structures)	10
Large consumer durables ( TV, sofa)	10
Small consumer durables (radio, cookware, iron)	1
Cell phone	5
Other land not used for agricultural purposes (pieces, residential or commercial land)	10
Means of transportation (bicycle, motorcycle, car)	15

## Annex 8: Women’s Empowerment Index (WEI)

The Women’s Empowerment Index (WEI) indicator used as part of CARE’s evaluation plan was adapted from, and follows closely, the Women’s Empowerment in Agriculture Index (WEAI) developed for Feed the Future. The WEAI is comprised as an average of two sub-indices: the 5 domains of empowerment index (5DE) and the Gender Parity Index (GPI).

The 5DE index is a direct measure of women’s empowerment and itself is split into two main components:

- Incidence of Women’s Empowerment: calculated as the percentage of women that are empowered
- Adequacy of the Disempowered: empowerment score of those women that are disempowered

Empowerment, as defined in the WEAI, is achievement in 80% or better of a weighted-index of the 10 indicators underlying the WEAI. The table below shows the weighting used for both the WEAI index and the adapted WEI index being used in this evaluation. The differences in weighting between the two are driven in large part by additional indicators that were included as part of CARE’s evaluation plan. Those new indicators include:

- Women’s self confidence
- Women’s mobility
- Women’s attitudes towards gender equitable roles in family life
- Women’s political participation

The addition of the new indicators adds several important dimensions directly related to women’s empowerment that were previously unaccounted for in the WEAI. Women’s engagement in the political process and a measure of self-confidence were added to the leadership domain. With the expansion of that domain from two to four indicators, the indicators were re-weighted to 5% from 10%, leaving the domain weighted at 20%.

The WEAI “Time” domain was relabeled “Autonomy” to more accurately reflect the indicators contributing to this domain in the WEI. The workload indicator, weighted at 10% in the WEAI, was replaced by two indicators measuring women’s mobility and their attitudes concerning gender equity in the home. Questions related to women’s workload were explored through qualitative interviews rather than the quantitative survey. Again, the addition of an extra indicator to the time domain resulted in the need to adjust indicator weights in order to leave all domains equally weighted at 20%.

### WEAI vs. WEI: Indicator weights

Domain	Indicator	WEAI weight	WEI (CARE) weight
<b>PRODUCTION</b> <b>(20%)</b>	With decision-making input for HH productive decision domains	1/10	10%
	With autonomy in HH production domains	1/10	10%
<b>RESOURCES</b> <b>(20%)</b>	With sole or joint ownership of household assets <sup>a</sup>	1/15	6.67%
	With sole or joint control over purchase or sale of household assets <sup>a</sup>	1/15	6.67%
	With access to and decisions on credit	1/15	6.67%
<b>INCOME</b> <b>(20%)</b>	With control over household income and expenditures in HH decision-making domains <sup>b</sup>	1/5	20%
<b>LEADERSHIP &amp; COMMUNITY</b> <b>(20%)</b>	Participating in formal and informal groups	1/10	6.67%
	Confident speaking about gender and other community issues at the local level	1/10	6.67%
	Who express self-confidence	N/A	6.67%
	Demonstrating political participation*	N/A	6.67%
<b>TIME/ AUTONOMY</b> <b>(20%)</b>	Satisfied with the amount of time available for leisure activities	1/10	6.67%
	Workload	1/10	0%
	Achieving a mobility score of 16 or greater**	N/A	6.67%
	Expressing attitudes that support gender equitable roles in family life	N/A	6.67%
	Total	100%	100%

<sup>a</sup> excluding poultry, non-mechanized farm equipment and small consumer durables as modeled in the WEAI.

<sup>b</sup> excluding minor household expenditures as modeled in the WEAI.

\* This indicator not included for Ethiopia.

\*\* Highest score possible is 32.

Analysis was initially conducted using the WEAI thresholds for indicator achievement, or those specified by CARE in the case of new indicators. These thresholds often resulted in baseline levels of achievement of 90% or greater, leaving little room for project improvement over time. To allow for country-specific improvement, baseline values were adjusted to country-specific thresholds. In cases where baseline indicator values were greater than 50% using the WEAI thresholds, the threshold for the indicator was adjusted until the value fell **between 45-60%**. In some cases, values remain above 60% when the threshold cannot be adjusted any further. The table below gives both the initial WEAI thresholds and the ending country-specific thresholds.

As an example where a threshold was adjusted for Ethiopia, the initial guidance for the indicator measuring the decision-making import for household productive decision domains was defined as achievement being realized for those women that had input in 2 or more (of 5 total) domains. When calculated, the percentage of women achieving this was 74.7%. Thus, the indicator was recalculated increasing the threshold for achievement from (2 of 5) to (3 of 5) production domains. Again, this was greater than 50% (72.6%) so the threshold was increased until the value fell between 45-60%. Finally, the threshold was adjusted to 5 of 5 production domains at which point the value fell to 64.8%. Generally, one would continue adjusting the threshold, however in this case the threshold could not be adjusted further. Those indicators with “N/A” signify cases where there was no threshold to adjust (i.e., participating in formal and informal groups – either they participated in at least one group or they didn’t).

#### Thresholds utilized to calculate WEI in Tanzania

Domain	Indicator	WEAI Threshold	Tanzania Threshold
<b>PRODUCTION</b>	With decision-making input for HH productive decision domains	2 of 5	5 of 5
	With autonomy in HH production domains	1 of 5	1 of 5
<b>RESOURCES</b>	With sole or joint ownership of household assets <sup>a</sup>	≥ 50%	≥ 75%
	With sole or joint control over purchase or sale of household assets <sup>a</sup>	≥ 50%	≥ 75%
	With access to and decisions on credit	N/A	N/A
<b>INCOME</b>	With control over household income and expenditures in HH decision-making domains <sup>b</sup>	≥ 50%	≥ 60%

<b>LEADERSHIP &amp; COMMUNITY</b>	Participating in formal and informal groups	N/A	N/A
	Confident speaking about gender and other community issues at the local level	2 of 4	3 of 4
	Demonstrating political participation*	N/A	N/A
	Who express self-confidence	2 of 7	5 of 7
<b>AUTONOMY</b>	Satisfied with the amount of time available for leisure activities	N/A	N/A
	Achieving a mobility score of 16 or greater**	N/A	N/A
	Expressing attitudes that support gender equitable roles in family life	N/A	N/A

<sup>a</sup> excluding poultry, non-mechanized farm equipment and small consumer durables as modeled in the WEAI.

<sup>b</sup> excluding minor household expenditures as modeled in the WEAI.

\* This indicator not included for Ethiopia.

\*\* Highest score possible is 32.

To accommodate the addition of CARE's new indicators, adjustments were also made to the GPI portion of the WEI. The most conspicuous change comes in the removal of the aggregated GPI component itself. Although a single index number for gender parity was not calculated, examination of the differences in response between males and females for each indicator allows CARE to gain an understanding of parity as it relates to each WEI domain.

Removal of the aggregated GPI component was necessary because of differences between men and women for three indicators. Including these three indicators as part of the GPI would have violated the spirit of what the GPI represents. The three indicators are: women's mobility, women's ownership of assets, and women's input in the purchase in sale of assets.

The GPI includes two components:

- Percentage of women achieving gender parity: measured by the percentage of empowered women + percentage of women that have empowerment scores  $\geq$  to the empowerment score of the male respondent in their household
- (Avg.) Difference in empowerment between men and women: calculated for those women that don't achieve gender parity.

The WEAI is structured to ask both men and women about their own mobility. The question was adapted as a result of input from the Ethiopia baseline survey (the first baseline study to be conducted) wherein men felt it absurd to be asked about their own mobility. The WEI, therefore, asked for men's

perceptions about their spouse's mobility. Thus, there was no measurement of men's empowerment as regards their own mobility, making it impossible to measure differences between male and female empowerment in mobility (i.e., parity), as men and women were asked different questions.

Both questions related to asset ownership were only asked of the female household member (in part to help shorten the lengthy survey), again making it impossible to calculate a relative difference in empowerment between males and females for ownership and control of assets.

One option would have been to exclude all three of these indicators from calculation of the gender parity index. However, that would have meant a lack of valuable information and muddied interpretation of the results. Thus, rather than calculating a single, somewhat meaningless number as indicative of differences in men's and women's overall empowerment, men's and women's empowerment in each domain is used to understand parity. Mobility was excluded due to the interpretation issues cited above. The two asset indicators were included because, as constructed, the questions asked of household females still captured the relative difference in asset ownership and decision-making between household males and females (even if only from the perspective of the household female). Finally, the percentage of women achieving women's parity and the average difference in empowerment between men and women respondents was excluded due to the issues cited above.