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Baseline study on Power Dynamics Among Gender Model Family Couple under the Women's Economic Advancement for Collective Transformation (WEACT) Project in Ghana

By:

Shaibu Baanni Azumah (PhD.)

William Adzawla (PhD.)

Abass Mahama (MPhil)

Asdev Consult. Tamale, Ghana

<http://asdevafrica.org/>

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LIST OF ABBREVIATIONS/ACRONYMS

CEDAW	Convention on the Elimination of All Forms of Discrimination Against Women
FGD	Focus Group Discussion
GBV	Gender-based Violence
GHS	Ghana Health Service
GTA	Gender Transformative Approaches
IC	Inductive Coding
IPTM	Indicator Performance Tracking Matrix
KII	Key Informant Interview
QCA	Qualitative Content Analysis
SDGs	Sustainable Development Goals
TOC	Theory of Change
TOR	Terms of Reference
UN	United Nations
WEACT	Women's Economic Advancement for Collective Transformation

EXECUTIVE SUMMARY

Women face a plethora of complex socioeconomic and cultural barriers which limit their economic empowerment. These barriers include prohibitive social norms, restricted access to productive resources, patriarchal structures, the traditional disproportionate division of labour at the household level, and lack of education. Women's empowerment is one of the most persistent social challenges, but also an entry point for improved livelihoods for households.

To address the complex barriers to women's economic empowerment, Oxfam Ghana together with its partners, SEND Ghana Friends of the Nation (FoN), Women in Law and Development in Africa (WiLDAF), TungTeiya Women's Association, Shea Network, NORSAAC and Viamo, is implementing the Women's Economic Advancement for Collective Transformation (WEACT) Project in Ghana with funding support from the Global Affairs Canada (GAC). As part of the WEACT project, SEND Ghana is implementing the Gender Model Family (GMF) approach. The GMF is a gender transformative approach to community mobilisation, addressing the unequal power relations between women and men. The approach works by establishing role model families and engaging wives, husbands and children as 'change agents' within their community.

This report establishes the power dynamics among Gender model family couples and identifies technology needs, labour constraints and existing technical solutions. This is to provide a basis for implementing a second key intervention under the WEACT project; the area of locally driven technical solutions by women for them to save time, labor and energy in order to realise the immediate outcome of improving capacities for household members (women, men, boys and girls) to recognize, reduce and redistribute unpaid work, freeing time for women to actively participate in economic activities. The study adopted a mixed research design, combining both quantitative and qualitative techniques and concepts. Desk review of literature was also conducted to support the findings. The data structure for the survey was cross-sectional, targeting Gender Model Family (GMF) couples and institutional stakeholders of the WEACT project. Sampled respondents were drawn from six project regions of Ghana - i.e., Upper West, Upper East, Northern, Savannah regions, Western North and Western regions. A project district was randomly sampled from each of the six beneficiary regions. Simple random sampling technique based on a proportionate-to-size approach was then used to select the couples. This approach considered the gender and age dimensions of the GMF couples' population. Quantitative data were processed using STATA 15 software and presented using descriptive statistics and frequency tables. The qualitative data (Key Informant Interviews) were analysed based on the various thematic areas identified in the research questions. This was mainly to buttress the outcomes of the household survey of the GMF couples.

The empirical findings suggest that husbands are mainly responsible for household decision making as opined by 87.5% of males and 83.3% of females GMF couples surveyed. Also, majority of male (85.1%) and female (75.6%) respondents think that men do have more power in household decision

making. Only 14.3% of males and 23.8% of females indicated that men and women have equal power in household decision making. A greater proportion of the male (68.5%) and female (53.6%) respondents indicated that women could make absolute decisions but only under limited instances bordering on household chores. These limited matters include the use and control of household resources, childcare, and income spending for immediate consumption.

Several socioeconomic factors including age, income, education, social status, cultural norms and religion had an effect on power differences among couples - usually favouring the male gender. In addition, majority of respondents (51.8% males and 53% females) are unable to discuss issues concerning community management and leadership participation with their partners. The results indicated that most males (86.3%) and females (85.7%) think that a better relationship is when decision making is done by both partners. Furthermore, the results showed that most males (56%) do not overwork themselves compared to 61.9% of females who indicated they usually overwork themselves in both domestic and economic activity - with labour peaking for women around the farming season. Currently, there is a high usage of improved kitchen technologies such as use of grinding machines, blenders, cooking stoves and roasting machines among couples. Tractors, wooden clubs for breaking cocoa pods, cassava processing machines and combine harvesters are necessary technologies.

Based on the findings, the study concludes that men (husbands) are mainly responsible for most household decision making. Generally, it is difficult for couples to discuss issues like sharing of household chores, community management and leadership, sexual and reproductive health issue, and control of resources at household level. Women's labour peaks during farming seasons as they are engaged in domestic and economic activities. During this period, women usually overwork themselves. Couples, particularly women, are using modern household and kitchen technologies to help them reduce the drudgery in domestic work and to conveniently save time. However, majority of the couples lack the required financial resources and knowledge to use some labour-saving technologies for their economic activities and this has culminated in low desire for some technologies such as solar dryer, post-harvest cooler, cocoa grinder, de-pulping machine, presser and cocoa pod splitting machine.

Consequently, it is important for the WEACTION project to engage in more training and sensitization for couples to ensure equal rights in household decision making. Also, the training should be tailored in a way that it helps the couples improve their communication on community action, leadership as well as on sexuality issues. Together with training on their use, labour saving technologies for women's economic activities should be made accessible and affordable to the couples. The development of technologies should be localised to ensure it meets the specific needs of the targeted users. Also, the design and implementation of training programmes should follow the bottom-up approach where the targeted users, particularly women, should be involved in the design

and implementation process. This will ensure full participation of beneficiaries in the training programmes since their time constraints would have been considered.

1. INTRODUCTION

1.1 Background to the study

Women's empowerment is one of the most persistent social challenges and opportunities. Gender inequalities manifest themselves in countless ways in every country and community across the globe (Cocoa life, 2018). According to the AU Strategy for Gender Equality and Women's Empowerment 2018-2028, gender equity is achieved when women and men enjoy the same rights and opportunities across all sectors of society, including economic participation and decision-making, and when different behaviours, aspirations of women and men are equally valued and favoured.

Women engaged in economic activities face many challenges including social and economic impediments (Peprah et al., 2019). In Ghana, the socialisation process for both sexes one way or the other influences the kind of economic activities that women find themselves in. For instance, women are perceived to be homemakers and are therefore nurtured for home and children care. This contributes to low self-esteem for women who are made to believe that they are inferior to men and can therefore not stand up for themselves (Food and Agriculture Organisation, 2018).

Acknowledgement of and the concerns for gender inequities, exclusion and marginalisation of women has reflected in the 1979 UN Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) and the 1995 Beijing Platform for Action (UN women). SDG 5 is a stand-alone goal for achieving gender equality and empowering all women and girls (van Eerdewijk et al., 2017). Also, women's equality and empowerment are reflected in targets across other SDGs, including those on poverty, health and education.

While there has been some progress on gender equality, it has been slow and uneven. Women and girls' health is at risk, and they often experience Gender-Based Violence (GBV). Women and girls are less likely to enrol in and complete schooling. Their work is often not recognised (e.g., care and household work), not equitably paid (e.g., it is unpaid or there is a gender pay gap) or performed under vulnerable conditions (van Eerdewijk et al., 2017). This is reflected in the earnings of women in Ghana. According to Osei-Asibey (2014), on average, women earn 57% income of that of men per hour in Ghana.

Women's low status in rural areas, coupled with gender stereotypes and a poor perception of gender inequalities, continues to persist in Ghana. This is largely due to practises which see men as 'heads of households' and women as 'contributing family workers', reinforcing the uneven and hierarchical status of women and men in rural areas (Food and Agriculture Organisation, 2018). These disadvantages and inequalities are due to unequal gender relations. This calls for empowerment of women and girls, and the transformation of patriarchal power hierarchies (Clinton Foundation, 2015)

Women's empowerment is important to improve the status of women and achieve greater gender equality and equity. It is also an important vehicle for achieving other development goals related to food security, nutrition, health, and economic growth (Bryan et al., 2020). Successive post-independence governments have embraced women's empowerment in diverse forms, either because of their own ideological positioning, or because of demands by their 'donor friends/partners' and/or organised domestic groups and NGOs. What has emerged is a varied landscape on women's rights and empowerment work comprising the state bureaucracy, multilateral and bilateral agencies, NGOs, and women's rights organisations (Anyidoho and Manuh, 2010).

To help find sustainable solutions to the complex barriers to women's economic empowerment, the WEACT project, alongside its civil society, governmental and corporate partners take a systematic approach to tackle the barriers women face when they are seeking to increase the agency and leadership to be economically empowered. The general goal of the WEACT project is to help address the systemic barriers to women's economic empowerment and give women a voice.

1.2 The WEACT Project

Women face many complex barriers to their economic empowerment, such as prohibitive social norms, restricted access to productive resources, patriarchal structures, the traditional division of labour at the household level and lack of education. In the WEACT project, alongside its civil society, governmental and corporate partners take a systematic approach to tackle the barriers women face when they are seeking to increase the agency and leadership to be economically empowered. The project adopts multiple entry points - individuals, collective, formal and informal - to address these barriers. This is the heart of the systematic approach which involves different stakeholders (women's rights organisations, government, private sector, civil society, primary change agents, etc.) leading to sustainable transformation and shifts in attitudes and behaviours across the agricultural sector to promote women economic empowerment. The Project brings together seven key partners: SEND Ghana, Friends of the Nation (FoN), Women in Law and Development in Africa (WILDAF), TungTeiya Women's Association, Shea Network, NORSAAC and Viamo. These partners share responsibility for the implementation of the project in their operating districts across six selected regions.

Oxfam plays a facilitating, supporting and convening role to ensure the success of this initiative. Over the next 5 years, Oxfam aims at enhancing economic empowerment, well-being and inclusive economic growth for women, in the shea and cocoa chains across 9 districts in the Upper West, Upper East, Northern, Western and Western North regions of Ghana. Approximately, 5,400 women and girls and 3,510 men and boys would directly benefit from the project. The WEACT project builds on 4 main pillars:

- Improve the ability of women to individually and collectively overcome legal and social barriers to their participation in agriculture and economic activities.

- Improve the capacity of household members (women, men, boys and girls to recognize, reduce and redistribute unpaid work freeing time for women to actively participate in economic activities.
- Increase access to economic opportunities by implementing a gender responsive skills development programme focused on transformative leadership, business acumen and negotiation skills, as well as providing technical and financial assistance for women to develop alternative livelihoods.
- Enhance equal access to productive resources for women by using a multi-stakeholder social lab approach.

1.3 The GMF Methodology

Gender transformative approaches (GTA) have emerged in the past 15 years to challenge different ways of 'doing development'. They focus on transforming the power relations and structures that reinforce gender inequity to achieve both gender equality and development outcomes. They differ from approaches to women empowerment in that they work with both women and men to transform social relations of gender to become more equitable. The GMF is a gender transformative approach to community mobilisation addressing the unequal power relations between women and men. The approach works by establishing role model families and engaging wives, husbands and children as 'change agents' within their community. The GMF entails a training program to enable husbands and wives to live in an equitable and just manner by challenging ways in which husbands and wives live together. It targets the family as the basic unit for social transformation, enabling them to unlearn unequal gender practises.

1.4 Objectives of the study

The primary aim of the baseline study is to establish the power dynamics among couples and to identify needs for technology, labour constraints and existing technical solutions. This is to provide a basis for WEACT project implementation of the second key intervention area. The specific objectives of the baseline survey are:

1. Collect baseline information on the power dynamics among GMF couples.
2. Understand when women's labour peaks occur, what type of labour-saving technologies they need, and how these can contribute to reducing work burden.
3. Identify technologies adapted for women and for women-specific priorities.
4. Determine how these technologies can be introduced and what measures and support are needed for their adoption.

2. METHODOLOGY FOR THE STUDY

2.1 Research design

The assessment adopted a survey approach, based on a mixed research design. This involved both quantitative and qualitative methods in data collection and analysis. The survey approach is best suited for this assessment because it allows to reach out to a significant proportion of households. The use of qualitative and quantitative methods provided the assessment with rich data sources for the baseline. The data structure for the survey was cross-sectional in nature. Levin (2006) summarised cross-sectional studies as providing snapshots of the outcome of the intended study.

2.2 Geographic locations and sampling procedure

The baseline study was implemented in all six project regions of Ghana - i.e., Upper West, Upper East, Northern, Savannah regions in the north of Ghana; Western North and Western regions in the south of Ghana – Targeting 270 gender model family couples. The seven project partner institutions (i.e., Send Ghana, Friends of the Nation - FoN, Women in Law and Development Africa (WiLDAF), Tungteiya Women's Association, Shea Network Ghana, NORSAAC and Viamo) were also considered in the design of the baseline study. Figure 1 shows the location of the sampled respondents.

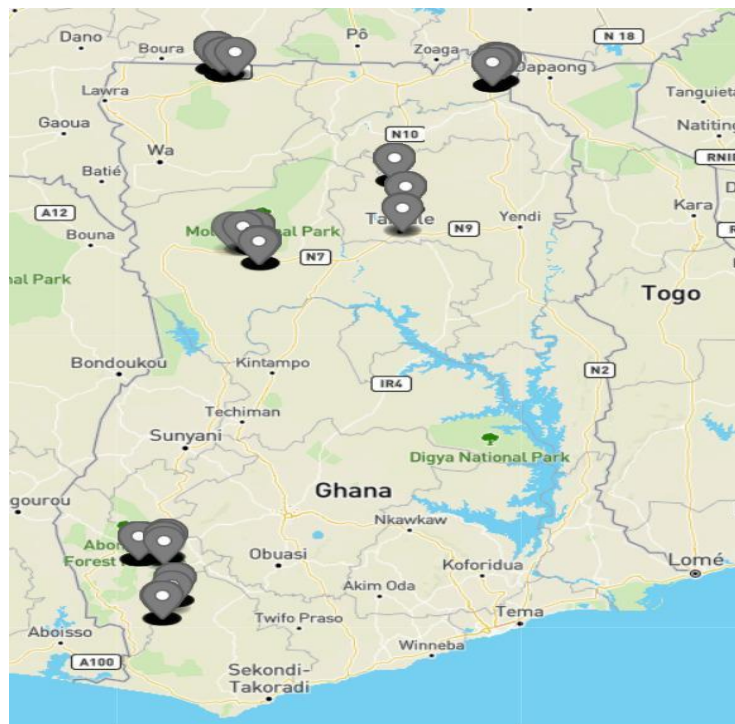


Figure 1: Location of sampled respondents

2.2.1 Sampling for quantitative data

The sampling approach followed Slovin's formula for sample size computation as shown by equation 1 given that the population (N) of the study is determined as 270.

$$n = \frac{N}{(1 + (e^2 * N))} \dots\dots\dots (1)$$

where n is the sample size, N is the population, and e is margin of error at 0.05. The N is the total of women and men (270) to benefit from the project. Therefore, the sample is estimated as:

$$n = \frac{270}{1 + (0.05^2 * 270)} = 162$$

- The minimum sample required for adequate representation therefore, is 162 GMF. This was adjusted to 168 GMF to allow for proportionate distribution among the six districts and regions where the data was collected.
- One district was selected from each of the six (6) project regions.
- 28 couples (28 females and 28 males) were interviewed from each district – resulting in 168 couples (336 respondents) from all six districts selected from the 6 regions.

Table 1: Sample sizes per project target beneficiaries for quantitative data

Region	District	Communities	# of couples		Total
			Women	Men	
Northern	Savelugu	2	28	28	56
Savannah	West Gonja	2	28	28	56
Upper East	Garu	2	28	28	56
Upper West	Sissala West	2	28	28	56
Western	Amenfi West	2	28	28	56
Western North	Sefwi- Wiaso	2	28	28	56
Total		10	168	168	336

Sampling of communities

The sample of GMF couples comprising females and males were drawn from purposively selected project communities presented by SEND Ghana. In each of the six Municipal and District Assemblies- (MDAs) that were sampled for the WEACT project baseline survey, selection of the survey communities was already predetermined.

Sampling of females and males

The procedure for sampling was initiated with a list of GMF couples' populations in the sampled communities. The sampling frame from each region was obtained from SEND Ghana. Using the simple random sampling technique based on proportional-to-size approach, the sample of females and males were identified. The proportional-to-size approach considered the gender and age dimensions of the GMF couples' population. Sampling of respondents was done at the community level.

2.2.2 Sampling for qualitative data

Table 2 presents estimates of the sample sizes for the qualitative data collection (i.e., Key Informant Interviews [KII]). The Key informants were drawn from WEACT project partners, the Women in Agriculture Directorate at the Ministry of Agriculture and the Department of Gender at the Ministry of Gender, Children and Social protection, and SEND Ghana.

Table 2: Sample sizes per project target beneficiaries for qualitative data

Region	District	KII	FGDs
Northern	Savelugu	2	4
Upper East	Garu	2	4
Savannah	West Gonja	2	4
Upper West	Sissala West	2	4
Western	Amenfi West	2	4
Western North	Sefwi- Wiaso	2	4
Others	-	4	-
Total		16	24

All respondents for KII sessions were purposively selected. One KII was conducted with each of the seven partners. The consultant together with the implementing partners identified persons with the requisite capacity to give in-depth information in line with the objectives of the baseline survey. Two FGDs were conducted in each of the communities; one for females and one for males. This gives a total of 24 FGDs. The basis for the female-only and male-only FGDs was to allow for the various

gender/sex groups to freely express themselves in the discussions. Due to certain socio-cultural and religious orders in rural communities, women are unable to freely talk openly when their husbands and household heads are found in groupings where information is being sought.

2.3 Baseline survey instruments

The design of the data collection instruments by Asdev was guided by the objectives of the WEACTION Project. The instruments included individual surveys using questionnaires and checklists for KII. The data collection instruments were designed and reviewed by SEND Ghana. The checklists were used to elicit qualitative data from the key informants. The data (questionnaire) was collected with the use of mobile phone data collection application (open data kit) to collect and manage the data and this ensured high data validity, accuracy and timeliness in the submission of the report, while the KII and FGD checklist guides were paper-based.

2.4 Data collection procedure

In collaboration with SEND Ghana, a two-day training workshop, including pretesting of instruments, was organised for the Research assistants as well as the field supervisors for the survey. Each field staff was assigned a specific district and centrally monitored by the field supervisor based on data transmitted. The training was facilitated by consultants from Asdev consult. The training covered issues such as overview of the WEACTION project, baseline survey objectives, contents of the baseline instruments, translation of baseline instruments into local dialects, use of the electronic data collection software, data transmission, ethics in research, roles of field staff, and anticipated challenges and how to resolve them. The pretesting of the survey instruments was conducted in the Mion district in the Northern Region. The field officers commenced the data collection activities, starting with the Northern Region, Upper East Region, Upper West Region, Savannah Region, Western Region and Western North Region.



Plate 1: Individual interview session with a female respondent in Garu

Photo credit: Asdev Consult

2.4.1 Data quality protocols

- Open data kit (ODK) tools were used to collect and manage the data to ensure high data validity, accuracy and timeliness in the submission of reports.
- The questionnaire was designed by Asdev and reviewed by SEND Ghana.
- The reviewed questionnaire was pretested on a few potential beneficiaries in order to improve the wording, arrangement, coding, consistency and reliability of the tool as well as conform with existing social norms. The questionnaire was reviewed using the pre-test result and final inputs from Rising staff.
- Qualified experts of the consultancy firm (Asdev Consult) transcribed the household questionnaire onto the mobile technology platform.
- Qualified Enumerators were used in the data collection. These Enumerators are those we have used over the years on several assignments and who are fluent in both the official language (English) and the local dialects of the various regions.

2.5 Protocol for Covid-19 prevention

In the midst of Covid-19 pandemic, safe data collection practises were followed in accordance with the laid down procedures of the Ghana Health Service (GHS) and the World Health Organisation. Asdev maintained social/physical distance to protect both the respondents and field officers. The field officers and the respondents were supplied with PPEs such as nose masks. All interviews were conducted in open spaces for proper ventilation, and with the appropriate social distancing to avoid infections. The numbers per focus group discussion (FGDs) (were necessary) were kept low for safety.

2.6 Ethical Issues and Clearance

All the primary respondents for the baseline survey of the WEACT project were assured of their anonymity and confidentiality of their responses. Accordingly, no personal identifiers were used in the reports, but represented using pseudonyms. To ensure confidentiality, all data files were password protected and shared only among the Asdev, field staff and the SEND Ghana. The researchers also obtained informed consent from all the respondents before conducting various interviews.

2.7 Data Cleaning, Analysis and Reporting ¹

The data collected was cleaned and processed for analysis to provide evidence-based descriptions of realities on the ground. Quantitative data was processed using STATA 15 software, and presented using a descriptive approach (frequencies, percentages, means and cross-tabulations) and statistical test of differences in means. The Consultant generated a metadata contained in a codebook describing each variable and how they were measured. The unit of analysis was the project beneficiaries and implementing partners. Data was disaggregated by region, district and respondent's demographic characteristics. The qualitative data was transcribed and analysed.

The responses from the interviews were analysed according to the various thematic areas identified in the baseline objectives. Qualitative analysis was done through Qualitative Content Analysis (QCA) and Inductive Coding (IC) to provide detailed baseline information on the power dynamics within the households and other relevant story lines. Also, there was intense literature review on gender and labour dynamics to support the analysis. The report was organised along the project indicators as well as key themes.

¹ As an addendum, we are updating the project indicator performance tracking matrix (IPTM), and suggesting possible adjustments to the various indicators where necessary. This could help the project consortium members to revise the TOC.

3. DESK REVIEW OF LITERATURE

3.1 The concept of Gender Model Family (GMF)

In the last 15 years, Gender Transformative Approaches (GTA) have evolved to challenge diverse ways of 'doing development.' To achieve both gender equality and development outcomes, they focus on changing the power relations and systems that support gender imbalance. They are distinct from other approaches to women's empowerment in that they work with both men and women to improve gender relations. Despite the growing popularity of GTA, there is little documentation of how they work in practice or proof of the long-term impact they contribute to.

Gender Model Family (GMF) is widely accepted as a popular example of gender transformative approach. GMF was originally conceptualised by SEND Ghana in 2001 to implement a livelihood and food security project promoting soya bean production to address malnutrition, but over the years it is being used to promote women and gender equity issues in governance, water, sanitation, education, peace building activities, and enable farm families to adopt climate-smart farming practises. The GMF is a gender transformative approach to community mobilisation addressing the unequal power relations between women and men (Kamara and Ayamga, 2020). The approach works by establishing role model families and engaging wives, husbands and children as 'change agents' within their community (SEND West Africa, 2014). The GMF entails a training program to enable husbands and wives to live in an equitable and just manner by challenging ways in which husbands and wives live together. It targets the family as the basic unit for social transformation, enabling them to unlearn unequal gender practises (KIT website).

The theory of change of the GMF approach is that through creating a locus of transformation at the household level it will have a ripple effect at the community level which will be sustained over time (SEND West Africa, 2014). The focus of transformation starts at the individual level within the space of the family. A core aspect of the approach is sparking a process of self-reflection within the gender model family to challenge unequal gender relations. GMFs have concrete action plans for which they are accountable. GMFs start off with a plan to share household tasks. Building on the benefits of these actions, they also start sharing decisions and being strategic about how they can capitalise on shared household and productive labour and resources. Through initiating their own process of critical reflection, the aim is that they become role models for other families in their communities.

This leads to a process of collective transformation whereby a network of community of change agents are created because GMFs are supportive of each other and always recruiting others to become GMFs. With a critical mass of GMFs, gender transformation will change, not just within families, but entire communities and societies. The GMF methodology over the years has been scaled to reach more families. For example, in the Eastern Corridor, SEND Ghana started with 105 GMFs in 2003, and scaled up to 1069 in 2018. The GMF methodology has been replicated by other

development partners, such as Oxfam, RING in Ghana. The 4R Nutrient Stewardship Programme in Ethiopia plans to scale this up to 4 300 between 2019 and 2024. Families of different levels of income, professions, religions and ethnic groups are members of the GMF programme. Communities in Ghana and Sierra Leone have teachers, health workers, farmers, pastors, traditional leaders and traders who are GMFs and actively support each other (Kamara and Ayamga, 2020; SEND West Africa, 2014).

3.2 Power dynamics among couples; and those practising gender model family approach

The concept of power is central to the study of all social relationships in society (Straus & Yodanis, 1995). Power is the ability to change the behaviour of another member of a social system. Furthermore, Wood et al. (2009) indicated that power dynamics within intimate partner relationships significantly determine the duration and quality of the relationship, as well as the well-being of the couple and other family members. unequal distribution of power within intimate partner relationships can have detrimental effects such as poorer psychological and physical functioning among women (Wood et al., 2009).

According to the United Nations (2016), women are globally treated unequally in comparison with men, and gender inequality emerges in cultures that support and promote the domination of men and the subordination of women. Therefore, gender inequality has been a global issue over the past decades (Ozaki & Otis, 2017), and many influential international institutions like the World Health Organisation (WHO) have promoted research and health interventions concerning gender-based power imbalances (WHO, 2009).

Power dynamics can and often do affect interpersonal relationships. In relationships that are strong and healthy, power is generally equal or close to equal (Bishop, 2011,). Partners may not have equivalent kinds of power: one partner may have more financial resources while the other has more social connections. However, influence is often reciprocal. Healthy partners often work together respectfully and each have a hand in decision-making. According to Kane (2014) a balanced relationship is the one in which power is, for the most part, held equally by both partners who know their value, respect each other and listen to each other's feelings and interest.

For GMF couples, each member of the family has equal rights and thus is entitled to opportunities for empowerment. Empowerment in GMF means that both men and women together can take control and improve their lives. It means that neither the man nor the woman exerts power over the other, but that they make decisions together, and share resources and their benefits (SEND West Africa, 2014). Anyone in the family can help out with cooking and cleaning, running a business or making financial decisions. Everyone in the family should have access to and control of resources, including education, which will help them to improve how they make decisions and direct their lives.

3.3 Labour constraints of women

In developing countries, the number of smallholder women farmers who feed their households is increasing yet they typically achieve yields that are considerably lower than men's (FAO, 2016). At the same time, the natural resources on which agriculture is based, particularly land, water, and forests are becoming degraded and there is growing competition for their use (FAO, 2017). Women in particular, are facing increasing threats in accessing these resources. Rural women simultaneously manage triple responsibilities, at work within the household and at community level. Women work within family businesses, as wage-workers or self-employed (Raney and Doss, 2011).

As farmers, this implies ploughing, weeding, seed preparation, planting, harvesting, processing of household crops and selling production surplus at local markets, as well as tending to small livestock. In artisanal capture fishing communities, women mostly support offshore fishing with time-consuming onshore tasks, such as net making and mending as well as processing of fish for sale (FAO, 2016). Household tasks involve looking after the family, caring for the children and the elderly, collecting firewood, fetching water and preparing meals while community tasks are linked to preserving culture and tradition, through the organisation of funerals and religious ceremonies and to ensuring the provision and maintenance of common resources such as water, healthcare and education.

The competing demands linked to this triple role make women time poor (FAO, 2016). Despite the benefit that this work brings to the household and the community at large, much of women's work is unpaid and unrecognised (Singh and Pattanaik, 2020). This affects their quality of life and decision making, puts their health at risk and prevents them from taking full advantage of economic opportunities through engagement in income generating activities. When women are overworked, this has an impact on the whole household, including children and youth.

3.4 Labour savings technologies that reduce women's burden

In this section, some labour-saving technologies that have been designed to reduce women's work burden are briefly discussed.

GEM parboiler: is an improved parboiling technology called grain quality-enhancer, energy efficient and durable material (GEM) parboiling technology combines the use of a uniform steam parboiler and an improved parboiling stove. The GEM parboiling technology is not only about the equipment but also the process. The GEM parboiling technology was co-developed with women from the Glazoue Innovation Platform (IP) in Benin. The technology was developed to reduce drudgery, the risk of heat burns and exposure to smoke to the operators who are mostly women.



Rotary Roaster machine: The rotary roaster machine is a cylindrical shaped vessel with three compartments: roasting chamber, basement and insulating chamber. The roasting chamber houses the fresh shea nuts and has baffles attached to it which help in the turning (stirring) of the nuts as heat energy is directed to the edgings of the roasting chamber. As such, with incessant agitating and application of heat, even roasting of the seeds is attained through conduction, convection and even radiation via the walls of the roaster. The basement chamber is the heat energy source chamber situated beneath the cylindrical roaster. This chamber accommodates the firewood, and when burnt, the heat is transferred via convection and heats up the outer wall surface of the roasting chamber thereby enabling roasting to take place. The insulating chamber is the third compartment of the rotary roaster equipment. It is made of strong insulating material. This insulator helps in reducing heat loss by conduction through the face of the walls of the roaster, as such conserving the heat energy in the system. The rotary machine relieves local women of the extreme measures of stress to process shea nuts into shea butter coupled with their inability to control moisture, a factor for the low yield of shea butter.



Cocoa de-pulping machine: The stainless steel mechanical de-pulper used in this research comprises a perforated (approximately 2–7mm) static cylindrical screen that is positioned horizontally on its longitudinal axis. Inside the screen are two (2) paddles or scraper systems, which are adapted to rotate. When the paddles are in motion the mass of cocoa beans are rotated and the friction removes the pulp. The de-pulper is equipped with a hopper (inlet), a means for feeding the fresh cocoa beans, a means for removing the de-pulped cocoa beans at the front end of the cylindrical screen (outlet) and also beneath the cylindrical screen a means to discharge pulp.



Shea nut crusher: The shea nut crusher is a machine that crushes shelled kernels into smaller sizes for further processing. The shea kernel crushing machine comprises the following functional components. The hopper; this is of a rectangular shape with dimensions 0.4 m x 0.35 m x 0.31 m. It is inclined at an angle of 45o in order to allow free flow of the materials into the crushing chamber. It is powered by a 4.5 kw electric motor. The crushing unit is made up of a shaft with dimensions 0.5 m x 0.04 m. Attached to the shaft are 14 rectangular beaters with dimensions 0.15 m x 0.03 m x 0.005 m. A concave sieve with grids of 0.005 m was attached at the bottom of the crushing unit.



Nutcracker/De-shelling machine: The shea nut shelling machine is made of hoppers through which the shea nut is fed into the shelling unit. Its frame is made of angled bar of 0.05m x 0.05m x 0.05m size which serves as a support for the machine. The transmission unit consists of a shaft, bearing, pulley and V-belt, which transmits power from the electric motor to the shelling and cleaning units. The shelling unit consists of rubber beaters attached to flat bars which are bent at one end at an angle of 90°. The flat bars are attached to the cylinder which houses the central shaft. The cleaning unit facilitates separation of the shell from the nuts. Power is being supplied by a 5 hp electric motor to the shelling drum shaft through belt connection via the pulleys. The shelling drum shaft which rotates with the support of the bearings provides drive to the cleaning chamber shaft through belts and pulleys. As the shea nuts are being fed into the shelling unit through the hopper, the nuts are beaten resulting in cracking and separation from the kernels. This is achieved by a cylinder fitted with rubber spikes which rotates above a stationary perforated cylinder drum. The materials pass by the action of rubber spikes. As the materials move over the perforated cylinder, air is being blown from the fan to clean the kernels and lighter broken shells are conveyed out through the shell outlet.



3.5 Technology acceptance and adoption among women

Various authors define technology in different ways. Loevinsohn et al. (2012) define technology as the means and methods of producing goods and services, including methods of organisation as well as physical technique. According to these authors, new technology is new to a particular place or group of farmers, or represents a new use of technology that is already in use within a particular place or amongst a group of farmers. Technology is the knowledge/information that permits some tasks to be accomplished more easily, some services to be rendered or the manufacture of a product (Lavison, 2013).

Technology itself is aimed at improving a given situation or changing the status quo to a more desirable level. Adoption on the other hand is also defined in different ways by various authors. Loevinsohn et al. (2013) defines adoption as the integration of a new technology into existing practice and is usually preceded by a period of 'trying' and some degree of adaptation. Technology acceptance and adoption among women is usually constrained by a number of factors. These include: (1) limited household-level decision-making power; (2) lack of collateral and access to credit; and (3) lack of awareness about technologies. Barriers for youth included: (1) lack of collateral and access to credit; (2) poor literacy and numeracy; and (3) limited human capital and skills for "beyond production" technology use, maintenance, and repair.

According to USAID (2020), while women may be involved in using agricultural inputs (e.g., seeds and fertilizers) and other technologies that facilitate agribusiness (e.g., cell phones), they have little to no role in determining which agricultural inputs to purchase. Men are considered the

breadwinners of the family and the head decision makers, giving women and youth little to no control over resources, income, and purchases.

3.6 Women-led technologies development to reduce burden

We found no specific contextual literature in Ghana at the moment on women-led technologies development to reduce burden. This could change in future as the project progresses towards mid-term evaluation.

4. EMPIRICAL FINDINGS FROM THE STUDY

This section presents the findings from the baseline study in relation to the four objectives for this study. The quantitative findings from target areas on specific topics are presented together with qualitative findings for the purpose of triangulation. Findings provided here are representative of the districts and communities in which the data collection was undertaken.

4.1 Power dynamics among couples who are practising the gender model family approach

This section provides the results on the power dynamics that exist among couples. It highlights both the pooled distribution as well as the regional distribution on specific indicators used in assessing the power dynamics among the couples.

4.1.1 Educational level of couples

From the sampling, the respondents of the baseline survey were 50% females 50% males (Table 3) - basically considering couples. Generally, in the formal education category (primary, secondary and tertiary), the number of males is fairly higher than females. For respondents with no formal education, the results indicated that less males (38.1%) had no formal education compared to 54.2% of females. Also, primary education is relatively high as 32.1% males and 28% females had primary education, while only 10.1% males and 7% females had tertiary education. Formal education is important in exposing couples to modern ways of keeping their households and enhances the understanding and respect of the rights of couples.

Table 3: Educational level of respondents

Educational level	Male		Female	
	Freq.	%	Freq.	%
No formal	64	38.1	91	54.2
Non formal	7	4.2	4	2.4
Primary	54	32.1	47	28.0
Secondary	26	15.5	19	11.3
Tertiary	17	10.1	7	4.2
Total	168	100.0	168	100.0

Source: Analysis of WEACTION project field data, 2021.

Table 4 also shows the regional distribution of the educational levels of males and females. This provides a localised understanding of the educational pattern among the respondents. The results show that there is regional difference in the educational level attainment among the respondents. The study revealed a high primary level education among respondents in the Western North and Western regions, while secondary level education is relatively high especially for males in the Northern and Upper West regions of Ghana. Comparatively, we also found a high tertiary level education especially for males in the Upper East and Upper West regions. The highest percentage of tertiary education among females is recorded in the Upper West and Western regions.

Table 4: Percentage distribution of educational level by location

Level	NR ²		SR		UER		UWR		WNR		WR	
	M	F	M	F	M	F	M	F	M	F	M	F
No formal	50.0	78.6	60.7	75.0	60.7	60.7	17.9	14.3	10.7	60.7	28.6	35.7
Non formal	0.0	3.6	0.0	7.1	3.6	0.0	17.9	3.6	3.6	0.0	0.0	0.0
Primary	17.9	7.1	25.0	10.7	7.1	25.0	14.3	42.9	75.0	32.1	53.6	50.0
Secondary	25.0	10.7	7.1	3.6	14.3	10.7	28.6	28.6	10.7	7.1	7.1	7.1
Tertiary	7.1	0.0	7.1	3.6	14.3	3.6	21.4	10.7	0.0	0.0	10.7	7.1

Source: Analysis of WEACTION project field data, 2021.

4.1.2 Household level decision making

Tables 5 and 6 present the results on household level decision making. Traditionally, men are the breadwinners and decision makers in a family, whereas women have been the nurturers, caregivers and housekeepers. As men and women move away from such strict traditional roles, household decision making roles become less predetermined than in the past. However, the results in Table 5 (from the pooled data) indicate that a vast majority of males (87.5%) and females (83.3%) opined that their husbands are mainly responsible for household decision making. A corroborative statement from a respondent further affirmed this finding. In her words, “I am not educated, and I do not feel confident. I think my husband knows best as he is educated. I would not risk the peace we are enjoying by trying to change his decision” (*female respondent, Kananto, West Gonja District*)

This means that the traditional role of men and women are still well defined in the minds of couples in the studied areas. According to a Gender Desk officer (Seidu Moomin, Sissala West District

² NR, SR, UER, UWR, WR, WNR are Northern, Savannah, Upper East, Upper West, Western, and Western North regions respectively.

assembly), ‘the decision-making process of most traditional couples is seen as quite simple because the roles of each spouse are clearly defined by culture and therefore conflict rarely arises’.

In terms of regional level distribution (see Table 6), the results show that husbands (males) dominate decision making in the Savannah and Western North regions. In the Northern, Western North, Savannah and Western regions, wives also take responsibility for decision making at the home. Uniquely, decision making for couples in the northern region depends on other persons other than the couples (mostly family heads). This is largely due to the practice of the extended family system where some younger couples still depend on the authority of their parents or family heads.

In separate focus group discussions, men in Ahokwa community of Western North region indicated that “both husbands and wives take decisions in the household. When one brings it up and its helpful, the other one supports it” while the women affirmed that that “ each couple has equal power to make household level decisions”. In the Kwabeng community of the Western region, it was concluded from a FGD of men that “both couples are responsible for household decision making but, men dominate it” while the women FGD concluded that “men, always had a final say because they are the household heads, but they mostly inform their wives before taking critical decisions”.



Plate 2: FGD session at Kwabeng, Amenfi West

Photo credit: Asdev Consult

Table 5: Persons responsible for decision making - pooled data

Person	Male		Female	
	Freq.	%	Freq.	%
Husband	147	87.5	140	83.3
Wife	1	0.6	3	1.8
Other relatives	20	11.9	25	14.9
Total	168	100.0	168	100.0

Source: Analysis of WEACTION project field data, 2021.

Table 6: Regional distribution of persons responsible for decision making

Person	NR		SR		UER		UWR		WNR		WR	
	M	F	M	F	M	F	M	F	M	F	M	F
Husband	42.9	53.6	100.0	92.9	89.3	85.7	96.4	71.4	100.0	100.0	96.4	96.4
Wife	0.0	3.6	0.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	3.6	3.6
Other relatives	57.1	42.9	0.0	3.6	10.7	14.3	3.6	28.6	0.0	0.0	0.0	0.0

Source: Analysis of WEACTION project field data, 2021.

4.1.3 Deliberation on household decision making among couples

Even though the study (see Table 5) shows the dominant role of men in decision making, the results as shown in Table 7 reveals that 67.3% of both men and women revealed that husbands and their wives sometimes deliberate on issues before decisions are taken. Some 32.1% of men and 29.8% of women revealed also that husbands and wives at all times, deliberate on issues before decisions are taken at household level. This finding is consistent with opinions from a WIAD officer (Duuli Rashida, Sissala West District Department of Agriculture). According to the officer, “both couples deliberate on issues such as technology adoption, size of land to cultivate, the farm activity [ies] to be carried out in a particular period etc before decisions on them are taken”. Madam Rashida Duuli further stated that “women’s contributions to household expenditure increases their relative influence during deliberations on certain household decisions to be taken”. Furthermore, it emerged that men and women tend to deliberate on issues regarding the use of productive assets such as land, shelter and crop sales and expenditures for food, health, and education before decisions are made.

In terms of regional distribution, the majority of males in Upper West and Western regions indicated that they deliberate on all issues with their spouses before making a decision. In the remaining regions, the majority of the males indicated that they deliberate with their spouses on only selected issues. A few females in the Savannah region (3.6%), Western North (7.1%) and Western (7.1%) regions indicated that they are not considered in any deliberation at all.

In a focus group discussion (FGD), women of Kpatia community also responded that “both couples partake in the decision making but on limited issues. In the event of a disagreement, the views of the husband are held and considered supreme... Couple deliberate in most times on household decision making, but this does not include extended family discussion such as inheritance, rivalry issues and landed properties”.

Table 7: Deliberation on decision by couples - pooled data

Response	Male		Female	
	Freq.	%	Freq.	%
Yes, at all times	54	32.1	50	29.8
Yes, for some times	113	67.3	113	67.3
Not	1	0.6	5	3.0
Total	168	100.0	168	100.0

Source: Analysis of WEACTION project field data, 2021.

Table 8: Regional distribution on deliberation on decision by couples

Response	NR		SR		UER		UWR		WNR		WR	
	M	F	M	F	M	F	M	F	M	F	M	F
Yes, in all issues	10.7	10.7	32.1	53.6	3.6	3.6	50.0	35.7	39.3	25.0	57.1	50.0
Yes, for some times	89.3	89.3	67.9	42.9	96.4	96.4	50.0	64.3	57.1	67.9	42.9	42.9
Not at all	0.0	0.0	0.0	3.6	0.0	0.0	0.0	0.0	3.6	7.1	0.0	7.1

Source: Analysis of WEACTION project field data, 2021.

4.1.4 Couple decision-making power at household level

The unfavourable social and economic conditions women are experiencing are as a result of the male dominating effect within the social and economic environment. The socialisation of men to compete, behave assertively and act powerfully while women are socialised to care for the softer, emotional aspects of life are distinguishing roles that are transposed into the socio-economic arena (Daplah, 2013). These variations of gender roles define behaviour patterns of men and women. Thus, the culturally ascribed roles transcend into the domestic space. The result of this is a male dominated household. This suggests that culture plays a dominant role in women's decision-making outcomes especially at the household level.

In terms of couple decision-making power in the household, the results outlined in Table 9 (pooled data) show that male (85.1%) and females (75.6%) think that men do have more power in household decision making, while 14.3% of males and 23.8% of females indicated that men and women have equal power in household decision making. This result affirms what is observed in Table 5. The

results of Tables 4 to 8 therefore indicate that although couples do deliberate on issues together, the final decision is mostly taken by the men. The details on specific decisions are presented in the next sub-section.

Table 10 shows the result on the percentage response of males and females based on their location on who holds the decision-making power in their opinion. Overall, both males and females in the Upper East region noted that males hold the decision-making power of the family. In Western North and Western regions, a significantly high percentage of the females, especially in the later region, expressed that there is equal decision-making power between male and female couples. It is only in the Savannah region that recorded a female holding decision making power.

The Gender Officer Rashida Chantima Ziblila, of SEND Ghana Tamale office corroborates the findings above. In her words, “there are clear imbalances to the disadvantage of women in rural household, which both men and women agree to during community sensitizations and training on the GMF methodology. The GMF approach is supposed to assist families to achieve a balance in household roles, responsibilities, and resources access and control. She further acknowledged that it was going to take a lot of efforts and time to achieve a balance among couples in rural household because these roles and responsibilities that burden women had cultural and religious underpinning.

Table 9: Couple decision-making power at household level - pooled data

Response	Male		Female	
	Freq.	%	Freq.	%
Men	143	85.1	127	75.6
Women	1	0.6	1	0.6
Both equally	24	14.3	40	23.8
Total	168	100	168	100

Source: Analysis of WEACTION project field data, 2021.

Table 10: Locational distribution of couple decision-making power at household level

Response	NR		SR		UER		UWR		WNR		WR	
	M	F	M	F	M	F	M	F	M	F	M	F
Men	82.1	89.3	92.9	92.9	100	100	82.1	82.1	92.9	57.1	60.7	32.1
Women	0.0	0.0	3.6	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Both equally	17.9	10.7	3.6	3.6	0.0	0.0	17.9	17.9	7.1	42.9	39.3	67.9

Source: Analysis of WEACTION project field data, 2021.

4.1.5 Decision making on specific socioeconomic issues and household chores

From the previous subsections, it was clear that although couples deliberate, final decisions are taken by men. This is a blanket description; therefore, this section provides detail on the specific decisions based on identified key areas. Table 11 shows that male (41.7%) and females (42.9%) indicated that women usually take the final decision on what to cook at home. About three in every ten men and women also responded that men take the final decision on what to cook at home. This finding is in tandem with observations from the key informants. For instance, Madam Zubaidatu Amidu Amingo (WIAD officer, West Gonja District Department of Agriculture) stated, “nowadays, most women make decisions on what to cook at home. This is because they also make significant contributions especially towards householding cooking.

It is common to see a woman footing the expenses for ingredients that are to be used for preparation of soup or other dishes”. Similar opinions were shared by Madam Alijata Haruna (Gender Desk Officer, West Gonja District Assembly) that, “very few men make decisions on what the women should cook. They spend most of their time outside [the home] and in some instances, barely eat food at home. This situation allows the woman to make decisions on what to cook at home”. According to Madam Belinda Akolgo (Program Officer, Tunteiya Women Association), “most women are engaged in economic activities and they earn income from that. This puts them in a position to support household-keeping, giving them the leverage to make decisions on what to cook at home”. The findings generally corroborate with emerging literature as Daplah (2013) reported that women make decisions on household food expenditures and what to cook.

On the use of economic resources such as trees and land, Table 11 shows it is mostly the males who take the decision. This was confirmed by 66.7% and 67.9% males and females respectively. This is largely because family resources are held in trust by males who often are the household heads and women can have access to such resources based on their request from the males. In the men FGD in Laranbanga, participants outlined that the resources of women come from “personal savings, petty trading, farming, rearing of fowls and small ruminants, gari processing, sheanuts, left-overs from harvesting” while those of men are associated with “land, animals, farming, and trading”.

Nearly, both couples (50% males and 54% females) indicated that both men and women take final decisions on the type of economic activity they should engage in. However, the results also show a relatively high proportion of males (42.9%) and females (38.7%) who indicated that men usually take the final decisions on the type of economic activity a partner should engage in. Women generally do not have sole autonomy over the final decision on the type of economic activity a partner should engage in.

Also, on the issue of who makes the final decision on the type of associations/groups a partner should belong or join, majority of males (59.5%) and females (60.7%) indicated that both men and women can take the final decisions, while only 6.5% of males and 8.9% of females think women can take the final decision on the type of association to join.

From Table 11, most males and females pointed out that both men and women can take final decisions on the number of children to have, timing of childbirth, and the use of family planning methods. While more frequencies suggest men have the final decision power on number and timing of children, more respondents support that woman take the final decisions on the use of family planning methods. Consistently, Madam Alijata Harunaa (Gender Desk officer, West Gonja District Assembly) stated that, "most couples have shifted from the traditional ways of keeping households to modern ways. The decision on the number of children to have and the timing are made by both partners. Given the fact that children will have to be educated, fed well, sheltered and their health promptly attended to, most couples [discuss] the number of children to have ". In terms of the use of family planning, Mr. Seidu Moomin (Gender Desk officer, Sissala West District Assembly) indicated, "some women are usually confused about their menstrual cycle, as such they tend to opt for family planning methods to avoid unplanned pregnancies. Some women make such decisions with their husbands, while most women make such decisions on their own ".

On decisions related to leisure activities (such as watching television or playing ludu), most males (64.9%) and females (59.5%) revealed that men and women jointly make the final decisions. In terms of household kitchen items, most females (42.9%) indicated that women take the final decision, while 37.5% of males revealed that women make the final decisions. However, a relatively high number of males and females indicated that couples take joint decisions on the purchase of household kitchen items.

Furthermore, the majority of both males (58.3%) and females (59.5%) indicated that it is men who make the final decision on the type of non-kitchen items to buy for the family. This is typical for many Ghanaian family homes as it is generally observed that the men usually take the responsibility of buying durable assets for the household. However, there are exceptions as some of the males and females in the sample indicated that couples usually take joint decisions regarding the purchase of non-kitchen items just as in the case of purchase of kitchen items. Also, the results indicated that for the education of children and use of household income, the final decisions are jointly taken by couples.

Table 11: Decision making on specific socioeconomic issues and household chores

Response	Male		Female	
	Freq.	%	Freq.	%
What to cook/eat at home				
Men	51	30.4	50	29.8
Women	70	41.7	72	42.9
Both	44	26.2	45	26.8
Undecided	3	1.8	1	0.6
Economic resources trees of value i.e land, etc.				
Men	112	66.7	114	67.9
Women	8	4.8	11	6.5
Both	48	28.6	42	25.0
Undecided	0	0.0	1	0.6
The type of economic activity to engage in				
Men	72	42.9	65	38.7
Women	10	6.0	11	6.5
Both	84	50.0	92	54.8
Undecided	2	1.2	0	0.0
The type of associations/groups to belong/join				
Men	32	19.0	32	19.0
Women	11	6.5	15	8.9
Both	100	59.5	102	60.7
Undecided	25	14.9	19	11.3
The number of children to have				
Men	41	24.4	34	20.2
Women	4	2.4	5	3.0
Both	108	64.3	113	67.3
Undecided	15	8.9	16	9.5
Timing of (when to have) children				
Men	19	11.3	14	8.3
Women	14	8.3	18	10.7
Both	107	63.7	107	63.7
Undecided	28	16.7	29	17.3
Use of family planning methods				
Men	15	8.9	11	6.5
Women	18	10.7	15	8.9
Both	107	63.7	103	61.3
Undecided	28	16.7	39	23.2
Leisure activities				
Men	19	11.3	16	9.5
Women	5	3.0	17	10.1
Both	109	64.9	100	59.5
Undecided	35	20.8	35	20.8

Household's kitchen item, e.g., cooking cylinder				
Men	38	22.6	30	17.9
Women	63	37.5	72	42.9
Both	63	37.5	63	37.5
Undecided	4	2.4	3	1.8
Household's non-kitchen items e.g. TV				
Men	98	58.3	100	59.5
Women	3	1.8	10	6.0
Both	65	38.7	56	33.3
Undecided	2	1.2	2	1.2
The education of children				
Men	65	38.7	69	41.1
Women	2	1.2	3	1.8
Both	99	58.9	96	57.1
Undecided	2	1.2	0	0.0
Household income				
Men	76	45.2	70	41.7
Women	5	3.0	3	1.8
Both	83	49.4	91	54.2
Undecided	4	2.4	4	2.4

Source: Analysis of WEACTION project field data, 2021.

From Table 12, there is divergence based on regional distribution of whether males or females are responsible for specific decisions at the household level. In the Northern, Upper East and Western regions, the majority of the males indicated that women are responsible for decision making on daily household food menus. Surprisingly, many males than females-controlled decision making on household daily food menu in the Savannah and Western North regions. It is only in the Upper West region that the decision on what to cook at home daily is based on collective decision among couples.

The empirical findings suggest that in all the locations except the Upper West region, men generally take final decisions on usage of economic resources such as trees with economic value and lands. Aside from the Upper West region, a relatively high proportion of the females in the Northern region also indicated that both males and females have equal control over economic resources of the family (See Table 12). Most of both males and females in the Upper East, Upper West and Western regions noted that there is a collective decision making on the type of socioeconomic activities that women in particular must be engaged in.

However, in the Savannah and Western North regions, decisions on which economic activity to engage in, is largely taken by males. In all the regions except Savannah region where it is largely male dominated decision process, majority of both males and females indicated that there is collective

decision-making arrangement among couples on the groups or associations any of the couple would join.

The decision on the timing and number of children to have been generally found to be collectively taken by all couples in the study regions. In the Western North region however, men were said to be final decision makers on house size to maintain.

Also, most males and females in all the regions except Western North and Western regions indicated that both couples take decisions on the education of children as well as use of household income. This was however the preserve of men in the Western and Western North regions (see Table 12).

Regarding who makes final decision on who performs which productive, representative and community management roles and responsibilities, the women of Kpatia community in a FGD ascribed this to men. “This is because the women are said to be the property of their husbands according to custom, and should conduct herself socially, economically and spiritually in accordance to the wishes their husbands”. From Sui community in the Western North region, it was revealed from the men’s FGD that “the men take final decisions on productive issues, but the decision is normally taken after several deliberations with the spouse. Also, “final decisions on reproductive issues are not designated to anyone in the household. This is because reproductive issues are very sensitive and affects the development of the children so one should not be autocratic about it. Both male and females plays critical roles in reproductive issues”. In the same community, it was concluded by the women’s FGD that “our husbands take final decisions on productive issues. Even if we want to sell our own farm crops, we have to inform them else they will not take it easy with us. [For reproductive decisions] we both take decisions on reproductive issues in the household. Our husbands are not selfish about that. For issues regarding the number of children to have usually taken [decisions] together to prevent us from secretly taking contraceptives”.



Plate 3: Focus group session with women at Kpatia (Upper East region)

Photo credit: Asdev Consult

Table 12: Decision making on specific socioeconomic issues and household chores by location

Response	NR		SR		UER		UWR		WNR		WR	
	M	F	M	F	M	F	M	F	M	F	M	F
What to cook/eat at home												
Men	25.0	28.6	75.0	60.7	0.0	3.6	0.0	0.0	64.3	53.6	17.9	32.1
Women	46.4	32.1	14.3	28.6	96.4	92.9	17.9	25.0	17.9	28.6	57.1	50.0
Both	28.6	35.7	7.1	10.7	3.6	3.6	78.6	75.0	17.9	17.9	21.4	17.9
Undecided	0.0	3.6	3.6	0.0	0.0	0.0	3.6	0.0	0.0	0.0	3.6	0.0
Economic resources and trees of value. e. g. Land												
Men	50.0	32.1	82.1	85.7	89.3	85.7	35.7	39.3	89.3	89.3	53.6	75.0
Women	17.9	21.4	10.7	10.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.1
Both	32.1	42.9	7.1	3.6	10.7	14.3	64.3	60.7	10.7	10.7	46.4	17.9
Undecided	0.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
The type of economic activity to engage in												
Men	42.9	39.3	78.6	60.7	17.9	14.3	10.7	3.6	71.4	71.4	35.7	42.9
Women	17.9	14.3	7.1	21.4	0.0	0.0	3.6	0.0	0.0	0.0	7.1	3.6
Both	39.3	46.4	10.7	17.9	82.1	85.7	82.1	96.4	28.6	28.6	57.1	53.6
Undecided	0.0	0.0	3.6	0.0	0.0	0.0	3.6	0.0	0.0	0.0	0.0	0.0
The type of association/group to belong/join												
Men	32.1	28.6	60.7	60.7	3.6	7.1	3.6	3.6	7.1	3.6	7.1	10.7
Women	21.4	21.4	14.3	14.3	0.0	0.0	3.6	0.0	0.0	3.6	0.0	14.3
Both	46.4	50.0	17.9	25.0	96.4	92.9	89.3	96.4	42.9	53.6	64.3	46.4
Undecided	0.0	0.0	7.1	0.0	0.0	0.0	3.6	0.0	50.0	39.3	28.6	28.6
The number of children to have												
Men	25.0	17.9	28.6	10.7	0.0	0.0	0.0	3.6	67.9	57.1	25.0	32.1
Women	10.7	3.6	0.0	0.0	0.0	0.0	3.6	7.1	0.0	0.0	0.0	7.1
Both	60.7	71.4	46.4	57.1	100.0	100.0	85.7	78.6	32.1	42.9	60.7	53.6
Undecided	3.6	7.1	25.0	32.1	0.0	0.0	10.7	10.7	0.0	0.0	14.3	7.1

Timing of (when to have) children

Men	17.9	17.9	32.1	10.7	0.0	0.0	0.0	7.1	10.7	7.1	7.1	7.1
Women	3.6	10.7	3.6	0.0	0.0	0.0	3.6	0.0	14.3	25.0	25.0	28.6
Both	75.0	64.3	42.9	53.6	100.0	100.0	92.9	85.7	32.1	35.7	39.3	42.9
Undecided	3.6	7.1	21.4	35.7	0.0	0.0	3.6	7.1	42.9	32.1	28.6	21.4

Use of family planning methods

Men	14.3	14.3	25.0	17.9	0.0	0.0	0.0	0.0	10.7	0.0	3.6	7.1
Women	10.7	7.1	7.1	0.0	0.0	0.0	3.6	0.0	10.7	21.4	32.1	25.0
Both	67.9	64.3	50.0	57.1	100.0	100.0	89.3	89.3	42.9	39.3	32.1	17.9
Undecided	7.1	14.3	17.9	25.0	0.0	0.0	7.1	10.7	35.7	39.3	32.1	50.0

Leisure activities

Men	7.1	3.6	46.4	50.0	0.0	0.0	3.6	0.0	7.1	3.6	3.6	0.0
Women	3.6	14.3	10.7	28.6	0.0	0.0	0.0	3.6	0.0	3.6	3.6	10.7
Both	85.7	78.6	39.3	17.9	100.0	96.4	92.9	92.9	17.9	32.1	53.6	39.3
Undecided	3.6	3.6	3.6	3.6	0.0	3.6	3.6	3.6	75.0	60.7	39.3	50.0

Household's kitchen items. e.g., cooking cylinder

Men	7.1	7.1	17.9	7.1	0.0	0.0	3.6	0.0	67.9	60.7	39.3	32.1
Women	21.4	17.9	64.3	85.7	53.6	67.9	10.7	14.3	25.0	21.4	50.0	50.0
Both	67.9	67.9	14.3	7.1	46.4	32.1	82.1	85.7	3.6	17.9	10.7	14.3
Undecided	3.6	7.1	3.6	0.0	0.0	0.0	3.6	0.0	3.6	0.0	0.0	3.6

Household's non-kitchen items. e.g TV

Men	10.7	7.1	67.9	75.0	71.4	75.0	14.3	14.3	100.0	100.0	85.7	85.7
Women	7.1	7.1	0.0	17.9	0.0	3.6	0.0	0.0	0.0	0.0	3.6	7.1
Both	78.6	78.6	28.6	7.1	28.6	21.4	85.7	85.7	0.0	0.0	10.7	7.1
Undecided	3.6	7.1	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

The education of children

Men	10.7	14.3	67.9	82.1	3.6	0.0	0.0	7.1	75.0	71.4	75.0	71.4
Women	7.1	7.1	0.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Both	82.1	78.6	28.6	14.3	96.4	100.0	96.4	92.9	25.0	28.6	25.0	28.6
Undecided	0.0	0.0	3.6	0.0	0.0	0.0	3.6	0.0	0.0	0.0	0.0	0.0
Household income												
Men	10.7	14.3	78.6	85.7	3.6	10.7	7.1	0.0	82.1	53.6	89.3	85.7
Women	7.1	3.6	0.0	7.1	0.0	0.0	3.6	0.0	7.1	0.0	0.0	0.0
Both	82.1	78.6	17.9	3.6	89.3	85.7	85.7	96.4	10.7	46.4	10.7	14.3
Undecided	0.0	3.6	3.6	3.6	7.1	3.6	3.6	3.6	0.0	0.0	0.0	0.0

Source: Analysis of WEACTION project field data, 2021.

4.1.6 Disagreement/compromise over decision making in the household

The respondents were asked whether in the past four weeks they had disagreement with their partners over decision making in the house. From Table 13, the majority of the respondents (83.3% males and 86.9% females) indicated that they have not had any disagreement, while just a few males (16.7%) and females (13.1%) revealed they had disagreement with their partners. Among respondents who had disagreement with their partners, 63.1% males revealed that the man/husband usually compromises, while 63.1% females think the woman/wife compromises. However, about 31.5% males and 32.7% females respectively indicated the women/wives and men/husband compromises.

Table 13: Disagreement and compromise over decision making in the house

Response	Male		Female	
	Freq.	%	Freq.	%
Disagreement				
No	140	83.3	146	86.9
Yes	28	16.7	22	13.1
Who compromises				
Woman/Wife	53	31.5	106	63.1
Man/Husband	106	63.1	55	32.7
Undecided	9	5.4	7	4.2

Source: Analysis of WEACTION project field data, 2021.

Table 14 shows the percentage distribution based on the gender and location of the level of disagreement among couples and who compromises during such disagreements. Overall, both males and females in the Northern, Savannah, Upper East, Upper West and Western regions indicated having no disagreement in the past four weeks. In the Western North region, there is a mixed result; while most of the males indicated having disagreement in the past four weeks, the majority of the females indicated having no disagreement. Except in the Upper West region, most of the males in all regions indicated that husbands must compromise during disagreements. Also, except in the Western North region, most of the females indicated that wives must compromise during disagreements. These findings show that both males and females feel they must take responsibility in preventing the escalation of disagreements.

Table 14: Disagreement and compromise over decision making in the house by location

Response	NR		SR		UER		UWR		WNR		WR	
	M	F	M	F	M	F	M	F	M	F	M	F
Disagreement												
No	89.3	96.4	92.9	96.4	100	100	96.4	85.7	35.7	64.3	85.7	78.6
Yes	10.7	3.6	7.1	3.6	0.0	0.0	3.6	14.3	64.3	35.7	14.3	21.4
Who compromises												
Woman/Wife	10.7	64.3	14.3	67.9	39.3	89.3	71.4	82.1	35.7	28.6	17.9	46.4
Man/Husband	82.1	35.7	85.7	28.6	60.7	10.7	25.0	14.3	60.7	71.4	64.3	35.7
Undecided	7.1	0.0	0.0	3.6	0.0	0.0	3.6	3.6	3.6	0.0	17.9	17.9

Source: Analysis of WEACTION project field data, 2021.

4.1.7 Women’s ability to make absolute decisions at household level

To clarify previous decisions on the limited decision making by women, the respondents were asked categorically whether women can take absolute decisions. The results (Table 15) indicated that most males (68.5%) and females (53.6%) revealed women can take absolute decisions but on limited matters, respectively. The respondents revealed that women are restrained from making absolute decisions especially with regards to the use and control of household resources, child care and income spending. Interestingly, while as high as 41.1% of the females indicated they can take absolute decisions on every matter at the household, only 19.1% of the males indicated the same. This implies that while women feel to be allowed to take absolute decisions, the men are unwilling to waive such autonomy to the women.

According to Madam Zubaidatu Amidu Amingo (WIAD officer, Damongo), “child care, income spending, and use and control of house resources are issues that are paramount to both the man and the woman. As such, women cannot make absolute decisions on them”. Similarly, the Gender Desk Officer of the Sissala West municipality, Mr. Seidu Moomin, stated that “the kind of society we have does not permit a woman to make absolute decisions especially if she is married. A woman who does that is often regarded as disrespectful. The man wants to exercise his power and does not want to exhibit weakness, as such will not allow a woman to make absolute decisions”.

Table 15: Women’s ability to make absolute decisions at household level

Response	Male		Female	
	Freq.	%	Freq.	%
Yes, on every matter	33	19.6	69	41.1
Yes, but on limited matters	115	68.5	90	53.6
Not at all	20	11.9	9	5.4

Source: Analysis of WEACT project field data, 2021.

Table 16 shows the regional percentage distribution of women’s ability to take absolute decisions at household level. All the respondents in the Upper West region opined that woman can only take absolute decisions on some selected matters at the household. Majority of both males and females in the Northern, Savannah and Upper West regions indicated women can take absolute decisions on limited matters while the majority of the women in these regions indicated they can take absolute decisions on all household matters. This can be a potential source of power play in such households. In the Western and Western North regions, the majority of both males and females indicated that women can take absolute decisions on all matters concerning their homes. This finding was confirmed by a respondent in Sefwi-Wiaso that most women take absolute decisions on all matters. For instance, a female respondent, Sui, Sefwi-Wiaso Municipal stated, “most women are economically empowered in this part of the country, such that they have their own cocoa farms, engaged in small-scale mining and many more. As such, they earn a lot of income to support household expenditures. Their cash contribution towards housekeeping puts them in a position to take absolute decisions”.

Table 16: Women’s ability to make absolute decisions at household level by location

Response	NR		SR		UER		UWR		WNR		WR	
	M	F	M	F	M	F	M	F	M	F	M	F
Yes, on every matter	3.6	7.1	17.9	78.6	0.0	0.0	3.6	10.7	46.4	85.7	46.4	64.3
Yes, but on limited matters	92.9	85.7	75.0	17.9	100	100	67.9	75.0	42.9	14.3	32.1	28.6
Not at all	3.6	7.1	7.1	3.6	0.0	0.0	28.6	14.3	10.7	0.0	21.4	7.1

Source: Analysis of WEACTION project field data, 2021.

4.1.8 Factors that contribute to the differences in power among couples

In order to understand what contributes to differences in power among couples, respondents were required to state their level of agreement with key predefined contributing factors. The results of FGDs show various reasons for the power difference among couples. For instance, the women at Sorbelle in the Upper West region mentioned during the FDG that the major factors that contribute to differences in power dynamics among couples at the household level include the fact that they were married by the men. They added that their weak financial standing also affected their control of power at home. This was affirmed by the men at a separate FGD in Sorbelle community, who indicated that “we married them (the women) to our homes.

The women of Kwabeng in the Western region also outlined “culture and customs, control of resources, and age” as the factors leading to power difference to the advantage of men, while the men mentioned that the difference in the “financial strength, education, age and customs” account for the difference in power among couples.

The men’s FGD at Kpatia community detailed that men have high power because “the right of ownership of the most important family resources such as land, livestock and customary power is given to a husband”



Plate 4: FGD session with women at Sorbelle, Upper West region

Photo credit: Asdev Consult

4.1.8.1 Effect of age on power difference among couples

From Table 17, the majority of males and females either agreed or strongly agreed that age has an effect on power differences among couples. That is, the eldest among the couples is most likely to hold more decision-making power than the youngest. Unfortunately for many couples in Ghana, the husbands are relatively older than their wives, therefore, this result clarifies why men usually have more decision-making power in the household.

Table 17: Effect of age on power difference

Response	Male		Female	
	Freq.	%	Freq.	%
Strongly agreed	72	42.9	80	47.6
Agreed	52	31.0	49	29.2
Undecided	7	4.2	4	2.4
Disagreed	22	13.1	25	14.9
Strongly disagreed	15	8.9	10	6.0

Source: Analysis of WEACT project field data, 2021.

From Table 18, there is an observed difference in the regional and gendered responses. For instance, while the majority of both couples in the Savannah region agreed that the age difference among couples influences the level of power difference among them, the majority of both couples in the Upper East, Western North and Western regions strongly agreed. In the Upper West region, all females and nearly all males either disagreed or strongly disagreed on the effect of age on power difference. Generally, the result shows that females agreed that the age differences among couples is a reason for the power difference among them.

Table 18: Effect of age on power difference by location

Response	NR		SR		UER		UWR		WNR		WR	
	M	F	M	F	M	F	M	F	M	F	M	F
Strongly agreed	32.1	32.1	21.4	28.6	71.4	78.6	0.0	0.0	67.9	71.4	64.3	75.0
Agreed	28.6	35.7	60.7	71.4	21.4	21.4	10.7	0.0	28.6	28.6	35.7	17.9
Undecided	7.1	14.3	17.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Disagreed	32.1	17.9	0.0	0.0	7.1	0.0	35.7	64.3	3.6	0.0	0.0	7.1
Strongly disagreed	0.0	0.0	0.0	0.0	0.0	0.0	53.6	35.7	0.0	0.0	0.0	0.0

Source: Analysis of WEACT project field data, 2021.

4.1.8.2 Effect of income on power difference among couples

The result on the effect of income on power differences is shown in Table 19. Most males and females agreed that when there is an income imbalance among couples, decision making power tends to be held by the person with the highest income. Because of the traditional glass ceiling and the generally higher income of men than women, this confirms why men wield more decision-making powers in the household. Few respondents (16.1% males and 14.9% females) however disagreed that income differences have an effect on power difference between men and women.

Table 19: Effect of income on power difference

Response	Male		Female	
	Freq.	%	Freq.	%
Strongly agreed	63	37.5	67	39.9
Agreed	45	26.8	54	32.1
Undecided	17	10.1	12	7.1
Disagreed	27	16.1	25	14.9
Strongly disagreed	16	9.5	10	6.0

Source: Analysis of WEACTION project field data, 2021.

Table 20 shows the effect of income on power difference in the various regions. Empirically, the majority of both male and female couples either agreed or strongly agreed that the higher the income difference among couples, the higher the power difference among them. Thus, the person with the highest income controls power in the family. This is because such persons often make decisions that would first favour them before any other person in the family. In the Upper West region, both male and female couples disagreed on this and that once there is a mutual understanding among couples, income difference does not influence power play among them. This is consistent with the opinion of Mr. Seidu Moomin (Gender Desk officer, Sissala West District Assembly) who stated, “men and women have distinct roles in households. Traditionally, men are supposed to provide financial resources, while women take charge of household management such as cooking, washing, bathing and caring for children, etc. Since these roles are clearly defined and understood by couples, the issue of power differences emanating from income differences does not come to play at all”.

Table 20: Effect of income on power difference by location

Response	NR		SR		UER		UWR		WNR		WR	
	M	F	M	F	M	F	M	F	M	F	M	F
Strongly agreed	17.9	17.9	21.4	39.3	71.4	78.6	3.6	0.0	67.9	60.7	42.9	42.9
Agreed	14.3	28.6	67.9	60.7	10.7	21.4	0.0	0.0	32.1	39.3	35.7	42.9
Undecided	35.7	39.3	10.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.3	3.6
Disagreed	32.1	14.3	0.0	0.0	14.3	0.0	42.9	64.3	0.0	0.0	7.1	10.7
Strongly disagreed	0.0	0.0	0.0	0.0	3.6	0.0	53.6	35.7	0.0	0.0	0.0	0.0

4.1.8.3 Effect of social status on power difference among couples

Table 21 outlines the perception of the couples on the effect of social status on gendered power difference. The result shows that overall, over 60% of males and females either agreed or strongly agreed that individuals with higher social status have higher decision-making power. In most societies, men hold high social status and leadership positions and this could give them the advantage to hold more power in the family.

Table 21: Effect of social status on power difference

Response	Male		Female	
	Freq.	%	Freq.	%
Strongly agreed	49	29.2	58	34.5
Agreed	54	32.1	46	27.4
Undecided	21	12.5	18	10.7
Disagreed	27	16.1	35	20.8
Strongly disagreed	17	10.1	11	6.5

Source: Analysis of WEACT project field data, 2021.

Table 22 shows the effect of social status on power difference in the various regions. This shows that the majority of both male and female couples either agreed or strongly agreed that the higher the social status difference among couples, the higher the power difference among them. From the perspective of Madam Alijata Haruna (Gender Desk officer, West Gonja District Assembly), “power differences do exist among couples. For instance, men with higher social status want to assume absolute control in households, they want to be feared and respected by their spouses and children. On the other hand, when a woman is of a higher social status than a man, decisions concerning households are often taken jointly. However, in rare cases, women with higher social status tend to be more powerful than the men in terms of household decision making”. Thus, the person with the highest social status controls power in the family. This is because such persons often make decisions that would first favour them before any other person in the family. In the Upper West region, both male and female couples disagreed on this and that once there is a mutual understanding among couples, social status difference does not influence power play among them.

Table 22: Effect of social status on power difference by location

Response	NR		SR		UER		UWR		WNR		WR	
	M	F	M	F	M	F	M	F	M	F	M	F
Strongly agreed	25.0	35.7	21.4	39.3	71.4	78.6	0.0	0.0	39.3	28.6	17.9	25.0
Agreed	32.1	25.0	57.1	50.0	21.4	21.4	7.1	0.0	39.3	50.0	35.7	17.9
Undecided	14.3	25.0	21.4	10.7	0.0	0.0	0.0	0.0	7.1	3.6	32.1	25.0
Disagreed	28.6	14.3	0.0	0.0	7.1	0.0	35.7	64.3	14.3	17.9	10.7	28.6
Strongly disagreed	0.0	0.0	0.0	0.0	0.0	0.0	57.1	35.7	0.0	0.0	3.6	3.6

Source: Analysis of WEACT project field data, 2021.

4.1.8.4 Effect of educational level on power difference among couples

Table 23 shows that, overall, most males (50.6%) and females (54.8%) agreed or strongly agreed that educational difference leads to power differences among couples. This reflects the need to ensure equity in educational opportunities between men and women. However, a fair share of males (38.8%) and females (36.9%) disagreed or strongly disagreed with the effect of education on power difference. In Ghana, data shows that the males are mostly educated than the females. Therefore, this could exacerbate the observed gendered power difference among couples.

Table 23: Effect of education on power difference

Response	Male		Female	
	Freq.	%	Freq.	%
Strongly agreed	50	29.8	51	30.4
Agreed	35	20.8	41	24.4
Undecided	17	10.1	14	8.3
Disagreed	31	18.5	29	17.3
Strongly disagreed	35	20.8	33	19.6

Source: Analysis of WEACTION project field data, 2021.

From Table 24, the percentage distribution of the effect of education on power difference among men and women. This shows divergence in the responses based on the location and gender. For instance, while the highest percentage of males in the Northern region disagreed that education influences decision-making power difference, the highest percentage of females in the region were undecided. For Savannah, Western North and Western regions, both males and females agreed that persons with higher education would have high decision-making power among couples while both males and females in Upper East and Upper West regions disagreed.

According to Madam Alijata Haruna (Gender Desk officer, West Gonja District Assembly), “education is increasingly becoming a major factor which enables women to break down barriers to some socialisation factors, giving rise to the division of household labour. The more educated a woman is, the more likely it is that she is going to venture into areas that are traditionally considered male areas”

Table 24: Effect of education on power difference by location

Response	NR		SR		UER		UWR		WNR		WR	
	M	F	M	F	M	F	M	F	M	F	M	F
Strongly agreed	14.3	28.6	35.7	35.7	7.1	7.1	3.6	0.0	57.1	75.0	60.7	35.7
Agreed	28.6	14.3	39.3	64.3	3.6	0.0	0.0	0.0	39.3	17.9	14.3	50.0
Undecided	17.9	39.3	21.4	0.0	0.0	0.0	0.0	0.0	3.6	0.0	17.9	10.7
Disagreed	39.3	17.9	3.6	0.0	21.4	14.3	39.3	64.3	0.0	7.1	7.1	0.0
Strongly disagreed	0.0	0.0	0.0	0.0	67.9	78.6	57.1	35.7	0.0	0.0	0.0	3.6

Source: Analysis of WEACTION project field data, 2021.

4.1.8.5 Effect of cultural norms on power difference among couples

Table 25 shows that most males and females strongly agreed that cultural norms contribute positively to gendered power differences. Only a few respondents disagreed. In most traditional settings in Ghana, the cultural norms tend to provide more powers to men than women. Men are often the head of the family and this automatically transfers all powers to them.

Table 25: Effect of cultural norms on power difference

Response	Male		Female	
	Freq.	%	Freq.	%
Strongly agreed	76	45.2	81	48.2
Agreed	54	32.1	57	33.9
Undecided	13	7.7	11	6.5
Disagreed	18	10.7	18	10.7
Strongly disagreed	7	4.2	1	0.6

Source: Analysis of WEACTION project field data, 2021.

On the regional effect of cultural norms on decision-making power difference, Table 26 shows that the majority of both males and females in all regions agreed or strongly agreed that existing cultural norms in the various locations promote decision-making power difference among couples. This effect usually favours the male couples and disadvantages the female couples. A relatively high proportion of the respondents in the Upper West region expressed that cultural norm do not influence decision-making power difference

Table 26: Effect of cultural norms on power difference by location

Response	NR		SR		UER		UWR		WNR		WR	
	M	F	M	F	M	F	M	F	M	F	M	F
Strongly agreed	25.0	14.3	28.6	46.4	75.0	78.6	57.1	60.7	60.7	57.1	25.0	32.1
Agreed	46.4	64.3	53.6	42.9	21.4	21.4	0.0	0.0	32.1	35.7	39.3	39.3
Undecided	17.9	17.9	17.9	10.7	0.0	0.0	0.0	0.0	0.0	0.0	10.7	10.7
Disagreed	10.7	3.6	0.0	0.0	3.6	0.0	21.4	35.7	7.1	7.1	21.4	17.9
Strongly disagreed	0.0	0.0	0.0	0.0	0.0	0.0	21.4	3.6	0.0	0.0	3.6	0.0

Source: Analysis of WEACT project field data, 2021.

4.1.8.6 Effect of religion on power difference among couples

Table 27 shows that most male and female couples agreed or strongly agreed that religion influences the level of decision-making power difference among the couples. Although both Christianity and Islamic religions which are dominant in Ghana preach respect for both males and females, they noted these religions still support males as being the heads of the family, hence the promotion of power difference among couples.

Table 27: Effect of religion on power difference

Response	Male		Female	
	Freq.	%	Freq.	%
Strongly agreed	53	31.5	64	38.1
Agreed	37	22.0	33	19.6
Undecided	20	11.9	21	12.5
Disagreed	43	25.6	40	23.8
Strongly disagreed	15	8.9	10	6.0

Source: Analysis of WEACT project field data, 2021.

Table 28 shows the regional effect of religion on decision-making power difference. The Table shows that the majority of both males and females in all regions agreed or strongly agreed that religion in the various locations promote decision-making power difference among couples. This effect usually favours the male couples and disadvantages the female couples. A relatively high proportion of the respondents in the Upper West region expressed that religion does not influence decision-making power difference.

Table 28: Effect of religion on power difference by location

Response	NR		SR		UER		UWR		WNR		WR	
	M	F	M	F	M	F	M	F	M	F	M	F
Strongly agreed	28.6	39.3	42.9	67.9	71.4	78.6	32.1	32.1	10.7	7.1	3.6	3.6
Agreed	28.6	25.0	39.3	32.1	14.3	21.4	0.0	0.0	35.7	17.9	14.3	21.4
Undecided	14.3	17.9	17.9	0.0	3.6	0.0	0.0	0.0	3.6	32.1	32.1	25.0
Disagreed	28.6	17.9	0.0	0.0	10.7	0.0	39.3	60.7	42.9	39.3	32.1	25.0
Strongly disagreed	0.0	0.0	0.0	0.0	0.0	0.0	28.6	7.1	7.1	3.6	17.9	25.0

Source: Analysis of WEACTION project field data, 2021.

4.1.9 Couples supporting each other in domestic activities

In terms of couples supporting each other in domestic activities, Figure 2 indicates that a vast majority of males (98.2%) revealed that they support their wives in carrying out domestic activities, while 88.7% of females pointed out that their husbands support them in domestic activities. This revealed that more women than men indicated having no support on domestic activities from their husbands. The details of the specific activities that the men provide support to the females is discussed in the next section.

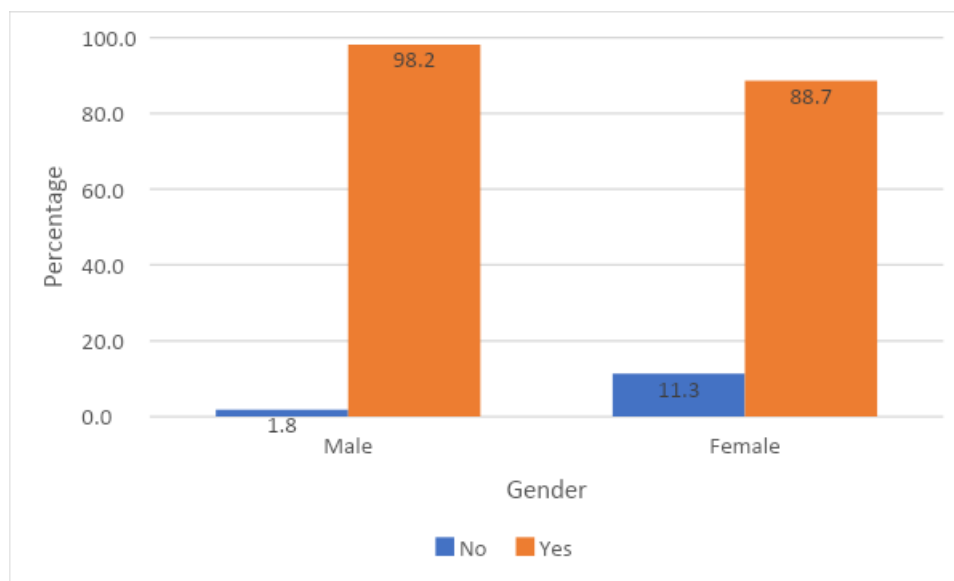


Figure 2: Extent of partner support in domestic activities

Figure 3 shows the percentage distribution of whether men support women in domestic activities. In all regions, most of both males and females indicated that men support women in domestic activities. In Upper East, Upper West, Western North and Western regions, all the male couples indicated that they support their spouses in domestic activities. The result shows that more males than females indicated supporting their wives in domestic activities. Perhaps, some of the women do not acknowledge the support or some of the men do not provide the support but indicated otherwise. Accordingly, a respondent indicated that “some of the domestic activities undertaken by men are too physical for women to help ... a reason for low support for male dominated activities” (male respondent, Daire, Savelugu Municipal).

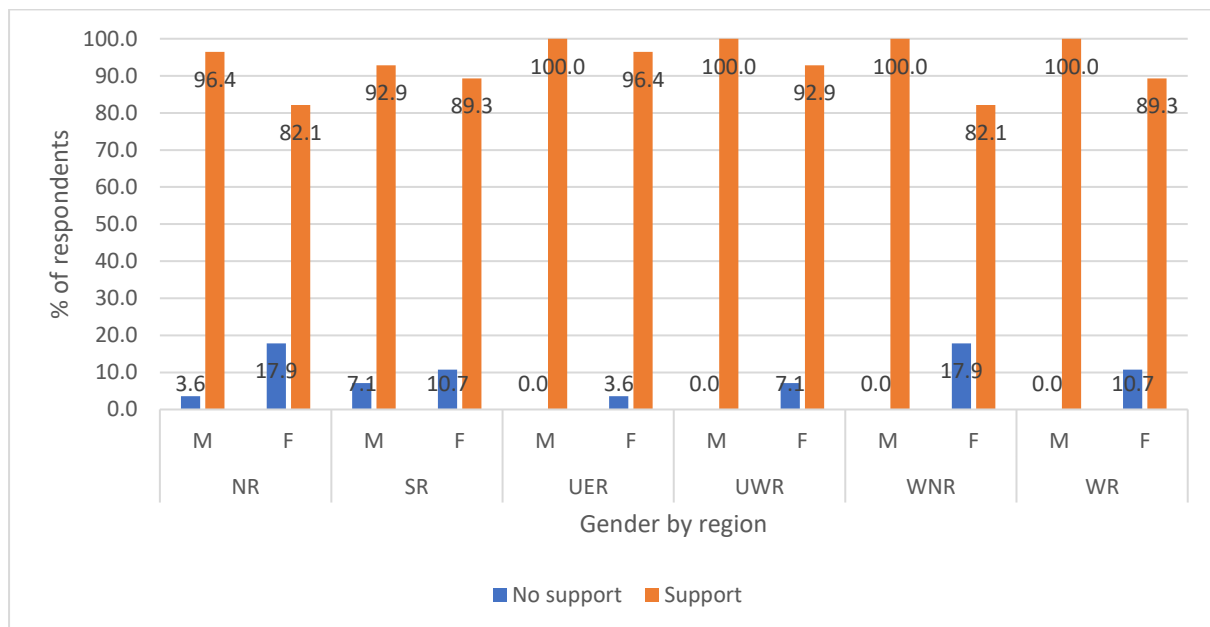


Figure 3: Extent of partner support in domestic activities by location

Source: Analysis of WEACT project field data, 2021.

4.1.12 Specific domestic works men engage in

Understanding male engagement in traditionally female dominated domestic works is critical for understanding power dynamics among couples. An important goal of interventions targeting gender equity and shifting gender norms can be increasing male engagement in areas of work traditionally dominated by women, potentially also decreasing the burden on women, and allowing them to invest more time in their personal development (economic, health, political, social, religious etc). Table 29 shows the results on whether men assist their wives in domestic activities, particularly with regards to childcare and firewood/water fetching. The results revealed that about 97.6% of the males indicated their involvement in childcare, while 93.5% of the women indicated that their husbands do assist them in childcare. Similarly, the majority of males (79.8%) and females (73.2%) indicated men support domestic work by fetching firewood and water for domestic needs.

Table 29: Men’s involvement in domestic work

Response	Male		Female	
	Freq.	%	Freq.	%
Men involvement in childcare				
No	4	2.4	11	6.5
Yes	164	97.6	157	93.5
Men involvement in firewood/water fetching				
No	34	20.2	45	26.8
Yes	134	79.8	123	73.2

Source: Analysis of WEACTION project field data, 2021.

Table 30 shows the regional distribution of the outcome in Table 28. This revealed that both men and women couples in the Savannah and Upper East regions indicated that the men provide child care assistance to women. According to Madam Alijata Haruna (Gender Desk Officer, West Gonja District Assembly) who revealed that, “most women in recent times are engaged in economic activities which keeps them busy, as such, their husbands support them by providing child care assistance”. All men in the Northern and Upper West regions also indicated providing childcare support to their spouses. The level of involvement or support by men in the provision of firewood or fetching water for domestic use is less compared with their support for childcare activities. This is particularly lowest in the Western and Western North Regions.

Table 30: Men’s involvement in domestic work by location

Topic	NR		SR		UER		UWR		WNR		WR	
	M	F	M	F	M	F	M	F	M	F	M	F
Men involvement in childcare												
No	0.0	7.1	0.0	0.0	0.0	0.0	0.0	7.1	14.3	17.9	0.0	7.1
Yes	100	92.9	100	100	100	100	100	92.9	85.7	82.1	100	92.9
Men involvement in firewood/water fetching												
No	3.6	21.4	14.3	14.3	3.6	10.7	0.0	3.6	57.1	50.0	42.9	60.7
Yes	96.4	78.6	85.7	85.7	96.4	89.3	100.0	96.4	42.9	50.0	57.1	39.3

Source: Analysis of WEACTION project field data, 2021.

4.1.10 Topics that couple find difficult to discuss with their partners

Table 31 presents topics that couples find difficult to discuss. The majority of respondents (51.8% males and 53% females) indicated that they are unable to discuss issues such as community management and leadership participation with their partners. A low percentage of males (23.2%) and females (20.8%) revealed they are unable to discuss sharing housework with their partners. Also, a relatively high proportion of males (41.1%) and females (41.1%) were unable to discuss the control of resources and decision making with their partners, while 37.5% of males and 39.9% of females were unable to discuss sexual and reproductive issues with their partners. These results mean that a fair proportion of couples are unable to freely discuss certain topics with their partners. According to Mr. Seidu Moomin (Gender Desk Officer, Sissala West District Assembly), “some couples hardly sit down to talk about issues that bother their personal and community life. Some men are hard on their wives to the extent that women become afraid or uncomfortable to discuss certain issues with [their] husbands”.

Table 31: Topics couple find difficult to discuss with their partners

Response	Male		Female	
	Freq.	%	Freq.	%
Sexual and Reproductive issues (e.g., family planning)	63	37.5	67	39.9
Sharing house work (e.g., fetching water, cooking, sweeping and taking care of children)	39	23.2	35	20.8
Control of Resources and Decision Making	69	41.1	69	41.1
Community management and leadership participation	87	51.8	89	53.0

Source: Analysis of WEACTION project field data, 2021.

The regional percentage distribution on the various topics couples find difficult to discuss is presented in Table 32. Couples in the Upper East, Western North and Western regions find it difficult to discuss sexual and reproductive issues with their spouses. Almost all couples in the Savannah and Upper West regions are able to discuss sexual and reproductive issues with their partners. Only in Northern and Western regions do most couples discuss topics related to the sharing of housework. Topics related to the control of resources and decision making are less discussed among couples in the Savannah region while topics related to community management and leadership are less discussed among couples in Western North and Western regions.

Table 32: Topics couple find difficult to discuss with their partners by location

Topic	NR		SR		UER		UWR		WNR		WR	
	M	F	M	F	M	F	M	F	M	F	M	F
Sexual and Reproductive issues (e.g., family planning)	28.6	17.9	3.6	0.0	71.4	78.6	7.1	7.1	46.4	78.6	67.9	42.9
Sharing house work (e.g., fetching water, cooking, sweeping and taking care of children)	53.6	60.7	3.6	3.6	3.6	0.0	17.9	17.9	21.4	14.3	39.3	57.1
Control of Resources and Decision Making	71.4	85.7	7.1	0.0	39.3	28.6	57.1	46.4	46.4	53.6	25.0	67.9
Community management and leadership participation	89.3	85.7	96.4	96.4	53.6	57.1	25.0	50.0	32.1	14.3	14.3	14.3

Source: Analysis of WEACTION project field data, 2021.

4.1.11 Respondent's perception on fairness/equality in relationships

Fairness or equality in a relationship is about understanding and respecting the rights of each other. Table 33 presents the understanding of respondents based on their experience on what contributes to a fair or equal relationship. The results indicated that a vast majority of males (86.3%) and females (85.7%) think that a fair relationship constitutes a case when decision making is done by both partners. Also, some of the respondents described that there is fairness and equality in a relationship when both partners engage in house chores or when both partners make financial contributions towards home and upkeep.

Table 33: Fairness/equality in relationships

Response	Male		Female	
	Freq.	%	Freq.	%
When decision making is done by both partners	145	86.3	144	85.7
House chores are done by both partners	76	45.2	80	47.6
Both partners make financial contributions for home upkeep	76	45.2	89	53.0

Source: Analysis of WEACTION project field data, 2021.

Table 34 shows the perceptions of the couples on what they considered as fairness or equality in relationship. All couples in the Upper East region described a fair relationship as when decisions are taken by both partners, house chores are done together by couples and both couples contribute financially for the home upkeep. In Savannah, Upper West, Western and Western North regions, the major perception of the couples is that a fair or equality in marriage is about both couples taking decisions together. In the Northern region, a fair marriage is generally considered as one where there is sharing of domestic chores.

Table 34: Fairness/equality in relationships by location

Topic	NR		SR		UER		UWR		WNR		WR	
	M	F	M	F	M	F	M	F	M	F	M	F
When decision making is done by both partners	53.6	57.1	96.4	100.0	100.0	100.0	100.0	100.0	92.9	85.7	75.0	71.4
House chores are done by both partners	96.4	89.3	0.0	0.0	100.0	100.0	42.9	46.4	17.9	35.7	14.3	14.3
Both partners make financial contributions for home upkeep	67.9	82.1	3.6	0.0	100.0	100.0	46.4	53.6	28.6	32.1	25.0	50.0

Source: Analysis of WEACTION project field data, 2021.

4.1.13 Couples participation in GMF programme

Table 35 presents results of the couple's participation in GMF. The results indicated that most respondents (over 90%) revealed that after becoming GMF, their masculinity and femininity have been strengthened. Also, while all male respondents (100%) revealed both partners are benefiting from GMF, 98.8% of females indicated both partners are benefitting. Regarding external family support for becoming GMF. The results also show that males (99.4%) and females (98.8%) received external family support for becoming GMF members. This means that people outside the GMF are beginning to appreciate the equal contribution of both males and females in managing households, unlike traditionally where there are clear distinct roles for men and women - wives are generally responsible for all domestic work and husbands provide financial needs of the household.

Table 35: Couples participation GMF

Response	Male		Female	
	Freq.	%	Freq.	%
Effect of GMF masculinity or femininity				
No	7	4.2	6	3.6
Yes	161	95.8	162	96.4
Are both partners benefitting from GMF				
No	0	0.0	2	1.2
Yes	168	100.0	166	98.8
External family support for becoming GMF member				
No	1	0.6	2	1.2
Yes	167	99.4	166	98.8

Source: Analysis of WEACTION project field data, 2021.

Table 36 shows the percentage distribution on couples' involvement in GMF. The majority of both males and females in all the regions indicated that belonging to a GMF have an effect on masculinity or femininity of a man or a woman. According to a respondent, "the positive effects of the GMF is that there is a more equitable division of labour between males and female members, and the burden of work for women and girls is reduced" (male respondent, Larabanga, West Gonja District Assembly). This finding is consistent with responses from Madam Belinda Akolgo (Programme Officer, Tunteiya Women Association), who stated, "each member of the family has equal rights and thus is entitled to opportunities to become empowered. Empowerment means that men and women together can take control and improve their lives, and that neither the man nor the woman exerts power over the other". They make decisions together, and share resources and their benefits. This is the case for all respondents in Upper East, Upper West and Western regions. The data also shows that except females in the Northern and Western regions, both males and females in the other regions noted that both partners benefit from GMF. Also, except the Upper East region, the majority of couples indicated that couples in GMF also get support from their extended families.

Table 36: Couples participation GMF by location

Topic	NR		SR		UER		UWR		WNR		WR	
	M	F	M	F	M	F	M	F	M	F	M	F
Effect of GMF masculinity or femininity												
No	21.4	14.3	0.0	7.1	0.0	0.0	0.0	0.0	3.6	0.0	0.0	0.0
Yes	78.6	85.7	100	92.9	100	100	100	100	96.4	100	100	100
Are both partners benefitting from GMF												
No	0.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6
Yes	100	96.4	100.0	100	100	100	100	100	100	100	100	96.4
External family support for becoming GMF member												
No	3.6	7.1	0.0	0.0	67.9	64.3	7.1	0.0	3.6	21.4	10.7	14.3
Yes	96.4	92.9	100.0	100	32.1	35.7	92.9	100	96.4	78.6	89.3	85.7

Source: Analysis of WEACTION project field data, 2021.

Also, the study sought to find out the level of agreement of respondents regarding whether GMFs are better off financially. Table 37 shows that the majority of males (91.7%) and females (89.9%) agreed that GMFs are better off financially because they save together and share household expenses amongst themselves. During further interactions with a female respondent in Amenfi West, Kwabeng community, it became evident that GMF couples often show transparency in what they earn from their businesses. During the individual survey, a woman stated “with what we have been taught so far about GMF, I strongly believe my husband will be relieved a bit financially since I will support in taking care of some household expenses”. Another woman added, “Since my husband will support me in some household chores, I will get enough time to do some business that will earn me income to support in house expenses”.

Table 37: GMFs are better off financially

Response	Male		Female	
	Freq.	%	Freq.	%
Agree	154	91.7	151	89.9
Do not know	14	8.3	17	10.1

Source: Analysis of WEACTION project field data, 2021.

Table 38 shows that all the couples in the Savannah, Upper East and Upper West regions indicated that couples are worse off financially under GMF. The majority of the couples in the other regions also indicated that couples are worse off financially for belonging to a GMF.

On whether women's self-esteem will increase when their roles are valued in a GMF, the women FGD at Ananekrom of Western region noted that “valuing our roles as women removes fear and shyness in us, will increase our participation in activities as well. It also enables us to express our views freely and to go for leadership positions as well”. The men also noted that “because valuing the roles of women encourages them and brings out their hidden abilities and potentials”.

The FGD for men in Ananekrom community also affirmed that GMF couples could experience a greater capacity to earn money because they have pooled their resources together and are sharing work at home. They men further noted that “pooling resources together enhances transparency and accountability in the household”. This assertion is further corroborated by the men’s FGD at Kpatia community in the Upper East region, who affirmed that because the entire family contribute their resources like labour and knowledge to the management of the family, GMF couple could experience a greater capacity to earn money because they have pulled their resources together and are sharing work at home responded.

Table 38: GMFs are better off financially by location

Topic	NR		SR		UER		UWR		WNR		WR	
	M	F	M	F	M	F	M	F	M	F	M	F
Agree	75.0	57.1	100.0	100.0	100.0	100.0	100.0	100.0	89.3	92.9	85.7	89.3
Do not know	25.0	42.9	0.0	0.0	0.0	0.0	0.0	0.0	10.7	7.1	14.3	10.7

Source: Analysis of WEACT project field data, 2021.

4.2 Labour constraints of women and the technical solutions they need to address them

This section discusses the labour constraints of women and the technical solutions needed to address them. Specifically, the section looks at the primary economic activity of couples, domestic and economic work burden among couples, labour saving technologies for domestic activities and types of labour-saving technologies for economic activities.

4.2.1 Primary economic activity of couple

Table 39 shows the results of couples' primary economic activity. The results indicated that most males (89.9%) and females (64.9%) are engaged in farming. Aside farming, the results showed a relatively high number of females also engaged in trading.

Table 39: Primary economic activity of couples

Response	Male		Female	
	Freq.	%	Freq.	%
Unemployed	3	1.8	5	3.0
Farming	151	89.9	109	64.9
Trading	1	0.6	38	22.6
Artisan	6	3.6	12	7.1
Employee	7	4.2	4	2.4

Source: Analysis of WEACT project field data, 2021.

Table 40: Primary economic activity of couples by location

Occupation	NR		SR		UER		UWR		WNR		WR	
	M	F	M	F	M	F	M	F	M	F	M	F
Unemployed	3.6	10.7	3.6	7.1	0.0	0.0	0.0	0.0	0.0	0.0	3.6	0.0
Farming	92.9	32.1	82.1	57.1	92.9	92.9	82.1	82.1	96.4	67.9	92.9	57.1
Trading	0.0	39.3	0.0	35.7	0.0	0.0	0.0	3.6	0.0	21.4	3.6	35.7
Artisan	0.0	17.9	14.3	0.0	0.0	0.0	3.6	7.1	3.6	10.7	0.0	7.1
Employee	3.6	0.0	0.0	0.0	7.1	7.1	14.3	7.1	0.0	0.0	0.0	0.0

Source: Analysis of WEACT project field data, 2021.

4.2.2 Domestic and economic work burden among couples

The results presented in Table 41 details whether there is a domestic and economic work burden on the couples or not. This revealed that most males (56%) do not overwork themselves while only 38.1% of the females do not have domestic and economic work burdens. The high work burden on more women than men is because of the domestic activities engaged by the women. As opined by Madam Zubaidatu Amidu Amingo (WIAD officer, West Gonja District Assembly) and Madam Alijata Haruna from (Gender Desk Officer, West Gonja District Assembly), in most cases women have to

wake up early, clean the house, prepare food for the family and prepare the children (if any) for school. After engaging in economic activity during the day, the women have to return home and prepare food for the family and provide further care for their dependents (children and aged). During these morning and evening hours where the woman is engaged in domestic activities, the man is mostly having leisure. The peak of work in both domestic and economic activities is usually during the farming season.

Table 41: Domestic and Economic work burden among couples

Response	Male		Female	
	Freq.	%	Freq.	%
No	94	56.0	64	38.1
Yes	74	44.0	104	61.9

Source: Analysis of WEACTION project field data, 2021.

Table 42: Domestic and Economic work burden among couples by location

Response	NR		SR		UER		UWR		WNR		WR	
	M	F	M	F	M	F	M	F	M	F	M	F
No	53.6	42.9	57.1	7.1	0.0	0.0	60.7	32.1	89.3	75.0	75.0	71.4
Yes	46.4	57.1	42.9	92.9	100	100	39.3	67.9	10.7	25.0	25.0	28.6

Source: Analysis of WEACTION project field data, 2021.

4.2.2: Level of labour support among partners

The level of labour support among partners is presented in Table 43. Most respondents revealed that the level of labour support from their partners is high or very high. However, few female respondents (13.1%) and 5.4% of the male indicated having received low or very low support from their husbands and wives, respectively. According to a respondent, “the reason why this is so is because some particular work activities are presumed to be a man or woman’s work, as such, it is rarely seen that a woman or man supports the partner in that regard” (male respondents, Ahokwa, Sefwi-Wiaso). Also, Madam Rashida Duuli (WIAD officer, Sissala West District Department of Agriculture) noted that, “women do provide labour support to their husbands especially in farm related activities, however, certain activities like uprooting of stumps, cutting down [trees] are physically demanding for women and so you do not see women supporting in that regard”. Regarding labour support from children, 41.1% males and 44% females indicated the labour support from their children is high, while some respondents revealed the labour support from their children is low. Also, the results showed that few respondents do not receive any labour support from their children.

Table 43: Level of labour support among partners

Response	Male		Female	
	Freq.	%	Freq.	%
Labour support from partner				
Very high	67	39.9	60	35.7
High	92	54.8	83	49.4
Low	8	4.8	18	10.7
Very low	1	0.6	4	2.4
No support at all	0	0.0	3	1.8
Labour support from children				
Very high	30	17.9	38	22.6
High	69	41.1	74	44.0
Low	47	28.0	39	23.2
Very low	10	6.0	6	3.6
No support at all	12	7.1	11	6.5

Source: Analysis of WEACTION project field data, 2021.

Table 44: Level of labour support among partners by location

Level	NR		SR		UER		UWR		WNR		WR	
	M	F	M	F	M	F	M	F	M	F	M	F
Level of support from partner(s)												
Very high	17.9	17.9	53.6	42.9	75.0	78.6	7.1	10.7	42.9	21.4	42.9	42.9
High	60.7	57.1	42.9	46.4	25.0	17.9	92.9	82.1	53.6	53.6	53.6	39.3
Low	17.9	7.1	3.6	7.1	0.0	3.6	0.0	7.1	3.6	25.0	3.6	14.3
Very low	3.6	10.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6
No support	0.0	7.1	0.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Level of support from children												
Very high	0.0	3.6	21.4	21.4	71.4	78.6	0.0	3.6	14.3	25.0	0.0	3.6
High	35.7	32.1	46.4	60.7	21.4	17.9	64.3	67.9	42.9	46.4	35.7	39.3
Low	25.0	28.6	28.6	17.9	7.1	3.6	28.6	25.0	28.6	17.9	50.0	46.4
Very low	14.3	10.7	3.6	0.0	0.0	0.0	7.1	0.0	3.6	0.0	7.1	10.7
No support	25.0	25.0	0.0	0.0	0.0	0.0	0.0	3.6	10.7	10.7	7.1	0.0

Source: Analysis of WEACT project field data, 2021.

4.2.3 Labour saving technologies for domestic activities

Labour-saving technologies can relieve women from the time constraints and drudgery involved in economic activities and household chores. This is particularly relevant given the growing involvement of women in economic activities. The results presented in Table 45 shows that females are more desirous of at least one of the listed technologies than males. Comparatively, more females (95.8%) than males (95.2%) were inclined to the use of gas; more females (92.9%) than males (92.3%) for refrigerator use; more females (94.6%) than males (90.5%) for rice cooker use; more females (93.5%) than males (91.1%) for washing machine use. However, more males (83.9%) than females (82.7%) are inclined to use a grinding machine. This finding reflects the general ownership and use of grinding machines in Ghana, where males are seen providing grinding services to women. Further interactions with Mr. Thomas Kofi Pang (Programme Coordinator, Tunteiya Women Association) revealed that some females in recent times own and operate grinding machines by themselves.

The Table also shows that more males than females are desirous of roasting machine and parboiler. This is particularly surprising given that roasting machines and parboiler are traditionally used by females. Probably, males are using these technologies for activities for which they were not originally designed for or may be venturing into female dominated activities. In general, most respondents,

particularly females, believe these technologies can conveniently save time if they are able to own or have access to these technologies.

From Table 46, respondents in Upper East, Upper West, Western North and Western regions are more desirous of gas than Savannah and Northern regions. This may be attributed to abundance of woodlot in Savannah and Northern regions where charcoal production and firewood are abundant compared to other regions (Brobbe, et al., 2015; International Climate Initiative, 2021). The local availability of charcoal and firewood presents cheapest options compared to other sources of cooking energy, thus, the reason for low use of gas (SERVIR-West Africa, 2018). Also, respondents in Upper East and Upper West regions are more inclined to the use of a roasting machine, grinding machine, refrigerator, blender, kettle and parboiler than other regions.

Additionally, stove, microwave, rice cooker and washing machine are more desired by respondents in the Upper East region. This result explains the physical demands in managing both domestic and economic tasks concurrently by males and females in the Upper East and Upper West regions. According to results from KII with Shea Network Ghana, the harsh climate conditions and poverty levels in the Upper East and Upper West regions force men and women to spend more time in economic activities, as a result are usually overwhelmed with domestic activities. This finding explains the high desire for labour saving technologies among men and women in these regions.

The men of Kpatia in FGD of the Upper East region mentioned that the women are now using labour-saving technologies such as “blender gas powered stove, washing machine, water pumping machine for watering garden, bicycle, motor and tricycle”. The women of Sui in the Western North region mentioned technologies such as “fufu machine, hair dryer, gas cookers, electric cookers, corn mill, rice mill, rice cookers, sewing machine”. On the effectiveness of these labour-saving technologies, the Kanato women in the Northern region also expressed that “the women found it easier to use and less time consuming and they are user friendly and meets the priorities of the women”. On the part of the men of Kanato, “they [the technologies] are easier to use, less time consuming and increase productivity and are user friendly and meets the specific priorities of women”.

Table 45: Desirous labour-saving technologies for domestic activities

Item	Male		Female	
	Freq.	%	Freq.	%
Gas	160	95.2	161	95.8
Stove	147	87.5	147	87.5
Microwave	143	85.1	144	85.7
Rice cooker	152	90.5	159	94.6
Washing machine	153	91.1	157	93.5
Fufu machine	114	67.9	117	69.6
Grinding machine	141	83.9	139	82.7
Refrigerator	155	92.3	156	92.9
Blender	154	91.7	156	92.9
Kettles	147	87.5	150	89.3
Roasting machine	133	79.2	132	78.6
Parboiler	105	62.5	101	60.1

Source: Analysis of WEACT project field data, 2021.

Table 46: Desirous Labour-saving technologies for domestic activities by location

Technology	NR		SR		UER		UWR		WNR		WR	
	M	F	M	F	M	F	M	F	M	F	M	F
Gas	82.1	92.9	89.3	85.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.4
Stove	89.3	96.4	89.3	75.0	100.0	100.0	89.3	96.4	89.3	96.4	67.9	60.7
Microwave	64.3	67.9	89.3	85.7	100.0	100.0	75.0	85.7	96.4	92.9	85.7	82.1
Rice cooker	96.4	96.4	82.1	85.7	100.0	100.0	75.0	85.7	89.3	100.0	100.0	100.0
Washing machine	89.3	92.9	85.7	82.1	100.0	100.0	96.4	100.0	89.3	89.3	85.7	96.4
Fufu machine	60.7	67.9	92.9	92.9	3.6	0.0	100.0	100.0	89.3	89.3	60.7	67.9
Grinding machine	71.4	71.4	92.9	67.9	100.0	100.0	100.0	100.0	82.1	96.4	57.1	60.7
Refrigerator	78.6	85.7	100.0	92.9	100.0	100.0	100.0	100.0	78.6	85.7	96.4	92.9
Blender	78.6	85.7	85.7	85.7	100.0	100.0	100.0	100.0	92.9	89.3	92.9	96.4
Kettles	67.9	78.6	89.3	67.9	100.0	100.0	100.0	100.0	78.6	92.9	89.3	96.4
Roasting machine	60.7	75.0	92.9	75.0	100.0	100.0	100.0	100.0	64.3	67.9	57.1	53.6
Parboiler	14.3	17.9	50.0	50.0	100.0	100.0	100.0	92.9	53.6	46.4	57.1	53.6

Source: Analysis of WEACT project field data, 2021.

4.2.4 Types of labour-saving technologies for economic activities

Table 47 presents the types of technology that can reduce the number of hours spent on economic activities without reducing output. Out of a total of 20 different technology types presented to the respondents, most respondents indicated that about 12 of these technologies can help improve their efficiency on their economic activities. The major technology with the highest percentage is tricycle for men and grinding machine for females. While the men consider the tricycles for easily carting their goods from farm to home and market, the women consider that the use of a grinding machine can allow them to have more time on their economic activities and not rush during the performance of economic activities for domestic ones. From the KIIs, tractor, wooden clubs for breaking cocoa pods, cassava processing machines and combine harvesters were technologies mentioned to help increase productivity and save time.

Table 48 shows differences in the type of labour-saving technologies desired by respondents for economic activities across the study regions. The results showed that respondents in Upper East are more desirous for labour saving technologies such as grinding machine, improved cooking stove, GEM parboiler, roasting machine, solar dryer (for only males) and post-harvest cooler. Also, use of GEM parboiler was desired more by respondents in the Upper West region. The results also show that except for respondents in the Northern region, lightweight shea/cocoa picker and plucker were desired by respondents in all regions.

Desire for tricycle and motorbikes were recorded for most male respondents in all regions except for Upper West region where there was equal distribution of males and females desire for motorbike and Western region where more females (78.6%) desire tricycle than their male (71.4%) counterpart. The use of tricycles and motorbikes have become the easiest and cheapest means of transport for most people living in both rural and urban areas in Ghana.

Goods are easily transported using these means especially on roads that are not in good shape. For people living in rural areas, tricycles and motorbikes are their surest means of commuting from one place and transporting goods from farm to home and from home to markets which saves them time. Also, respondents in Western North region showed more desire for a cocoa splitting machine than respondents in the other regions. This is attributed to the high production of cocoa in this region, hence the need for this technology. Evidently, shea nut crusher was desired more by respondents in Upper East, Savannah, Northern and Upper West. This is consistent given that shea processing is dominant in these regions compared to other regions.

Table 47: Type of labour-saving technologies for economic activities

Technology	Male		Female	
	Freq.	%	Freq.	%
Grinding machines	130	77.4	127	75.6
Improved cookstove	113	67.3	115	68.5
Roasting machine	105	62.5	104	61.9
GEM parboiler	85	50.6	78	46.4
Solar dryer	74	44.0	72	42.9
Post-harvest cooler (charcoal cooler for storing food produce)	79	47.0	80	47.6
Cocoa grinder	16	9.5	19	11.3
Wheelbarrow	120	71.4	79	47.0
Tricycle	152	90.5	121	72.0
Motorcycle	143	85.1	117	69.6
bicycle	229	136.3	106	63.1
Shea nut crusher	101	60.1	100	59.5
Nutcracker/De-shelling machine	105	62.5	93	55.4
De-pulping machine	61	36.3	65	38.7
Kneading machine	86	51.2	80	47.6
Presser	47	28.0	50	29.8
Cocoa pod splitting machine	43	25.6	40	23.8
lightweight shea/cocoa plucker	119	70.8	107	63.7
lightweight shea/cocoa picker	122	72.6	111	66.1

Source: Analysis of WEACTION project field data, 2021.

Table 48: Type of labour-saving technologies for economic activities by location

Technology	NR		SR		UER		UWR		WNR		WR	
	M	F	M	F	M	F	M	F	M	F	M	F
Grinding machines	85.7	82.1	92.9	67.9	100	100	100	92.9	32.1	50.0	53.6	60.7
Improved cookstove	89.3	92.9	89.3	75.0	100	100	92.9	89.3	10.7	21.4	21.4	32.1
Roasting machine	67.9	82.1	89.3	67.9	100	100	82.1	85.7	7.1	10.7	28.6	25.0
GEM parboiler	21.4	21.4	50.0	50.0	100	100	100	92.9	10.7	7.1	21.4	7.1
Solar dryer	3.6	92.9	67.9	100	100	39.3	53.6	10.7	17.9	17.9	17.9	96.4
Post-harvest cooler	50.0	64.3	89.3	71.4	100	100	3.6	0.0	21.4	28.6	17.9	21.4
Cocoa grinder	71.4	28.6	96.4	57.1	100	100	89.3	64.3	28.6	14.3	42.9	17.9
Wheelbarrow	0.0	3.6	0.0	0.0	7.1	0.0	0.0	7.1	17.9	21.4	32.1	35.7
Tricycle	92.9	32.1	100	89.3	100	96.4	100	96.4	78.6	39.3	71.4	78.6
Motorcycle	96.4	64.3	96.4	85.7	100	100	100	100	46.4	21.4	71.4	46.4
bicycle	96.4	67.9	89.3	89.3	85.7	96.4	89.3	96.4	21.4	3.6	42.9	25.0
Shea nut crusher	60.7	75.0	89.3	75.0	96.4	100	100	100	3.6	3.6	10.7	3.6
Nutcracker/De-shelling machine	60.7	71.4	89.3	75.0	96.4	96.4	100	82.1	10.7	7.1	17.9	0.0
De-pulping machine	21.4	32.1	53.6	50.0	96.4	85.7	35.7	50.0	7.1	7.1	3.6	7.1
Kneading machine	60.7	78.6	85.7	53.6	96.4	78.6	39.3	50.0	10.7	17.9	14.3	7.1
Presser	3.6	3.6	64.3	50.0	39.3	25.0	35.7	53.6	10.7	17.9	14.3	28.6
Cocoa pod splitting machine	0.0	0.0	0.0	0.0	3.6	3.6	0.0	0.0	96.4	75.0	53.6	64.3
lightweight shea/cocoa plucker	0.0	0.0	89.3	75.0	82.1	78.6	100	96.4	92.9	71.4	60.7	60.7
lightweight shea/cocoa picker	0.0	0.0	89.3	78.6	82.1	82.1	100	100	92.9	75.0	71.4	60.7

Source: Analysis of WEACTION project field data, 2021.

4.3 Types of labour-saving technologies available and how they work to reduce women’s labour burden

4.3.1 Ownership of smartphones and, use of social media and internet

The respondents were assessed on their ownership of smartphones as well as the use of social media platforms and other internet services. From the result (Table 49), 32.7% and 17.3% of the males and females respectively own a smartphone. Thus, the majority of both couples do not have a smartphone. This is attributed to the low use of social media and other internet services among the couples as shown in Table 49. These can be a limiting factor for technology promotion.

Across the regions, the results from Table 50 show that ownership of smartphones is more among respondents in the Upper West region. The Table shows that more males (64.3%) than females (32.1%) in this region own smartphones. However, except for males (35.7%) in the Upper West region, most respondents across the various regions do not own smartphones. Similarly, use of social media and internet are more among respondents in the Upper West region. Most respondents across the regions except for males in the Upper West region do not use social media and the internet. These results are surprising because the Upper West region is described as the poorest region in Ghana and so it was expected that the ownership of smartphones, use of internet and social media would have been the lowest in this region. However, the emerging trend in the use of basic information technology such as social media do not reflect the poverty conditions of the poor especially as they have become a common way of communicating with their relatives outside the community. There is also generally high information on social media, hence, their high usage among the respondents.

Table 49: Smartphone ownership, use of social media and other internet services - pooled data

Response	Male		Female	
	Freq.	%	Freq.	%
Ownership of smart phone				
No	113	67.3	139	82.7
Yes	55	32.7	29	17.3
Use of social media				
No	115	68.5	141	83.9
Yes	53	31.5	27	16.1
Use of internet				
No	125	74.4	147	87.5
Yes	43	25.6	21	12.5

Source: Analysis of WEACTION project field data, 2021.

Table 50: Smartphone ownership, use of social media and other internet services by location

Response	NR		SR		UER		UWR		WNR		WR	
	M	F	M	F	M	F	M	F	M	F	M	F
Ownership of smartphone												
No	67.9	92.9	78.6	92.9	75.0	92.9	35.7	67.9	78.6	75.0	67.9	75.0
Yes	32.1	7.1	21.4	7.1	25.0	7.1	64.3	32.1	21.4	25.0	32.1	25.0
Use of social media												
No	67.9	96.4	82.1	96.4	75.0	92.9	35.7	67.9	78.6	75.0	71.4	75.0
Yes	32.1	3.6	17.9	3.6	25.0	7.1	64.3	32.1	21.4	25.0	28.6	25.0
Use of internet												
No	67.9	96.4	82.1	96.4	85.7	96.4	35.7	67.9	92.9	89.3	82.1	78.6
Yes	32.1	3.6	17.9	3.6	14.3	3.6	64.3	32.1	7.1	10.7	17.9	21.4

Source: Analysis of WEACTION project field data, 2021.

4.3.2 Labour-saving technologies used at households

Several labour-saving technologies have emerged over the years while new ones continue to be introduced. These technologies are assessed in Table 51. From the result, most of the respondents reported using the various technologies. Most importantly, there is a high usage of improved kitchen technologies such as grinding machines, cooking stoves and roasting machines. These are very important innovations that can help reduce the hours women spend in preparing food for the family. With these technologies, it becomes easier for men to easily prepare some foods without necessarily waiting for their wives. This finding corroborates with responses from Madam Rashida Duuli (WIAD officer, Sissala West Department of Agriculture), Madam Alijata Haruna (Gender Desk Officer, West Gonja District Department of Agriculture) and Madam Belinda Akolgo (Programme Officer, Tunteiya Womens Association), who revealed that in recent times household technologies such as fufu pounding machines, blenders, fridges, gas and electric cookers have been introduced to households to benefit women the most since they reduce the time women spend on household chores.

For instance, Madam Alijata Haruna (Gender Desk Officer, West Gonja District Department of Agriculture) noted, “the burden of domestic activities is gradually been reduced as a result of the emerging use of various electronic gadgets such as blenders and this can have a positive effect on the performance of their activities”. To Madam Rashida Duuli (WIAD officer, Sissala West Department of Agriculture), “various technologies are been used by women that allow them to be fast in their domestic activities and to get more time for other activities”

The ownership of other durable assets is high among the respondents. For instance, as high as 76.8% and 66.1% of the males and females have motorcycles, respectively. There is also high ownership of production technologies such as shea nut crushers and a relatively low number of the respondents have a cocoa pod splitter.

Table 51: Labour-saving technologies used at households

Item	Male		Female	
	Freq.	%	Freq.	%
Grinding machines	154	91.7	154	91.7
Improved cookstove	154	91.7	150	89.3
Roasting machine	139	82.7	138	82.1
GEM parboiler	104	61.9	102	60.7
Solar dryer	84	50.0	79	47.0
Post-harvest cooler (charcoal cooler for storing food produce)	81	48.2	67	39.9
Cocoa grinder	25	14.9	18	10.7
Wheelbarrow	99	58.9	73	43.5
Tricycle	116	69.0	101	60.1
Motorcycle	129	76.8	111	66.1
bicycle	113	67.3	106	63.1
Shea nut crusher	113	67.3	111	66.1
Nutcracker/De-shelling machine	108	64.3	101	60.1
De-pulping machine	64	38.1	66	39.3
Kneading machine	97	57.7	88	52.4
Presser	50	29.8	59	35.1
Cocoa pod splitting machine	31	18.5	20	11.9
lightweight shea/cocoa plucker	102	60.7	94	56.0
lightweight shea/cocoa picker	104	61.9	96	57.1

Source: Analysis of WEACTION project field data, 2021.

Table 52 shows types of labour-saving technologies used by respondents at households across the six regions. The results showed that respondents in Upper East are more desirous for 12 out of the 19 labour saving technologies such as grinding machine, improved cooking stove, GEM parboiler, roasting machine, solar dryer, wheelbarrow, tricycle, motorbike, nutcracker/de-shelling machine, sheanut crusher, de-pulping machine and post-harvest cooler. Six out of the 19 labour saving technologies such as use of grinding machine, GEM parboiler, improved cooking stove, motorbikes, bicycles and sheanut crusher were desired more by respondents in the Upper West region. The results also show that except for respondents in the Northern and Western regions, lightweight shea/cocoa picker and plucker were desired by respondents in all regions. The results also showed that most respondents in Western North and Western regions desired grinding machine, improved cooking stove and roasting machine

Most respondents (male and female) in Savannah, Upper East, Upper West and Northern desire tricycles, bicycles and motorbikes. However, females in the Northern region showed less desire for tricycles. The use of tricycles and motorbikes have become the surest and cheapest means of transport for most people living in both rural and urban areas in Northern Ghana. It is common to see women and men in tricycles with their goods being transported to the market, farm and homes, while bicycles and motorbikes are used for internal movements within communities or external movements across communities, districts and regions. Also, respondents in Western and Northern regions showed less desire for a cocoa splitting machine, lightweight shea/cocoa plucker and picker than respondents in the other regions. This result is rather surprising given the extent of production of cocoa and shea in these regions. However, respondents Western North showed more desire for cocoa splitting machines than all other regions. This is attributed to the high production of cocoa in this region, hence the need for this technology. Evidently, shea nut crusher was desired more by respondents in Upper East, Savannah, Northern and Upper West. This is consistent given that shea processing is dominant in these regions compared to other regions.

The FGDs with men and women in Ahokwamen community of the Western North region outlined “blenders, fufu machine, gas cookers, corn mill, and sewing machine as labour-saving technologies available to women in the area”. The women in Kwabeng community in the Western region in a FGD mentioned “washing machines, refrigerators, rice mill, blenders, fufu machine, gas cookers, corn mill, sewing machine” while their male counterparts in a FGD mentioned “knapsack sprayer, rice mill, blenders, fufu machine, gas cookers, corn mill, sewing machine” as labour-saving technologies that support their work. Regarding their experience with the use of labour-saving technologies, the women FGD in Ananekrom of Western region indicated that “it has been an interesting experience but some of them are difficult to operate” and when asked whether the technologies have been user-friendly and meets the specific priorities of women, they concluded that “yes, they are user-friendly and have met our priorities as women because they make most of our work easier and faster”.

Table 52: Labour-saving technologies used at households by location

Technology	NR		SR		UER		UWR		WNR		WR	
	M	F	M	F	M	F	M	F	M	F	M	F
Grinding machines	75.0	85.7	89.3	71.4	100.0	100.0	100.0	100.0	92.9	100.0	92.9	92.9
Improved cookstove	89.3	96.4	89.3	78.6	100.0	100.0	92.9	96.4	96.4	100.0	82.1	64.3
Roasting machine	67.9	78.6	92.9	71.4	100.0	100.0	78.6	96.4	92.9	92.9	64.3	53.6
GEM parboiler	10.7	10.7	50.0	53.6	100.0	100.0	96.4	92.9	60.7	71.4	53.6	35.7
Solar dryer	3.6	0.0	89.3	71.4	100.0	100.0	50.0	60.7	32.1	25.0	25.0	25.0
Post-harvest cooler	50.0	46.4	89.3	67.9	100.0	96.4	10.7	3.6	25.0	10.7	14.3	14.3
Cocoa grinder	0.0	0.0	0.0	0.0	7.1	10.7	0.0	3.6	32.1	32.1	50.0	17.9
Wheelbarrow	50.0	25.0	96.4	60.7	96.4	100.0	78.6	60.7	3.6	0.0	28.6	14.3
Tricycle	71.4	32.1	100.0	89.3	96.4	96.4	71.4	64.3	21.4	25.0	53.6	53.6
Motorcycle	92.9	57.1	96.4	92.9	100.0	100.0	100.0	100.0	21.4	10.7	50.0	35.7
bicycle	89.3	64.3	92.9	89.3	85.7	96.4	89.3	96.4	14.3	10.7	32.1	21.4
Shea nut crusher	64.3	75.0	89.3	82.1	100.0	100.0	100.0	100.0	21.4	28.6	28.6	10.7
Nutcracker/De-shelling machine	64.3	71.4	85.7	78.6	100.0	100.0	100.0	89.3	14.3	17.9	21.4	3.6
De-pulping machine	25.0	25.0	50.0	53.6	96.4	92.9	35.7	50.0	7.1	14.3	14.3	0.0
Kneading machine	67.9	75.0	89.3	57.1	85.7	85.7	42.9	53.6	25.0	25.0	35.7	17.9
Presser	3.6	64.3	53.6	35.7	25.0	35.7	53.6	10.7	28.6	32.1	46.4	28.6
Cocoa pod splitting machine	0.0	0.0	7.1	0.0	7.1	7.1	0.0	0.0	60.7	42.9	35.7	21.4
lightweight shea/cocoa plucker	0.0	0.0	89.3	78.6	82.1	85.7	92.9	100.0	57.1	53.6	42.9	17.9
lightweight shea/cocoa picker	0.0	0.0	89.3	82.1	82.1	82.1	100.0	100.0	60.7	50.0	39.3	28.6

Source: Analysis of WEACTION project field data, 2021.

4.4 Introduction of technologies and measures/supports needed for their adoption

4.4.1 Group membership among respondents

Group membership is an important source of information for technology adoption and a medium for technology dissemination. From Table 53 (pooled data), the majority of the respondents belonged to a group. The high group membership of both couples can be an important opportunity for the promotion of technologies that can help improve the lives of the couples. Largely, the majority of the males belonged to farmer-based organisations while the majority of the females belonged to village saving and loan associations- VSLA. These groups are largely made up of both men and women. Although the mixed gender groups are essential for collaborative support, it is important that the women are not marginalised in these groups. To introduce new technologies therefore, the group members should be prioritised with special attention to women.

Table 54 shows group membership across the study regions. The results indicate that most respondents across all the regions are members of a group. However, more respondents in the other regions than respondents in the Northern region and Savannah region (males) are members of a group. Also, more females (92.9%) in the Savannah region are members of a group. In terms of the type of group respondents belong to, the results show that most respondents in Western North (males: 100% and females: 85.7%) and Western regions (males: 92.6%, females:91.3%) belong to FBOs than the other group types. Also, more males (52.6%) in Northern region, males (40%) in Upper West region and males (44.4%) in Savannah region belong to FBOs.

On the other hand, most respondents (males:70.4% and females: 92.6%) in Upper East region belong to VSLAs, while more females (89.3%) in Upper West, females (80.8%) in Savannah and females (58.8%) in Northern belong to VSLAs. However, membership of self-help groups was the lowest across all regions. Furthermore, the results from the Table reveal that more males than females across all regions belong to FBOs, while more females than males except for Western North and Western regions belong to VSLAs.

According to a World Cocoa Foundation report (2020) VSLA is a group mainly for women, who pool their savings in a fund from which members can borrow at an interest rate during an agreed period of time. Therefore, it was not surprising to observe high participation of the couples in VSLA. In the Upper West and Western North regions for instance, all females belonged to a VSLA. This can be a potential source of minimizing the financial challenges of couples, especially for the women. A woman in an individual survey noted that *“thanks to VSLAs, women can manage businesses and participate with greater confidence in households and community decisions”*.

Table 53: Group membership among respondents

Item	Male		Female	
	Freq.	%	Freq.	%
Membership in a group				
No	24	14.3	19	11.3
Yes	144	85.7	149	88.7
Type of group				
Farmer Based Organisation	87	60.4	52	34.9
Village Savings and Loans Association	40	27.8	81	54.4
Self-help group	17	11.8	16	10.7
Nature of group				
Only women	5	3.5	34	22.8
Both men and women	139	96.5	115	77.2

Source: Analysis of WEACTION project field data, 2021.

Table 54: Group membership among respondents - by location

Response	NR		SR		UER		UWR		WNR		WR	
	M	F	M	F	M	F	M	F	M	F	M	F
Membership in a group												
	32.	39.	35.									17.
No	1	3	7	7.1	3.6	3.6	10.7	0.0	0.0	0.0	3.6	9
	67.	60.	64.	92.	96.	96.		100.	100.	100.		82.
Yes	9	7	3	9	4	4	89.3	0	0	0	96.4	1
Type of group												
Farmer Based	52.	11.	44.	11.	22.				100.			91.
Organisation	6	8	4	5	2	3.7	40.0	3.6	0	85.7	92.6	3
Village Savings and	31.	58.	38.	80.	70.	92.						
Loans Association	6	8	9	8	4	6	32.0	89.3	0.0	0.0	0.0	0.0
	15.	29.	16.									
Self-help group	8	4	7	7.7	7.4	3.7	28.0	7.1	0.0	14.3	7.4	8.7
Nature of group												
		35.	16.	46.								
Only women	5.3	3	7	2	3.7	3.7	0.0	14.3	0.0	35.7	0.0	4.3
Both men and	94.	64.	83.	53.	96.	96.	100.		100.		100.	95.
women	7	7	3	8	3	3	0	85.7	0	64.3	0	7

Source: Analysis of WEACT project field data, 2021.

4.4.2 Access to new technologies

Table 55 shows the results on the medium of accessing new technologies. This indicates that the major source of information on new technologies is the mass and social media as well as through group members. Most of the respondents have access to radio, TV or use social media platforms such as WhatsApp. Therefore, they are able to hear of any new technology that is being promoted.

The high interaction among the people also relates to why a significant number of the females in particular gets to know of new technologies through group members. Most of the respondents, especially the males, obtain information on new technologies in the English language, perhaps, due to their higher formal education than the females. English is generally the language used in promoting new technologies except where there is a deliberate interpretation into the local languages. It is therefore consistent that a significant percent of the males (69.6%) and females (73.2%) obtained information on new technologies through both English and local languages.

Majority of the respondents expressed that those new technologies are not affordable, perhaps this is because the majority of the respondents do self-finance the cost of the new technologies. Although many would not accept technologies that do not conform to their traditional beliefs and cultural settings, the majority also noted that women's indigenous knowledge and experience are not considered during the design of technologies. This is because the technologies are not localised but introduced technologies. For instance, the couples indicated that they would not accept a technology that would change the traditional status of men in their societies. Nonetheless, the respondents indicated by far, no such technology that would infringe on their culture and traditions has been introduced into their communities. The key informants indicated that some technologies such as washing machines, fufu pounding machines, corn mills, blenders, gas cylinders and refrigerators are less common although they have been adapted for women and are meeting women-specific priorities.

Table 55: Access to new technologies - pooled data

Item	Male		Female	
	Freq.	%	Freq.	%
Medium of access to information on new technology				
Through radio/TV/ Mobile phones	141	83.9	138	82.1
Direct contact with extension officer	55	32.7	54	32.1
Through group members	72	42.9	85	50.6
Through NGO intervention	65	38.7	56	33.3
Language of information				
English	69	41.1	56	33.3
Local language	25	14.9	28	16.7
Both	117	69.6	123	73.2
Affordability of new technologies				
Not affordable	94	56.0	98	58.3
Affordable	74	44.0	70	41.7
How to access cost of new technologies				
Through credit support	28	16.7	40	23.8
Own financial support	140	83.3	128	76.2
Acceptance of technologies that do not conform to your traditional beliefs and cultural setting				
No	81	48.2	71	42.3
Yes	87	51.8	97	57.7
Consideration of women's indigenous knowledge and experience in the design of technologies				
No	86	51.2	90	53.6
Yes	82	48.8	78	46.4

Source: Analysis of WEACT project field data, 2021.

From Table 56, the main medium of access to information on new technologies for most respondents across all study regions is through radio/TV. However, more female respondents in the Upper East region (100%) compared to the other regions indicated they accessed information through radio/TV. Also, the majority of respondents in the Upper East region, compared to the other regions, accessed information on new technologies through extension officers, NGO interventions and group members. The language of information delivery was local for most respondents in the Northern region compared to the other regions where both English and local dialects were the languages used for information dissemination on new technologies.

In terms of affordability of technologies, most respondents in Upper East, Western North and males in Western region indicated that the technologies were affordable, while most respondents in Northern, Savannah, Upper West and females in Western region indicated new technologies they access information about were not affordable. Also, except for most respondents in the Upper East who could afford new technologies through credit, most respondents in the other regions indicated they can access the cost of technologies with their own finances. Most respondents in Savannah and Upper East regions indicated they will not accept technologies that do not conform to their traditional beliefs and cultural setting, while most respondents in other regions indicated they will accept.

Also, most respondents in Western North, Western, Savannah and Upper East regions indicated technologies developed do not take into consideration women's knowledge and experience, while most respondents in Northern and Upper West regions indicated women's knowledge and experiences are considered.

Table 56: Access to new technologies by location

Technology	NR		SR		UER		UWR		WNR		WR	
	M	F	M	F	M	F	M	F	M	F	M	F
Medium of information on new technology												
Radio/TV/ Mobile phones	75.0	75.0	71.4	50.0	96.4	100	96.4	96.4	89.3	85.7	75.0	85.7
Extension officers	35.7	17.9	3.6	3.6	92.9	100	35.7	35.7	14.3	21.4	14.3	14.3
Group members	32.1	25.0	7.1	42.9	100	100	78.6	92.9	21.4	21.4	17.9	21.4
NGO intervention	0.0	0.0	21.4	3.6	96.4	100	60.7	42.9	14.3	17.9	39.3	35.7
Language of information						100						
English	10.7	7.1	14.3	14.3	17.9	0.0	85.7	82.1	64.3	46.4	53.6	50.0
Local	89.3	100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Both	0.0	0.0	89.3	85.7	96.4	100	85.7	100	50.0	53.6	96.4	100
Affordability of new technologies						100						
Affordable	39.3	42.9	25.0	42.9	96.4	100	35.7	39.3	85.7	78.6	53.6	46.4
Not afford	60.7	57.1	75.0	57.1	3.6	0.0	64.3	60.7	14.3	21.4	46.4	53.6
How to access cost of new technologies												
Through credit support	3.6	10.7	3.6	10.7	35.7	42.9	57.1	67.9	0.0	3.6	0.0	7.1
Own financial support	96.4	89.3	96.4	89.3	64.3	57.1	42.9	32.1	100	96.4	100	92.9
Acceptance of technologies that do not conform to your traditional beliefs and cultural setting												
No	14.3	14.3	89.3	89.3	89.3	100	7.1	7.1	39.3	32.1	50.0	10.7
Yes	85.7	85.7	10.7	10.7	10.7	0.0	92.9	92.9	60.7	67.9	50.0	89.3
Consideration of women's indigenous knowledge and experience in the design of technologies												
No	14.3	21.4	75.0	82.1	85.7	100	3.6	0.0	67.9	67.9	60.7	50.0
Yes	85.7	78.6	25.0	17.9	14.3	0.0	96.4	100	32.1	32.1	39.3	50.0

Source: Analysis of WEACTION project field data, 2021.

4.4.3 Access to credit by women

Lack of funds hinders technology diffusion and adoption. Therefore, it is important to understand how women are able to access credit for technology adoption. From Table 57 (pooled results), a significant proportion of the men (53%) and women (51.2%) indicated that any woman who applied for credit for the purpose of technology adoption is given access. Further probing during individual interviews revealed that some women accessed credit through their membership in Village Savings and Loans Associations (female respondents, Bunglung, Savelugu Municipal). Others also indicated they get in-kind and cash credit support from interventions of local and international NGOs and local financial institutions as well. Thus, about one in every two women would be granted a credit request. Credit was granted to most of the women in cash although a relatively high proportion of the couples indicated that they would prefer both cash and in-kind credit forms. From a response by Madam Belinda Akolgo (Programme Officer, Tunteiya Women Association), women effectively use credits if they are provided in both cash and in-kind forms since these complement the deficiencies of each other. Access to credit by women for technology adoption was less for women in the Western North and Western regions compared to those in the Upper East, Upper West, Savannah and Northern regions (see Table 58).

Table 57: Access to credit among women - pooled

Response	Male		Female	
	Freq.	%	Freq.	%
Access to credit by women for technology adoption				
No	76	45.2	74	44.0
Yes, for all women who apply	3	1.8	8	4.8
Yes, for some who apply	89	53.0	86	51.2
Form of credit given				
Cash	80	87.0	73	77.7
In-kind	5	5.4	4	4.3
Both	7	7.6	17	18.1
Form of credit needed/desired				
Cash	46	50.0	48	51.1
In-kind	2	2.2	2	2.1
Both	44	47.8	44	46.8

Source: Analysis of WEACTION project field data, 2021.

Table 58: Access to credit among women - by location

Response	NR		SR		UER		UWR		WNR		WR	
	M	F	M	F	M	F	M	F	M	F	M	F
Access to credit by women for technology adoption												
No	82.1	82.1	3.6	0.0	0.0	0.0	7.1	14.3	85.7	82.1	92.9	85.7
Yes, for all who apply	0.0	3.6	3.6	7.1	0.0	3.6	3.6	10.7	0.0	0.0	3.6	3.6
Yes, for some who apply	17.9	14.3	92.9	92.9	100	96.4	89.3	75.0	14.3	17.9	3.6	10.7
Form of credit given												
Cash	60.0	100	77.8	32.1	89.3	100	96.2	95.8	100	100	100	75.0
In-kind	0.0	0.0	7.4	14.3	7.1	0.0	3.8	0.0	0.0	0.0	0.0	0.0
Both	40.0	0.0	14.8	53.6	3.6	0.0	0.0	4.2	0.0	0.0	0.0	25.0
Form of credit needed/desired												
Cash	60.0	100	44.4	39.3	10.7	3.6	96.2	100	75.0	60.0	0.0	100
In-kind	0.0	0.0	7.4	7.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Both	40.0	0.0	48.1	53.6	89.3	96.4	3.8	0.0	25.0	40.0	100	0.0

Source: Analysis of WEACT project field data, 2021.

4.4.4 Women’s right to access to and control of natural resources

An important source of discrimination against women and a limiting factor to technology adoption is the unequal access to and control over natural resources. Table 59 shows that the majority of the couples expressed that woman have the right to access to and control over natural resources such as land.

Also, results from the KIIs revealed that women have more access to and control over shea nut trees as compared to men. However, there is a significant proportion of the couples who indicated that women do not have the right to access to and control over natural resources. This is consistent with observations from the KIIs that men generally have control over land and other natural resources. This is a major threat to technology dissemination and adoption among couples. During KII with Madam Belinda Akolgo of TunTeiya Women Association, it became abundantly clear that women’s lack of access and control over natural resources such as land limits their adoption of agricultural technologies such as fertilizer and improved seed.

For instance, Alhaji Thomas Kofi Pang (Programme Coordinator, TunTeiya Women Association stated, “most women who do not have absolute control of land, and for that matter, are reluctant to adopt improved technologies which could improve farm outcomes. This is because they are not sure if they can utilise such technologies on lands that do not belong to them”.

Table 59: Women’s right to access to and control of natural resources

Response	Male		Female	
	Freq.	%	Freq.	%
No access	73	43.5	81	48.2
Have access	95	56.5	87	51.8

Source: Analysis of WEACT project field data, 2021.

Table 60: Women’s right to access to and control of natural resources by location

Technology	NR		SR		UER		UWR		WNR		WR	
	M	F	M	F	M	F	M	F	M	F	M	F
No	21.4	39.3	92.9	89.3	89.3	100.0	42.9	50.0	7.1	0.0	7.1	10.7
Yes	78.6	60.7	7.1	10.7	10.7	0.0	57.1	50.0	92.9	100.0	92.9	89.3

Source: Analysis of WEACT project field data, 2021.

4.4.5 Consideration of women's time constraint in technology dissemination

Table 61 (pooled results) shows the results of whether women's time constraint is considered in the dissemination of technologies and if so, how these constraints are considered. From the result, the majority of both men (57.7%) and women (52.4%) expressed that the limited time of women are not given the needed attention whenever technologies are to be transferred to them. This means that it is most possible that the technology dissemination periods, time of day chosen, the season-where women labour peaks and the days chosen; market days may conflict with other activities of women and this may mean that the women may not have enough time to participate or may not have the needed information on how to adopt the technologies. This can be an ineffective approach to technology transfer especially considering the importance of women in the diffusion of technologies.

Two approaches are adopted when women's time constraint is to be considered in technology dissemination. From the result, the major approach used is to organise the training on the technology at periods that the women can have time to participate and the second approach which is less among the respondents is to shorten the duration of the training sessions so it does not further constrain the little time constraint women have. The former approach reported a high percentage because it allows detailed training to the women without having an effect on the training schedules.

The result in Table 62 (regional distribution) shows that women's time and constraints are considered in technology dissemination for most respondents in Western North and Western regions as well as females in Upper West region, while most respondents in Savannah, Upper East regions and males in Upper West region revealed women's time and constraints are not considered. However, most respondents in the Northern region were unaware if technology dissemination considers women's time and constraints. Regarding how women's time constraints are considered, most respondents in Northern, Savannah, Upper East regions and males in Upper West region indicated training is organised during periods when women are less busy, while most respondents in Western North, Western regions and females in Upper West region indicated training time is short. According to Madam Alijata Haruna (Gender Desk Officer, Sefwi-Wiaso District Assembly), "given that women are mostly busy with domestic and economic activities, it is important that any training to be provided to the women should not be long so that the duration would not draw them away from the training".

Table 61: Consideration of women's time constraint in technology dissemination - pooled data

Response	Male		Female	
	Freq.	%	Freq.	%
Consideration of women's time constraint				
Yes	57	33.9	62	36.9
No	97	57.7	88	52.4
Unaware	14	8.3	18	10.7
How women's time constraint is considered				
Training time are short	62	36.9	66	39.3
Trainings are organised during periods when women are less busy	106	63.1	102	60.7

Source: Analysis of WEACTION project field data, 2021.

Table 62: Consideration of women's time constraint in technology dissemination - by region

Response	NR		SR		UER		UWR		WNR		WR	
	M	F	M	F	M	F	M	F	M	F	M	F
Consideration of women's time constraint												
Yes	35.7	21.4	14.3	25.0	0.0	0.0	39.3	67.9	53.6	57.1	60.7	50.0
No	17.9	14.3	82.1	75.0	100	100	60.7	32.1	46.4	42.9	39.3	50.0
Unaware	46.4	64.3	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
How women's time constraint is considered												
Training time are short	17.9	7.1	50.0	32.1	0.0	0.0	35.7	60.7	53.6	67.9	64.3	67.9
Trainings are organised during periods when women are less busy	82.1	92.9	50.0	67.9	100	100	64.3	39.3	46.4	32.1	35.7	32.1

Source: Analysis of WEACTION project field data, 2021.

5. CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

Based on the findings, the following conclusions have been drawn:

Men (husbands) are mainly responsible for most household decision making that has an impact on every household member; thus, decision making is limited for females (wives). Though couples sometimes deliberate on issues before decision making, husbands usually have more power in the final decision making. It is clear from the baseline study that although there is a divergent view on what constitutes a fair and equitable relationship, most women are disadvantaged in benefiting from a fair and equitable relationship due to the dominant roles of men in household decision making.

There is a limitation on topics to discuss publicly. Generally, couples find it difficult to discuss issues like sharing of household work, community management and leadership, sexual and reproductive and control of resources. The implication is that these topics are often considered private matters, for which couples prefer to keep confidential.

There is external support for couples practising the GMF, especially from families. This is a positive sign for the promotion and improved outcomes from the GMF concept. Women engage in triple roles and this has implications on their effective hours for each activity. This largely poses a labour constraint to the women. Women's labour peaks during farming seasons as they engage in domestic and economic activities. During this period, although both men and women overwork themselves, it is comparably higher for women than for men. This does not mean that they have less labour burden in the dry season. They have to walk further distances to source water and also fruits and seeds for processing while still taking care of their existing domestic activities.

Couples, particularly women, are using modern household and kitchen technologies that are essential in reducing drudgery in domestic work and labour constraint of the couples. Some of the technologies for domestic chores include grinding machines such as blenders as well as electronic roasters. Motorcycles are important for reducing drudgery in economic activities, especially among the men. However, some couples lack the required knowledge in using some labour-saving technologies for their economic activities. This has culminated in low need for such technologies including solar dryer, post-harvest cooler (charcoal cooler for storing food produce), cocoa grinder, de-pulping machine, presser and cocoa pod splitting machine. The use of social media and other internet services is low among couples. These can be a limiting factor for technology promotion.

There is a high group membership among couples. Most males belonged to farmer-based organisations while most females belonged to Village Saving and Loan Associations (VSLAs). The major source of information on new technologies is the mass and social media as well as through group members. Although couples are willing to use new technologies, most of these new

technologies are not affordable. Also, most couples may not accept technologies that do not conform to their traditional beliefs and cultural settings. The indigenous knowledge and experience of women are not considered during the design of technologies, as such the technologies are not localised. Also, there is a lack of consideration to the limited time of women in technology dissemination or training. It is not surprising that most couples prefer training on technologies to be done on periods where women are relatively less busy.

Most women who apply for credit are usually granted, especially in cash form. Nonetheless, there is high preference for both cash and in-kind credits. This can ensure that the cash credits are used to complement the in-kind credits which are mostly in the form of an asset (technology). There is high acknowledgement that credit access by women is important in boosting the technology adoption of couples. There is also a relatively low access to and control of natural resources by women and this requires balance especially in ensuring that the women contribute significantly to the development of their households.

5.2 Recommendations

The following recommendations are made based on the conclusions drawn:

- The WEACT project should engage in more training and sensitization of couples to ensure equal rights in household decision making. Also, the training should be tailored in a way that helps couples improve their communication on topics that especially hinders equity in decision making.
- Labour saving technologies for women's economic activities should be made accessible and affordable. The WEACT project may consider introducing very relevant technologies that can offset the labour/time constraint of women. The process should include identifying and working with local artisans to produce tailored equipment for use by the women.
- The project should support couples with training regarding the use of new technologies such as GEM parboilers, post-harvest coolers, and roasters. This should be accompanied by credit support especially for women to purchase and own such technologies.
- The use of social media and internet services should be encouraged among couples. This will help them benefit from new technologies that are promoted on these platforms. This should be accompanied with training in their usage.
- The project should work with existing GMF couples to form associations. These associations will serve as units for special discourse concerning household issues, community issues and technological needs of members. The associations will provide guidance and support in overcoming challenges among member couples and their technological needs. They associations could also serve as labour gangs that can provide support for its members.
- The development of technologies should be localised. This will ensure it meets the specific needs of targeted users. Also, the design and implementation of training programmes should

follow the bottom-up approach where the targeted users, particularly women, should be involved in the design and implementation process. Thus, women's time constraint should be considered in the design of technology training sections for the couples. This will ensure full participation of women in training programmes since their time constraints would have been considered.

- The project should embark on sensitization and advocacy programmes in communities to increase women's access to and control over natural resources especially land. This would empower the women to take decisions without relying on the decision of their husbands.

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ANNEXES

Annex 1: Questionnaire for primary data collection

CONSENT FORM

I acknowledge that I have read or have had the purpose and contents of the consent form read and all questions satisfactorily explained to me in a language I understand (English, Akan, Dagbani, Ewe or Ga Languages, etc). I fully understand the contents and any potential implications as well as my right to change my mind (i.e. withdraw from the research) even after I have signed/endorsed this form. I voluntarily agree to be part of this study.

Consent: (1) Yes (2) No

Objective 1: Power dynamics among GMF couples

1. Gender of the respondent. (1) Male (2) Female
2. Age of respondent.
3. Educational status of the respondent. (1) No formal (2) Non formal (3) Primary (4) Secondary (5) Tertiary
4. If no formal or non-formal, can you
 - I. Read an English text? (1) Yes (2) No
 - II. Write in English? (1) Yes (2) No
 - III. Can you communicate in English? (1) Yes (2) No
5. How many people are in your household?
6. How many children do you have?
7. Current marital status of the respondent. (1) Married and stays with partner (2) Married but do not stay with partner (3) Divorced/Single parenting (4) Widow/Widower (5) Never married
8. Are you the household head? (1) Yes (2) No
9. Who is responsible for taking major decisions for the household? (1) Husband (2) Wife (3) Other relatives
10. Do you and your partner deliberate on issues before decisions are taken? (1) Yes, in all issues (2) Yes, for some issues (3) Not at all
11. Who do you think has more decision-making power in your household? (1) Men (2) Women (3) Equal for men and women
12. Who takes the final decision on the following in your household?

Item	(1) Men (2) Women (3) both (4) Undecided
What to cook/eat at home	
Economic resources trees of value i.e land, etc.	
The type of economic activity to engage in	

The type of associations/groups to belong/join	
The number of children to have	
Timing of (when to have) children	
Use of family planning methods	
Leisure activities	
Household's kitchen item. E.g cooking cylinder	
Household's non-kitchen items e.g TV	
The education of children	
Household income	

13. Have you had any disagreement in the past four weeks over decision making in the house?
(1) Yes (2) No
14. Who often compromises to compromise during disagreements? (1) Woman/Wife (2) Man/Husband (3) Undecided
15. What are some of the topics that are difficult to discuss with your partner?
16. Do you think women should be allowed to make absolute decisions? (1) Yes, on every matter the woman feels to take independent decision (2) Yes, but on limited matters. (3) Not at all
17. If 2 above (Yes, but on limited matters.) which matters should women be restrained from taking absolute decisions.
18. What do you think contribute to the differences in power between you and your partner?

Factor	Level of agreement (1) Strongly agreed (2) Agreed (3) Undecided (4) Disagreed (5) Strongly disagreed
Age	
Income	
Social status	
Education	
Cultural norms	
Religion	

19. Does your partner assist you in domestic activities? (1) Yes (2) No
20. If yes, on which activities?
21. If no, why?
22. Which of these topics are you unable to discuss with your partner?
- (1) Sexual and Reproductive issues (eg. family planning)
 - (2) Sharing house work (eg. fetching water, cooking, sweeping and taking care of children)
 - (3) Control of Resources and Decision Making
 - (4) Community management and leadership participation
23. In your experience, what contributes to a fair or equal relationship?
- (1) When decision making is done by both partners
 - (2) House chores are done by both partners
 - (3) Both partners make financial contributions for home upkeep
24. Do men in the household generally help with childcare?
- (1) Yes (2) No
25. Are men involved in collecting firewood or water for the household?
- (1) Yes (2) No
26. After becoming a GMF, do you feel your masculinity or femininity has been strengthened or threatened because of shifting gender roles?
- (1) Yes (2) No
27. Are both partners equally benefitting from being GMF couples in the relationship?
- (1) Yes (2) No
28. Do you think your external family will support you for becoming GMF?
- (1) Yes (2) No
29. In your experience, do you think you will integrate well into the GMF concept?
- (1) Yes (2) No
30. What is your level of agreement with the following statements? Household tasks are done, but not according to whether you are a woman or girl. Everyone helps out with all tasks?

(1) Agree (2) Disagree (3) Do not know

31. Would you agree that GMFs are better off financially?

(1) Agree (2) Disagree (3) Do not know

Objective 2: Women's labour peaks occur, what type of labour-saving technologies they need

32. What is your primary economic activity? (1) Unemployed (2) Farming (3) Trading (4) Artisan (5) Employee

33. If unemployed, why? (1) No job (2) Prevented by partner to work (3) Incapable of working

34. Aside from your primary activity? What other activities do you do? (1) None (2) Farming (3) Trading (4) Artisan (5) Employee

35. Typically, what time do you sleep?

36. Typically, what time do you wake up from bed?

37. How many hours do you spend working on your economic activity on a working day?

38. How many hours do you spend on domestic activities each day?

39. How many hours do you spend on leisure activities each day?

40. Which domestic activities often require most of your time?

41. Do you think you sometimes overwork (on domestic and economic activities)? (1) Yes (2) No

42. If yes, during which periods do you overwork?

43. What is the level of labour support from your partner? (1) Very high (2) High (3) Low (4) Very low (5) No support at all

44. What is the level of labour support from your children or other relatives? (1) Very high (2) High (3) Low (4) Very low (5) No support at all

45. Which of the following do you think you need and can conveniently use to save some time from domestic activities?

Item	Response (1) Yes (2) No
Gas cylinder	
Improved cooking stove	
Electronic microwave	
Rice cooker	
Washing machine	
Fufu pounding machine	
Grinding machines	
Refrigerators	
Blenders	
Kettles for heating water	

Roasting machines (groundnut, shea nut, maize, soybean etc.)	
GEM rice parboiler	
others (mention)	

46. What types of technology do you think is needed to enable you to reduce the number of hours you spend on your economic activity without reducing your output?

Technology	Response (1) Yes (2) No
Grinding machines	
Improved cookstove	
Roasting machine	
GEM parboiler	
Solar dryer	
Post-harvest cooler (charcoal cooler for storing food produce)	
Cocoa grinder	
Wheelbarrow	
Tricycle	
Motorcycle	
bicycle	
Shea nut crusher	
Nutcracker/De-shelling machine	
De-pulping machine	
Kneading machine	
Presser	
Cocoa pod splitting machine	

lightweight shea/cocoa plucker	
lightweight shea/cocoa picker	
other (mention)	

Objective 3: Identify technologies adapted for women and for women-specific priorities

47. Do you have a smartphone? (1) Yes (2) No

48. Do you use any social media handles, e.g. whatsapp? (1) Yes (2) No

49. Do you use the internet? (1) Yes (2) No

50. Which of the following technologies do you think are adapted for women?

Technology	Response (1) Yes (2) No
Grinding machines	
improved cookstove	
Roasting machine	
GEM parboiler	
Solar dryer	
Post-harvest cooler (charcoal cooler for storing food produce)	
Cocoa grinder	
Wheelbarrow	
Tricycle	
Motorcycle	
bicycle	
Shea nut crusher	
Nutcracker/De-shelling machine	
De-pulping machine	
Kneading machine	
Presser	
Cocoa pod splitting machine	
lightweight shea/cocoa plucker	
lightweight shea/cocoa picker	
other (mention) solar drying unit	

Objective 4: Determine how these technologies can be introduced and what measures and support are needed for their adoption

51. Do you belong to any group?
(1) Yes (2) No
52. What kind of group is it?
(1) Farmer Based Organisation
(2) Village Savings and Loans Association
(3) Self help group
53. What is the nature/composition of group (s) used for information on technology dissemination?
(1) Group made up of only women (2) Group made up of both men and women
54. How are you able to access information about new technologies?
(1) Through radio/TV/ Mobile phones
(2) Direct contact with extension officer
(3) Through group members
(4) Through NGO intervention
55. In what language (s) are technologies introduced to you?
(1) English (2) Dagbani (3) Fante/ Sefwi (4) others
56. In your opinion, do you think the technologies introduced to you are affordable?
(1) Yes (2) No
57. How are you able to access the cost of technology?
(1) through credit support (2) own financial support

58. Will you accept technologies that do not conform to your traditional beliefs and cultural setting? Example?
(1) Yes (2) No
59. Do you feel women indigenous knowledge and experience are considered during the design of technologies?
(1) Yes (2) No

60. Are you burdened by domestic and care work?
(1) Yes (2) No
61. How is the burden affecting your adoption of technologies?

62. Do technology dissemination training takes into consideration women's time constraint?
(1) Yes (2) No
63. How is this factored into training strategy?
(1) Trainings time are short
(2) Trainings are organised during periods when women are less busy
64. Are women allowed to access extension services?
(1) Yes (2) No
65. How important is extension service to the adoption of technologies among women?
(1) primary agents of transfer technology
(2) support rural adult learning
(3) assist farmers in problem-solving

(4) getting farmers actively involved in the agricultural knowledge and information system

66. Are women able to access credit to facilitate technology adoption?

(1) Yes for all women who apply for credit

(2) Yes for some who apply for credit

(3) No

67. In what form is credit given to women ?

(1) Cash (2) In-kind (3) Both

68. In what form is credit needed by women?

(1) Cash (2) In-kind (3) Both

69. Do women have the right to access and control natural resources such as land?

(1) Yes (2) No

70. What are the limitations of women's right to access and control land?.....

71. What is the average land size they access or control (1 acre, 2 acres, 3 acres, more than 3 acres)?

(1) 1 acre

(2) 2 acres

(3) 3 acres

(4) More than 3 acres

Annex 2: Key Informant Interview Guide

CONSENT FORM

I acknowledge that I have read or have had the purpose and contents of the consent form read and all questions satisfactorily explained to me in a language I understand (English, Akan, Dagbani, Ewe or Ga Languages, etc). I fully understand the contents and any potential implications as well as my right to change my mind (i.e. withdraw from the research) even after I have signed/endorsed this form. I voluntarily agree to be part of this study.

Consent: (1) Yes (2) No

1. Do you think Gender model family (GMF) couples experience a greater capacity to earn money because they have pooled their resources and are sharing the work? Women are getting more time to engage in economic activities to earn money?
2. Would you agree that women's self-esteem will increase because women and their roles are valued in gender model families and communities practice the family and community when they join GMF?
3. What resources do women have access to and control over which men do not?
4. What resources do men have access to and control over which women do not?
5. What kinds of labour-saving technologies are available to women to increase productivity and save labour in your community?
6. What new labour-saving technologies have been introduced to women?
7. Indicate the technologies that have been adapted for women.
8. Which of the adapted technologies meets women-specific priorities?