



Understanding Gender and Empowerment in Cocoa Farming Communities in the Brong Ahafo Region of Ghana

Baseline Qualitative and Quantitative Assessment

Aishat Abdu, PhD Candidate – McGill University, Queen Elizabeth Scholar¹

Bobbi Gray, Research Director – Grameen Foundation

October 29, 2020

Abstract: This report outlines the findings of quantitative and qualitative baseline assessments on gender and empowerment conducted among cocoa farmers who are part of the Satellite for Farming (Sat4Farming) project in the Brong Ahafo region of Ghana. Leveraging the project-level women's empowerment in agriculture index (Pro-WEAI), the results find that men and women were similarly disempowered even though women (67%) were slightly more disempowered than men (61%) across the indicators. Sixty percent of households achieved gender parity. The main indicators contributing to disempowerment for both women and men were work balance, membership in influential groups and respect among household members. Self-efficacy, access to and decisions on financial services, control over use of income were greater contributors of disempowerment for women whereas autonomy in income and self-efficacy were greater contributors of disempowerment for men.

¹ <https://www.mcgill.ca/desautels/mcche/research/queen-elizabeth-scholars-qes>

Executive Summary

This report outlines the findings of quantitative and qualitative baseline assessments on gender and empowerment conducted among cocoa farmers who are part of the Satellite for Farming (Sat4farming) project in the Brong Ahafo region of Ghana. Quantitative data were collected from 49 households using the project-level women's empowerment in agriculture index (pro-WEAI). Qualitative data, collected at both the baseline and a midline assessment, are used to help interpret the results of the quantitative pro-WEAI survey.

Men and women were similarly disempowered even though women (67%) were slightly more disempowered than men (61%) across the indicators. The overall women's empowerment score is 73%, which is below the pro-WEAI cut off of 75%. Sixty percent of households achieved gender parity and the gender parity index score for the sample is 0.91. The average empowerment gap between women who do not achieve gender parity and the men in their households is 24 percent. Women have a disempowerment score of 0.29 while men had a disempowerment score of 0.26.

The main indicators contributing to disempowerment for both women and men are work balance, membership in influential groups and respect among household members. Self-efficacy, access to and decisions on financial services, control over use of income are other large contributors of disempowerment for women whereas autonomy in income and self-efficacy are large contributors of disempowerment for men.

The qualitative results corroborate the findings from the survey. Although workload is an issue for both genders, women discussed time and energy constraints associated with their work activities and the challenges of balancing both farm and care work. The men and women also discussed the lack of membership in groups that support their farming activities with knowledge and training, farming resources and finance. Women also report having less influence within these groups compared to men. Mutual trust and respect within households was found to be an issue, particularly for men. Women, on the other hand, report not being included by the primary male cocoa farmers of the household in cocoa farming activities and most discussed not having any knowledge about the farm investment plan being developed through the Sat4Farming project and its recommended activities.

As such, the following recommendations were made to improve gender and empowerment in the Sat4farming project. 1) Leverage existing, organize, or develop linkages to influential groups, 2) increase farmer access to and decisions on financial services through group-based or individual methodologies, 3) Support farmer self-efficacy through traditional (formal education) and innovative approaches (such as through technology), 4) Consider labor-saving technologies and take a deeper dive into understanding contributors to work balance for both men and women, and 5) Sat4Farming should consider more inclusive strategies for women, particularly regarding their involvement in the agronomic support and the farm investment plan.

Acknowledgements

I would like to thank the McGill University-University of Ghana Queen Elizabeth Scholarship program for providing the opportunity to work with Grameen Foundation as my Research Placement Partner. “The Canadian Queen Elizabeth II Diamond Jubilee Scholarships (QES) is managed through a unique partnership of Universities Canada, the Rideau Hall Foundation (RHF), Community Foundations of Canada (CFC) and Canadian universities. The QES-AS is made possible with financial support from IDRC and SSHRC.” I would also like to extend my gratitude to Professors Grace Marquis (Faculty of Agriculture and Environmental Sciences, McGill), Nii Addy (Institute for the Study of International Development, McGill), Richmond Aryeetey (School of Public Health, University of Ghana) for making the engagement with Grameen Foundation possible. I am grateful to Bobbi Gray for her support and guidance throughout this research project. Many thanks to Emile Mawutor Tsekpo who assisted in the cleaning and coding of the Pro-WEAI data. Finally, thank you to the Grameen Foundation Ghana and the University of Ghana teams for welcoming me and sharing their current work. –Aishat Abdu, PhD Candidate – McGill University, Queen Elizabeth Scholar

On behalf of Grameen Foundation, I would like to thank the team at the International Food Policy Research Institute (IFPRI) for their support with the pro-WEAI methods as well as the University of Ghana, in particular Dr. Yaw Osei-Asare, Dr. Daniel Sarpong and their data collection teams, for collecting the pro-WEAI quantitative and qualitative data. In addition, I’d like to thank Alfred Yeboah and Francis Arthur of Grameen Foundation for their support of collecting baseline qualitative data. Finally, I’d like to acknowledge the partners of the Sat4Farming consortium, Rainforest Alliance, Touton, Satelligence, WaterWatch Projects (now AuxFin) and voice our appreciation for the G4AW program of the NSO for funding this work. Finally, many thanks go to the cocoa farmers who belong to the Touton cocoa societies in Kasapin and Sunyani districts. Without their valuable time and input, this research would not have been possible. – Bobbi Gray, Research Director, Grameen Foundation



Table of Contents

| | |
|--|----|
| Executive Summary | 2 |
| Acknowledgements | 3 |
| Acronyms | 5 |
| Introduction | 6 |
| Ghana | 6 |
| Project background: Sat4Farming | 6 |
| Methods | 8 |
| The Project Level Women’s Empowerment in Agriculture Index (pro-WEAI) | 8 |
| Life History Methodology | 10 |
| Study Design | 10 |
| Sample: pro-WEAI | 10 |
| Data Analysis | 11 |
| Quantitative | 11 |
| Qualitative | 11 |
| Results | 12 |
| Quantitative Results | 12 |
| Demographics | 12 |
| Quantitative pro-WEAI Results | 14 |
| Qualitative Results | 17 |
| Demographics | 17 |
| Defining Empowerment – What does empowerment mean to the study participants? | 18 |
| Indicators of Empowerment | 21 |
| Input in Productive Decisions | 22 |
| Control Over Use of Income and Autonomy in Income | 22 |
| Ownership of Land and Other Assets | 24 |
| Work Balance | 25 |
| Visiting Important Locations | 26 |
| Access to and Decisions on Financial Services | 26 |
| Attitudes about Domestic Violence | 28 |
| Group Membership and Membership in Influential Groups | 28 |
| Self-Efficacy and Life Satisfaction | 29 |
| Intra-Household Relationships | 31 |
| Discussion and Conclusion | 32 |
| Programmatic Recommendations | 34 |
| References | 36 |
| Appendix | 38 |
| Table 1: Adequacy of each indicator of empowerment | 38 |
| Table 2: Input in productive decisions | 38 |
| Table 3: Ownership of land or other assets | 39 |
| Table 4: Access to financial services | 40 |
| Table 5: Control over the use of income | 41 |
| Table 6: Autonomy in income | 42 |
| Table 7: Group membership | 42 |
| Table 8: Physical mobility | 44 |
| Table 9: Respect among household members | 44 |
| Table 10: Attitudes about domestic violence | 45 |
| Table 11: Defining Empowerment – Female Interviews | 46 |
| Table 12: Defining Empowerment– Male Interviews | 49 |

Acronyms

| | |
|----------|--|
| CMC | Cocoa Marketing Clerk |
| DHS | Demographic and Health Survey |
| FDP | Farm Development Plan |
| FG | Farm Grow |
| GBV | Gender Based Violence |
| GAP | Good Agricultural Practices |
| GAAP2 | Gender, Agriculture and Assets Project, Phase Two |
| GII | Gender Inequality Index |
| GPI | Gender Parity Index |
| G4AW | Geodata for Agriculture and Water |
| IFPRI | International Food Policy Research Institute |
| MDGs | Millennium Development Goals |
| NGOs | Non-Governmental organizations |
| NSO | Netherlands Space Office |
| OPHI | Oxford Poverty and Human Development Initiative |
| PBC | Produce Buying Company |
| PC | Purchasing Clerk |
| PPI | Poverty Probability Index |
| pro-WEAI | Project-level Women's Empowerment in Agriculture Index |
| SDGs | Sustainable Development Goals |
| VSLAs | Village Savings and Loans Associations |
| WEAI | Women's Empowerment in Agriculture Index |
| 3DE | 3 Domains of Empowerment |

Introduction

This report provides the results of the analysis of the baseline data on the Project level Women's Empowerment in Agriculture Index (pro-WEAI)² and midline qualitative data collected under the Satellite for Farming (Sat4Farming)³ project in the Brong Ahafo region of Ghana. It includes information on the following: background of the Sat4Farming project; description of the data collection methods; results from the quantitative and qualitative Pro-WEAI baseline and midline, and the implications of these data for future programming and research to improve gender relations and women's empowerment within the study context.

Ghana

Ghana, a lower middle-income country in West Africa, has made significant economic progress over the last few decades as evidenced by the country achieving its poverty and hunger goals in 2015 as set out in the Millennium Development Goals (MDGs) [1]. Nevertheless, poverty rates were still estimated at 50.90% in 2016 (3.6% decline from 2012), with wide disparities among regions and higher incidence in the rural areas (37.9%) when compared with urban (10.6%) [2-4]. The Ghanaian population largely resides in the rural areas (62%) with subsistence farming as the major source of livelihood [5]. Rural poverty rates in Ghana have been attributed in part to low productivity and poorly functioning markets for agricultural outputs.

Ghana currently ranks 133 out of 189 countries in the United Nations Development Program's Gender Inequality Index (GII) [6]. Women (17%) are less likely to be employed as wage and salary workers compared to men (33%) [7]. Women also lag behind men in other economic opportunities with the majority of women being engaged in informal low-profit businesses [8]. This varies by areas with rural women facing greater challenges than urban females. Although nearly 50% of Ghanaian women are entrepreneurs, they face barriers in accessing bank loans and financial capital for their enterprises [9, 10].

About half of rural women are employed as farmers as a main source of livelihood, yet they fall under the category of low-income earners [5]. The FAO estimated 72% of women farmers earning lower income in comparison to 48% of men. Women are more likely to be employed as unpaid family workers as well as face time constraints by juggling both productive and domestic activities. Estimates showed the time allocated to domestic activities by Ghanaian men and women differ with about 65% of men spending between 0-10 hours/week on domestic activities and 89% of women spending ≥ 10 hours [5, 11]. Women also have limited control over land with data showing only about 29% of women having ownership compared to 65% of men [12]. They also have less access to productive assets, labor and extension services, fertilizers as well as farm equipment and technology [5, 11, 13]. Additionally, they have limited access to formal credit resulting in their greater reliance on informal networks (e.g., family, money lenders) as well as non-governmental organizations (NGOs) and cooperatives as a source of credit [5]. These inequalities limit women's economic productivity and place women particularly at-risk poor health and well-being outcomes [14-16]. Thus, there is a need for the continued analysis on gender relations to improve the conditions of women as a right and a means to achieve the Sustainable Development Goals (SDGs) on poverty reduction and gender equality.

Project background: Sat4Farming

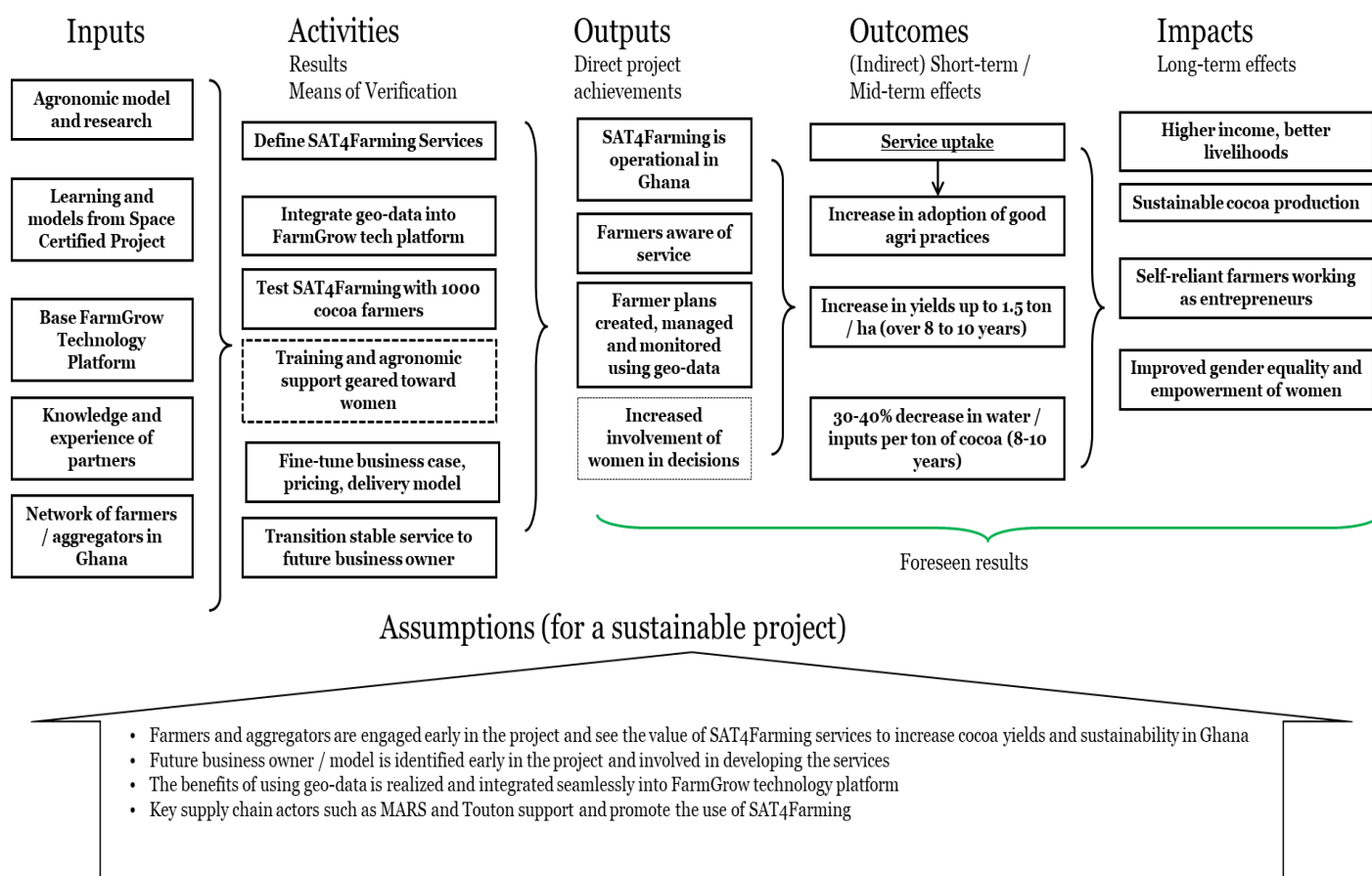
Sat4Farming is a consortium of the Rainforest Alliance (lead institution), Touton, Grameen Foundation, University of Ghana, WaterWatch Projects, and Satelligence and is funded by the Geodata for Agriculture and Water (G4AW) program of the Netherlands Space Office (NSO) [17]. The Sat4Farming project is

² International Food Policy Research Institute. 2018. <https://www.ifpri.org/search?keyword=project+level+WEAI>

³ Grameen Foundation. 2020. <https://grameenfoundation.org/stories/press-releases/grameen-foundation-and-partners-bringing-satellite-technology-to-benefit-smallholder-cocoa-farmers-in-ghana>

designed to assist smallholder cocoa farmers in Ghana to increase cocoa yields from 400 kg / hectare to 1500 kg / hectare (over 300%) over an 8- to 10-year period by developing a geo-data enabled individualized agricultural service platform that leverages long-term individual business plans and coaching techniques based on insights from behavioral economics. Agronomists use FarmGrow with participating cocoa farmers to provide them with individualized support in adopting good agricultural practices (GAPs) and increasing on-farm investments to improve cocoa yields and cocoa income. Figure 1 outlines the theory of change guiding the Sat4Farming project. It is important to note that during the proposal stage of the program, “improved gender equality and empowerment of women” was an impact-level indicator established for the project, but no activities or outputs were defined that were assumed to lead to this impact. Therefore, the activity of “training and agronomics support geared towards women” and the output of “increased involvement of women in decisions” were added during the inception phase of the project. It was assumed that baseline research would help guide the project team in determining how to best to engage women in the FarmGrow process. This report serves as one critical input for that guidance.

Figure 1: Sat4farming theory of change



Methods

The Project Level Women's Empowerment in Agriculture Index (pro-WEAI)

Empowerment is described in terms of an “increase in power”. One side of empowerment is related to the resources and achievements (the sources of power which can take a variety of forms); the other side related to agency (exercising of power) [18, 19]. Power as agency has been classified into different types: (i) *Power to*: which refers to an increase in the capacity and options for change of an individual, (ii) *Power within*: which is described as critical consciousness and having the inner most desire to bring about change to one's life (iii) *Power with*: which is described as working together with others as agents to challenge existing inequities or to bring about change into one's life, and (iv) *Power over*: which is described as challenging of existing power relations or the ‘status quo’ to bring about change to one's life [20]. The process of empowerment occurs through an interaction between the *resources*, the pre-condition for making choices, *agency*, the process in which choices are made, and *achievements*, the outcomes of the choices made [18].

The pro-WEAI is a survey-based tool developed by International Food Policy Research Institute (IFPRI) to measure over time women's agency in the agriculture-based projects [21]. Data come from interviews of women and men from the same household. This novel tool was developed in accordance with theories of empowerment and includes three of the four types of power previously discussed as domains of agency: *power to*, *power with* and *power within* [20]. *Power over* was not included due to its negative connotation held by men and women alike.

The tool is an aggregate index composed of two sub-indices: 1) the 3 domains of empowerment (3DE), and 2) the gender parity index within the household (GPI). The 3DE measures women's agency in 3 domains, which include, (1) instrumental agency (*power to*), (2) intrinsic agency (*power within*), and (3) collective agency (*power with*). The three domains are measured using 12 equally weighted indicators (Table 1), and a woman is defined as empowered in the 3DE if she has adequate achievements in at least 9 out of 12 indicators or has achieved an adequacy in 75% or higher (Table 2) [22]. The 3DE accounts for 90% of the pro-WEAI score. For the GPI, the pro-WEAI characterizes empowerment by women have relative to men in the empowerment domains. This sub-index accounts for 10% of the total pro-WEAI score. Table 2 summarizes the cut-offs of the assessment of each of the pro-WEAI indicators.

Table 1: Domains, Indicators, and Weight for Pro-WEAI

| Domain | Indicator | Weight |
|---|---|--------|
| Instrumental Agency (<i>Power to</i>) | Input in productive decisions | 1/12 |
| | Ownership of land and other assets | 1/12 |
| | Access to and decisions on financial services | 1/12 |
| | Control over use of income | 1/12 |
| | Work balance | 1/12 |
| | Visiting important locations | 1/12 |
| Collective Agency (<i>Power with</i>) | Group membership | 1/12 |
| | Membership in influential groups | 1/12 |
| Intrinsic Agency (<i>Power within</i>) | Respect among household members | 1/12 |
| | Autonomy in income | 1/12 |
| | Self-efficacy | 1/12 |
| | Attitudes about domestic violence | 1/12 |

Source: Johnson *et al.*, 2016

Table 2: Pro-WEAI Indicators and Definitions of Adequacy

| Indicator | Definition of adequacy |
|-----------|------------------------|
|-----------|------------------------|

| | |
|--|---|
| Input in productive decisions [Module G2] | Meets at least ONE of the following conditions for ALL of the agricultural activities they participate in <i>1) Makes related decision solely,</i> <i>2) Makes the decision jointly and has at least some input into the decisions</i> <i>3) Feels could make decision if wanted to (to at least a MEDIUM extent)</i> |
| Ownership of land and other assets [Module G3(A)] | Owns, either solely or jointly, at least ONE of the following: <i>1) At least THREE small assets (poultry, nonmechanized equipment, or small consumer durables)</i> <i>2) At least TWO large assets</i> <i>3) Land</i> |
| Access to and decisions on financial services [Module G3 (B)] | Meets at least ONE of the following conditions: <i>1) Belongs to a household that used a source of credit in the past year AND participated in at least ONE sole or joint decision about it</i> <i>2) Belongs to a household that did not use credit in the past year but could have if wanted to from at least ONE source</i> <i>3) Has access, solely or jointly, to a financial account</i> |
| Control over use of income [Module G2 (G2.06 & G2.07)] | Has input in decisions related to how to use BOTH income and output from ALL of the agricultural activities they participate in AND has input in decisions related to income from ALL non-agricultural activities they participate in, unless no decision was made |
| Work balance [Module G4] | Works less than 10.5 hours per day: <i>Workload = time spent in primary activity + (1/2) time spent in childcare as a secondary activity</i> |
| Visiting important locations [Module G6] | Meets at least ONE of the following conditions: <i>1) Visits at least TWO locations at least ONCE PER WEEK of [city, market, family/relative], or</i> <i>2) Visits least ONE location at least ONCE PER MONTH of [health facility, public meeting]</i> |
| Group membership [Module G5] | Active member of at least ONE group |
| Membership in influential groups [Module G5] | Active member of at least ONE group that can influence the community to at least a MEDIUM extent |
| Respect among household members [Module G7] | Meets ALL of the following conditions related to another household member: <i>1) Respondent respects relation (MOST of the time) AND</i> <i>2) Relation respects respondent (MOST of the time) AND</i> <i>3) Respondent trusts relation (MOST of the time) AND</i> <i>4) Respondent is comfortable disagreeing with relation (MOST of the time)</i> |
| Autonomy in income [Module G8(A)] | Uses the relative autonomy index approach (“based on self-motivation theory and is a measure of internal and external motivations that determine a person’s decisions”) More motivated by own values than by coercion or fear of others’ disapproval: Relative Autonomy Index score ≥ 1 RAI score is calculated by summing responses to the three vignettes (yes=1; no=0), using the following weighting scheme: -2 for vignette 2 (external motivation), -1 for vignette 3 (introjected motivation), and +3 for vignette 4 (autonomous motivation) |
| Self-efficacy [Module G8] | "Agree" or greater on average with self-efficacy questions: New General Self-Efficacy Scale score ≥ 32 |

| | |
|--|--|
| Attitudes about intimate partner violence against women [Module G9] | Believes husband is NOT justified in hitting or beating his wife in all 5 scenarios: 1) <i>She goes out without telling him</i> 2) <i>She neglects the children</i> 3) <i>She argues with him</i> 4) <i>She refuses to have sex with him</i> 5) <i>She burns the food</i> |
|--|--|

Source: Malapit *et al.*, 2019

Life History Methodology

The Life History Methodology is a qualitative method adapted by the second phase of the Gender, Agriculture and Assets Project (GAAP2)⁴ to gain insights on the perceptions and experiences of empowerment within agriculture-related projects [23]. This method is a type of semi-structured in-depth interview that has been widely used in the social sciences to understand and explain individuals' lived experiences within the broader social context [24]. This methodology, along with the quantitative pro-WEAI survey, was also used by Grameen Foundation in Burkina Faso [25]. The life history approach usually follows a chronological recount of a chain of events, providing a nuanced understanding of the social and economic structures that shape an individual's or a group's attitudes, beliefs and behaviors [24].

The life history method is particularly suitable for understanding human experiences as it provides depth and detailed information. It allows for study participants to express their voices and views about a particular subject, while also allowing for the understanding of individual factors such as memories, relationships, perceptions and aspirations that shape lived experiences. The combination of these narratives provides enriching data on life events.

In this project, the Life History Methodology was used with a sample of empowered and non-empowered women and men who were selected based on two empowerment categories, 'empowered' and 'non-empowered' to gain a nuanced understanding of empowerment among the Sat4Farming project participants. To allow the selected participants to share their life history, the interview process explored their life course by starting from a specific time point in their lives and progressing chronologically to the present and future aspirations of the respondents. Areas covered in the semi-structured interview guides included: (1) childhood and adolescence, (2) adulthood – marriage, relationships, and having children, (3) mobility and gender constraints, (4) resilience, (5) present self, and (6) future aspirations.

The Life History Method uses open ended questions with probing by the interviewer to allow the interviewee to provide more detail in their responses. Although this method is often focused on a small group of individuals as in this paper, thereby affecting generalizations of the findings, detailed qualitative data obtained through the life history method can be used to complement quantitative findings [26]. It is also a suitable method for exploring a topic such as empowerment which may vary across social and cultural contexts.

Study Design

Sample: pro-WEAI

The pro-WEAI participants were selected from the households who participated in the Sat4Farming baseline survey [27]. The baseline study included a random sample of 564 cocoa farming households in three cocoa districts (Kasapin, Goaso, and Sunyani) that are of relevance to Touton, a private sector business entity and a

⁴ International Food Policy Research Institute. 2020. <https://gaap.ifpri.info/about-gaap2/>

key project partner. Cocoa farmers sampled from the Sunyani and Kasapin cocoa districts were project participants ready to utilize FarmGrow (and thus served as the treatment group) while those sampled from Goaso district were non-project participants (not utilizing FarmGrow and hence served as a counterfactual group, or the comparison group). Farmers were recruited based on their status as "FarmGrow"-ready: they had achieved cocoa certification and had at least 2 hectares of cocoa.

Fifty cocoa farming households were also purposefully sampled for the pro-WEAI and were only drawn from the treatment group districts (Sunyani and Kasapin). Although 50 households were originally planned, the field work resulted in 49 households in total. A total of 16 life history participants were also recruited for the qualitative interviews. Touton agronomists and other local experts were consulted to help identify women who they felt were empowered and those they felt were disempowered. This definition could be locally derived, but generally agronomists were advised to identify women who appeared to participate locally, who had their own economic activities, etc. Interviews were conducted with both the women and their spouse or primary male decision maker within the household. With one woman and one man interviewed per household, the total Sat4Farming pro-WEAI sample includes 100 participants. This small sample was due to budgetary constraints and the desire of the Sat4Farming team to include a more purposeful study into gender dynamics than was originally budgeted by the project.

Data Analysis

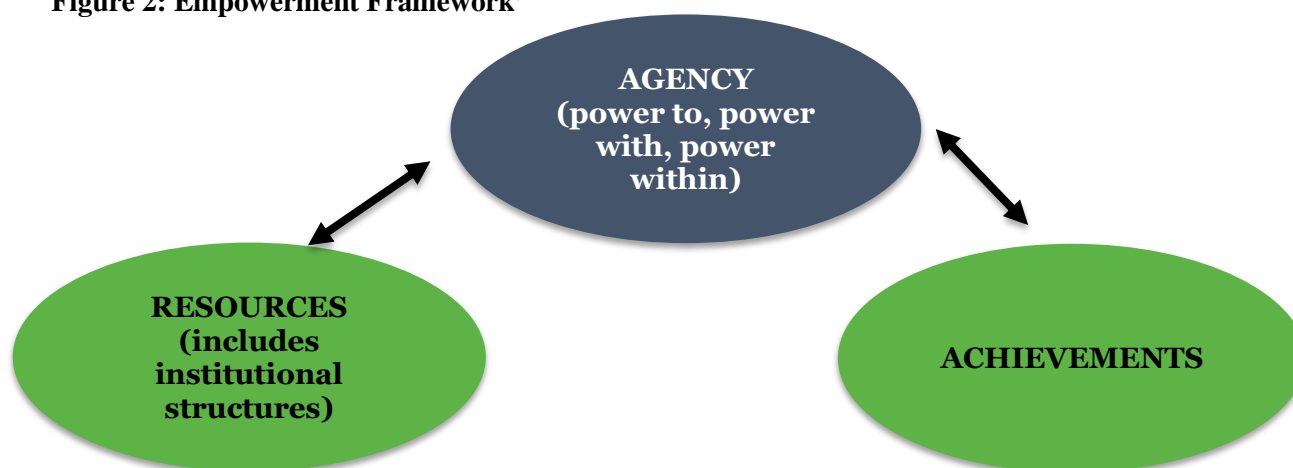
Quantitative

Data were analyzed using STATA 16 software. The Pro-WEAI score was calculated following the methodology described for the original WEAI tool [28]. The score was calculated as the weighted sum of the two sub-indices [3DE (90%) and GPI (10%)]. First, women and men were classified as either adequate (=1) or inadequate (=0) in the individual indicators based on the pro-WEAI cut offs (Table 2). Next, the empowerment score for the respondents were generated. The empowerment score for the study participants is the weighted average of their adequacy scores in all the pro-WEAI indicators that are equally weighted (1/12). Participants were then considered empowered if they were adequate in 9 out of 12 indicators or had an empowerment score of 75% or higher. In contrast, they were considered disempowered if they had a score less than 75%. Quantitative data are presented as descriptive statistics using frequencies and percentages.

Qualitative

A total of 16 life history interviews were analyzed using the Qualitative Data Analysis software MAXQDA. The analysis of the qualitative interviews followed an inductive (data driven) and deductive (concept driven) approach. Thus, the codebook for the analysis was developed using *a priori* themes of an empowerment framework and *a posteriori* themes that emerged from the data. The analysis began with a review of the literature and adaptation of an empowerment framework (Figure 2). Next the transcripts were read freely and repeatedly to identify other themes from the data and refine the adapted framework. Then the transcripts were uploaded into the qualitative software and the text in the interviews were coded. Similar codes were grouped into categories. The information was then analyzed and written up. Midline qualitative data were read and coded manually with similar themes developed from the life history interviews to enrich the data and write up. The code book is included in the appendix section.

Figure 2: Empowerment Framework⁵



Results

Quantitative Results

Demographics

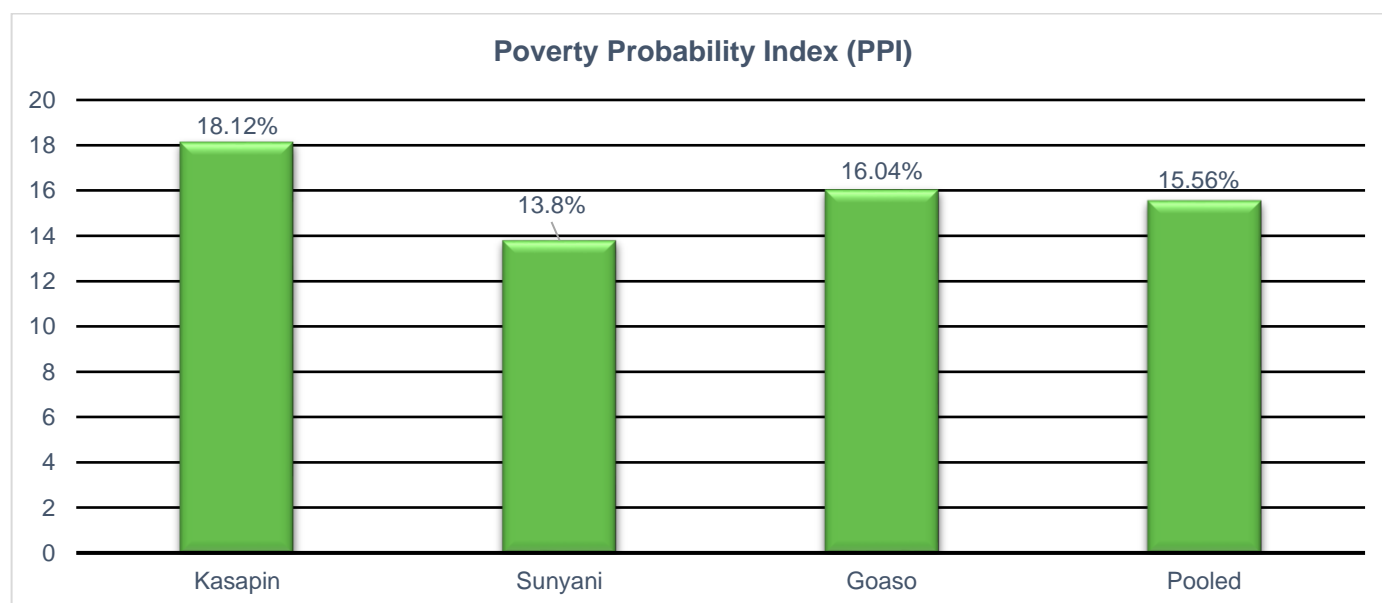
Female respondents in the sample were younger than the male respondents with 50% of women falling within the age range of 26-45 years and over 50% of men falling within the age category of 46-65 years. Thirty-one percent of women and 33% of men have never attended school in the sample, while more men than women have achieved higher education in the sample as observed by the percentage achieving secondary, undergraduate or higher education. Also, more women (35.42%) in the sample than men (31.25%) report stopping education at the secondary (junior and senior high) level. This observation is comparable to the larger Sat4Farming project sample where 66% of women attained primary and secondary education and only 6% reported achieving higher education [27]. Given the interest of using the pro-WEAI tool to measure empowerment and gender parity within cocoa households, the sample includes only households with a primary male and female respondent. Thus, all of the study sample are married/cohabiting. A large proportion of the male (80%) and female (78%) respondents are from the Sunyani cocoa district, while a small proportion are from Kasapin. Although, not measured by the pro-WEAI tool, the average household size for the project sample is 6 members, with a range of 1-23 in the project districts [27].

⁵ Kabeer N. Resources, agency, achievements: reflections on the measurement of women's empowerment. Dev. Change. 1999

Table 3: Demographic Characteristics of pro-WEAI Respondents

| Variable | Percent of respondents (%) | |
|-------------------------|----------------------------|------|
| | Women | Men |
| Age group | | |
| 18-25 | 0 | 0 |
| 26-45 | 50 | 48.9 |
| 46-65 | 45.8 | 51 |
| > 65 | 0 | 4.2 |
| Education | | |
| Never attended school | 31.3 | 33.3 |
| Less than primary | 6.3 | 0 |
| Primary | 12.5 | 8.3 |
| Secondary | 35.4 | 31.3 |
| Undergraduate or higher | 14.6 | 27.1 |
| Marital status | | |
| Married | 100 | 100 |
| District | | |
| Sunyani | 77.5 | 79.6 |
| Kasapin | 22.5 | 20.4 |

In the Sat4Farming sample from which the pro-WEAI study participants were drawn, the proportion of households living below the poverty line of USD 3.1 was estimated using the Poverty Probability Index (PPI). Figure 3 shows that about 16% of the households surveyed were recorded as living below the USD 3.1 poverty line with a higher proportion in the more rural district (18% in Kasapin) when compared with the more urban regional capital Sunyani (14%) district [27].

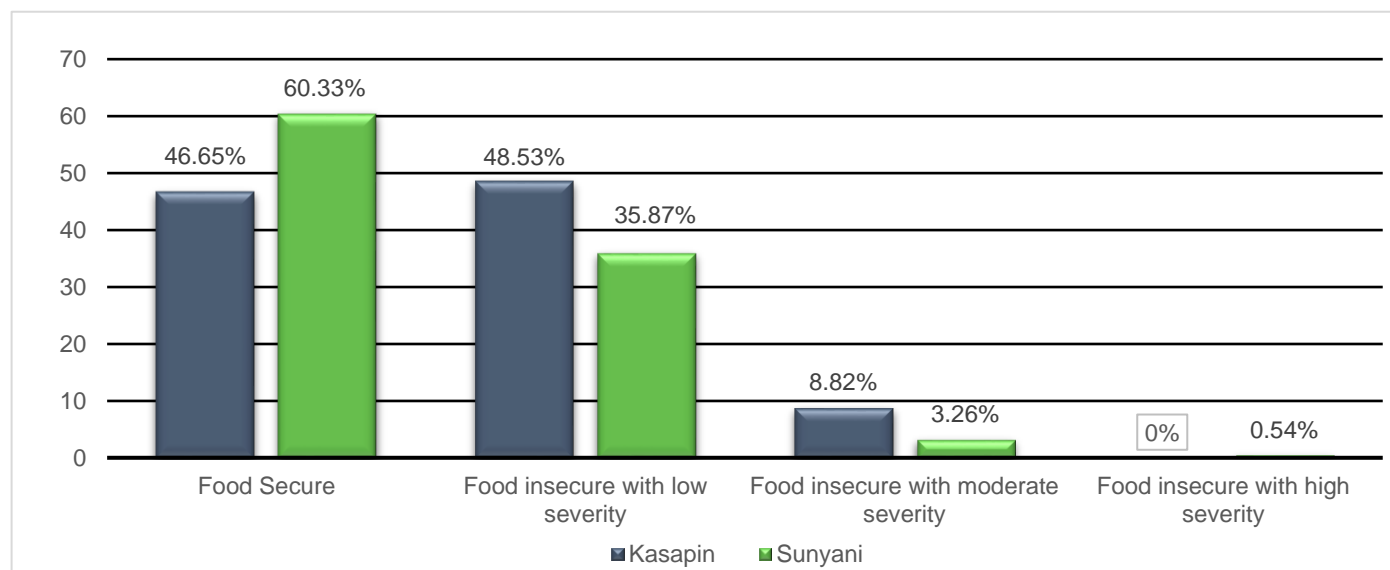
Figure 3: Poverty status below USD 3.1 poverty line – Sat4Farming sample

Source: SAT4Farming baseline report

Figure 3 demonstrates the household food security status of the sample for the SAT4Farming project. Forty-eight (48) percent of the households were found to be food secure compared to 52% that were food insecure with different degrees of severity [27]. Of the 52%, 46% were food insecure with low severity, 6% were

food insecure with moderate severity and 0.18% were food insecure with high severity. The food security status of households also varied by study district with a larger proportion of food secure households in the Sunyani district when compared with the more rural Kasapin cocoa district.

Figure 4: Household Food Security Status – Sat4Farming sample



Source: SAT4Farming baseline report

Quantitative pro-WEAI Results

The aggregate pro-WEAI score for women in the baseline sample was 0.73. This value is the weighted sum of the 3DE score for women, 0.71, and the GPI score, 0.91 (Table 4). The results of the analysis show that 33% of women and 39% of men in this sample are empowered. Among both those women and men who are disempowered, the mean adequacy score was 0.57, indicating that they achieved adequacy in an average of 57% of the indicators, that is 6.8 out of 12 of the indicators. The GPI score is 0.91, and 61 percent of households achieved gender parity. The average empowerment gap between women who do not achieve gender parity and the men in their households is 24 percent.

Table 4: pro-WEAI Results

| Indicator | Women | Men |
|--|-------|------|
| Number of observations | 49 | 49 |
| 3DE score | 0.71 | 0.74 |
| Disempowerment score (1 – 3DE) | 0.29 | 0.26 |
| % achieving empowerment | 0.33 | 0.39 |
| % not achieving empowerment | 0.67 | 0.61 |
| Mean adequacy score for not yet empowered | 0.57 | 0.57 |
| Mean disempowerment score (1 — adequacy) for not yet empowered | 0.43 | 0.43 |
| Number of dual-adult households | 49 | |
| Gender Parity Index (GPI) | 0.91 | |
| % achieving gender parity | 0.61 | |
| % not achieving gender parity | 0.39 | |
| Average empowerment gap | 0.24 | |
| Pro-WEAI score | 0.73 | |

Table 5 summarizes the household patterns of empowerment for our sample. In about 41% of the households, men have more adequacy in the indicators than the women; women have more adequacy than the male in the household in almost 39% of the sampled households; and the women and men have equal adequacy in the indicators in 20% of the households. In about 43% of the households neither the man nor the woman is empowered. Only a small percentage of households have both an empowered woman and man in the sample.

Table 5: Household patterns of empowerment

| Difference in adequacy by sex | % of households |
|---|------------------------|
| Male adequacy score > female adequacy score | 40.82 |
| Female adequacy score > male adequacy score | 38.78 |
| Female adequacy score = male adequacy score | 20.41 |
| Only male is empowered | 24.49 |
| Only female is empowered | 18.37 |
| Both male and female are empowered | 14.29 |
| Neither male nor female are empowered | 42.86 |

Table 6 shows the contribution of each indicator to disempowerment for women and men in the study sample. More than half of women (67%) and men (61%) are disempowered and more women than men are disempowered in most of the indicators. The gap between women and men is largest for autonomy in income, membership in influential groups, respect among household members, access to and decisions on financial credit and attitudes about domestic violence. The indicators for autonomy in income and respect among household members contribute more to the disempowerment of men than women. The wide gaps between the uncensored and censored headcount ratios for men for the previously mentioned indicators suggests that a large proportion of men in the sample are inadequate in this indicator but not disempowered. Similarly, the wide gaps in these ratios for women in the membership in influential groups indicator indicates that a large proportion of women in the sample are groups indicator indicates that a large proportion of women in the sample are inadequate in this indicator even though they are not disempowered. Work balance is a slightly higher contributor of disempowerment among women than men in the disempowered sample. For men, the uncensored and censored headcount ratios are similar for self-efficacy, attitudes about domestic violence, ownership of land and assets and group membership, which suggests that most men who are inadequate in these indicators are also disempowered. Among women, the uncensored and censored headcount ratios are similar for input in productive decisions, ownership of land and assets and visiting important locations, which suggests that most women who are inadequate in these indicators are also disempowered.

The proportional contribution of each indicator to disempowerment reflects how much each indicator contributes to disempowerment among respondents who have not achieved empowerment. It is calculated as the censored headcount ratio for a given indicator divided by the total empowerment score, multiplied by the indicator's weight times 100. The main **indicators contributing to disempowerment for both women and men are work balance, membership in influential groups and respect among household members. Self-efficacy, access to and decisions on financial services, control over use of income are other large contributors of disempowerment for women. Whereas, autonomy in income and self-efficacy are large contributors of disempowerment for men.**

Figure 5 graphically shows the absolute contribution of each indicator to disempowerment for women and men in the sample. The overall height of each bar shows the total disempowerment score (1-3DE), and the different colored bars within show the absolute contribution of each indicator to empowerment. The figure shows all women and men at baseline and corresponds to data in Table 6. Women have a disempowerment score of 0.29 while men had a disempowerment score of 0.26.

Table 6: Relative Contributions of each indicator to disempowerment

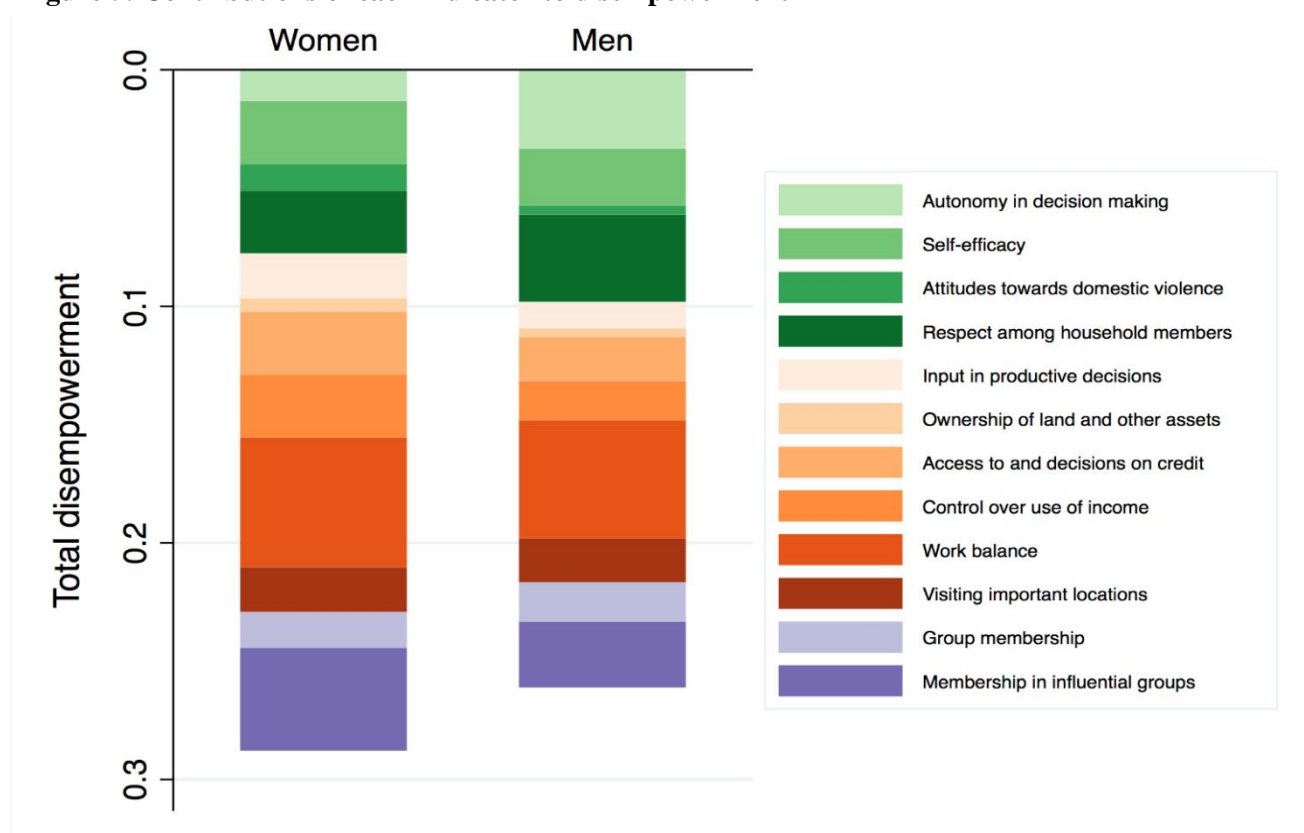
| Indicator | Uncensored headcount ratio ⁶ (%) | | Censored headcount ratio ⁷ (%) | | Proportional contribution ⁸ (%) | |
|---|--|------|--|------|---|------|
| | Women | Men | Women | Men | Women | Men |
| Intrinsic agency | | | | | | |
| Autonomy in income | 32.7 | 73.5 | 20.4 | 44.9 | 5.9 | 14.2 |
| Self-efficacy | 34.7 | 32.7 | 30.6 | 32.7 | 8.8 | 10.3 |
| Attitudes about domestic violence | 16.3 | 4.1 | 12.1 | 4.1 | 3.5 | 1.3 |
| Respect among household members | 40.8 | 63.3 | 30.6 | 44.9 | 8.8 | 14.2 |
| Instrumental agency | | | | | | |
| Input in productive decisions | 20.4 | 16.3 | 20.4 | 12.2 | 5.8 | 3.9 |
| Ownership of land and other assets | 6.1 | 4.1 | 6.1 | 4.1 | 1.8 | 1.3 |
| Access to and decisions on financial credit | 36.7 | 20.4 | 30.6 | 20.4 | 8.8 | 6.5 |
| Control over the use of income | 38.8 | 28.6 | 32.7 | 20.4 | 9.4 | 6.5 |
| Work balance | 100 | 100 | 67.3 | 61.2 | 19.4 | 19.4 |
| Visiting important locations | 26.5 | 22.4 | 26.5 | 20.4 | 7.6 | 6.5 |
| Collective agency | | | | | | |
| Group membership | 18.4 | 18.4 | 16.3 | 18.4 | 4.7 | 5.8 |
| Membership in influential groups | 65.3 | 36.7 | 53.1 | 32.7 | 15.3 | 10.3 |

⁶ Uncensored headcount ratio is the proportion of respondents who are inadequate in a given indicator regardless of their empowerment status

⁷ Censored headcount ratio is the proportion of respondents who are disempowered and inadequate in a given indicator

⁸ Proportion contribution to disempowerment is calculated as the censored headcount ratio for a given a given indicator divided by the total empowerment score, multiplied by the indicator's weight times 100

Figure 5: Contributions of each indicator to disempowerment



Qualitative Results

Demographics

Table 7 shows that the majority of respondents interviewed were older persons with 75% of women and 63% of men in the 46-65 age category. The data also shows that men have higher access to education than women. Almost thirteen percent of women have never attended school, while an equal percentage, 37.5% of both women and men have had primary education, and half of the women and almost 63% of men have achieved secondary education. With regards to marital status, the sample was composed mainly respondents in a union, that is about 63% of women and 100% men. The remainder of the sampled women were two widows (25%) and one divorced woman. Cocoa farming was the primary occupation for all of the respondents, while 75% of women and 50% of men engaged in a secondary income activity. The secondary occupation activities were grouped into self-employment and wage salary employment activities. Women engaged more in self-employment activities such as dress making, poultry and livestock rearing and trading as another income source. Secondary activities for men were Cocoa Marketing Clerk (CMC), Purchasing Clerk (PC), carpenter and corn mill operator, which fit into the category of wage salary employment. Twenty-five percent of women were selected for the “empowered” category when compared with 88% of men, and 75% of women were selected for the “disempowered” category when compared with 12.5% of the men. The empowered and disempowered categories for the qualitative interviews were defined locally with agronomists.

Table 7: Demographic Characteristics of Life-History Respondents

| Variable | Percent of respondents (%) | |
|-----------------------------|----------------------------|------|
| | Women | Men |
| Number of interviews | 8 | 8 |
| Age group | | |
| 18-25 | 0 | 0 |
| 26-45 | 25 | 37.5 |
| 46-65 | 75 | 62.5 |
| Education | | |
| Never attended school | 12.5 | 0 |
| Primary | 37.5 | 37.5 |
| Secondary | 50 | 62.5 |
| Marital status | | |
| Married | 50 | 100 |
| Widowed | 37.5 | 0 |
| Divorced | 12.5 | 0 |
| Primary occupation | | |
| Cocoa farming | 100 | 100 |
| Secondary occupation | | |
| Yes | 75 | 50 |
| No | 25 | 50 |

Defining Empowerment – What does empowerment mean to the study participants?

According to the life-history interviews, empowerment is described in various ways related to agency, resources and achievements⁹ (Figure 6). The descriptions of empowerment were found to fall within the the agency domains of *power to*, *power within* and *power with*.

Women described empowerment as expressing one's voice through sharing of views and ideas and speaking one's mind. Expression of voice at the household level also came up during the interviews. Another way empowerment was described that fit with the category of agency as *power to* was in terms of having the mindset of achieving goals. Having inputs in decision making as well as participating in decision making at the household and community levels were also described by a widow and another divorced woman. One of the married women had said during the interview *"I am less empowered because my husband always takes the final decision"*. An older widow described an empowered person as someone who is independent and makes their own decisions.

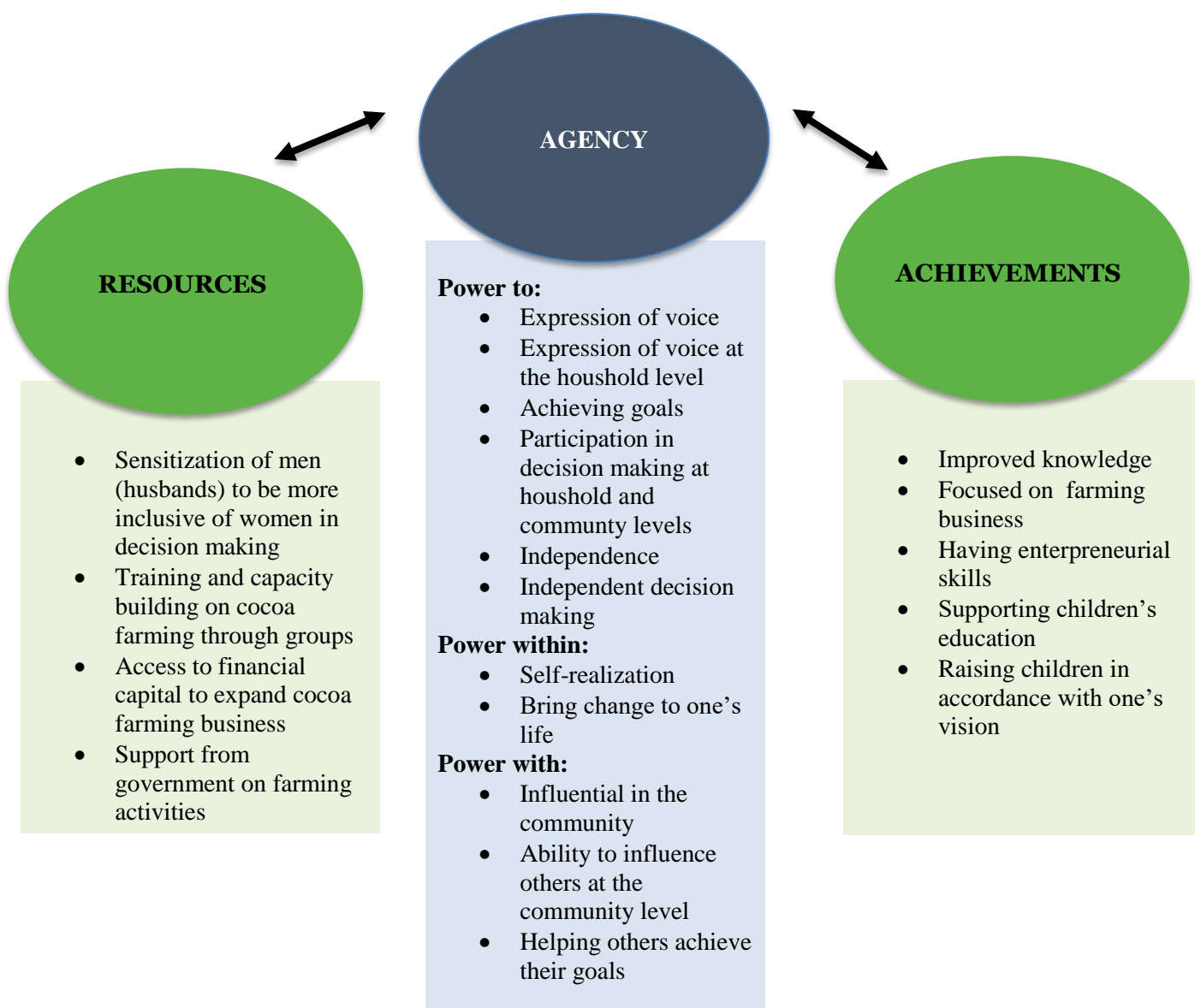
One person described empowerment as self-realization when given the resources, *"an empowered woman is one who [...] has the space to realize her potential"*, which fits in the agency category of *power within*. It is also about bringing change into one's life. Empowerment was also described as the agency domain of *power with*. An empowered person is influential in the community and has the ability to influence others with their views at the community level. Empowered women are also those who have the ability to help other women to achieve their goals.

⁹ Kabeer N. Resources, agency, achievements: reflections on the measurement of women's empowerment. Dev. Change. 1999

When asked about the things that make one feel empowered or changed their views on their empowerment, some of the women cocoa farmers described their achievements as making them more empowered. Achievements discussed included having improved knowledge and understanding of cocoa farming from group trainings provided by Cocoa Life Village Savings and Loans Associations (VSLAs), focusing on the farming business and also having entrepreneurial skills. Others described achievements such as supporting children's education and raising their children how they had imagined, in accordance with their set goals.

Women also discussed resources in their descriptions as enablers of empowerment. These are resources that some women have or wish they had to improve their empowerment status. One resource that was brought up by a married woman was the sensitization of men through education to include women in decision making within the household. Other resources discussed by women include capacity building and trainings with farmer groups, e.g. "Touton's Akuffo Yie Die group's (Farmers' Development/ wellbeing/welfare) training on good agricultural practices (GAPs)", access to financial capital to expand their cocoa farming business and support from the government for their farming activities. Table 11 in the appendix section provides more detailed information on women's descriptions of empowerment with supporting quotes.

Figure 6: Local Meanings of Empowerment – Female Interviews



The men interviewed in the life history interviews had different ways that they described empowerment (Figure 7). While some of their descriptions are similar to the women's responses, others were found to be unique to the male respondents alone. Similar to the women, men described empowerment as having decision making power which falls in the agency domain of *power to*. An empowered person was described as someone who makes decisions or has the ability to contribute to a decision making process. Having decision making power was discussed at the household level where they make a lot of input as well as the community level with their participation in the decision making as leaders in the community.

In contrast to the women's responses, men mentioned decision making at the group level to influence collective decision making as well as making decisions for others as making someone more empowered. Men also described empowerment as the expression of voice through speaking one's mind as well as achieving one's goals through the use of accessed resources. It is also about being a 'goal getter' as described by one man in the interviews.

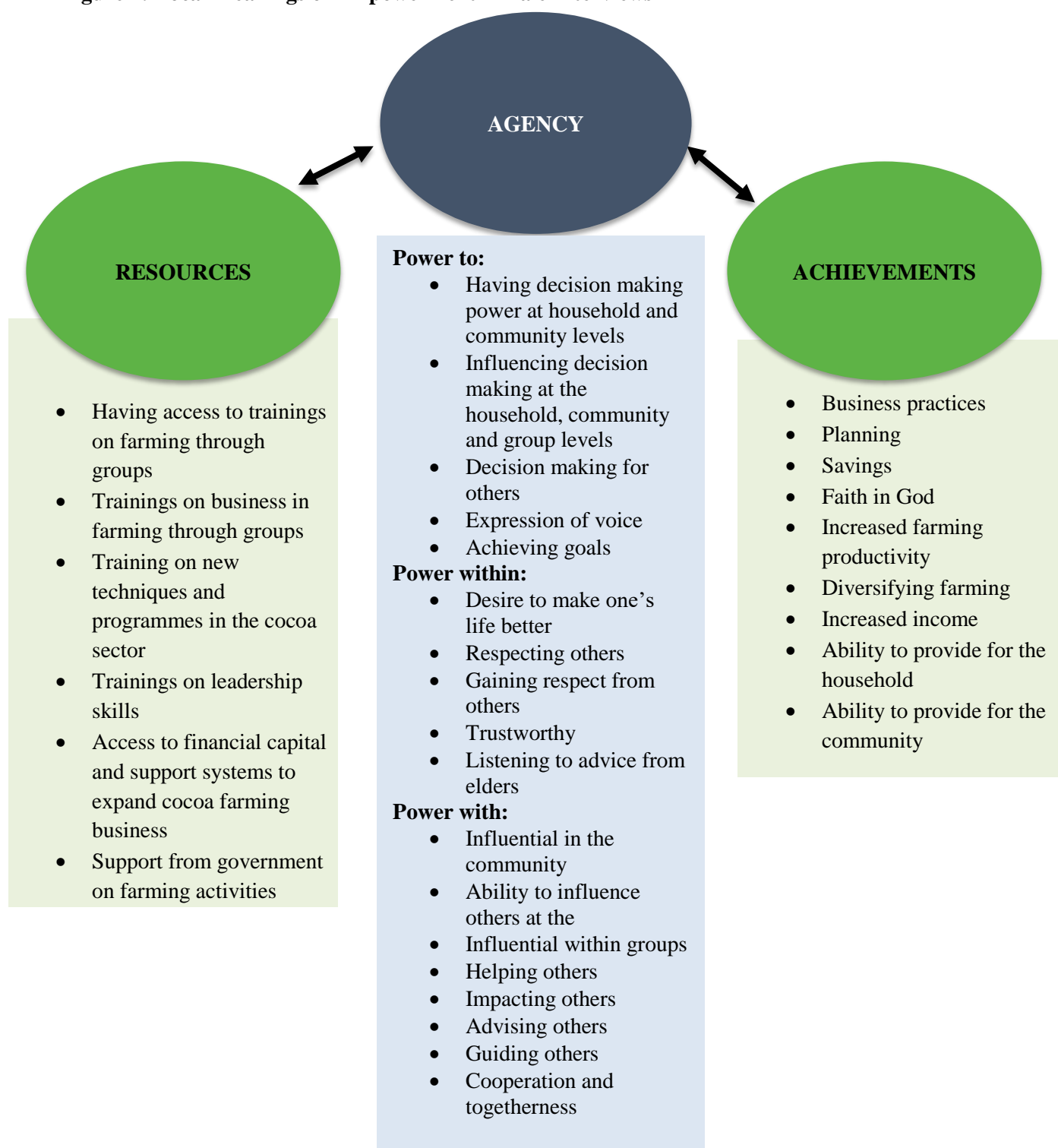
Descriptions of empowerment that fit with the agency domain of *power within* were also discussed in the interviews. Empowerment was described as having the desire to make one's life better so as to impact others. Men also discussed empowerment as having some internal qualities that make one empowered. An empowered person is respectful to others as well as respected by other people. This person is also trustworthy and listens to the advice of elders.

Empowerment was also described as having interpersonal relationships that fall in the agency domain of *power with*. An empowered person is influential at the community level where they share their ideas with members and they are consulted for their inputs regarding important issues. Furthermore, this person is influential within the groups in which they participate in through influencing decision making. An empowered person also helps others, impacts other peoples' lives, advises and offers guidance to others. In addition, someone described cooperation and togetherness as making one empowered.

Similar to the life history interviews with women, some of the male cocoa farmers described their achievements as part of their descriptions of empowerment. Some of the achievements that made men feel empowered included their business practices, planning ahead, having savings and their faith in God. Other achievements were related to farming and included increased productivity, diversifying of farming and having increased income. Some men also described having the ability to provide for their household and their communities as making them feel empowered.

Male cocoa farmers also talked about having resources as a source of empowerment. Similar to women, these are resources that men have or wish they had to improve their empowerment status. One of the key resources discussed is training that is related to their farming activity. Some men mentioned trainings on the farming business as well training on new techniques and programmes in the cocoa sector. An example of a training referenced in the interviews that made men feel empowered was the "Touton's Akuffo Yie Die group's (Farmers' Development/ wellbeing/welfare) training on GAPs and business aspects of farming". It was also mentioned in an interview that more trainings offered through farmer groups would make one feel more empowered. Men also discussed trainings on leadership provided through a church as well as trainings on empowerment skills as contributors to feeling empowered. Access to financial capital and support systems to help expand cocoa farming business and support from the government for their farming activities were also discussed resources in the interviews. Table 12 in the appendix section provides more detailed information on men's descriptions of empowerment with supporting quotes.

Figure 7: Local Meanings of Empowerment – Male Interviews



Indicators of Empowerment

This section aims to discuss the qualitative findings of the different indicators of empowerment in the pro-WEAI tool.

Input in Productive Decisions

In the life history interviews, most of the married women report that decisions are made jointly with their spouse including decision making on the farming business. Nevertheless, some women say that men have more influence and usually have the final say in the decision making process. Women also report contributing to decision making within the household and for some cocoa and agricultural-related activities, although their inputs are not always taken. However, men do consult them on decisions relating to food, child education, and healthcare and some believe they have enough decision making with regards to these.

Women discuss having a lot of influence in decision making around the cocoa processing activities such as pod breaking, weeding, pruning and drying of the cocoa beans. However, they mention that men are the sole decision makers for the sale of the cocoa beans with the exception of a divorced woman and women who own their own farms. Interestingly, when women make decisions they often consult men and consider the men's inputs in their own decision making.

In the male interviews, most men report having the final say in decision making. While men do say that they consult their spouses when making decisions about cocoa farming activities, they also say they do not always consider the women's inputs, or the final decision lies with them. Some other men have said that they do not consult women at all when it comes to decisions on agricultural activities or agree with women's decisions. Similar to women, men also say they make the sole decision about the sale of the cocoa beans. Men believe they have more influence in decision making since they are the head of the household and because it is the cultural norm for the man to have more decision-making power.

In some cases, women may be involved in other business activities, so decisions related to the cocoa farm are made by the men who own the cocoa farms. One respondent said he and his wife have separate farms and each person makes their own decisions for their farm. However, another respondent said that both he and his wife have separate farms and he makes most of the decisions for his own farm while his wife consults him on decisions relating to her own farm.

According to men, women mostly decide on what to eat in the house, although sometimes it is decided together, or women consult them on household food preparation. Some men have said decisions relating to child health and food purchase are made together within the household.

Control Over Use of Income and Autonomy in Income

Some women report they have inputs in decisions on how income is used for the household, food and agricultural activities. A divorced woman, talking about her past, shared how income was controlled and misused by her husband before their separation but now has more control over the use of her income. Most of the women, however, expressed the desire to have more decision making power especially around financial planning within the household. Some women have discussed in their interviews that having control over other livelihood activities such as the growing of other crops, managing finances as well as contributing to the household income makes them have more influence in decision making within the household.

“Decision making is made together, and I usually make inputs to any decision at the household level. Decisions made together include plans for our children and how to plan on our household spending” **(Life-history interviews \Respondent 3: Woman, 45yrs, Married)**

“Income from farming activities are mostly handled by him alone and he is not transparent. He is always cash strapped and I do not know what he used his monies for. Any complaint from me results in quarrels. Due to bad management of finances, he got himself entangled in huge bank debts which I have to pay.” **(Life-history interviews \Respondent 14: Woman, 59 yrs, Divorced)**

“I make most of the income decisions in my household.” **(Life-history interviews \Respondent 14: Woman, 59 yrs, Divorced)**

“No. I feel I should have more decision-making power especially around financial planning at the household level.” **(Life-history interviews \Respondent 2: Woman, 47 yrs, Married)**

“Being in charge of additional livelihood activities like growing other crops and accounting for those finances and contributing to household income. This has made me more influential when it comes to household decision making.” **(Life-history interviews \Respondent 3: Woman, 45yrs, Married)**

Men, on the other hand, had a different view with regards to women’s control over the use of income. One respondent said in his interview that he decides how income is used in his household including the income his wife earns from her own cold store business. Another interviewee said he does not consult his wife on decisions related to spending for agricultural activities. While some of the men acknowledged that women do not partake in decisions related to the use of income, men say they do share with women about income generated from cocoa sales and their plans for the use of income.

One man said he gives his wife the daily household upkeep money which she is often not satisfied with and results in disagreements in the household. Few of the men, however, have said that they decide together with their spouse how to spend income from farming activities. One of the respondents explained that both he and his wife have their own farms and they each have control over income generated from their individual farms. Nevertheless, he still decides on how income is used within the household. According to most men, their income is used for their farming activities, children and the household needs; however, some of the men discussed financial difficulties when it comes to providing for the needs and health of their household and children.

“I dictate how household income is to be spent, even income accruing from her own business. For my business, I take all decisions and only relay to her what I intend using the money for, but she does not dictate to me.” **(Life-history interviews \Respondent 5: Man, 41 yrs, Married)**

“Decisions and expenses on agricultural activities, I do not consult her. What I do is I only tell her income generated from cocoa sales after I have deducted my expenses. She consults me on household food preparation.” **(Life-history interviews \Respondent 7: Man, 52 yrs, Married)**

“My wife complained about the daily household upkeep money not being enough and this ensued into heated quarrel. We went through a lot of counselling led by traditional authorities and a counselling group established by Action Aid through this counselling, all the issues were resolved amicably.” **(Life-history interviews \Respondent 7: Man, 52 yrs, Married)**

“I make most of the income decisions in my household although I do consult my wife.” **(Life-history interviews \Respondent 7: Man, 52 yrs, Married)**

“I do discuss with my wife on how to spend income from farming activities and we both decide on what to eat at home.” **(Life-history interviews \Respondent 12: Man, 44 yrs, Married)**

“I enjoyed the farming activities because that has helped me to some extent cater for my children and proceeds from the farming activities are used for household expenses. Proceeds from the farm are utilized based on collective decisions between my wife and myself.” **(Life-history interviews \Respondent 16: Man, 53 yrs, Married)**

“I make decisions on how to disburse our household income although my wife does support. My wife decides on what to eat in the house and since we have separate farms each person has control over income from the farm.” **(Life-history interviews \Respondent 13: Man, 54 yrs, Married)**

“I am into farming (cocoa) and cocoa marketing. I like both jobs because I get income to support home and other personal expenditure. I decide on what to use the proceeds from these activities personally.” **(Life-history interviews \Respondent 5: Man, 41 yrs, Married)**

Ownership of Land and Other Assets

To analyze the indicator for ownership of land and other assets, the different farming and non-farming activities that women and men participate in for income were assessed. Grouping of assets was done using the pro-WEAI asset list.

Fewer women compared to the men have talked explicitly about owning assets in the life history interviews. A female respondent reported working as a seamstress in addition to her farming activity, which may suggest access or ownership to a sewing machine which is a non-farm business equipment. A married woman also talked about purchasing a farmland for herself as an outcome of her booming cocoa farming business. Similarly, a widow also discussed running the cocoa farm herself with the support of labourers. Furthermore, a husband discussed about how he and his wife owned separate farms for their cocoa businesses. Qualitative interviews also conducted at midline revealed that a number of women manage farmland ranging from 1-3 farms sometimes. In the follow up interviews, the wife of one the cocoa farmers talked about owning land in which she grows vegetables like cabbage, okro, and peppers for sale to buyers that come from the city. Collectively, it seems that women own land in this context based on the interviews.

Women also report engaging in certain cocoa farming activities such as land preparation, spraying, pruning, weeding, pod breaking and drying of cocoa beans as well as the cultivation of other crops like cassava and plantain. Women’s participation in these activities may suggest their access to or sole/joint ownership of non-

mechanized farming equipments to help them carry out the various activities. However, a lot respondents have talked about lacking spraying machines in follow up interviews. A husband shared how his wife runs a cold store business, suggesting that the woman has access to or owns a large consumer durable such as a freezer for her business. Some women also engage in trading and poultry and livestock rearing which may possibly indicate their sole/joint ownership to small consumer durables and small (or large) livestock.

Men in their interviews have also talked about owning farmland for cocoa farming and the cultivation of other crops (i.e. plantain, cassava, rice, yam) and vegetables (i.e. tomato, pepper, garden eggs). A respondent reported renting 11 acres of land for his own farming activities in which he splits the proceeds between himself and the landowner. Some men have also said they engage in livestock rearing as a secondary occupation which may suggest their sole/joint ownership of either small or large livestock. One respondent reported purchasing a corn mill, a large consumer durable, to run a business in addition to his farming. Another respondent runs a transportation business and owns two vehicles, a small loading truck and a taxi. A lot of the men have also mentioned performing farming activities such as spraying, fertilizer application, weeding, pruning, pod breaking, and planting which may suggest access to or ownership of non-mechanized farming equipments.

Work Balance

In the life history interviews collected at baseline, a few women talked about workload and work balance in relation to their activities. A married woman discussed facing difficulties in managing both her cocoa farming activities and dressmaking business, although she acknowledges that she gets support from her husband with the farming activity. Another respondent shared her ability to juggle around multiple activities but sometimes getting overloaded with her work. A widow who is very much involved in different activities both in cocoa farming and her community talked about not having time to attend all meetings related to her activities.

In the follow interviews conducted at midline, women discussed the struggles they face in carrying out their work activities. Some women described having to walk for 30 minutes to an hour to and from their farmland. One respondent says it takes her an hour to work to the farm, which is why she limits her farm visits to once per week. Women also discussed transporting the cocoa beans/pods on their heads to and from the farm to their household to dry the beans. This has been described as putting physical strain by a respondent.

“We carry them (cocoa beans) here. Traders are the only people with the tricycles (motorized motorcycle/wagon vehicles). I carry them (cocoa beans) on my head here. It takes 45 minutes to walk from the farm to the house. The next day, your neck can really hurt” – Female respondent

A lot of the women also talked about having to hire and pay for labor to help them carry out activities on their farms, which can be quite expensive. Such activities include weeding, gathering the cocoa beans and transporting them. There were also expressions by women on balancing care and farm work from the data. When asked about work-life balance a respondent described her typical day as:

“I start by sweeping the house and fetching water. I take care of the children and get them off to school. I cook, eat, and then go to the farm. I support with the weeding and weed the other crops where we grow vegetables. I go back to the house and cook the evening meal. Take a bath. On the days when I have fish to sell, I’ll sell fish after I drop the children off at school (between 8 and 9). Around 10, I’ll go to the farm.” – Female respondent, 36 yrs, Married

Because the question on time and work balance was not asked directly in the life history interviews, men did not discuss it in their interviews. However, some mentioned having to hire labor to help with activities on the farm. For both men and women, we do not have qualitative data on the number of hours spent on activities in a day

Visiting Important Locations

Most of the women expressed that they are not limited in their mobility as women and they can visit any place without any restrictions. However, women did bring up some other issues that may prevent them from going places they might want to go. For instance, a widow talked about travel distance and caring for children as one of the factors affecting her decision to visit some locations. Another interviewee mentioned lack of funds as another factor that prevents her mobility. Restrictions from husbands was also brought up in one of the male interviews where the man expressed that he had prevented his wife from travelling to visit her close relatives. All of the men report that they do not face any restrictions in their mobility, however one respondent did talk about married men not being able to visit certain places, such as smoking bars and drinking spots, because of societal beliefs.

“I can go to any place I wish to, and I am not limited because I am a woman.” (Life-history interviews \Respondent 1: Women, 54 yrs, Widow)

“I can go to any place alone without any barrier.” (Life-history interviews \Respondent 2: Woman, 47 yrs, Married)

“As a woman, I am sometimes limited by the distance of the travel and the need to cater for my children.” (Life-history interviews \Respondent 6: Woman, 57 yrs, Window)

“If not financial difficulties, there is no place I cannot go.” (Life-history interviews \Respondent 14: Woman, 59 yrs, Divorced)

“My wife got annoyed when I stopped her from travelling to visit her close relatives due to the need for her to attend to seemingly important household issues. She eventually agreed to my suggestions and we resolved our issue.” (Life-history interviews \Respondent 12: Man, 44 yrs, Married)

“I think at this level as a married man, I need not to be at certain places that society will tag you otherwise. For instance, drinking spots, smoking bars, etc.” (Life-history interviews \Respondent 16: 53 yrs, Married)

Access to and Decisions on Financial Services

The available data on access to financial services suggest that women and men both suffer, although not equally, in this indicator of empowerment. Women report facing a lot of financial difficulties resulting in them borrowing money to resolve their situations and to repay debt in some cases. It was not clear which sources women borrowed cash (or in-kind) in the life history interviews. In follow up interviews conducted at the midline, women have discussed borrowing from Purchasing Clerks (PC) and have expressed the need to pay 50% interest rate on cash borrowed by the household. However, some say they get loans from the PC without any interest. In general, women mention high interest rates prevent them from accessing credit.

Most of the female respondents also reported not having any savings to fall on during difficult periods. Few women, however, did talk about belonging to households with savings and having a savings account. Similarly, it was not clear from the interviews if these savings are with a formal financial institution or other channels. Some have also discussed using mobile money. A respondent mentioned using the mobile money platform through agents in the community to deposit and save money from her business in her wallet as well withdraw money for use. In the midline interviews, a respondent said she uses her savings to purchase fertilizer for her farm. Some have also talked about belonging a susu group that loans money to members although with interest. An older widow who owns her own cocoa farming business did talk about accessing finance through a farmer group, Akuffo Yie Die, and a Cocoa Life VSLA that gives farmers financial support. The older widow, together with other women in their own interviews, expressed the need for access

to loans and inputs from financial institutions and other support systems in order to make investment in their farms as well as apply the good agricultural practices such as spraying and purchasing fertilizer that are recommended to them by the agronomists.

Men did talk about formal and informal sources from which they are able to access finance for their farming activities or when facing financial difficulties, especially at the household level. In one interview, the respondent discussed about borrowing and repaying of loans to a formal lender, which was a bank. In other situations, the respondent has been able to gain access to finance through a savings (susu) group that he belongs to that support members financially. Other respondents have accessed loans or credit from friends, Cocoa Marketing Clerks (CMC) and Purchasing Clerks (PC) in their area. However, men also discuss on challenges with taking loans because of the high interest rates.

Some men report having savings and investments they can tap into during periods of shock or in financial need for the farm or the household. Similar to the women, it was not clear from the interviews whether their savings are with a formal or informal institution. Some other channels where men have accessed finance are through a farmer group and community-based groups that offer financial help to group members. Similar to women, most of the men interviewed expressed the need for more access to finance to support their farming activities, make investments on their cocoa farms and apply the GAPs recommendations. Men and women alike talk about the difficulty in adhering to the FDP due of the lack of access to credit to acquire the necessary resources. Lack of access to credit was also discussed as a barrier to invest in other sources of income for the household such as livestock which can help in making investments in the farm.

“I belong to a farmer group (‘Akuffo Yie Die’) established by Touton and Cocoa Life VSLA group that supports cocoa farmers on GAPs and access to finance respectively.

For the farmer group, I was introduced to the group by the purchasing clerk and this has benefited me a lot by equipping my skills in good agricultural practices as well as financial support. For Cocoa Life VSLA group, I heard of the group through sensitization drive carried out in the community. This group facilitates my access to finance.

I want huge credit facility not those provided by the VSLA,” **(Life-history interviews \Respondent 6: Woman, 57 yrs, Window)**

“Because of the savings I keep, I am able to fall on that money during emergency situations.” **(Life-history interviews \Respondent 10: Man, 39 yrs, Married)**

“I had a high defaulting rate on input and cash credit I gave to farmers and therefore I have to sell my personal assets to defray the loan I took from the bank.

I belong to a farmer group (‘Akuffo Yie Die’) established by Touton that supports cocoa farmers on GAPs and how to increase agricultural yield as well as a susu group (Peace and Love) that supports members financially.” **(Life-history interviews \Respondent 5: Man, 41 yrs, Married)**

“Yes. For the farmer group, I was introduced to the group by the purchasing clerk and this has benefited me a lot by equipping my skills in good agricultural practices as well as financial support.” **(Life-history interviews \Respondent 13: Man, 54 yrs, Married)**

“I faced huge financial difficulties (i.e. household and farming finances) which ended up with me getting credit from the cocoa marketing clerk/ purchasing clerk.

I belong to two groups; one is a farmer group (‘Nyame Bekyere’) while the other is a community-based humanitarian club (‘Adwen Pa Kuo’). The community-based humanitarian club supports the needy in the

community (i.e. financially and in-kind support). The farmer group supports cocoa farmers on GAPs and how to increase agricultural yield.” **(Life-history interviews \Respondent 16: Man, 53 yrs, Married)**

Attitudes about Domestic Violence

There was no discussion on abuse in the interviews with both men and women. However, some men did talk about quarrels and verbal exchanges that have occurred with their spouses as a result of issues such as the man (husband) living away from the family, providing insufficient daily upkeep money for the household, and making decisions on what to purchase for the household. A divorced older woman also talked about being maltreated by a previous husband. It was not clear from this data if any or what form of abuse (physical, verbal or emotional) had occurred. However, a male described in his interview:

“My wife complained about the daily household upkeep money not being enough and this ensued into heated quarrel. We went through a lot of counselling led by traditional authorities and a counselling group established by Action Aid through this counselling, all the issues were resolved amicably.” **(Life-history interviews \Respondent 7: Man, 52 yrs, Married)**

Group Membership and Membership in Influential Groups

Qualitatively, collective agency was analyzed based on group membership, being an active member of a group, membership in an influential group and other themes that emerged from the data set that reflect this domain of empowerment. These themes include having influence at the community level through leadership roles, being respected, expressing of views and opinions and influencing community decision making.

All of the women interviewed report being members of a group, although the type of groups differed by the different categories of women. Groups where women are members include women’s fellowship group, church women’s group, farmer group (Akuffo Yie Die), Cocoa Life VSLA group, susu savings groups and a women’s savings group. Two of the women (a widow and a divorced woman) who are part of the farmers group, Akuffo Yie Die, report it as a group that influences the community through providing farmers with skills on agricultural practices as well as financial assistance.

Some of the women discussed having active roles in these groups. For instance, two women, one married and the other a widow, discussed being treasurers of a susu group and women’s savings groups, respectively, and another married woman mentioned her role as the treasurer of a church women’s group. Few women, however, discussed having leadership roles in these groups in the interviews. One of the married women talked about her role as the president of a women’s fellowship group and a widow discussed being a cocoa farming women ambassador in her community.

Follow up interviews, however, revealed that most women are not part of influential groups and they express wanting to join these kinds of groups because of the support they would receive as well as to share their farming experiences and learn from the experiences of others. However, women may view themselves as inferior to men and prefer men to lead them within these groups. When asked if a female respondent would like to be part of a farmer group with similar FDP she said:

“Yes, but I’d like for them to be mixed gender. Women’s intelligence is low. I’d prefer a mixture of men and women so men can support the women.” She’d also be willing to share her own experiences with the group”
- **Female, 44 yrs, Married**

Another older female farmer discussed in her interview that *“leveraging existing farmer society grouping would be useful for facilitating discussions on FarmGrow with other like-minded farmers”*, and that she will feel comfortable sharing her experiences with other farmers in the community.

As discussed above, collective agency was not discussed only at the group level but also within the communities in which the women are residing. Having influence at the community level seemed to be an important aspect of this indicator. Some of the women expressed that they do not influence community life because their views and opinions were not considered as a result of their gender. However, other women did feel that they were influential in their communities. A widow talked about being able to voice her opinions as well as being respected by others in her community. Another woman with a leadership role in her group (women's fellowship) also shared how she is respected in her community and able to make contributions during community meetings and discussions. An older divorced woman talked about her role in influencing community decisions and advising others on important issues that affect community life. A widow who is also a cocoa farming ambassador, Sunday school teacher and treasurer discussed being highly respected in her community and supporting others through providing informal extension services to others to guide them in their farming business. Furthermore, she is able to influence decisions at the community level such as the construction of a borehole which she reports as one of her achievements that had occurred in her community. Men also discussed in their interviews about queen mothers in the community who are highly respected and contributing to community life. Nevertheless, men acknowledge that these women do not have the final say even with their involvement.

Not all of the men interviewed were group members but are more members of influential groups than women. The majority belong to farmer groups (Akuffo Yie Die and Nyame Bekyere) that train farmers on good agricultural practices and provide financial support to members. Other groups men report being a part of include a men's fellowship group, susu groups, Touton cocoa farmer societies, and a community-based humanitarian club (Adwen Pa Kuo). Some men have also mentioned being members of a Produce Buying Company (PBC). Most of the men report being part of groups that influence the community. For instance, (1) the men's fellowship group provides education at the community level on sexual and reproductive health and basic water and sanitation habits, (2) the susu group provides members with financial support, (3) Touton cocoa farmers society provides farmers with skills on good farming practices and, (4) the community-based humanitarian club (Adwen Pa Kuo) supports community members during difficult times either financially or in-kind. Like the women, men still express wanting to be part of groups that will share their farming experiences with people having the same farm investment plan and also learn from the experiences of others.

Men interviewed also reported having a lot of influence at the community level. Some of the men discussed having leadership roles such as being the chief, the right hand of the chief (Bonkomhene), and other traditional titles in the community. Others have mentioned roles such as the head of the Apostolic Church and Cocoa Marketing Clerk and Purchasing Clerk. Most of the men discussed being highly respected in the community as well as influencing community decisions through the sharing of their views and opinions in meetings and discussions.

Self-Efficacy and Life Satisfaction

Qualitatively, the self-efficacy of the respondents was assessed based on their perceived individual empowerment, gender constraints and satisfaction with their current state in life. In response to questions related to individual empowerment some women perceived that they were empowered as well more empowered compared to other people because of their ability to achieve their own goals even in the face of difficulties, express their own preferences as well as influence others within their community. Some of the women also agreed that they were not limited in the things they could do because of their gender. Nevertheless, a number of the women were not confident that they could perform certain tasks effectively due to obstacles they face. For instance, an older widow and a divorced woman talked about their inability to carry out cocoa farming activities such as weeding, pruning and land preparation due to the strength and energy it requires which they lack. This often results in the women hiring farm labour, which is quite expensive and discourages further investments and, in some cases, these labourers do not perform tasks to the farmer's own standards. The lack of strength also prevents women from carrying out small activities within the household. Other women have also brought up literacy issues in the interviews as an obstacle to carrying out certain task and accomplishing goals related to cocoa farming business as women. A lot of the

women did express some level of satisfaction with life when they were interviewed. Some said they were satisfied because of how content they were with their current status, their resilience, and the achievements they have made so far.

Respondent 8, a married woman aged 46 years says in her interview “I am not limited in what I can do as a woman. Once the activities do not require literacy, I can do anything as a woman. I am able to do everything I wish to do; I am not limited at all based on my gender. Yes, I consider myself as empowered because I am able to speak my mind. I am more empowered because nothing can stop me from achieving my goal in life. Very satisfied (with life).”

Respondent 6, a widow aged 57 years says in her interview “Strength is the key bottleneck to my ability to do certain things especially farming activities like pruning, weeding, land preparation etc. Due to this, I have to spend a lot on hired labourers and these expenses discourage me. Due to strength issues, I am unable to do some household activities like basic carpentry works and farming activities. Yes, I consider myself empowered since although I do partake and make inputs into decision making. I am satisfied with my life looking at my current situation and the job I am currently doing.”

Respondent 14, a divorced woman aged 59 years says in her interview “I am satisfied with my life because I am content with what I have, and I know I am more resilient than some people although not to a higher extent.”

Respondent 15, a widow aged 49 years says in her interview “Yes, I consider myself as empowered because I am very influential in my community and can get things done. I am more empowered because I am able to influence other community members to accept my thoughts and suggestions. I am able to help other women to achieve their goals. Pruning, spraying the farm is quite difficult for me to do given the energy required. I wished I had the strength to do some of these activities since hired laborers do not do some of these activities to the standards I would want. Yes, some activities related to my farming business I would like to do but because it requires a lot of strength, I am unable to do. Some other women who have the strength are able to do these. Very satisfied because I have achieved quite a lot even with the death of my husband.”

Most of the men interviewed perceived their individual empowerment level to be high to some extent due to their ability to express their preferences in different areas (that is at household, community and group levels), achieve their own personal goals, and influence others in the community. However, one man believed he was not empowered when comparing himself to other men in his community. All of the men expressed that they were not limited because of their gender and they can carry out their goals without any obstacles. Nevertheless, one respondent did talk about his lack of knowledge as a potential barrier for him accomplishing things. Men also expressed different levels of life satisfaction in the interviews from being very satisfied to somewhat satisfied. Most were satisfied with life for reasons such as their farming activity, ability to provide for themselves, ability to manage their finances, religiosity, and being respected in the community.

Respondent 7, a married man aged 52 years says in his interview “I can do anything I want to without restrictions. Yes, I consider myself less empowered since although I do make suggestions but there are others whose suggestions carry higher weight than mine. I am satisfied with my life to some extent because I am able to manage my finances and avoid unnecessary expense like alcohol.”

Respondent 10, a married man aged 39 years says in his interview “I am not limited in what I can do as a man, it is difficult to say same for other men. I am able to do everything I wish to do; I am not limited at all based on my gender. Yes, I consider myself as empowered because I am a goal getter. I am more empowered because nothing can stop me from achieving my goal in life. Very satisfied (with life).”

Intra-Household Relationships

In the qualitative analysis, the indicator assessing respect among household members examined spousal/intra-household communication, household cooperation, spousal support, and household disagreement. Most of the women respondents discuss regular communication with their spouses on issues related to the cocoa farming business, childbirth, children’s needs, and household finances and welfare. Some made mention of having discussions and deciding together on day-to-day activities within their respective households. A few of the women also reported receiving support from their spouses. For example, one woman who is both a cocoa farmer and seamstress described her husband as supportive when it comes the farming activities. A lot of the interviewed women also discussed disagreeing with their spouses on issues related to their children’s future, finances and other household affairs.

In the midline interview, a lot of the female spouses mention not being included in the FarmGrow farm investment plan visits and some have expressed that the husbands do not share the information with them. One respondent says, “*when the agronomist comes, he speaks only to my husband.*” Women express wanting to participate in the meetings and trainings. In households where couples are engaged, the woman can be a key resource to adhering to the farm plan. For instance, Joseph (Pseudonym) and wife who agree to a large extent on their farm plan and she occasionally reminds him about farm activities that are skipped.

In life history interviews with men, they report communication as common within their household on issues related to the household welfare, including collective decision making within the household. Men also discussed supporting their spouses in different ways. One man talked about helping with household chores, and two others have talked about their intention to raise funds to support their wives in starting a trading business to complement the household income. Disagreement with their spouses were also reported by most of the men. Men discussed about women disagreeing with them on issues such as daily household upkeep money, purchasing of an equipment for business activities, and living away from the family. Men also talked about disagreeing with their wives when they thought something was not right. Some men say disagreements are often resolved through discussion, communication, and counselling from traditional authorities and existing groups that tackle such issues in the area.

Respondent 2, a married woman aged 47 years says in her interview, “(We talk) almost every day and talk about the cocoa farming business, and the future of our children. Being able to combine my work as a seamstress or dressmaker and that of cocoa farming, my husband has been supportive with the cocoa farming activities.”

Respondent 16, a married man aged 53 years says in his interview “I frequently engage my wife in any household decision making processes highly pertaining to family activities and the welfare of our children. We often discuss issues collectively for consensus before any formal decision making is taken. Most of the discussion points is between my wife and myself with few instances for children involvement. I mostly do not take decisions exclusively by myself but rather consult my wife on decisions pertaining to the cocoa farming activities. For the welfare of our children, we collectively discuss issues before funds from the farming activities are disbursed. On purchase and food consumption for household, we jointly decide on what to eat but she sometimes takes the decision and as well prepares the food. I wish/or intend to support her with funds to start trading to support the household financially.”

Discussion and Conclusion

The pro-WEAI score shows that women are not empowered in the study area. The overall women’s empowerment score is 73%, which is below the empowerment cut off of 75%. Men and women were similarly disempowered even though women (67%) were slightly more disempowered than men (61%) across the indicators. Among those disempowered, men and women were equally adequate in the various indicators, that is in 57% of the indicators. Sixty percent of households achieved gender parity. When assessing what contributed most to disempowerment, work balance and membership in influential groups were the top contributors for women, whereas work balance, respect among household members and autonomy in income were the most common among men. Areas where women are disempowered are similar to findings from an analysis of the pro-WEAI indicators across 13 projects implemented in parts of Sub-Saharan Africa and South Asia [21].

Work balance was a major contributor of disempowerment for men and women alike, but the data suggests it is slightly higher for women. In the pro-WEAI, this indicator measures workload from both the primary and care (secondary) activities that respondents carry out over a 24-hour period. The qualitative analysis finds that women carry out work activities that put a lot of high burdens on them. Women described spending a lot of time and energy walking and carrying cocoa beans to/from the household to the farms. In most cases, women do not have the appropriate transporting resources, often carrying the cocoa beans on their heads and shoulders. The long walking distance also affects how often women are able to visit the farm during the week. Women also juggle between household/care responsibilities, non-farm related businesses and farm related activities. Women in female headed household most often mentioned the need to hire farm labor to support them with their farming activities because of the strength and energy it requires, which also adds to their financial burdens due to an increase in the expenses on the farm. Although there is indication that women find it difficult to manage their responsibilities, men articulated very little about work balance in the qualitative interviews.

Another leading cause of disempowerment among women and to some extent men is the membership in influential groups indicator. Even respondents that are empowered as assessed by the index may not be empowered in this particular indicator. The qualitative analysis suggests that while both men and women belong to groups, more men than women are part of groups that they believe are influential in the community. For both men and women, influential groups are those that provide support to farmers and influence community life. Quantitative analysis of the individual group membership questions (see appendix for the data) included in the pro-WEAI agree with the qualitative findings that women feel they have less

influence in most groups. Meanwhile, a lot of men talked about making decisions at the group level. For agriculture groups, both men and women mentioned the high prevalence of these groups, but women noted very little membership and influence within these groups. Few women do report some participation in religious groups and credit/microfinance groups with fewer reporting active membership and influence in decision making in these groups. The qualitative analysis finds that women may take up roles such as treasurers within these groups.

Our qualitative data suggests that some women would prefer to be part of mixed sex groups and this represents the majority of the type of groups respondents participate in the quantitative survey. The qualitative indicates that women want men to lead within these groups because women lack the human capital. This is quite interesting and may suggest women's internalization of their lower status and the need to build women's capacity, skills and confidence levels within groups to take up different roles. Indeed, both women and men have talked about membership in influential groups as a source of empowerment for cocoa farmers in their descriptions of empowered persons. These were discussed as groups that provide them with trainings on farming practices, business and access to finance. In more recent interviews, the cocoa farmers using FarmGrow have talked about the need for the creation and/or leveraging of existing groups so farmers can interact with others with similar farm investment plans and experiences as theirs.

Men were severely disempowered in the indicator respect among household members. Being respectful and respected was discussed a lot by men in the qualitative interviews but mostly at the community level and not the household level. This does not contribute much to our interpretations of the pro-WEAI results. However, it may suggest that in relation to respect men think more broadly not just within the household. This indicator of empowerment requires further investigation among our sample as it is large contributor of disempowerment for male cocoa farmers, even among those that may be empowered across most of the indicators.

In relation to household relationships, recent interviews suggest that men do not include women in FarmGrow, and most women report not having any knowledge about the farm plan and its recommended activities. Women are also not able to understand the FarmGrow manuals because they are not literate. As expected, more men make productive decisions in relation to the cocoa farming activities. Women report making some inputs, but these always considered in the final decisions by the men of the households. Some men and women agree that men should have more influence in decision making because they are the heads of the households. Engaging couples in gender dialogues may be a strategy to promote trust, respect, gender equity within cocoa farming households and communities.

The analysis also finds that more women than men justify gender based violence (GBV) within the household. This is consistent with findings from an analysis of Demographic and Health Survey (DHS) data from 17 Sub-Saharan African countries where women were more likely to justify domestic violence than men [29]. The 2014 Ghana DHS also found that 28% of women and 13% of men justify a husband beating a wife for at least one reason [30]. However, education and wealth seemed to decrease these estimates. The qualitative does not provide specific information on attitudes about domestic violence, but women did share incidents of quarrels resulting from disagreement with their spouses. Domestic violence is an important issue that requires intervention among the cocoa farmers through different strategies such as those that focus on women's and community perceptions and beliefs towards GBV and promote joint decision making and income gains within the household.

Access to and decisions on financial services was another indicator of disempowerment that showed importance in both the quantitative and qualitative analysis. Both women and men expressed in the qualitative interviews the need for accessing financial capital in order to make investments in their farms such as purchasing chemicals and fertilizer. Access to financial services is very low for women, but men seem to have a slightly better access. The main sources of finance from the quantitative data are the formal lender, informal lender and informal credit/savings group. It was not clear from the qualitative the extent of women's access to formal financial services, but some make reference to using mobile money to save money

from their income activities (mainly growing and selling of vegetables), transfer and withdraw money through local agents in the community.

In the qualitative analysis, some farmers say they often do not access finance through available sources such as they informal lender because of the high interest rates they have to pay when they take loans. Lack of access to credit hinders the farmers' abilities to follow some of the FarmGrow recommendations provided to them by the agronomists. Some farmers report using their savings or income from other sources for the household to pay for services or make purchases for their cocoa farms. Supporting other household income sources and groups may be another way in which access to finance may be improved for the cocoa farmers.

Finally, self-efficacy contributed to the disempowerment of both genders. Qualitatively, men's lack of self-efficacy was linked to their inability to accomplish things from lacking the necessary resources such as knowledge. Women's low self-efficacy was linked to their lack of confidence, inability to carry out certain tasks due to obstacles they face such as literacy issues and lack of energy and strength that prevent them from performing some tasks.

Programmatic Recommendations

The quantitative and qualitative assessment with the pro-WEAI tool helped to identify areas where women's and men's empowerment may be improved to achieve the objectives of improving gender equality and empowerment of women within the Sat4Farming project. The findings suggest improvements in the current design of the project in the areas of influential group formation, access to finance, household relations, women's and men's work burdens, and attitudes about domestic violence.

The recommendations are as follows:

1. **Leverage existing, organize, or develop linkages to influential groups.** Qualitatively, few women reported being part of influential groups. The research reveals that from both men's and women's perspectives, influential groups are those that support them with farm and household finances and their other needs, such as the need for information and training on GAPS or labor support. Either through leveraging these groups or building complementary ones, **domestic violence, respect and gender roles** can also be explored through gender-specific conversations as well as gender dialogues that include both men and women. Existing groups such as Touton's Akuffo Yie Die, Cocoa life VSLAs and other VSLAs, susu groups, and other community-based humanitarian groups were those already mentioned by the cocoa farmers.
 - a) For women, in particular, groups that equip them with skills, educate them, build their confidence and leadership capacity and that allow them to share their views and opinions as well as equip them to influence household or community decision making are needed.
 - b) For men, groups that promote positive masculinity and sensitize men and community members to be more inclusive of women in decision making and that also link them to financing, financial education, and leadership opportunities are needed. Men were disempowered in autonomy in income which suggests other community leader's/men's approval or disapproval guide men's decisions.
2. Either through group-based methodologies or individualized products and services, **increase farmer access to and decisions on financial services.** An important area of disempowerment for women and men was limited access to capital from financial institutions.
 - a) For women, given they appear to have limited say over cocoa farming unless they are the land-owner, they need increased access to capital that enables them to build their own income-generating activity (IGA) or business which would **likely increase their ability to control their own income**. One respondent shared she would like to be trained by Touton on other IGAs, especially non-agriculture related IGAs such as hairdressing and soap making. The demographics also show that more women than men are engaged in a secondary activity.

- b) For men, they reported more access to finance from formal and informal sources compared to women, but they are also disempowered in this area and also acknowledge their lack of credit worthiness due to their past payment performance on credit. The common source of access seems to be through informal sources such as susu groups, farmer groups, community-based groups and individuals like the CMCs and PCs. Individual and household financial education approaches should be explored to improve financial behaviors but also strengthen their credit worthiness.
3. **Support farmer self-efficacy through traditional (formal education) and innovative (using technology) approaches.** Another big contributor to women's and men's disempowerment was their self-efficacy, accounting 9.2% for both genders.
 - a) For women, their low self-efficacy was linked to their relatively lower educational achievement as well as their lack of confidence and inability to carry out certain tasks to achieve their goals. Increasing the girl child and younger women's access to formal education must continue and which may be addressed by increasing financing options for educational fees. Also, providing literacy, farming, and business training to women, either through group-based methodologies such as VSLAs or through innovations in digital technology should continue to be explored.
 - b) For men, their low self-efficacy in the interviews was linked primarily with lack of knowledge that may prevent them from achieving their goals. Similarly, to women, leveraging group-based methods or digital technology training approaches should be explored.
4. **Consider labor-saving technologies and take a deeper dive into understanding contributors to work balance for both men and women.** While the quantitative uncovered the work balance issue, the qualitative revealed very little about drivers of work balance issues, except for some on women finding it challenging to manage farming and IGA activities. Labor saving technologies, such as carts, motorcycles or other means to transport their goods between home and farm or home and other IGAs and to sell their commodities are needed. Women, in particular, noted the time it takes them to walk to the farm as well as the need to transport cocoa on their heads between farm and home, which is detrimental to their health. Given women often are in charge of watering newly-planted cocoa plants, support with improved water sources may be needed. Given the expense of some of these technologies, leveraging group-based structures where women and men share the ownership or pay low-cost rental of the technologies should be explored.
5. Finally, **FarmGrow needs to consider more inclusive strategies for women, particularly regarding their involvement in the agronomic support and the investment plan.** Currently, the interactions between the agronomist and the households is often limited to an exchange between the male household head and the agronomist, unless the land-owner is a woman. Meetings should be scheduled, where possible, to coincide with times convenient for both men and women or additional training/information sharing needs to occur for women at convenient times for them, such as through group-based methodologies. Women clearly play a role on the farm. They may not necessarily want to gain more responsibility due to other IGAs and household duties they manage; however, their voice is critical given the impact that decisions made on the farm by the man, particularly for replanting, grafting or other cost-intensive decisions, can impact household finances. Women may not need to be present for all agronomic visits, but their inclusion in the discussions regarding the investment plan is important for household financial management.

References

1. United Nations Ghana. National Development Planning Commission, Republic of Ghana. Ghana Millennium Development Goals 2015 Report. Ghana; September 2015. Available at: gh.undp.org/content/dam/ghana/docs/Doc/Inclgro/UNDP_GH_2015%20Ghana%20MDGs%20Report.pdf.
2. Abdulai AG. The politics of resource sharing and regional inequality in Ghana: lessons for the post-2015 development agenda. *Development*. 2014;57(3-4):488-96. <https://doi.org/10.1057/dev.2015.12>
3. Cooke E, Hague S, and Andy M. The ghana poverty and inequality report: using the 6th ghana living standard survey 2016. Ghana; March 2016. Available at: [https://www.unicef.org/ghana/Ghana_Poverty_and_Inequality_Analysis_FINAL_Match_2016\(1\).pdf](https://www.unicef.org/ghana/Ghana_Poverty_and_Inequality_Analysis_FINAL_Match_2016(1).pdf).
4. World Bank. Ghana Poverty Rate 1987-2020. Available at: <https://www.macrotrends.net/countries/GHA/ghana/poverty-rate>
5. Gender, Equity, and Rural Employment Division of FAO: Gender inequalities in rural employment in Ghana 2012. Available at <http://www.fao.org/docrep/016/ap090e/ap090e00.pdf>.
6. United Nations Development Programme. Human Development Reports: Gender Inequality Index 2018. Available at: <http://hdr.undp.org/en/composite/GII>.
7. World Bank. 2019
8. Hallward-Driemeier M. Enterprising women: expanding economic opportunities in africa in africa development forum. Washington, DC: Agence Française de Développement, The World Bank; 2013. Available at: <http://documents.worldbank.org/curated/en/509981468193131963/pdf/782990PUB0EPI00C00PUBDATE0604020130.pdf>.
9. Mastercard Index for Women Entrepreneurs 2018. Available at: https://newsroom.mastercard.com/wp-content/uploads/2018/03/MIWE_2018_Final_Report.pdf.
10. Kuada J. Gender, social networks, and entrepreneurship in Ghana. *J Afr Bus*. 2009; 10(1): 85-103. DOI: <https://doi.org/10.1080/15228910802701445>
11. Quaye W, Dowuona S, Okai M, Dziedzoave N. Gender dimensions of decision-making on production assets and challenges facing women. *Dev Pract*. 2016; 26(1): 77-90. DOI: <https://www.tandfonline.com/doi/abs/10.1080/09614524.2016.1112364>
12. Doss C, Deere CD, Oduro AD, Swaminathan H, Suchitra JY, Lahoti R, Baah-Boateng W, Baokye-Yiadom L, Contreras J, Twyman J, Zachary C, Grown C, and Hillesland M. The gender asset and wealth gaps: Evidence from Ecuador, Ghana, and Karnataka, India. Bangalore: Indian Institute of Management Bangalore, 2011. Available at: https://www.researchgate.net/publication/264859166_The_Gender_Asset_and_Wealth_Gaps_Evidence_from_Ecuador_Ghana_and_Karnataka_India.
13. Doss CR. Men's crops? Women's crops? The gender patterns of cropping in Ghana. *World Dev*. 2002; 30(11): 1987-2000. DOI: [https://doi.org/10.1016/S0305-750X\(02\)00109-2](https://doi.org/10.1016/S0305-750X(02)00109-2)
14. World Food Programme, Ministry of Food and Agriculture, Ghana Statistical Service. Comprehensive Food Security and Vulnerability Analysis (CFSVA): Focus on Northern Ghana. Ghana; April-May 2012. Available at: https://documents.wfp.org/stellent/groups/public/documents/ena/wfp257009.pdf?_ga=2.192979435.732409814.1544743108-201370197.1534181503.
15. Malapit HL, Quisumbing AR. What dimensions of women's empowerment in agriculture matter for nutrition in Ghana? *Food Policy*. 2015; 52: 54-63. DOI: <https://doi.org/10.1016/j.foodpol.2015.02.003>
16. Doss C. The effects of intrahousehold property ownership on expenditure patterns in Ghana. *J Afr Econ*. 2005; 15(1):149-80. DOI: 10.1093/jae/eji025
17. Grameen Foundation. *Grameen Foundation and Partners bringing satellite technology to benefit smallholder cocoa farmers in Ghana*. 2018. Available at

- <https://grameenfoundation.org/stories/press-releases/grameen-foundation-and-partners-bringing-satellite-technology-to-benefit-smallholder-cocoa-farmers-in-ghana>
18. Kabeer N. Resources, agency, achievements: reflections on the measurement of women's empowerment. *Dev. Change*. 1999; 30:435-464. DOI: <https://doi.org/10.1111/1467-7660.00125>
 19. Ibrahim S, Alkire S. Agency and empowerment: a proposal for internationally comparable indicators. *Oxf. Dev. Stud.* 2007; 35(4):379-403. DOI: <https://doi.org/10.1080/13600810701701897>
 20. Rowlands J. Empowerment examined. *Dev Pract.* 1995; 5(2): 101-107. DOI: <https://doi.org/10.1080/0961452951000157074>
 21. Malapit H, Quisumbing A, Meinzen-Dick R, Seymour G, Martinez E, Heckert J, Rubin D, Vaz A, Yount K, Gender Agriculture Assets Project Phase 2 (GAAP2) Study Team. Development of the project-level Women's Empowerment in Agriculture Index (pro-WEAI). *World Dev.* 2019; 22:675-692. DOI: <https://doi.org/10.1016/j.worlddev.2019.06.018>
 22. Johnson NL, Kovarik C, Meizen-Dick R, Njuki J, Quisumbing A. Gender, assets, and agricultural development: lessons from eight projects. *World Dev.* 2016; 83: 295-311. DOI: <https://doi.org/10.1016/j.worlddev.2016.01.009>
 23. International Food Policy Research Institute. Guides and Instruments: GAAP2 qualitative research protocols 2018. Available at <https://weai.ifpri.info/weai-resource-center/guides-and-instruments/>.
 24. Gramling L, Carr R. Lifelines: a life history methodology. *Nurs Res.* 2004;53(3):207-10. DOI: <https://doi.org/10.1097/00006199-200405000-00008>
 25. Kieran C, Gray B, Gash M. Understanding Gender Norms in Rural Burkina Faso: A Qualitative Assessment. 2018. Available at https://grameenfoundation.org/documents/Understanding_Gender_Norms_Baseline_Qualitative_Assessment_BRB.pdf
 26. Ojermark, A. Presenting life histories: A literature review and annotated bibliography. Chronic Poverty Research Centre Working Paper No. 101, Available at SSRN: <https://ssrn.com/abstract=1629210>
 27. Sarpong D, Osei-Asare Y, Gray B, Tsekpo E. FarmGrow: Farm development plans for smallholder cocoa farmers in Ghana baseline report. Rainforest Alliance, Grameen Foundation and University of Ghana, Legon. 2020. Available at <https://grameenfoundation.org/documents/FarmGrow-Baseline-Report-2182020.pdf>
 28. Alkire S, Meinzen-Dick R, Peterman A, Quisumbing Agnes, Seymour G, Vaz A. The women's empowerment in agriculture index. *World Dev.* 2013; 52: 71-91. DOI: <https://doi.org/10.1016/j.worlddev.2013.06.007>
 29. Uthman O, Lawoko S, Moradi T. Factors associated with attitudes towards intimate partner violence against women: a comparative analysis of 17 sub-Saharan countries. *BMC Int Health Hum Rights.* 2009; 9:14. DOI: <https://doi.org/10.1186/1472-698X-9-14>
 30. Ghana Demographic and Health Survey. 2014. Available at <https://dhsprogram.com/pubs/pdf/fr307/fr307.pdf>

Appendix

Table 1: Adequacy of each indicator of empowerment

| Indicator | Adequacy in empowerment (%) | |
|---|-----------------------------|-------|
| | Women | Men |
| Intrinsic agency | | |
| Autonomy in income | 67.4 | 26.53 |
| Self-efficacy | 65.3 | 67.4 |
| Attitudes about domestic violence | 83.7 | 95.9 |
| Respect among household members | 59.18 | 36.7 |
| Instrumental agency | | |
| Input in productive decisions | 79.6 | 83.7 |
| Ownership of land and assets | 93.8 | 95.9 |
| Access to and decisions on financial services | 63.3 | 79.6 |
| Control over the use of income | 61.2 | 71.4 |
| Work balance | 0 | 0 |
| Ability to visit important locations | 73.5 | 77.6 |
| Collective agency | | |
| Group membership | 81.6 | 81.6 |
| Membership in influential groups | 34.7 | 63.3 |

N = 98 (Females, n= 49; Males, n = 49)

The results show a higher proportion of men than women achieve adequacy in the pro-WEAI indicators in Table 1. The indicator for which women have a higher number of people with adequacy than men include autonomy in income and respect among household members.

Table 2: Input in productive decisions

Participation in each activity

| Variable | Percentage participating in activity | |
|--|--------------------------------------|------------|
| | Women | Men |
| Staple grain farming | 77.55 (38) | 75.51 (37) |
| Horticultural or high value crop farming | 79.59 (39) | 75.51 (37) |
| Small livestock raising | 36.73 (18) | 49.98 (24) |
| Poultry and other small animals | 44.90 (22) | 57.14 (28) |
| Non-farm economic activities | 46.94 (23) | 40.82 (20) |
| Wage salary employment | 6.12 (3) | 20.41 (10) |

N= 98 (Women n= 49; Men n = 49)

How much input did respondents who participate have in making decisions about each activity?

| Variable | Little to no input decisions % | | Input in some decisions % | | Input into most or all decisions % | |
|----------------------|--------------------------------|-----|---------------------------|----------|------------------------------------|------------|
| | Women | Men | Women | Men | Women | Men |
| Staple grain farming | 4.08 (2) | 0 | 20.41 (10) | 8.16 (4) | 53.06 (26) | 67.35 (33) |

| | | | | | | |
|---|--------------|-------------|--------------|--------------|---------------|---------------|
| Horticultural or high value crop farming | 10.20 (5) | 6.12 (3) | 16.33 (8) | 10.20 (5) | 53.06 (26) | 59.18 (29) |
| Small livestock raising | 6.12 (3) | 2.04 (1) | 6.12 (3) | 4.08 (2) | 24.49 (12) | 42.86 (21) |
| Poultry and other small animals | 4.08 (2) | 2.04 (1) | 8.16 (4) | 12.24 (6) | 32.65 (16) | 42.86 (21) |
| Non-farm economic activities | 0 | 4.08 (2) | 2.04 (1) | 0 | 44.90 (22) | 36.73 (18) |
| Wage salary employment | 0 | 0 | 0 | 2.04 (1) | 6.12 (3) | 18.37 (9) |
| Large occasional household purchases (land, transport vehicles, bicycles) | 4.08 (2) | 0 | 2.04 (1) | 4.08 (2) | 12.24 (6) | 26.53 (13) |
| Small household purchases (food for daily consumption) | 0 | 6.12 (3) | 10.20 (5) | 16.33 (8) | 77.55 (38) | 38.78 (19) |

The extent to which respondents feel they can participate in decisions if he/she wanted to

| Variable | Not at all % | | Small extent % | | Medium extent % | | High extent % | |
|--|-----------------|-----|-------------------|--------------|--------------------|---------------|------------------|---------------|
| | Women | Men | Women | Men | Women | Men | Women | Men |
| Staple grain farming | 0 | 0 | 14.29 (7) | 6.12 (3) | 12.24 (6) | 30.61 (15) | 51.02 (25) | 38.78 (19) |
| Horticultural or high value crop farming | 6.12 (3) | 0 | 12.24 (6) | 18.37 (9) | 16.33 (8) | 14.29 (7) | 44.90 (22) | 42.86 (21) |
| Small livestock raising | 2.04 (1) | 0 | 6.13 (3) | 2.04 (1) | 4.08 (2) | 12.24 (6) | 24.49 (12) | 34.69 (17) |
| Poultry and other small animals | 2.04 (1) | 0 | 4.08 (2) | 6.13 (3) | 6.12 (3) | 26.53 (13) | 32.65 (16) | 24.65 (12) |
| Non-farm economic activities | 0 | 0 | 0 | 4.08 (2) | 4.08 (2) | 4.08 (2) | 42.86 (21) | 32.65 (16) |
| Wage salary employment | 0 | 0 | 0 | 2.04 (1) | 0 | 2.04 (1) | 6.12 (3) | 16.33 (8) |
| Large occasional household purchases | 2.04 (1) | 0 | 2.04 (1) | 0 | 2.04 (1) | 14.29 (7) | 12.24 (6) | 16.33 (8) |
| Small household purchases (food for daily consumption) | 0 | 0 | 6.12 (3) | 10.20 (5) | 16.33 (8) | 24.49 (12) | 65.31 (32) | 26.53 (13) |

Table 3: Ownership of land or other assets

Ownership of land

| Variable | Percentage of respondents | |
|-----------------------|---------------------------|------------|
| | Women | Men |
| Cultivate land | | |
| Solely | 29.17 (14) | 55.32 (26) |
| Jointly | 64.58 (31) | 40.43 (19) |
| Solely and jointly | 6.25 (3) | 4.26 (2) |
| No | 0 | 0 |

| Own any household land | | |
|-------------------------------|------------|------------|
| Solely | 22.92 (11) | 57.45 (27) |
| Jointly | 31.25 (15) | 17.02 (8) |
| Solely and jointly | 6.25 (3) | 2.13 (1) |
| No | 39.58 (19) | 23.40 (11) |

N= 98 (Women n= 49; Men n = 49)

Ownership of assets that could be used to generate income

| Variable | Women % | | | Men % | | |
|---------------------------------|--------------------|----------------|---------------------------|------------------|----------------|---------------------------|
| | Solely | Jointly | Solely and jointly | Solely | Jointly | Solely and jointly |
| Small livestock | 21.05 (4) | 73.68 (14) | 5.26 (1) | 70.83 (17) | 20.83 (5) | 8.33 (2) |
| Poultry and other small animals | 40.91 (9) | 40.91 (9) | 0 | 65.38 (17) | 19.23 (5) | 15.38 (4) |
| Non-mechanized farm equipment | 29.27 (12) | 53.66 (22) | 4.88 (2) | 52.94 (18) | 38.24 (13) | 5.88 (2) |
| Mechanized farm equipment | 0 | 100 (2) | 0 | 100 (2) | 0 | 0 |
| Non-farm business equipment | 71.43 (5) | 28.57 (2) | 0 | 37.50 (3) | 25 (2) | 12.50 (1) |
| House or building | 17.14 (6) | 37.14 (13) | 2.86 (1) | 56.76 (21) | 32.43 (12) | 5.41 (2) |
| Large consumer durable | 41.03 (16) | 41.03 (16) | 2.56 (1) | 59.46 (22) | 37.84 (14) | 2.70 (1) |
| Small consumer durable | 84.21 (16) | 15.79 (3) | 0 | 92.59 (25) | 7.41 (2) | 0 |
| Cell phone | 77.78 (35) | 22.22 (10) | 0 | 95.35 (41) | 4.65 (2) | 0 |
| Non-agriculture land | 40 (4) | 60 (6) | 0 | 72.73 (8) | 27.27 (3) | 0 |
| Means of transport | 51.02 (25) | 16.33 (8) | 0 | 61.22 (30) | 6.12 (3) | 2.04 (1) |

Table 4: Access to financial services

Access to financial bank account

| Variable | Women % | | | Men % | | |
|----------------------------------|--------------------|---------------|-------------------|------------------|---------------|-------------------|
| | Yes | No | Don't know | Yes | No | Don't know |
| Access to financial bank account | 55.10 (27) | 42.86 (21) | 2.04 (1) | 65.31 (32) | 34.69 (17) | 0 |

Belongs to a household that did not use credit in the past year but could have borrowed if wanted to from at least ONE source

| Variable | Women % | | | Men % | | |
|-----------------|--------------------|-----------|--------------|------------------|-----------|--------------|
| | Yes | No | Maybe | Yes | No | Maybe |

| | | | | | | |
|--|----------------|---------------|---------------|---------------|---------------|--------------|
| Non-governmental organization (NGO) | 20.41 (100) | 59.18 (29) | 20.41 (10) | 28.57 (14) | 65.31 (32) | 6.12 (3) |
| Formal lender (bank//financial institution) | 42.86 (21) | 38.78 (19) | 18.37 (9) | 59.18 (29) | 38.78 (19) | 2.04 (1) |
| Informal lender | 42.86 (21) | 46.94 (23) | 10.20 (5) | 48.98 (24) | 42.86 (21) | 8.16 (4) |
| Friends or relatives | 32.65 (16) | 44.90 (22) | 22.45 (11) | 30.61 (15) | 61.22 (30) | 8.16 (4) |
| Group based micro-finance or lending including VSLA's/SACCOs | 32.65 (16) | 48.98 (24) | 18.37 (9) | 32.65 (16) | 57.14 (28) | 10.20 (5) |
| Informal credit/savings groups (e.g. funeral societies) | 32.65 (16) | 46.94 (23) | 20.41 (10) | 40.82 (20) | 53.06 (26) | 6.12 (3) |

Belongs to a household that used a source of credit in the past year

| Variable | Women % | | | Men % | | |
|--|--------------|-------------|----------------|---------------|---------|----------------|
| | Cash | In-kind | Cash & In-kind | Cash | In-kind | Cash & In-kind |
| Non-governmental organization (NGO) | 5 (1) | 0 | 95% (19) | 11.76 (2) | 0 | 88.24 (15) |
| Formal lender (bank//financial institution) | 40 (12) | 0 | 60 (18) | 56.67 (17) | 0 | 43.33 (13) |
| Informal lender | 30.77 (8) | 3.85 (1) | 64.38 (17) | 42.86 (12) | 0 | 57.14 (16) |
| Friends or relatives | 7.41 (2) | 0 | 92.59 (25) | 15.79 (3) | 0 | 84.21 (16) |
| Group based micro-finance or lending including VSLA's/SACCOs | 16.00 (4) | 0 | 84.00 (21) | 28.57 (6) | 0 | 71.43 (15) |
| Informal credit/savings groups (e.g. funeral societies) | 7.69 (2) | 0 | 92.31 (24) | 26.09 (6) | 0 | 73.91 (17) |

Table 5: Control over the use of income

Has input in decisions related to how to use income of all agricultural and non-agricultural activities

| Variable | Little to no input decisions % | | Input in some decisions % | | Input into most or all decisions % | |
|--|-----------------------------------|-------------|------------------------------|--------------|------------------------------------|---------------|
| | Women | Men | Women | Men | Women | Men |
| Staple grain farming | 6.12 (3) | 0 | 14.29 (7) | 10.20 (5) | 55.10 (27) | 65.31 (32) |
| Horticultural or high value crop farming | 8.16 (4) | 6.12 (3) | 12.24 (6) | 14.29 (7) | 40.82 (20) | 44.90 (22) |

| | | | | | | |
|---------------------------------|-------------|-------------|-------------|--------------|---------------|---------------|
| Small livestock raising | 6.12 (3) | 2.04 (1) | 6.12 (3) | 2.04 (1) | 22.45 (11) | 44.90 (22) |
| Poultry and other small animals | 4.08 (2) | 0 | 6.12 (3) | 14.29 (7) | 30.61 (15) | 40.82 (20) |
| Non-farm economic activities | 0 | 4.08 (2) | 0 | 0 | 36.73 (18) | 30.61 (15) |
| Wage salary employment | 0 | 0 | 0 | 2.04 (1) | 6.12 (3) | 16.33 (8) |

Has input in decisions related to how to use outputs of all agricultural activities

| Variable | Little to no input decisions % | | Input in some decisions % | | Input into most or all decisions % | |
|--|--------------------------------|-------------|---------------------------|--------------|------------------------------------|---------------|
| | Women | Men | Women | Men | Women | Men |
| Staple grain farming | 6.12 (3) | 0 | 14.29 (7) | 10.20 (5) | 55.10 (27) | 65.31 (32) |
| Horticultural or high value crop farming | 8.16 (4) | 6.12 (3) | 12.24 (6) | 14.29 (7) | 40.82 (20) | 44.90 (22) |
| Small livestock raising | 6.12 (3) | 2.04 (1) | 6.12 (3) | 2.04 (1) | 22.45 (11) | 44.90 (22) |
| Poultry and other small animals | 4.08 (2) | 0 | 6.12 (3) | 14.29 (7) | 30.61 (15) | 40.82 (20) |

Table 6: Autonomy in income

| Variable | Story | Percentage of respondents who are similar to person in story | |
|---|---|--|---------------|
| | | Women | Men |
| How to use income generated from agricultural and non-agricultural activities | There is no alternative to how [person's name] uses his/her income. How she uses her income is determined by necessity. | 36.73 (18) | 10.20 (5) |
| | [Person's name] uses his/her income how her spouse, or another person or group in her community tell her/him she/he must use it there. She/he does what they tell her/him to do. | 6.12 (3) | 10.20 (5) |
| | [Person's name] uses her/his income in the way that her/his family or community expect. She/he wants them to approve of her. | 71.43 (35) | 32.65 (16) |
| | [Person's name] chooses to use her income how she/he personally wants, and thinks is best for herself/himself and her/his family. She/he values using her/his income in this way. If she/he changes her/his mind, she/he could act differently. | 71.43 (35) | 32.65 (16) |

Table 7: Group membership

Composition of groups respondents report are present in the community

| Variable | Percentage of respondents | | | | | |
|--|---------------------------|--------------|------------|-----|---------------|---------------|
| | All Male | | All female | | Mixed sex | |
| | Women | Men | Women | Men | Women | Men |
| Agricultural/livestock/fisheries producers' group (including marketing groups) | 0 | 3.03 (1) | 0 | 0 | 100 (40) | 31 (93.94) |
| Credit or. Microfinance group (including SACCOs/merry-go-rounds/VSLAs) | 0 | 0 | 0 | 0 | 95.93 (23) | 100 (11) |
| Mutual help or insurance group (including burial societies) | 0 | 0 | 0 | 0 | 100 (15) | 100 (11) |
| Trade and business association group | 71.43 (5) | 16.67 (1) | 0 | 0 | 14.29 (1) | 83.33 (5) |
| Civic group (improving community) or charitable group (helping others) | 16.67 (1) | 0 | 0 | 0 | 66.67 (4) | 100 (6) |
| Religious group | 27.50 (11) | 7.41 (2) | | | 70 (28) | 85.19 (23) |

Proportion of respondents who are active members of a group of those who are part of groups

| Variable | Percentage of respondents | |
|--|---------------------------|---------------|
| | Women | Men |
| Agricultural/livestock/fisheries producers' group (including marketing groups) | 35.0 (14) | 78.79 (26) |
| Credit or. Microfinance group (including SACCOs/merry-go-rounds/VSLAs) | 58.33 (14) | 18.18 (2) |
| Mutual help or insurance group (including burial societies) | 40 (6) | 27.27 (3) |
| Trade and business association group | 28.57 (2) | 50.0 (3) |
| Civic group (improving community) or charitable group (helping others) | 16.67 (1) | 33.33 (2) |
| Religious group | 75.0 (30) | 81.48 (22) |

The extent to which respondents can influence decisions of the group

| Variable | Percentage of respondents | | | | | | | |
|--|---------------------------|--------------|--------------|--------------|---------------|---------------|--------------|--------------|
| | Not at all | | Small extent | | Medium extent | | High extent | |
| | Women | Men | Women | Men | Women | Men | Women | Men |
| Agricultural/livestock/fisheries producers' group (including marketing groups) | 62.50 (25) | 18.18 (6) | 7.50 (3) | 15.15 (5) | 20 (8) | 48.48 (16) | 10 (4) | 18.18 (6) |
| Credit or. Microfinance group (including SACCOs/merry-go-rounds/VSLAs) | 45.83 (11) | 63.64 (7) | 4.17 (1) | 27.27 (3) | 37.50 (9) | 0 | 12.50 (3) | 9.09 (1) |
| Mutual help or insurance group (including burial societies) | 53.33 (8) | 72.73 (8) | 13.33 (2) | 18.18 (2) | 26.67 (4) | 9.09 (1) | 6.67 (1) | 0 |
| Trade and business association group | 71.43 (5) | 33.33 (2) | 14.29 (1) | 16.67 (1) | 14.29 (1) | 16.67 (1) | 0 | 33.33 (2) |

| | | | | | | | | |
|--|--------------|--------------|--------------|--------------|--------------|---------------|---------------|--------------|
| Civic group (improving community) or charitable group (helping others) | 66.67 (4) | 33.33 (2) | 16.67 (1) | 16.67 (1) | 16.67 (1) | 33.33 (2) | 0 | 16.67 (1) |
| Religious group | 35 (14) | 18.42 (5) | 7.50 (3) | 7.41 (2) | 30.0 (12) | 48.15 (13) | 27.50 (11) | 25.93 (7) |

Table 8: Physical mobility

How often do respondents visit different places? Percentage of respondents below

| Variable | Everyday | | At least once every week | | At least once every 2 weeks | | At least once every month | | Less than once a month | | Never | |
|---|--------------|---------------|--------------------------|---------------|-----------------------------|--------------|---------------------------|---------------|------------------------|---------------|---------------|---------------|
| | W | M | W | M | W | M | W | M | W | M | W | M |
| Urban center | 2.04 (1) | 4.08 (2) | 38.78 (19) | 24.49 (12) | 4.08 (2) | 14.29 (7) | 20.41 (10) | 26.53 (13) | 28.57 (14) | 22.45 (11) | 6.12 (3) | 8.16 (4) |
| Market | 10.20 (5) | 4.08 (2) | 51.02 (25) | 26.53 (13) | 8.16 (4) | 4.08 (2) | 10.20 (5) | 8.16 (4) | 14.29 (7) | 12.24 (6) | 6.12 (3) | 44.9 (22) |
| Family or relatives | 6.12 (3) | 10.20 (5) | 12.24 (6) | 18.37 (9) | 8.16 (4) | 12.24 (6) | 24.49 (12) | 14.29 (7) | 38.78 (19) | 30.61 (15) | 10.20 (5) | 15.29 (7) |
| Visit a friend/neighbor's house | 18.37 (9) | 20.41 (10) | 12.24 (6) | 28.57 (14) | 0 | 8.16 (4) | 8.16 (4) | 6.12 (3) | 22.45 (11) | 8.16 (4) | 38.78 (19) | 28.57 (14) |
| Hospital/clinic/doctor (seek health services) | 0 | 0 | 4.08 (2) | 6.12 (3) | 2.04 (1) | 10.20 (5) | 10.20 (5) | 12.24 (6) | 71.43 (35) | 40.82 (20) | 12.24 (6) | 30.61 (15) |
| Public village gathering/community meeting/training for NGO or programs | 0 | 0 | 10.20 (5) | 24.49 (12) | 2.04 (1) | 4.08 (2) | 12.24 (6) | 24.49 (12) | 30.61 (15) | 26.53 (13) | 44.90 (22) | 20.41 (10) |

Table 9: Respect among household members

| Variable | Percentage of respondent | | | | | | | |
|---|--------------------------|---------------|---------------|---------------|-------------|-------------|-------------|---|
| | Most of the time | | Sometimes | | Rarely | | Never | |
| | W | M | W | M | W | M | W | M |
| Do you respect your [relation] | 97.96 (48) | 97.96 (48) | 2.04 (1) | 2.04 (1) | 0 | 0 | 0 | 0 |
| Does your [relation] respect you | 93.88 (46) | 97.96 (48) | 4.08 (2) | 2.04 (1) | 0 | 0 | 2.04 (1) | 0 |
| Do you trust your [relation] to things that are in your best interest | 83.67 (41) | 95.92 (47) | 14.29 (7) | 2.04 (1) | 2.04 (1) | 2.04 (1) | 0 | 0 |
| Do you feel comfortable telling him/her that you disagree | 73.47 (36) | 38.78 (19) | 22.45 (11) | 61.22 (30) | 4.08 (2) | 0 | 0 | 0 |

Relation is defined spouse/partner/other person interviewed in the household

Table 10: Attitudes about domestic violence

Proportion of respondents who agree a husband is justified in hitting or beating his wife in the following situations

| Variable | Percentage of respondents | |
|-------------------------------------|---------------------------|-------------|
| | Women | Men |
| If she goes out without telling him | 4.08 (2) | 0 |
| If she neglects the children | 8.16 (4) | 0 |
| Is she argues with him | 4.08 (2) | 0 |
| If she refuses to have sex with him | 10.20 (5) | 0 |
| If she burns the food | 4.08 (2) | 2.04 (1) |

Table 11: Defining Empowerment – Female Interviews

| No. | Codes | Quotes | Respondents |
|-----|---|---|--|
| 1 | Expression of voice | <p>“An empowered person is one that can speak his mind.....” (Life-history interviews \Respondent 1: 41 - 41)”</p> <p>An empowered person is one that can speak his mind and can do anything that he applies himself to (Life-history interviews \Respondent 3: 41 - 41)</p> <p>An empowered person is one that can speak his mind and can do anything that he or she applies himself or herself to (Life-history interviews \Respondent 4: 41 - 41)</p> <p>Yes, I consider myself as empowered because I am able to speak my mind (Life-history interviews \Respondent 8: 41 - 41)</p> <p>One who has the opportunity to express his/her views (Life-history interviews \Respondent 14: 41 - 41)</p> <p>Yes, I consider myself empowered compared to others since my exposure to Touton has laid the opportunity for people to take my views. (Life-history interviews \Respondent 14: 41 - 41)</p> <p>An empowered woman is one who is able to speak her mind on issues and have the space to realize her potential (Life-history interviews \Respondent 15: 41 - 41)</p> | <p>Resp 1 (54, widow)</p> <p>Resp 3 (45, married)</p> <p>Resp 4 (38, married)</p> <p>Resp 8 (46, married)</p> <p>Resp 14 (59, Divorced)</p> <p>Resp 15 (49, married)</p> |
| 2 | Even just having the ability to express voice without being heard | <p>“Yes, I consider myself as empowered because I am able to speak my mind though my views are not always taken (Life-history interviews \Respondent 1: 41 - 41)”</p> <p>“Yes, I consider myself as empowered because I am able to speak my mind though my views are not always taken (Life-history interviews \Respondent 2: 41 - 41)”</p> <p>Yes, I consider myself as empowered because I am able to speak my mind though my views are not always taken (Life-history interviews \Respondent 3: 41 - 41)</p> <p>Yes, I consider myself as empowered because I am able to speak my mind though my views are not always taken. At the household level I feel less empowered. (Life-history interviews \Respondent 4: 41 - 41)</p> | <p>Resp 1 (54, widow)</p> <p>Resp 2 (47, married)</p> <p>Resp 3 (45, married)</p> <p>Resp 4 (38, married)</p> |
| 3 | Achieving goals | <p>“I am more empowered because nothing can stop me from achieving my goal in life. (Life-history interviews \Respondent 1: 41 - 41)”</p> | <p>Resp 1 (54, widow)</p> |

| | | | |
|---|--|--|--|
| | | <p>“An empowered person is one that can speak his mind and can do anything that he applies himself to (Life-history interviews \Respondent 1: 41 - 41)”</p> <p>“I am more empowered because nothing can stop me from achieving my goal in life. (Life-history interviews \Respondent 2: 41 - 41)”</p> <p>“An empowered person is one that can speak his mind and can do anything that he applies himself to (Life-history interviews \Respondent 3: 41 - 41)”</p> <p>I am more empowered because nothing can stop me from achieving my goal in life. (Life-history interviews \Respondent 3: 41 - 41)</p> <p>I am more empowered because nothing can stop me from achieving my goal in life. (Life-history interviews \Respondent 8: 41 - 41)</p> <p>Yes, I consider myself as empowered because I am very influential in my community and can get things done (Life-history interviews \Respondent 15: 40 - 40)</p> | <p>Resp 2 (47, married)</p> <p>Resp 3 (45, married)</p> <p>Resp 8 (46, married)</p> <p>Resp 15 (49, married)</p> |
| 4 | <p>Having achievements such as:</p> <p>Raising children how they would want</p> <p>Supporting children’s education</p> <p>Improved knowledge from support and training in cocoa farming</p> <p>Being focused and entrepreneurial</p> | <p>“Being able to raise my children the way I would want (Life-history interviews \Respondent 1: 41 - 41)”</p> <p>Being able to raise my children the way I would want (Life-history interviews \Respondent 2: 41 - 41)</p> <p>Being able to raise my children the way I would want (Life-history interviews \Respondent 3: 41 - 41)</p> <p>Being able to raise my children the way I would want (Life-history interviews \Respondent 8: 41 - 41)</p> <p>Being able to support my children to go to school (Life-history interviews \Respondent 4: 41 - 41)</p> <p>Yes, Cocoa Life VSLSA changed my understanding about cocoa farming. (Life-history interviews \Respondent 6: 41 - 41)</p> <p>Being focused on my farming business and being entrepreneurial (Life-history interviews \Respondent 15: 40 - 40)</p> | <p>Resp 1 (54, widow)</p> <p>Resp 2 (47, married)</p> <p>Resp 3 (45, married)</p> <p>Resp 8 (46, married)</p> <p>Resp 4 (38, married)</p> <p>Resp 6 (57, widow)</p> <p>Resp 15 (49, married)</p> |

| | | | |
|---|---|--|------------------------|
| 5 | Resources to enable empowerment | “Support from government for my farming activity (Life-history interviews \Respondent 1: 41 - 41)” | Resp 1 (54, widow) |
| | Support | Support from government for my farming activity (Life-history interviews \Respondent 3: 41 - 41) | Resp 3 (45, married) |
| | | Support from government for my farming activity (Life-history interviews \Respondent 8: 41 - 41) | Resp 8 (46, married) |
| | Sensitization of men | Education for my husband to engage me in decision making at the household level (Life-history interviews \Respondent 4: 41 - 41) | Resp 4 (38, married) |
| | | Enhanced capacity building and training I have been receiving. (Life-history interviews \Respondent 6: 41 - 41) | Resp 6 (57, widow) |
| | Training/group training | Yes, Touton’s Akuffo Yie Die group’s (Farmers’ Development/ wellbeing/ welfare) training on GAPs and training programme. (Life-history interviews \Respondent 14: 41 - 41) | Resp 14 (59, Divorced) |
| | | Training and exposure to big cocoa players (Life-history interviews \Respondent 14: 41 - 41) | |
| | Access to finance | Access to finance (I want huge credit facility not those provided by the VSLA) (Life-history interviews \Respondent 6: 41 - 41) | Resp 6 (57, widow) |
| | | Access to finance and training. (Life-history interviews \Respondent 14: 41 - 41) | Resp 14 (59, Divorced) |
| | Being focused and entrepreneurial | Access to more capital (financial and supportive systems to expand my cocoa farming) (Life-history interviews \Respondent 15: 40 - 40) Being focused on my farming business and being entrepreneurial (Life-history interviews \Respondent 15: 40 - 40) | Resp 15 (49, married) |
| 6 | Making changes in one’s life even with challenges | “An empowered person is one that makes change happen in the face of obstacles or limitations (Life-history interviews \Respondent 2: 41 - 41)” | Resp 2 (47, married) |
| 7 | Expression of voice at the household level | Yes, I consider myself as empowered because I am able to speak my mind though my views are not always taken. At the household level I feel less empowered. (Life-history interviews \Respondent 4: 41 - 41) | Resp 4 (38, married) |
| 8 | Decision making (inputs in decision making) | Yes, I consider myself empowered since although I do partake and make inputs into decision making. (Life-history interviews \Respondent 6: 41 - 41) | Resp 6 (57, widow) |
| | Decision making at the household level | Yes, to some extent since I do make suggestions which are considered for decision making. (Life-history interviews \Respondent 14: 41 - 41) | Resp 14 (59, Divorced) |

| | | | |
|----|---|---|---|
| | Decision making at the community level (someone who has an input in dm at the community level) | <p>I am less empowered because my husband always takes the final decision. (Life-history interviews \Respondent 4: 41 – 41)</p> <p>Yes, because I do contribute to decision making in the community beside my household. (Life-history interviews \Respondent 6: 41 - 41)</p> <p>Yes, because I do contribute to decision making in the community beside my household. (Life-history interviews \Respondent 6: 41 - 41)</p> | <p>Resp 4 (38, married)</p> <p>Resp 6 (57, widow)</p> <p>Resp 6 (57, widow)</p> |
| 9 | Independent decision making | Someone who is able to take her own decision and do not depend so much on support from others to improve his/her life. (Life-history interviews \Respondent 6: 41 - 41) | Resp 6 (57, widow) |
| 10 | Independent and does not rely on other to improve their life | Someone who is able to take her own decision and do not depend so much on support from others to improve his/her life. (Life-history interviews \Respondent 6: 41 - 41) | Resp 6 (57, widow) |
| 11 | <p>Influential in community</p> <p>Having the ability to influence others at the community level with ideas</p> | <p>Yes, I consider myself as empowered because I am very influential in my community and can get things done (Life-history interviews \Respondent 15: 40 - 40)</p> <p>I am more empowered because I am able to influence other community members to accept my thoughts and suggestions. (Life-history interviews \Respondent 15: 40 - 40)</p> | Resp 15 (49, married) |
| 12 | Helping others (other women) achieve their goals | I am more empowered because I am able to influence other community members to accept my thoughts and suggestions. I am able to help other women to achieve their goals (Life-history interviews \Respondent 15: 40 - 40) | Resp 15 (49, married) |
| 13 | Self-realization | An empowered woman is one who is able to speak her mind on issues and have the space to realize her potential (Life-history interviews \Respondent 15: 41 - 41) | Resp 15 (49, married) |

Table 12: Defining Empowerment– Male Interviews

| No. | Codes | Quotes | Respondent |
|-----|---|---|---|
| 1 | Decision making (inputs in decision making) | <p>Someone who is able to take decision, has training and want to improve his life so as to impact on others as well. (Life-history interviews \Respondent 5: 41 - 41)</p> <p>Someone who listens to elders' counsel, respect everyone and able to contribute to decision making. (Life-history interviews \Respondent 7: 41 - 41)</p> <p>Yes, to some extent since I do make suggestions for decision making. (Life-history interviews \Respondent 7: 41 - 41)</p> | <p>Resp 5 (41, married)</p> <p>Resp 7 (52, married)</p> |

| | | | |
|--|---|---|---|
| | | <p>Yes, Touton's Akuffo Yie Die group's (Farmers' Development/ wellbeing/ welfare) training on GAPs and business aspect of farming. Again, I do consult a lot on most of my decision-making process which was not the case before. (Life-history interviews \Respondent 7: 41 - 41)</p> <p>Someone who is able to take decision and help others toe the right path (Life-history interviews \Respondent 9: 41 - 41)</p> <p>Yes, I consider myself more empowered since although I do partake ad make inputs into decision making. (Life-history interviews \Respondent 13: 41 - 41)</p> <p>Yes, because I do make a lot of input in decision making process in my household, community and the groups I belong. (Life-history interviews \Respondent 5: 41 - 41)</p> | <p>Resp 9 (47, married)</p> <p>Resp 13 (54, married)</p> <p>Resp 5 (41, married)</p> |
| | Decision making at the household level | | |
| | Decision making/input in decision making at the community level | <p>Someone who shares his opinion and make decisions in the community he resides. (Life-history interviews \Respondent 13: 41 - 41)</p> <p>Yes, because I am part of the authorities that make decisions in my community. (Life-history interviews \Respondent 13: 41 - 41)</p> | <p>Resp 13 (54, married)</p> |
| | Decision making in groups one belongs to | <p>Yes, because I do make a lot of input in decision making process in my household, community and the groups I belong. (Life-history interviews \Respondent 5: 41 - 41)</p> <p>Yes, because I do make a lot of input in decision making process in my household, community and the groups I belong. (Life-history interviews \Respondent 5: 41 - 41)</p> <p>Someone who can share ideas ad can influence collective decision-making process (Life-history interviews \Respondent 16: 41 - 41)</p> <p>Yes, because I do make a lot of input in decision making process in my household, community and the groups I belong. (Life-history interviews \Respondent 9: 41 - 41)</p> <p>Yes, because I do make a lot of input in decision making process in my household, community and the groups I belong. (Life-history interviews \Respondent 12: 41 - 41)</p> | <p>Resp 5 (41, married)</p> <p>Resp 5 (41, married)</p> <p>Resp 16 (53, married)</p> <p>Resp 9 (47, married)</p> <p>Resp 12 (44, married)</p> |

| | | | |
|---|--|--|---|
| | Decision making for others | <p>Yes, because I do make a lot of input in decision making process in my household, community and the groups I belong. (Life-history interviews \Respondent 16: 41 - 41)</p> <p>Yes, I consider myself as more empowered than others since I make a lot of decisions for others and people rely on my counsel. (Life-history interviews \Respondent 5: 41 - 41)</p> | <p>Resp 16 (53, married)</p> <p>Resp 5 (41, married)</p> |
| 2 | <p>Having resources such as</p> <p>Training/group training</p> <p>Training/finance</p> | <p>Someone who is able to take decision, has training and want to improve his life so as to impact on others as well. (Life-history interviews \Respondent 5: 41 - 41)</p> <p>Yes, Touton's Akuffo Yie Die group's (Farmers' Development/ wellbeing/ welfare) training on GAPs and business aspect of farming as well as church trainings on leadership. (Life-history interviews \Respondent 5: 41 - 41)</p> <p>Yes, Touton's Akuffo Yie Die group's (Farmers' Development/ wellbeing/ welfare) training on GAPs and business aspect of farming. Again, I do consult a lot on most of my decision-making process which was not the case before. (Life-history interviews \Respondent 7: 41 - 41)</p> <p>Training on new techniques and programmes in the cocoa sector. (Life-history interviews \Respondent 5: 41 - 41)</p> <p>Yes, Touton's Akuffo Yie Die group's (Farmers' Development/ wellbeing/ welfare) training on GAPs and business aspect of farming. (Life-history interviews \Respondent 9: 41 - 41)</p> <p>I think more trainings offered by the farmer group should be intensified. (Life-history interviews \Respondent 9: 41 - 41)</p> <p>Yes, Touton's training on GAPs and business aspect of farming (Life-history interviews \Respondent 12: 41 - 41)</p> <p>Access to finance and training. (Life-history interviews \Respondent 7: 41 - 41)</p> <p>Access to more capital (financial and supportive systems to expand my cocoa farming) (Life-history interviews \Respondent 11: 41 - 41)</p> | <p>Resp 5 (41, married)</p> <p>Resp 7 (52, married)</p> <p>Resp 5 (41, married)</p> <p>Resp 9 (47, married)</p> <p>Resp 12 (44, married)</p> <p>Resp 7 (52, married)</p> <p>Resp 11 (58, married)</p> |

| | | | |
|---|---|--|--|
| | <p>Training on leadership and skills</p> <p>Support</p> <p>Cooperation and togetherness</p> | <p>Yes, Touton's Akuffo Yie Die group's (Farmers' Development/ wellbeing/ welfare) training on GAPs and business aspect of farming as well as church trainings on leadership. (Life-history interviews \Respondent 5: 41 - 41)</p> <p>Training on key leadership and empowerment skills. (Life-history interviews \Respondent 12: 41 - 41)</p> <p>Support from government for my farming activity (Life-history interviews \Respondent 10: 41 - 41)</p> <p>Cooperation and togetherness. (Life-history interviews \Respondent 13: 41 - 41)</p> | <p>Resp 5 (41, married)</p> <p>Resp 12 (44, married)</p> <p>Resp 10 (39, married)</p> <p>Resp 13 (54, married)</p> |
| 3 | Someone who wants to bring about change to one's life | Someone who is able to take decision, has training and want to improve his life so as to impact on others as well. (Life-history interviews \Respondent 5: 41 - 41) | Resp 5 (41, married) |
| 4 | Helping others/Having impact on others | <p>Someone who is able to take decision, has training and want to improve his life so as to impact on others as well. (Life-history interviews \Respondent 5: 41 - 41)</p> <p>Someone who is able to take decision and help others toe the right path (Life-history interviews \Respondent 9: 41 - 41)</p> | <p>Resp 5 (41, married)</p> <p>Resp 9 (47, married)</p> |
| 5 | Advising others | Yes, I consider myself as more empowered than others since I make a lot of decisions for others and people rely on my counsel. (Life-history interviews \Respondent 5: 41 - 41) | Resp 5 (41, married) |
| 6 | <p>Achievements such as</p> <p>Business practice</p> <p>Planning</p> <p>Savings</p> <p>Religion ("fear of God" & "Getting closer to God")</p> | <p>Yes, my business orientation, planning and savings as well as fear of God. (Life-history interviews \Respondent 5: 41 - 41)</p> <p>Getting closer to God because I feel it is God who enlightens and empowers people. (Life-history interviews \Respondent 16: 41 - 41)</p> | <p>Resp 5 (41, married)</p> <p>Resp 16 (53, married)</p> |
| 7 | Listens to advice form elders | Someone who listens to elders' counsel, respect everyone and able to contribute to decision making. (Life-history interviews \Respondent 7: 41 - 41) | Resp 7 (52, married) |

| | | | |
|----|---------------------------------------|--|---|
| 8 | Respect: Show respect to people | Someone who listens to elders' counsel, respect everyone and able to contribute to decision making. (Life-history interviews \Respondent 7: 41 - 41) I do respect everyone (Life-history interviews \Respondent 7: 41 - 41) I am trustful and respect everyone (Life-history interviews \Respondent 13: 41 - 41) | Resp 7 (52, married) Resp 13 (54, married) |
| | Gaining respect from people | To be trustworthy and gain enough respect from all persons. (Life-history interviews \Respondent 16: 41 - 41) | Resp 16 (53, married) |
| | | | |
| 9 | Expression of voice | An empowered person is one that can speak his mind and can do anything that he applies himself to (Life-history interviews \Respondent 10: 41 - 41) | Resp 10 (39, married) |
| | | Someone who shares his opinion and make decisions in the community he resides. (Life-history interviews \Respondent 13: 41 - 41) | Resp 13 (54, married) |
| 10 | Achieving goals | An empowered person is one that can speak his mind and can do anything that he applies himself to (Life-history interviews \Respondent 10: 41 - 41) | Resp 10 (39, married) |
| | | I am more empowered because nothing can stop me from achieving my goal in life. (Life-history interviews \Respondent 10: 41 - 41) | |
| 11 | Determined individual | Yes, I consider myself as empowered because I am a goal getter (Life-history interviews \Respondent 10: 41 - 41) | Resp 10 (39, married) |
| 12 | Achievements: Increased production | Being able to increase my farm productivity, have increased income and be able to provide for the needs of my household and community (Life-history interviews \Respondent 10: 41 - 41) | Resp 10 (39, married) |
| | | Being able to increase my farm productivity, have increased income and be able to provide for the needs of my household and community (Life-history interviews \Respondent 11: 41 - 41) | Resp 11 (58, married) |
| 13 | Achievements: Increased income | Being able to increase my farm productivity, have increased income and be able to provide for the needs of my household and community (Life-history interviews \Respondent 10: 41 - 41) | Resp 10 (39, married) |
| | | Being able to increase my farm productivity, have increased income and be able to provide for the needs of my household and community (Life-history interviews \Respondent 11: 41 - 41) | Resp 11 (58, married) |

| | | | |
|----|--|--|-----------------------|
| 14 | Achievements: Ability to provide for the household | Being able to increase my farm productivity, have increased income and be able to provide for the needs of my household and community (Life-history interviews \Respondent 10: 41 - 41) | Resp 10 (39, married) |
| | Ability to provide for the community | Being able to increase my farm productivity, have increased income and be able to provide for the needs of my household and community (Life-history interviews \Respondent 11: 41 - 41) | Resp 11 (58, married) |
| 15 | Ability to use resources to achieve goals | An empowered person is one that is able to mobilize resources and use it to achieve their full potential (Life-history interviews \Respondent 11: 41 - 41) | Resp 11 (58, married) |
| 16 | Influential in community | Yes, I consider myself as empowered because I am very influential in my community and can get things done (Life-history interviews \Respondent 11: 41 - 41) | Resp 11 (58, married) |
| | | I am more empowered because I am able to influence other community members to accept my thoughts and suggestions. I am able to help other women to achieve their goals (Life-history interviews \Respondent 11: 41 - 41) | |
| | Influential in groups | Someone who make a lot of suggestions and community do consult him on certain pertinent issues. (Life-history interviews \Respondent 12: 41 - 41) | Resp 12 (44, married) |
| 17 | Trustworthy | Someone who can share ideas ad can influence collective decision-making process (Life-history interviews \Respondent 16: 41 - 41) | Resp 16 (53, married) |
| | | I am trustful and respect everyone (Life-history interviews \Respondent 13: 41 - 41) | Resp 13 (54, married) |
| 18 | Cooperation and togetherness (as a resource for empowerment) | To be trustworthy and gain enough respect from all persons. (Life-history interviews \Respondent 16: 41 - 41) | Resp 16 (53, married) |
| | | Cooperation and togetherness. (Life-history interviews \Respondent 13: 41 - 41) | Resp 13 (54, married) |
| 19 | Share ideas for collective decision making (Note to self: This code found in group decision making) | Someone who can share ideas ad can influence collective decision-making process (Life-history interviews \Respondent 16: 41 - 41) | Resp 16 (53, married) |

| | | | |
|----|--|---|--|
| 20 | Expression that suggest men may have more power in the setting | <p>Yes, because women are also giving the opportunity to express their sentiments and within group and community setting although final decisions may not go in their favour. Even within the traditional authority setting, we have queen mothers who are highly respected. (Life-history interviews \Respondent 16: 41 - 41)</p> <p>Yes, because women are also giving the opportunity to express their sentiments in decision making process. But this is different among the Muslims in the community since women do not a say in decision making process. (Life-history interviews \Respondent 9: 41 - 41)</p> | <p>Resp 16 (53, married)</p> <p>Resp 9 (47, married)</p> |
| 21 | Achievements: Diversifying farming | Yes, I have been enlightened to diversify my farming activities hence, I do engage in plantain, cassava etc. farming. (Life-history interviews \Respondent 16: 41 - 41) | Resp 16 (53, married) |