The Gendering of a Farming System

A study of the relationship between gender and

agricultural production in Ghana.

Anna Dybwad Alstad

Master Thesis in Development Geography

Department of Geography

University of Bergen

May 2018

"Then Ghana, and the smell of Ghana, a contradiction, a cracked clay pot: the smell of dryness, wetness, both, the damp of earth and dry of dust. The airport. Bodies pushing, pulling, shouting, begging, touching, breathing."

- Taiye Selasi, *Ghana Must Go* (2014:56) .

"The problem with gender is that it prescribes how we should be rather than recognizing how we are."

- Chimamanda Ngozi Adichie, *We Should All Be Feminists* (2014:34).

iv

PREFACE

Writing this thesis has been a turbulent journey with many ups and downs. I have had days where I have laughed and cried out of both joy and frustration, and I have considered giving up many times. I am therefore so proud and happy that I despite it all, managed to finish.

Conducting research in Ghana stands out as being one of the most incredible experiences of my life. During my fieldwork, I met so many magnificent people, who all contributed to my well-being and happiness. I want to thank Austin for the warm welcome to Ghana, Theophilus for introducing me to the study area and his wonderful family, and Kweku and Wood for brightening the days of the fieldwork with smiles and constant laughter. Thanks to Theresa for cooking for me, listening to me and taking so well care of me. You will always have a special place in my heart, and I cannot wait to eat fufu with you again. I would like to express my deepest appreciation to my interpreter, who could not have been better. Thank you for all the help, for always laughing at my bad jokes and for letting me be a part of your everyday life during my stay in Ghana.

My supervisor Ragnhild Overå should be given an award for everything she has done for this thesis and for convincing me to go to Ghana. She has contributed enormously with feedback and support during the whole process of writing, and her enthusiasm and interest have been essential for my motivation to finish. Thank you!

I am lucky to have many great people in my life that have cheered me up during the process of writing this thesis. Thanks to Mamma, Pappa, Ole and Ragna, for always supporting and caring for me, both emotionally and financially. Thanks to the Heggstads for all the dinners, conversations and study breaks. Thanks to 'Feskarlaget Fliring', Ada, Oda, Hanne and Ingvild, for being my biggest fan club and the best friends anyone could ever dream of. Thanks to my favourite academic, Marikken for reading through the whole thesis and giving me adequate and invaluable feedbacks. Finally, thanks to Malene and Oda, 'Lesesalens Venner' for making all the long hours spent in the study hall a lot better. I would never have been able to finish without you, and I am so happy we did this together!

<div align="right">Anna Dybwad Alstad, 15.05.2018</div>

ABSTRACT

Gender issues have increasingly been given attention to in research on agriculture and farming systems. Prior to the 1970s, gender was rarely addressed, as economic activities and more technical descriptions were prioritized in farming system research. However, as the approach developed to emphasise a more holistic understanding of various production environments, gender was included.

This thesis is based on a two-month long fieldwork in the area of Essiam and Denkyira in the Central Region in Ghana in 2017. The empirical data produced during the field work has been complimented by a theoretical framework including concepts such as farming system and sustainable livelihood approach, institutions and gender. The objective of this study has been to explore how gender is a factor influencing roles, responsibilities, rights and duties in the farming system in this particular study area. This is addressed through the research question: *How does gender influence the agricultural production in farming households in Essiam and Denkyira?*

The study identifies the farming system of Essiam and Denkyira as a complex and diverse system consisting of several connected units that are influencing both each other and the agricultural production. The study points to a gender division of labour within the farming system, as men and women hold different roles and responsibilities due to perceived physical differences and socially constructed norms about appropriate behaviour; men performing specific 'male tasks' and women performing 'female tasks'. A gender division of decision-making is also found: Women have the power to influence certain decisions in the household, but men are nonetheless in charge of most of the decisions regarding agricultural production. Both male and female farmers are found to have formal rights to access various important productive resources necessary for agricultural production, but women's manoeuvring space for accessing these resources are found to be limited due to gender roles and norms about gender appropriate behaviour in the farming system. Female farmers are especially limited in the access to labour – a resource determining how much land (and other resources) they are able to obtain. As there are limitations in what tasks women can perform, female farmers are in need of mobilising labour that can assist them in the performance of agricultural tasks. The ability female farmers have to mobilise this labour is found to be depending on their economic capital and social capital in the form of male social relations that can assist them in the negotiation of access to such human resources.

TABLE OF CONTENT

LIST OF FIGURES, MAP, TABLE AND PICTURES

Figures

Map

Tables

Pictures

All pictures are taken by the researcher during the fieldwork.

Front picture: A bowl of harvested cassava standing next to a female farmer.

GLOSSARY

Abunu:	Sharecropping agreement, land/produce split in 1/3
Abusa:	Sharecropping agreement, land/produce split in 1/2
Abusua:	Extended family
Banku:	Ghanaian dish, made from fermented corn and cassava dough
Fufu:	Ghanaian dish, made from cassava and plantain
Gari:	Ghanaian dish, made from cassava
Kenkey:	Ghanaian dish, made from maize
Nnoboa:	Farming community cooperative practice, where farmers assist each other in the performance of agricultural tasks
Obruni:	Ghanaian term used to explain foreigners. Meaning 'strangers'.
Ohemma:	Queen mother
Omanhene:	Chief/paramount Chief
Pole:	Local way of measure the size of land. One pole $= 30m^2$.
Stool:	The traditional symbol of office for chiefs. In terms of land tenure 'stool' is the term used to refer to the chieftaincy or representative of the tribal system that owns the land.

LIST OF ABBREVIATIONS

AGRA	Alliance for a Green Revolution in Africa
FAO	Food and Agriculture Organization of the United Nations
GAD	Gender and Development
GDP	Gross Domestic Product
GHS	Ghanaian Cedis
GLSS	Ghana Living Standard Surveys
GSS	Ghana Statistical Service
IDRC	International Development Research Centre
IFPRI	International Food and Policy Research Institute
MFL	Ministry of Lands and Forestry (Ghana)
MIS	Management Information Systems
MOFA	Ministry of Food and Agriculture (Ghana)
SLA	Sustainable Livelihood Approach
WIAD	Women in Agricultural Development
WID	Women in Development

CHAPTER 1: INTRODUCTION

Gender is a social construct that is shaped by and shaping all the social spheres we belong to, and in every society, there are different expectations towards the roles, responsibilities and appropriate behaviour for men and women. These expectations are rooted in the specific contexts social organisation and cultural norms, beliefs and values, and they have an effect on the distribution of tasks, resources and benefits in society. Gendered ideas and expectations about appropriate behaviour is also inherent in agriculture (Cresswell, 2013). Men and women tend to play different roles within particular systems of agricultural production, and as a result of this, they occupy different socioeconomic positions (Carr, 2008).

The aim of this study is to investigate how gender is a factor influencing agricultural activities in Essiam and Denkyira, two neighbouring rural communities in the Central Region in Ghana. By the use of a farming system approach, the current situation of agricultural production in the study area will be described and explained. A specific focus will be put on the gendering of roles and responsibilities in farming households and agricultural production, by shedding light on the gender division of labour and decision-making. Drawing on a theoretical framework that includes gender theory, elements from farming system and the sustainable livelihood approach, as well as institution theory, female farmer's ability to access various agricultural resources in the farming system of Essiam and Denkyira will be discussed.

1.1. Gender perspectives in development and agricultural research

As this study focuses on gender in agriculture, a review of some of the existing literature and research on this topic is relevant. Before the 1970s, discussions and research on agriculture and development had an overwhelming focus on economic activities, ignoring gender perspectives and the fundamental role women play in agriculture (Cresswell, 2013). This however changed when Ester Boserup published a book called *Women's Role in Economic Development* in 1970. In this publication, Boserup put focus on gender divisions of labour in agricultural systems, and the notion that such divisions often are caused by social constructions of gender, rather than biological differences between the sexes (Quisumbing et al., 2014; Boserup, 1970). She further argued that economic development could not be evaluated without including the perspectives of women. Even though Boserups work later have been criticised, it was influential in the way

that it shed light on gender as an important factor in development and agriculture, and this further inspired research on gender in agriculture.

As a means to further integrate gender issues in development research, the Women in Development (WID) approach emerged. This approach called for an explicit attention to the needs and preferences of women when designing and implementing development projects. With reference to agriculture, WID criticised development practitioners for ignoring programs directed towards female farmers (Quisumbing et al., 2014). The WID approach was succeeded by Gender and Development (GAD). GAD criticised the previous approach for having an exclusive focus on women as such, rather than on gender relations. The GAD approach, which today is seen as the 'mainstream approach' to development research, argued for a recognition of how social roles, norms and resources ascribed to men and women shape the opportunities and constraints they face. In other words, GAD called for a recognition of the importance of both men and women and the interplay between the two in agriculture (ibid.).

This study is based on the approach to gender research that GAD represented. The goal is therefore not to investigate women's role in the agriculture of Essiam and Denkyira in isolation. Rather, this thesis seeks to investigate how gender, the interplay between men and women and the power relations that exists between them shape and influence agricultural production, decision-making and resource allocation within the farming system. However, a special focus will be put on how this interplay affects female farmers' roles, resource access and production.

Doss et al. (2018) notes that an increased focus on gender equality and women's rights have led to the creation of some myths or statistically unfounded stylized facts about women in agriculture, that have been adopted by development practitioners and programs. Cornwall et al. (2007:4) illustrate that these myths are useful for development agencies to 'guide and motivate action'. For instance, it has been claimed that women contribute to 60-80 % of the world's food production, and that women own only 1 % of the land in the world (Doss et al., 2018:1). Other myths claims that women are less corrupt than men because they have higher morals, and that women have a closer relationship to nature, and therefore naturally are better suited to take care of the environment (Cornwall et al., 2007; Leach, 2007). While these contributions have intended to promote the women's roles in agriculture despite the inequality and discrimination they face, they have led to a promotion of stereotypes of women as either victims or saviours, treating women as a monolithic group and ignoring the contributions of men, communities and

institutions in the agricultural sector. Doss et al. (2018) argue that that development practitioners and researchers need to be aware of these myths when creating developing plans for, and conducting research on, agriculture. The variations that exist within groups of women, women's strengths as well as limitations, in addition to the role of men and the relationship between men and women in the agricultural sector needs to be addressed when researching gender issues in agriculture. Furthermore, researchers should be aware of how prevailing stereotypes and myths such as those presented above exist in literature on agriculture.

1.2. Gender and agriculture in Africa

Agriculture has been, and still remains one of the most important sectors in many African economies. The diversity of the continent in terms of natural environment and socio-political conditions leads to a great variety of agricultural systems from one context to another. However, smallholder agriculture is the predominant form of farm organisation across sub-Saharan Africa (Kilic et al., 2015). Even though there is a trend towards more people becoming employed in off-farm jobs in many locations, farming will most likely continue to be the major source of employment in most African countries for at least a decade or more (AGRA, 2016:8).

According to AGRA (2016), gender inequality is highly present in agriculture in Africa. Gender inequality is not necessarily inequality of outcomes for men and women, but rather inequality in the determinants of these outcomes – that is, opportunities or resources, rights and voice (World Bank, 2001). Much of the literature on gender in agriculture in Africa focuses on this gender inequality by investigating and comparing male and female experiences, the challenges female farmers face in contradiction to their male counterparts, and how these challenges influence their agricultural production. For instance, various scholars have pointed out that female farmers tend to have less access to six key productive resources: land, labour, credit, technology, extension and information (Huyer, 2016). This inequality of access to resources leads to a so-called 'gender gap' between men and women in agriculture. Even though there are great variations in the size of this gender gap, both in terms of resource and location, the underlying causes for the gender gap, "social norms that systematically limit the options for women", is found across regions (FAO, 2011:23).

Differences in the productivity between men and women has been a topic of interest for researchers, and also here a 'gender gap' is identified. In literature measuring gender differences

in productivity, the major reasons for the gender gap has been identified as gender differences in the use of agricultural inputs, land tenure security, market and credit access, human and physical capital and institutional and cultural constraints (Kilic et al., 2015). For instance, in a study from Burkina Faso in the 1990s, Udry et al. (1995) found that plots cultivated by women had significantly lower yields than similar plots cultivated by men. The explanation for the disparities in agricultural productivity was higher inputs of external labour and manure on the plots cultivated by men. Women were therefore not found to be less efficient than men in the cultivation process, they just had less access to external inputs. What this show, is that productivity is linked to access to resources, and it can be argued that higher levels of equity in resource access can lead to increased agricultural productivity in general.

1.3. Gender and agriculture in Ghana

In Ghana, agriculture constitutes the major economic activity, occupying 60 % of the population and contributing to 21 % of the gross domestic product (GDP) (GSS, 2013a). Ghana is one of the world's leading producers of the profitable cash crop cocoa, but nonetheless, small-scale farming dominates the agricultural sector, as the majority of farms in Ghana have a size under 2 hectares (MOFA, 2015).

Agriculture serves as the most important economic activity for men and women in rural areas in Ghana (FAO, 2018). Women are responsible for all parts of the food chain, from production, processing, trading, distribution and consumption, but their roles and responsibilities vary in the different areas in the country (Doss, 2002). Looking at women's role in cash crop production in Ghana, IDRC (2012) observed that in pre-colonial, traditional subsistence agriculture, men and women farmed together on the same plot of land, producing exclusively for home consumption. Specific agricultural tasks were confined to certain gender and age groups; men were the main producers, women assisted in weeding and harvesting. However, the introduction of cash crops such as cocoa and oil palm in the Ghanaian agricultural sector significantly influenced gender roles. While men became the prime cash crop producers, women's responsibilities shifted toward production of food crops for home consumption and sale. Today, however, neither Doss (2002), Carr (2008) or Lambrecht et al. (2017) find significant gendered patterns of cropping in Ghana, even though some crops are grown more by men and some more by women. This shows that women gradually have become more involved in the production of

4

cash crops, and that they now participate in both the production of cash crops and subsistence crops (see for example Hill and Vigneri, 2014; Duncan, 2010).

Several researchers have written about issues related to gender and resource access in Ghanaian agriculture. In a study looking at data collected from a national survey, Doss and Morris (2001) addressed the case of technology adoption in maize production. They found that technology adoption and decisions regarding this adoption did not depend on gender per se, but rather on access to resources. Further, they found that extension agents more frequently approached farmers with better access to land, labour and capital, as well as farmers with a history of adopting technological innovations. In a study on cocoa production in Ashanti, Brong Ahafo and Western Region, Hill and Vigneri (2014) identified that female cocoa farmers faced barriers in accessing input markets, especially for labour inputs. In an IFPRI discussion paper comparing 20 years of data collected through the Ghana Living Standard Surveys (GLSS), Lambrecht et al. (2017) investigated the development of the gender division of agriculture. They identified that women in Ghana in general tend to hold less land, and smaller plots of land than men. Lambrecht (2016) examined gender differences in land access across seven regions in Ghana and argued that such differences are directly or indirectly driven by social norms, rules and perceptions about men's and women's roles, responsibilities and capabilities in their households, families and communities. Further, in a study on maize and cassava production in Awapim in Eastern Region, Goldstein and Udry (2008) found that men and women gained different yields and profits from their fields because female farmers were not able to maintain the fertility of the land. This was due to differences in land rights. They found that people who were disadvantaged in the social and political networks, something that women were, were more likely to have their land expropriated in the periods where they kept the land fallow. As a way of reducing this risk, female farmers kept their land under continuous cultivation. This led to a reduction in fertility. Since women had to adapt their production to their weak land rights, they experienced lower yields and less income than men did, even though they were just as efficient in the production.

What these studies shows is that also in Ghana, women face barriers related to access of important productive resources. However, even though they face some challenges, their roles and involvement in agricultural production in Ghana must not be underestimated. It also has to be noted that there are large regional differences in Ghana, in terms of natural environment, population, religion, kinship systems, culture and thus agricultural production. Studies that are

conducted in the northern parts of Ghana may identify a completely different reality than the situation in the south. As will be seen in this study, there were aspects with the local context that led land rights to not be an issue for female farmers, even though several studies have pointed out that women have weaker land rights than men in Ghana. This shows local variations occur.

1.4. The study area: Breman Essiam and Enyan Denkyira

Ghana is a country located in West Africa, between Togo, Ivory Coast and Burkina Faso. Ghana was the first country in the sub-Saharan Africa to gain independence from colonial rule in 1957. Before this, it was held under the name Gold Coast by the British. Since its independence, Ghana has gone through large changes, both socially, politically and economically, experiencing a relatively high rate of economic growth and poverty reduction, especially in the southern part of the country (Malapit and Quisumbing, 2015). Today, the country is considered a multicultural nation, with a population of 27 million from various ethnic, linguistic and religious groups.

This study was carried out in Breman Essiam and Enyan Denkyira, two neighbouring villages located in the Central region of Ghana. These villages are located in the Ajumako/Enyan/Essiam district, which is one of 13 districts in the Central Region. According to GSS (2013b), the population of the district is approximately 138 000 and among these, 49 000 are involved in agricultural production. The study area is considered rural, but nonetheless it is located relatively close to large cities like Cape Coast (50 km) and Accra (110 km), in addition to market towns like Mankessim (10 km). This open up possibilities for flow of goods and people in and out of the area. Even though Essiam and Denkyira constitute two independent villages with individual characteristics, the aim of this study is not to make a comparative study between the two. Since they are located next to each other there are virtually no differences between the farming system of these two locations. Thus, hereafter, when the study refers to Essiam and Denkyira, this is ought to be thought of as one study area, compromising of two similar villages.
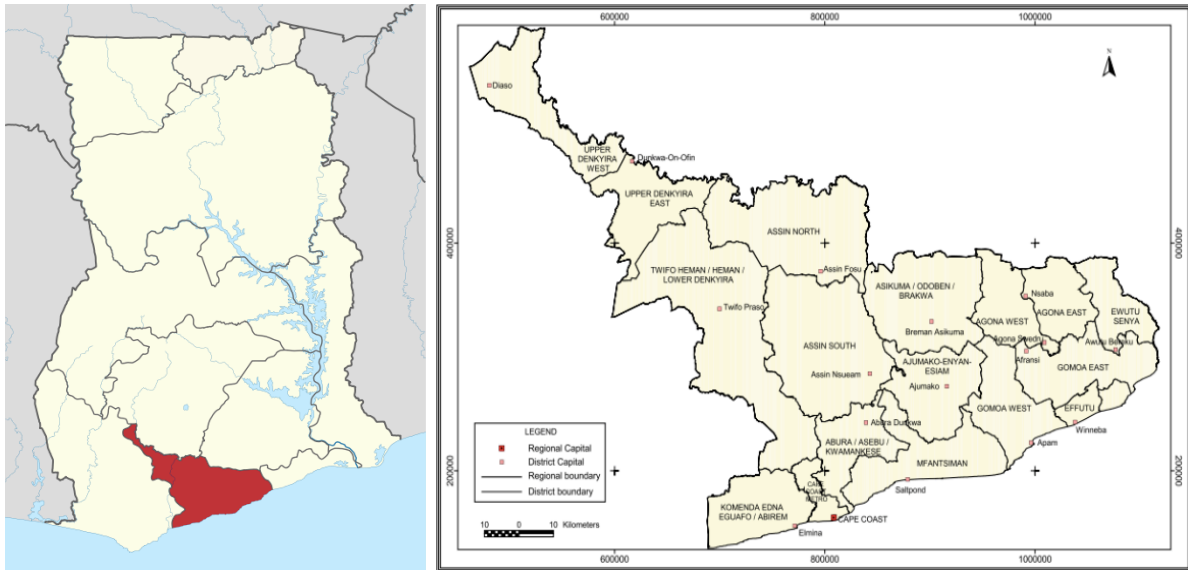
Map 1: Map illustrating the Central region and the location of Ajumako/Enyan/Essiam district within the region (Map derived from Wikipedia and GSS, 2013b)

1.4.1. People and social organisation

The people in this area identify as '*Mfansefo*' or Fante people, which constitute one of the subgroups of the Akan people. The Akans are the largest ethnic group in Ghana, and the Fante consist of a population of approximately 2,5 million (GSS, 2013b). They practice the matrilineal inheritance system, where kinship is transferred through the mother line (Nukunya, 1992:29). As other Akan communities, Essiam and Denkyira are led by traditional administrations with a paramount chief (*omanhene*) as the political and spiritual leader of the people. He is the head of the stool, which represents an ancient clan in the community. The person next in order of importance in the traditional council is the Queen Mother (*ohemma*). She and several sub-chiefs and community leaders together make up the traditional administration led by the paramount chief. The paramount chief with his traditional council exercise considerably political authority as they have an official reconditioned status by the government and hold a position with social and economic power in their local communities (Crook et al., 2007:57)

Religion is an important part of the everyday life of most Ghanaians. The three main religious faiths in Ghana, Christianity, Islam and Traditional African religion, are all represented in the study area, Christianity being the most common. Being religious and participating in religious practices is considered an important part of community participation in the study area.

Picture 1: Denkyira (left) and the entrance of Essiam (right). The villages are separated by a large hill. Standing at the top of the hill in Denkyira it is possible to look down to Essiam.

As in other parts of the matrilineal south of Ghana, women in Essiam and Denkyira stands relatively free to be active participants in the society, compared to many other contexts. They have rights to land through the matrilineal kinship system, are highly involved in economic actives, and hold certain positions within the traditional and political systems that govern. However, patriarchal structures, which create a social order with male privilege and female subordination exist (Cresswell, 2012:279). These patriarchal structures confer more power to men than women, by giving men the authority to dominate positions of power in society.

1.4.2. Agriculture and other employment

The livelihoods of those living in Essiam and Denkyira are heavily dependent on agriculture, as almost all people in the area are engaged in the agricultural sector as either farmers, labourers or traders. Farming households in Ghana are typically small-scale production units who produce agricultural products both for sale and home consumption (Doss, 2002:1988), and this is also the case in Essiam and Denkyira.

Agricultural production varies according to the natural environment. Ghana has a warm and humid climate, and the country is divided into five agro-ecological zones based on climate, vegetation and soil: Rain forest, deciduous forest, transitional zone, coastal savannah and northern savannah (Guinea and Sudan savannah) (MOFA, 2015). The study area is located within the deciduous forest zone and in Essiam and Denkyira the landscape is characterised with semi-deciduous forest and fertile land with high potential for agricultural production. The climate is divided into two major seasons; a dry season which constitute most of the year, and a rainy season which lasts from May to August. The climatic seasons have great influence on

the agricultural production in the area, as agriculture is largely rain-fed and hence dependent on sufficient amount of rain during the rainy season. An agricultural calendar reflecting the seasonality of the agricultural production in the study area will be presented in chapter 5.1. Because of the uncertainties regarding the natural environment, most farmers have adopted a high crop-diversity, producing both cash crops and food crops, to protect themselves from total crop failure and to supply their households with crops both for consumption and for sale.

Even though agriculture constitutes the largest economic sector in the area, people are also engaged in other income-earning activities as business-owners, traders of non-farm produce, teachers, tailors/seamstresses, hairdressers, taxi-drivers, bankers, construction workers and government workers, as a way of diversifying their livelihoods. In more recent times, the villages have experienced an increase in out-migration of youth who move to cities and urban areas to get education or seek other work, as labour and income opportunities are seen as better outside the village. As the paramount chief of Denkyira noted: "They move to the cities to find 'greener pastures".

1.5. Research questions and structure of thesis

This study seeks to investigate how gender ideologies influence agricultural production, decision-making and resource allocation in farming households in Essiam and Denkyira. By conducting a gender analysis of the social roles of men and women the aim is to see if gender is a factor determining what, why and how agricultural products are being produced and handled. To be able to investigate this, the following research question has been put forward:

1. ***How does gender influence the agricultural production in farming households in Essiam and Denkyira?***

To further explore the topic, three sub-questions have been formulated:
2. *How does the local gender ideology shape gender roles in the study area?*
3. *How does gender shape the division of work tasks, responsibilities and resource access in the local farming system?*
4. *To which extent do women in farming households have decision-making power to influence decisions regarding agricultural production?*

To produce relevant data to these research questions, a two-month long fieldwork in Essiam and Denkyira have been conducted. During this fieldwork, a household survey, semi-structured interviews, field conversations and observation was performed. To analyse the data that was produced through the use of these methods, the data will be seen in light of a theoretical framework, which includes concepts of farming systems, livelihood capitals, institutions and gender.

This thesis is organised in seven chapters. Chapter one constitutes the introduction of the study, by presenting the topic and an elaboration of study area. It also presents the research questions and an overview of the organisation of the thesis. Chapter two constitute the theoretical background which lay the fundament for analysis of the findings in this study. Chapter three presents the methodological approach used to explore the research questions. The practicalities and challenges related to the fieldwork are presented and discussed, including the role and positionality of the researcher and the interpreter. Methods of analysis and an evaluation of the data quality of this study is also included. Chapter four, five and six constitute the findings and discussion of findings in relation to the theoretical framework. Chapter four focus on the local gender ideology and chapter five is dedicated to present the local farming system. Chapter six present a discussion of female farmers resource access within the local farming system. The final chapter seven summarises the study and present some concluding remarks with reference to the research questions.

CHAPTER 2: CONCEPTUALISING GENDER IN AGRICULTURE

In order to sufficiently understand how context specific norms and values regarding gender influence the agricultural production of substance and cash crops in Essiam and Denkyira, we need to present the conceptual grounds through which these issues are being addressed. The aim of this chapter is thus to give a theoretical overview of important ideas and concepts that can be used in understanding and debating such issues of gendering of agricultural production.

In this thesis, the farming system approach is used to describe the agricultural production of the study area, through an explanation of the various units and components involved, and the relationship between them. The development of the farming system approach will be presented, and it will be addressed how other elements of analysis, like gender, have come to be included into previously more technical descriptions of farming systems. Secondly, the sustainable livelihood approach (SLA) and the concept of institutions will be presented. In this study, it is particularly the SLAs conceptualisations of the role of various capital types, that in relation to the institutional perspective, will be important tools when analysing farmers' access and use of productive resources. Gender theory will be presented, as a means of analysing the gendered variations in agricultural production and resource access. In the end, three institutions which are influential in shaping the farming system and the gendered access to resources will be elaborated on.

2.1. The farming system approach

The farming system approach is a descriptive framework that tries to investigate the complexity of agriculture and the processes and components that work together and make up the agricultural production of a specific location (Turner and Brush, 1987). Each farm has its own characteristics, and "the household, its resources and the resource flows at the individual farm level are together referred to as a *farm system"* (Dixon et al., 2001:2). A *farming system* is further defined as "a population of such individual farm systems that have similarities in resource base, enterprise patters, livelihoods and constraints, and for which similar development strategies and interventions could be appropriate" (Dixon et al., 2001:2)

The farming system approach involves the investigation and description of components and the relationships between these components engaged in the agricultural production in a specific location. These components include, amongst other, the household, which is considered the main production unit in most farming system, as well as and land, labour, credit, which constitute the main productive resources. In this thesis, the components of the farming systems will be referred to as units. The units and attributes of a farming system are interrelated, and a change in any unit or attribute will have the potential to spur changes in other units (Turner and Brush, 1987:27). For example, the amount and quality of land available is crucial for the agricultural production, but in addition, it constitutes a 'gateway' through which individuals can access other forms of resources like economic capital, since access to land provide individuals with employment and income (Lastarria-Cornhiel et al., 2014:117). An increase or decrease in the amount of land can thus influence and change the income of a farming household. This illustrates the importance of identifying all the units and the interconnectedness between these when analysing farming systems.

The farming system approach emerged in the 1970s when development practitioners and researchers saw the need of a framework that provided a holistic understanding of the complexity of the production environment for all farmers (Poats et al., 1988). This need came out of an awareness that the Green Revolution and the agricultural innovations developed in the 1960s mostly benefitted wealthy, large-scale farmers. Simultaneously, the role of small-scale farmers and their importance for maintaining the food security in rural areas was increasingly being recognised. The farming system approach consequently developed as a framework that classified types of farming systems according to the individual and complex nature of various production environments (Norman, 2002). By this process of classification, it became possible to design technologies that could benefit a wider range of farmers (ibid). This stood in contrast to Green Revolution research, which had an overwhelming focus on large-scale, intensive production in favourable, homogenous production environments (ibid.:1).

According to the definition of Turner and Brush (1987:13) there are three types of subsystems that work together and form the farming system; the human, the environmental and the genetic subsystem. The environmental sub-subsystem concentrates on natural elements like soil, water, pests and organisms. The genetic sub-system focuses on genotypes and phenotypes of cultivars and animals in the farming system (ibid.) As the aim of this thesis is to investigate the gendered nature of the local farming system an extra focus will be put on the human subsystem. The

primary concern when investigating the human sub-system is the mobilisation of the productive resources essential in farming households, which are diverse and gendered units. Especially important are the mobilisation of land, labour and credit (ibid:14). This mobilisation is investigated by, amongst other, addressing rules that govern resource use, labour availability, use of technology and decision-making processes.

According to Dixon et al. (2001) fifteen varieties of farming systems have been identified in sub-Saharan Africa, but five types of systems dominate: 1) *The Irrigated Farming System,* 2) *the Tree Crop Farming System,* 3) *the Cereal-Root Crop Mixed Farming system,* 4) *the Maize Mixed Farming system* and 5) *the Agro-Pastoral Millet/Sorghum Farming system.* Two of these systems, Cereal-Root Crop Mixed and Tree Crop, are present in West Africa. The Cereal Root Crop Mixed farming system dominate in dry areas, and the production is characterised with root crops like yams and cassava, intercropped with other crops (for example maize, millets, sorghum). The Tree Crop farming system is dominated by the production of industrial tree crops (cocoa, oil palm) and food-crops are inter-planted between tree crops. The aim with the production is both home consumption and sale for income generation, and the poverty level among the farmers is considered limited but concentrated among very small-scale farmers and agricultural workers (ibid.:8). It is important to remember that 'generalised' categorisations of farming systems like those presented by Dixon et al. (2001) do not always correspond fully with reality. All farming systems are made up by an array of material variables, structural variables and individual behaviour in a constant flux, and thus time and locational variations will occur (Turner and Brush, 1987:40). Thus, one can expect the farming system of Essiam and Denkyira to be unique and complex in its own way, while simultaneously having similarities with such farming system "arch types". This will be discussed in chapter 5.

2.1.1. Livelihood capitals

From the 1970s until today, the scope of farming system research has broadened and increasingly included a wider set of issues and contextual factors. Using the concepts of Norman (2002), the ratio between *variables* and *parameters* have changed. Variables are the factors that are considered to be endogenously determined and thus a subject to analysis and modification through the farming system approach, while parameters being the exogenously determined constants (ibid.:2). In the beginning of the use of farming system approach, variables were largely limited the nature-given factors; like land, crops and water. However,

with the expansion of analytical approaches and methods, the scope of analysis expanded and the ratio of variables to parameters increased, and factors like gender, education and community were included in the analysis as variables (ibid.). According to Norman (2002), the end product of this systematically broadening of the farming system approach was the development of the Sustainable Livelihood Approach (SLA). SLA have in latter time played a central role in development research and the debate about rural development, poverty reduction and environmental management (Scoones, 1998). This approach conceptualises the multiple ways in which individuals make a living into a single framework (Whitehead, 2002), and its aim is to identify the particular livelihood strategies individuals pursue as a result of the various resources they have access to, and control over (Boamah and Overå, 2016:102).

In the SLA, resources are referred to as assets or capitals owned or accessed by members of a household (Ellis and Allison, 2004). According to Scoones (1998:7-8), these capitals can be divided into four types; natural, economic/financial, human and social. *Natural capital* constitutes natural resources (soil, water, air, genetic resources, etc.) and environmental services (hydrological cycle, pollution sinks etc.). *Economic or financial capital* refers to the capital base, including credit, savings and other economic assets including basic infrastructure, production equipment and technology. *Human capital* refers to skills, knowledge, good health and physical capabilities, and *social capital* refers to networks, social claims, relationships, affiliations and associations. Access to these livelihood capitals are primarily determined by farmers ability to utilize and manage them through institutions, organisations and social relations with various embedded structures of difference (Leach et al., 1999; Scoones, 1998). On the basis of this, a sustainable livelihood is defined as the following;

> *A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks, maintain or enhance its capabilities and assets, while not undermining the natural resource base.*

> (Scoones, 1998:5)

In this thesis, the aim is not to investigate the sustainability of livelihoods per se, and thus the approach will not be applied in total. However, the concepts of capitals will be useful when discussing and analysing farmers claim, access to, and use of, resources. According to Leach et al. (1999:233), putting a focus on resource claims highlights two issues. Firstly, some actors'

claims will most likely prevail over those of others, due to existing power relations. Secondly, certain social actors might not be able to mobilise some rights and resources that are necessary in order to make efficient use of others. Further, Sen (1990 in Awanyo, 2001:103) suggest that the outcome of bargaining processes, which often occur in negotiations for resources, are skewed in favour of those with greater power. What this show, is that to understand access of resources, one also need to understand power dynamics and the social positions of various actors. Even though the SLA has been widely accepted and used in development and agriculture research, the approach have nonetheless been criticised for ignoring these elements of power and inequality (Whitehead, 2002). However, further developments of the livelihood approach have integrated these elements by including an *institutional perspective* in the analysis (see for example De Haan and Zoomers, 2005). Because of this, the next part of this chapter will further look into the role institutions have on people's ability to access resources or livelihood capitals.

2.1.2. Institutions

According to Hodgson (2006:2), "institutions are systems of established and embedded rules that structure social interaction". They are made up by sets of formal and informal rules and norms that describe and shape the relationship between humans and nature, and that mediate, structure and facilitate particular outcomes in interactions and negotiations with regards to resources (Agrawal and Gibson, 1999). Institutions and their processes thus act as frameworks that modify and mediate the access to livelihood capitals and hence have an influence on the outcome of individuals livelihood strategies (Scoones, 1998). As this thesis seeks to investigate gender differences in resource access in the farming system of Essiam and Denkyira, it is important to explain the institutional framework, the gendering of institutions and the role institutions play in this process of resource access.

Rather than fixed frameworks, institutions should be conceptualised as dynamic and processual elements continuously being constructed and de-constructed. According to Leach et al. (1999:226), institutions are not rules themselves, but rather regularised patterns of behaviour that emerge from underlying structures and 'rules in use'. By people's active involvement, they are constantly made up and reproduced. "They are thus a part of a process of social negotiation rather than fixed 'objects' or 'bounded social systems'" (Scoones, 1998:12). North (1990:5) argues that we need to distinguish the 'rules of the game' (institutions) from the 'players' (the organisations or groups of individuals that are engaged in purposive activities bound together

by a common purpose). Individuals per se are thus not 'members' of institutions, but rather participants in organisations that act as players practicing the rules of the institutions.

It is common to distinguish between formal and informal institutions. Formal institutions are written and formalised law of the state that require exogenous enforcement by a third-party organisation (Leach et al., 1999:238). An example can be the national laws for tax payment or local laws that regulate property development. Informal institutions on the other hand, refer to the unwritten norms and rules in society. They are endogenously enforced, as they are made up by a mutual agreement of its social actors. Informal institutions are often culturally and contextually determined, as they are made up by norms and ideas of a specific society. It is important to understand that formal and informal institutions coexist and depend on each other, and thus they should not be seen as completely separated (Hodgson, 2006). For instance, as Leach et al. (1999) present, the rules determining property rights over the *Marantaceaea* leaves in Ghana are both formal and informal. Traditionally, these leaves were under the control of women through customary property rights legitimised by social norms and codes of behaviour (ibid.). However, aiming to protect woodlands, formal property rights and laws were enforced by the Forest Department. These formal rights included access rights through permits issued by the Department. As a result, rights to the leaves are today gained through a mediating interplay between formal property rights and informal/customary property rights (ibid.).

Scholars have pointed out that informal institutions have a socially embedded nature as multiple actors are involved in multiple institutional relations at one time (Leach et al., 1999:238). Through institutions, people are able to interact within and across social boundaries and thus institutions can be seen as constellations of social interaction where people move, acquire, negotiate and exchange ideas and resources (Berry, 1997). Within all institutions a range of power relations and aspects of inequality exist, and thus different institutions carry different meanings for different actors (Leach et al., 1999:238). Because of the various interests by the multiple actors, it is not always possible for an institution to serve a collective purpose, since what is considered a 'collective good' is depending on the social position of the actors (ibid.). This becomes valid when looking at land tenure and various claims to access of land in Ghana. For a farmer, land is considered a crucial resource for livelihood, economy and maintenance of everyday life. For a chief or traditional council, land is important as a spiritual heritage and control over land is significant to preserve the authority of the chieftaincy. For the government and state, land possession can be considered a political interest, important for state development

and investment. Whom gets access to land through the institutional framework, and how the other actors involve perceive this access, thus vary and depend on the views of the actors.

As mentioned, institutions are central in mediating access to livelihood recourses. By successfully taking advantage of, and utilizing institutions that govern resource access, various actors can increase their ability to pursue their livelihood strategies. This is investigated in a study where Boamah and Overå (2016) look at two biofuel projects in Ghana. They argue that the ability (or inability) of groups or individuals to utilize institutions are central to the livelihood impacts they face by the biofuel project. In this study, they found that migrants had less rights to land through the land tenure system than those families who had resided in the villages for generations. However, by complying to social norms and customs in the communities by for instance paying tribute to the chiefs and participate in labour-exchange networks, migrants were able to negotiate access to land. This process of social manoeuvring thus secured them land rights, even though they were excluded from the land tenure system, formally.

Seen in relation to agriculture production, actors' abilities to take advantage of formal and informal institutions will shape the ability of individuals to increase gains from agricultural production. According to Brock, Cornwall and Gaventa (2001, in Daré and Venot, 2017:177) , this ability is partly determined by how these individuals are positioned, by themselves and by others in the different sites where policy making takes place. Understanding the social aspect of institutional processes, and how these social processes underlie livelihoods is therefore important, as the ways people mediate access to resources/capitals are essential for agricultural production. This might be especially so when attempting to grasp the gendering of such processes in Ghana; as being a woman might influence an individual's ability to utilize such institutions, and subsequently this might have large influences on livelihoods. I will now elaborate central concepts and elements of gender theory and show how the aspect of gender can be considered relevant as a means to analyse institutions and access of important types of capitals in agricultural production.

2.2. Gender theory

In order to gain a full understanding of the gendering of the agricultural processes in Ghana, some key elements in gender theory should be addressed. This section will thus more generally

look into theories on gender to be able to explain how processes of gendering can influence social relations and the ability of individuals to access resources through governing institutions.

Issues of gender was included in geographical research by feminist researchers in the 1970s as a critique of the male bias in geographic discipline (Dixon and Jones, 2006). Over time gender perspectives have evolved into becoming central scopes for geographical research. According to Dixon and Jones (2006) feminist geographers often conduct their research based on three various understandings of gender; gender as *difference*, gender as *social relation* and gender as *social construction*. The first aspect, gender as *difference*, concerns research where the spatial dimensions of different experiences of men and women are being addressed. The second aspect, gender as *social relation,* put emphasis on how social relations link men and women. The third and final aspect examines how gender as *social construction* have been imbued with particular meaning, both positive and negative (Dixon and Jones, 2006:49). This study can be seen as drawing on conceptualizations of gender as *difference* and *social relation*, as it seeks to investigate how gender ideology shape gender roles and everyday life of male and female farmers in Essiam and Denkyira.

Gender is a social institution that constitutes one of the major ways in which humans organise their life (Lorber, 1994:277). The concept of gender is often mentioned in relation to 'sex', and previously (and to a certain extent still) gender and sex have been misunderstood as being the same thing. When gender theory emerged, it was therefore partly as a critique of traditional, essentialist ways of understanding gender, and party as an attempt to find new ways to think about the concept. Sex, which is a way of categorizing people based on human biology and a persons' chromosomes, is not always overlapping with gender, which is defined as a social construct shaped by culture, social norms and expectations about what is 'feminine' and 'masculine' (Cresswell, 2013). However, these are often seen as two sides of the same coin, as the alignment of a gender starts when a child is born and put into a sex category according to the looks of the genitalia (Lorber, 1994:55). Throughout your life, the sex category you were put into at birth is likely to affect how people act towards and treat you. This process, which clearly indicates a wrongful conceptualisation of sex and gender as overlapping, shapes and has great impact on our lives. The treatment by others, and the expected roles and identities that are aligned to us due to our sex, can be seen as shaping us into 'becoming a man' or 'becoming a woman', and this further influences how we experience the wold, interact with others and what opportunities and privileges we get access to (Cope, 2002:45). This chapter will now examine

gender ideologies and link this to the concept of intersectionality. Further, the next part will attempt to connect such concepts to the agricultural institutions to begin to understand how processes of gendering might influenced farming systems.

2.2.1. Gender ideologies

In her famous feminist book *Gender Trouble*, Judith Butler (1990:34) argues that gender is produced through discursive practises, and is thus not something you have or do not have. It is rather something you perform. In other words, gender should be seen as a social construction which depends on everyone constantly 'doing gender' (West and Zimmerman, 1987). In society we find context specific norms and ideas about the acceptable and unacceptable ways of doing or performing one's gender. Linda McDowell (1997) defines these norms or mainstream assumptions about gender appropriate behaviour and about how to be a 'good man' or a 'good woman' as *gender ideology*. The views of appropriate behaviour are a reflection of cultural ideas and beliefs that influence social relations and create difference between men and women.

Gender ideology, seen as a social institution, thus acts both as an organising principle as well as a principle of differentiation, that shape societies views about gender appropriateness. Using the concepts of (Lorber, 1994:60) gender as a *process*, *stratification* and *structure*, produce unequally ranked social statuses with various rights and responsibilities attached to them. As a *process*, gender creates social differences that define 'woman' and 'man' (ibid.). Through social interaction and the performance of gender, individuals learn what behaviour, actions and reactions are expected of them. By behaving accordingly to these expectations of appropriate behaviour, gender differences are produced and reproduced. As a *stratification*, gender ranks men above women of the same race and class according to hegemonic ideas and norms that exist in most societies. According to these ideas, men are seen as the 'normal' and dominant, while women are being seen as 'different' and subordinate (ibid.). Finally, as a *structure*, gender divides work in the home and in economic production, legitimating those in authority, and organising sexuality and emotional life (Connell, 1987 in Lorber, 1994). With structural inequality, devalued genders have less power, prestige and economic rewards than the valued gender, and gender ideology hence justifies gender statuses, and particularly their different evaluation (Lorber, 1994:30).

Gender ideologies are dynamic and context specific as they vary from place to place and between cultures and social strata (Overå, 2003:51). One demonstration of gender ideologies being dynamic rather than fixed can be seen from Ghanaian market trade. Within this sphere, both men and women are participants, but norms about appropriate occupations for men and women render the market a 'female' arena where women hold dominant positions. Female traders are thus not considered un-female when they use physical strength, talk loudly or expresses power in the market place; because this behaviour is considered appropriate and a 'natural' way for women to fulfil a social expectation about being both economic actors and mothers (Clark, 2000 in Overå, 2007:504). The making of the market as a female arena can be seen as a result of an interplay between global historical forces and local social relations (Grosz-Ngate, 1997 in Overå, 2007). In the beginning of the 20th century, training and education provided by the British colonial administration led men to largely withdraw from market trade and take on occupations such as cocoa farmers, government workers and other skilled workers (Clark, 1999). Women, on the other hand, were restricted by the colonial powers to participate in the new economy and continued to fill occupations as traders. The market place thus became naturalised as a female arena. Some men have later returned to trading occupations as a result of poor socio-economic conditions and a downturn of the Ghanaian economy (Overå, 2007), but trading nonetheless continues to be considered more appropriate for women. Because of this, the market place is still considered a female arena where women hold dominant positions.

Outside the market place, gender ideologies traditionally associate men with positions representing authority and power in both in Ghana, and other contexts. A number of West African counties have gendered political systems where major interests are defined and represented by gender. These systems has been called 'dual-sex' systems, and are structured around both men and women having power and autonomy – but within separate societal systems where they manage their own affairs (Okonjo, 1976). Through this gender duality discourse, men and women are seen as opposite and different, but are still perceived as equally necessary and valuable to society (Overå, 1998:77). The so-called dual-sex systems can be explained as parallel gender hierarchies, where women hold and execute considerable power within the female domain. Outside this domain, however, their positions are weaker than those of men. This means that even though the hierarchies are parallel, there is a power asymmetry between them, and the power asymmetry leads to differences in *manoeuvring space*; the room that each gender have to manage their own affairs (Poewe,1981 in Overå, 2003:55). The manoeuvring space can be seen as being created and shaped when genders interact with society;

and forming gendered barriers leading individuals to perform their gender according to ideas about appropriate behaviour. By risking informal sanctions or threats of punishment for the performance of gender-inappropriate behaviour by peers in the surrounding environments, the manoeuvring space is enforced and maintained (Lorber, 1994). If individuals want to cross gendered barriers, they thus have to find ways to manoeuvre that are legitimate or acceptable according to the local gender ideology.

To conclude, the unequal treatment of men and women based on their gender is made up by a social construction where men and women are seen as having dominant and subordinate positions in relation to each other. This cannot be seen as a mere consequence of factors like sex, physiology, anatomy or genetics, but rather something produced and maintained by social processes that is further built into social structures and individual identities (Lorber, 1994:62). Such social and structural gender inequalities are deeply internalised within humans and have historically justified the limitation and devaluation of women in various social spheres (ibid.). As the Nigerian feminist author Chimamanda Ngozi Adichie (2014:13) states; "if we do something over and over, it becomes normal. If we see the same thing over and over, it becomes normal". If doing gender means producing a social order that supposedly reflects natural differences, hierarchical arrangements where men dominate and women are subordinate are reproduced and legitimised (West and Zimmerman, 1987:146). In other words, the fact that something is a social construction, does not make it less valid. Gender ideologies and the different evaluation and valuation of gender is felt by people all over the world, every day, shaping various social and institutional spheres that humans participate in, forming the rights and duties we have, and putting limitations and restrictions to our behaviour.

However, issues of inequality and oppression goes beyond only the aspect of gender. This can be described through the concept of intersectionality, which is the belief that oppressions are interconnected and cannot be solved alone. Through intersections with each other, social categories like gender, age, class, ethnicity, sexuality, occupation, and so forth, produce distinct patterns of power, oppression and experience that influence and determine the opportunities an individual has and the oppression he/she face (Collins, 2009). The concept of intersectionality was first coined by Kimberly Crenshaw when she did a comparison of the legal status of black women, black men and white women. Crenshaw theorised the intersection of race, class and gender for black women and argued that without use of an intersectional lens, we risk to ignore 'intragroup differences' (Crenshaw, 1991; Valentine, 2007). The experience of being a woman

can be different if you are black or white, heterosexual or homosexual, young or old, and if we fail to emphasise this, we risk marginalizing those who are already the victims of multiple levels of social injustice.

In relation to farming and agriculture, the concept of intersectionality can help us recognise that the experience of one farmer is not the experience of all farmers; they hold identities with multiple characteristics, such as being married or single, educated or illiterate, rich or poor. These multiple characteristics leads them to have variating needs and beliefs. Farmers' thoughts and actions reflects their individual identity and hence it is not suitable to consider farmers as a homogenous group with similar experiences, goals and needs. Because of this, this thesis will present and use data from individual households and farmers included in the sample, in addition to include data that shows general trends.

2.3. Gendered institutions shaping the farming system

As addressed in chapter 2.1.2, institutions influence the access individuals have to resources or livelihood capitals within agricultural production. Within this division, gender plays a role. Gender as a social institution create a division where men and women are aligned to different roles and responsibilities in society and farming activities per se. These gender roles influence men and women's opportunities to access resources through various institutions. This part will highlight three institutions highly relevant for the analysis of the gender division of agricultural production and resource access; the household, the matrilineal kinship system and the land tenure system of Ghana.

2.3.1. Household

Household and lineage are classical analytical concepts that are seen as the two of the most important institutions of farming systems in Africa (Guyer, 1981). However, various researchers, and especially feminist scholars, have criticised the ways in which these concepts have been understood and applied in research. For instance, in the vast and diverse literature about 'the African household', there has been a trend, especially in economic literature, to consider households as 'single economic units' where united decisions about production and consumption are being made (Doss, 2001:2084). This notion is not necessarily a true reflection of reality; instead of being single units with unite goals, households are diverse entities

consisting of different people with competing goals. Men and women, grown-ups and children, live together but also lead separate lives within the same household, controlling and accessing different resources. Because of this, the process of decision-making is often a matter of negotiation and conflict. According to Alkire et al. (2013 in Akter et al., 2017:271), "empowerment in agriculture is generally defined as a person's ability to make decisions on matters related to agriculture as well as the persons access to the material and social resources needed to carry out these decisions". The gender roles that exist in society and intra-household dynamics profoundly affect farmers' opportunities to participate and exercise power in household decision-making processes. Further, the ways which households are formed and the activities members pursue together are deeply affected by the institutional context (Guyer, 1981:99). Thus, to simplify the household into a single unit and to assume that there is a unity in the interests of its members, is a reductionist approach failing to recognise the complicated nature of relations of gender and generation in households (O'Laughlin, 1995).

The Norwegian Anthropologist Ingrid Rudie argue that an agricultural household is best described as an "irregular conglomeration of units of residence, consumption, production and common ownership" (Rudie, 1969/70:189). A household thus consist of what Rudie calls personnel, aiming to improve the situation of the household through various tasks. The successfulness of the personnel in maintaining a high productivity level is seen as depending on the 'household cycle', made up by two factors: demography and organisation. Demography is related to the household composition and household members' age, gender, and abilities. Organisation is related to the way the household manages to direct and guide the personnel in the household to maximise the agricultural production. Even though the right kind and amount of labour is present in a household, the organisational capacity of the household influences the use of basis assets, monetary capital and manpower (ibid.:195). With reference to agriculture, the organisation capacity of farming households influences the division of labour, utilization of resources and agricultural productivity. As the household is considered the main production unit in agricultural production according to the farming system approach, the theoretical concept of household in addition to Rudies 'household cycle', will thus serve as useful tools in the analysis of gendering of tasks, responsibilities and decision-making in this thesis.

2.3.2. The matrilineal kinship system

In Ghana, different ethnic groups follow different customary norms regarding kinship. Kin membership is transmitted from one generation to the next through the ancestors of one gender; thus, depending on what ethnic group you belong to, you will be considered the successor of either your mother or your father (Nukunya, 1992:16-18). In patrilineal societies, kin membership is transferred through the father, while in matrilineal societies the transfer goes through the mother. As mentioned, Akan people follow the matrilineal system, and thus every person is by birth a member of his or her mother's lineage (*abusua*).

Inheritance of property in Ghana generally occur according to the customary rules and the present inheritance system. This means that land can be acquired through the matrilineage or patrilineage, depending on the location. The heir who produce on and occupies family land gained through the lineage is not supposed to treat such land as his/her personal possession, but instead (s)he should act as a trustee of the land, managing it for the benefit of the family as a whole (Berry, 1997).

In addition to constituting the rules for customary inheritance, the matrilineal and patrilineal systems in Ghana serve as a basis for social organisation (Takyi and Gyimah, 2007). A traditional principle that has a strong position in matrilineal societies in Ghana is that men and women give their absolute priority to the matrilineal kin (Clark, 1999). The extended family *(abusua)* is seen as a support system, where various members hold an obligation to assist other members of the family in times of need. For instance, if a parent is not capable to take care of his/her children, the child will be taken care of by relatives of the mother. In addition, it is not uncommon that a child's uncle represent an alternative source of financial support and moral guidance, as a mother's brother is considered the 'male mother', in a structural sense (Clark, 1999).

An effect of the importance of the *abusua* system is that the institution of marriage traditionally has been considered less important or weaker than the bond you share with your maternal kin; the biggest responsibility is held towards your *abusua*, not your spouse (ibid.). Because of this, it is uncommon for married couples to pool their resources together for the benefit of the conjugal family unit (Takyi and Gyimah, 2007). This creates a division of financial responsibilities between mothers and fathers in a household where women are usually seen as

responsible for the daily subsistence, while fathers pay for major items such as school fees and housing facilities (Clark, 1999). In a paper analysing traders and urban Asante ideals and practices about gender and parenting, Clark (1999) argues that Asante women express their maternal devotion by working hard outside the household to be able to meet their children's financial needs, rather than by staying home with them. Being a parent is considered an essential element of both the male and female gender identity in Ghana. As 'motherhood' and 'fatherhood' is both culturally and context specific, this Asante 'working mother ideal' can be seen as shaped by the Akan matrilineal kinship system and the notion that in the end, it is always the mother who is responsible for her child, since the child is a descent from her kin.

Matrilineality influences inheritance systems and social organisation, but it is important to understand that a matrilineal society is not the same as a matriarchy (Debevec, 2015). The matrilineal kin system does not necessarily confer power to women, and thus patriarchal structures where men control matters of inheritance, land, marriage and politics exist also in matrilineal societies. This applies to the study area of this thesis; the area is matrilineal, but as identified, patriarchal in the way that men hold most positions of power.

2.3.3. Land tenure in Ghana

The legal framework for land law in Ghana consist of 166 pieces of legislation, several of them overlapping and/or contradicting (Lambrecht and Asare, 2016:252). The tenure system is characterised by legal pluralism (Runger, 2006 in Higgins and Fenrich, 2012:8), since both customary law and enacted legislation are recognised by the state and influencing the management of land (Ministry of Lands and Forestry (MFL), 2003). It is argued that the plurality of the systems regulating land has created difficulties, especially for those more vulnerable, with regard to the "practical enjoyment of their land rights", even though the rights are guaranteed under the law (Sarpong, 2006:2). Despite several attempts of land reformation, the complexity of the land tenure system and the contradictory role of customary and public law in land disputes continue to be a source of debate and conflict in the county.

In Ghana, land is considered a spiritual entity that belongs to past, current and future generations, and land is divided into two forms: customary and private land (MFL, 2003). About 80 percent of the land in Ghana is held customarily (ibid.). Depending on the location, this land is owned by communities - under the control of a chief (stool or skin land), or by

families, lineages or clans under control of the head of the respective family, lineage or clan (family land) (Ghebru and Lambrecht, 2017:295). Management of customary land is based on a form of tenure system with unwritten codes constituting flexible, negotiable and location-specific norms and practices (Agbosu et al., 2007:30). Hence, there is a great variety across the country regarding the constitutions of such land tenure systems. The remaining 20 percent of the land in Ghana is considered public land which can be divided into two categories: state land and vested land. State land refers to land that the Government have acquired though the 1962 State Land Act for a specific public purpose for the interest of the general public (MFL, 2003). The actors who previously held interest in such land are compensated, and the state land is held in trust by the state for the people of Ghana. Vested land refers to previously held customary land that is taken over by the Government under the 1962 Administration of Land Act. Here, the customary land ownership retains, but the state takes over the management of the land and hold it in trust for the owner (ibid.:11).

According to the Land Title Registration Act of 1986, there are four types of recognised land interest which shape land access in Ghana; allodial title, customary freehold, common law freehold, leasehold (Sarpong, 2006). The allodial title of any land is held by the actor that has the final authority over it (Lambrecht and Asare, 2016). Depending on the context, traditional authorities like stools or skins, a family head or the government hold the allodial title of land. When the allodial title is held by the chief through stools or skins, the land is held in trust for the whole community (Kasanga and Kotey, 2001). Originally, settlement was the main way of land acquisition in Ghana (Lambrecht and Asare, 2016). The first person that settled in an area gained the status as the custodian (chief) of the land. Today there is no unclaimed land left in Ghana, but throughout history, land occupied by the chiefs have in certain areas been divided and allocated to different extended families in villages. This land constitute family land.

Individuals or groups can gain usufruct rights to land if the holder of an allodial title give land up for the disposition through customary freehold or common law freehold (Kasanga and Kotey, 2001). Customary freehold can only be held by members of a community, while common law freehold can also be held by people from outside the community. Through the freehold system, holders have the right to transfer the land to their successors according to the inheritance system. Such land can also be leased to tenants either though leasehold or sharecropping agreements (ibid.)

Leaseholds are rights granted to a person to occupy land for a specified term, typically for a period of 50-99 years. The conditions of leaseholds vary from payments of rent or sharecropping agreements (or a combination of these). When a tenant holds leasehold rights, s(he) have the possibility to sublease the land to his/her descendants, given the consent of the allodial title holder (Kasanga and Kotey, 2001). The two most common sharecropping arrangements in Ghana is *abunu* (harvest shared in three portions) and *abusa* (harvest/land shared in two portions). *Abunu* is most commonly practiced when annual crops like maize and cassava is produced. Here, the yield of the field is divided into three after harvest; one part is given to the landowner, one part to the tenant and one part is used for maintenance of the field (either by selling produce or re-plating crops). After the yield is harvested, the land is given back to the landowner, or the leasehold is continued through settlement of a new agreement. *Abusa* is most commonly applied when tree crops are grown on the fields. Various forms of the agreement exist, depending on context. In some areas, the trees planted on the field are divided between the tenant and landowner after the whole field is planted. In these cases, the agreement stops when the trees die. In other areas, land is divided rather than the trees. When the whole field is planted, the land is measured and split into two parts. The landowner takes one part, and the other is left for the tenant. Through this agreement, the land remains with the tenant even after the trees dies. In other words, leasehold through this form of *abusa* is considered as a permanent agreement.

Lambrecht and Asare (2016) argue that according to the existing land interests in Ghana, the system of land acquisition can be divided in two; non-market and market-based systems. The non-market systems constitute the acquirement of land by allocation or inheritance through the customary inheritance system. Market based systems on the other hand, involves rent or sharecropping agreements. In the pluralistic land tenure system of Ghana, both systems are present, but as mentioned, local variations occur.

A common misconception of land tenure systems in that it applies to an area or a country as a whole. The land tenure system in Ghana is - like other informal institutions - constituted by local norms and rules of society and shaped by the behaviour of the actors involved in it. Due to this, the system is characterised by diversity and local variations. Even though various actions have been put forward to formalise the process of land access in Ghana, the land tenure system is still to a large extent a fluid and dynamic institution that continuously adapt to social, political and ecological changes in various contexts.

The fluidity and informality of the land tenure system make it inclusive, as it opens up for various individuals in society to access land. This is illustrated by Berry (1993:18), who show that in the case of accessing land for cocoa cultivation in Ghana, local farmers negotiate access through families and the stools, while 'strangers' negotiate access through payments of money, produce, labour and the acknowledgement of the owners land rights. Access to resources are thus influenced by the ability to negotiate through the existing social institutions (Berry, 1989 in Boamah and Overå, 2016:102).

According to Boamah and Overå (2016) a person's relationship to community members, involvement in community activities, respect for authorities and attendance of social events and services have great influence the outcome of dispute during land claims. Thus, even if a highly inclusive system, the inclusion to such land tenure systems might depend on one's position. Seeing how social relationships influence and shape resource access in social institutions, it is plausible to assume that dimensions of difference like gender, age and wealth also have effects in the land tenure system. Focusing on gendered differences in access to land in sub-Saharan Africa, Whitehead and Tsikata (2003) have found that within customary systems, patriarchal values and power often seeks to exclude women from land. In Ghana, the Constitution, which constitute a formal institution within the land tenure system, state that men and women have equal access to property rights (The Constitution of the Republic of Ghana, 1992). As the land tenure system is fluid and open for various actors, one would perhaps expect it to be gender neutral in practice too. However, various scholars have identified that there are clear gender differences intrinsic to informal customary land rights, shaped by norms and local practices. For instance, Duncan (1997) have argued that due to the general perception of men as physically stronger than women, and thus seen as performing the most physically demanding tasks in agriculture, men have been given a dominant position in individual claims of land. This statement is supported by Quisumbing et al. (2001). Various explanations have been lifted forward to explain this gender divide, and according to Sarpong (2006) these explanations can be summarised as resulting from other social institutions in society like the inheritance/kinship systems, or marital relations, lack of information, exclusion from decision-making, usufruct user limitations and impacts of modernization.

2.4. Summary

The chapter have emphasised how gender is a factor shaping all the spheres we belong to in society. The theoretical foundation established, identify gender and institutions as central concepts when investigating farming systems and individual's access to livelihood capitals. On the basis of this, gender ideology and institutions like the local land tenure system and the matrilineal kinship system thus must be considered as crucial factors shaping and affecting household dynamics, livelihoods and hence also the agricultural production in Essiam and Denkyira. This thesis will further explore how processes of gendering influence the agricultural production in Essiam and Denkyira, and the access to, and ability to mobilise, resources. The following part will elaborate on the methods and the methodological underpinnings for doing so.

CHAPTER 3: METHODOLOGY

Methodology is about the methods used, and the rationale for using these methods in a research project. Examining the farming system of Essiam and Denkyira within the frames of the outlined theoretical approach have had methodological implications, which will be elaborated on in this chapter. The purpose here is to present and clarify the process of producing this thesis, and thus the methods and techniques used will be presented. Experiences, challenges and ethical dilemmas that occurred during the fieldwork and in the process of analysis will be explained and critically evaluated, and a discussion about my positionality and the effect this had on the data will be included.

3.1. Scientific approach to research

One of the first things a researcher needs to consider when performing a research project is what kind of scientific approach the study will be based on (Busch, 2013:48). The scientific approach will have an effect on the research design, data production and analysis, and thus it is extremely important. This thesis is based on a constructivist approach with a influence from feminist theory and feminist perspectives.

When talking about a scientific approach, there are three different concepts that needs to be addressed; ontology, epistemology and methodology. *Odontology* concerns questions about what knowledge that is considered to be 'true' or actually existing (Busch, 2013). From constructivist view, there is no true knowledge because all knowledge is subjective interpretations of the world. As Cope (2002:43) states; "knowledge is not something we can passively or actively acquire because we are always involved in its production and interpretation. Similarly, knowledge production is never a 'value free' or unbiased process". *Epistemology* can further be understood as a theory of knowledge that is primarily concerned with how knowledge is produced (Cresswell, 2013). Epistemological questions thus seek to answer how and to what extent we are able to acquire knowledge about the world (Busch, 2013:50). For feminist researchers, it has been important to give value to gender and how gender influence knowledge production. Historically, the knowledge produced by women have been seen as less valid or true than the knowledge produced by men. However, with a constructivist understanding stating that there is no objective truth or true knowledge, the limitation of actors in knowledge production on the basis of gender is failed and wrong. This is

why feminist scholars have drawn attention to how gender has had an effect on how produced knowledge is legitimised, reproduced and re-presented (Cope, 2002). According to feminist epistemology, it is thus important to include the viewpoints of various actors when conducting, also those marginalised and oppressed. Finally, *methodology* concerns the methods and approaches used to acquire knowledge (Busch, 2013:51). From a constructivist view, it is especially important to acknowledge that the methods used are not selected by coincidence, it is rather a (un)-conscious choice made by the researcher. This is also the foundation for this study. As will be discussed in the following chapters, the knowledge and the methods chosen to produce the data for this study is largely influenced and shaped by the researcher positionality. It will be identified that the study has, according to feminist epistemology, included a sample consisting of both male and female farmers who belong to diverse households, in addition to other stakeholders.

3.2. Research design

The research design involves the relationship between theory, methods and analysis. According to Clifford et al. (2016:8-10) there are six key points we need to keep in mind when we formulate our research design; the research questions, the most appropriate methods to apply, what data the research will produce, the practicalities of the research, the ethical issues and in which form the research will be presented.

Mixed method research is an approach to knowledge that attempts to consider multiple viewpoints, perspectives, positions and standpoints, always including both qualitative and quantitative data (Johnson et al., 2007:113). The world is complex, and one way that researchers try to get grip of this complexity is to adapt a research strategy where multiple sets of data are included (Eyles, 1988:5). This thesis is qualitatively oriented, but includes some aspects of quantitative data, and thus it can be claimed that a mixed method approach has been used. Qualitative data allows the researcher to explore human environments and human emotions, and it seeks to investigate deeper meanings of phenomena and processes (Winchester and Rofe, 2010). In this thesis, I have employed such methods in order to get an in-depth understanding of the topic, and the experiences of the people dealing with these issues on a daily basis. I have chosen to couple these methods with certain quantitative data. Quantitative data do not seek to investigate deep meanings. Rather it seeks to find information that can be measured and written down in numbers. The quantitative data in this study were collected though a household survey

using a questionnaire, which was integrated into the data production methods as to add a depth to the understanding of the case. This approach to research, where one draw on different sources or perspectives to be able to answer the research questions can also be called triangulation (Clifford et al., 2016:9)

The study constituting the basis of this thesis can be seen as a case study that has aimed to investigate the role of gender in agriculture in Essiam and Denkyira in Central Region, Ghana. A case study is defined as an empirical inquiry that investigates a contemporary phenomenon within its real-life context (Yin, 1981:88) and this approach has been chosen as to explore the various and complex processes occurring within agricultural production in the given area. Fieldwork was conducted from June to August 2017, and during this period qualitative and quantitative data was produced through a household survey, semi-structured interviews, field conversations and observation.

3.3. Field research

Field research is claimed to be a valuable way of producing data because it can help the researcher facilitate a deep understanding of the research context (Guyer, 1981:89). A goal with field research is to get access to 'backstage' information that informants grant the researcher only after having established a relationship of trust. In addition, it is an aim to find areas of cooperation with the informants where knowledge relevant for the research question can be produced (Aase and Fossåskaret, 2014:70). However, getting such access is not an easy process.

The biggest limitation of this study has been the time available to perform the field research. In total, I had eight weeks in the study area and luckily, because of contacts at the University of Ghana and the arrangements they made for me, I was able to start the research right away upon my arrival. This gave me enough time to produce sufficient amount of data to write this thesis. However, more time in the area could probably have given me more insight and a better understanding of the contextual elements of the case than I was able to achieve during these eight weeks.

3.3.1. Positionality in the field

The knowledge of a researcher is limited and situated in her positionality. Positionality can be explained as a person's unique mix of race, class, gender, sexuality, nationality and other identifiers (Mullings, 1999:337). The positionality of the researcher is highly influential in every step of the research process, from the choice of methods and planning of the data production to the production and analysis of data. What methods that are chosen, how the data are interpreted and analysed is all shaped by the researcher's values and understanding of the world. It is therefore extremely important that the researcher is reflective about her positionality throughout the whole knowledge production process and that she acknowledge that no knowledge is objective, value-free and unaffected by her. My own attributes as a white, young, Norwegian woman with higher education have without a doubt had an impact on this study. In addition, the fact that I have grown up on a farm and identify myself as a feminist can be considered important. My individual perspective had an influence on the research design that was decided upon before the fieldwork, and it continued to shape the knowledge production throughout the fieldwork. This chapter will elaborate and discuss how my positionality shaped and influenced the data production during the field research.

Linton (1936) defines a person's *status* as the social position occupied in a particular society or setting. This social position has certain formal rights and duties attached to it, in addition to informal norms called *role expectations*. When a person acts according to the role expectations of their status, they are performing a *role* and confirming their status. According to Aase and Fossåskaret (2014) every social system has a range of different statuses in their local status inventory. When conducting fieldwork, the researcher needs to negotiate between the statuses in the specific local status inventory to get access to the different kind of knowledge that exist in her research context. The researchers' possibility to negotiate between these available statuses is influenced by her positionality.

In addition to status and role, a researcher will occupy positions as 'insider' or 'outsider' when performing research. According to Mullings (1999), a researcher is considered an 'insider' if she study a group she belong to, and an 'outsider' if she study a group she do not belong to. However, being an insider or an outsider is not a fixed attribute that is static over time, and the researcher can benefit from both of the positions. Because of this, it can be beneficial for the

researcher not to take on a constant position as insider/outsider, but rather try to switch between the two positions.

During the fieldwork in Ghana, I was aligned to many different statuses, ranging from a tourist, researcher, future agriculture official, researcher, student and friend. I also held both outsider and insider positions, depending on whom I spoke with. My status and position in the area changed as time went by and people became familiarised with me. I experienced a gap between the statuses I was put in before and after being introduced to people, and thus the statuses I was ascribed to only because of my visual appearance and the ones I was aligned to when people started to know me, my project and my behaviour.

Entering the field, it was clear for everyone that I was an outsider because of my skin colour and foreign nationality. Many people thought I was a tourist and wondered what I was doing traveling to this location. Some also thought I was a teacher working as a volunteer at one of the local schools. I quickly realised that these statuses would not give me access to relevant arenas of knowledge production. As Aase and Fossåskaret (2014) argue, the only way of 'escaping' a status is to act in contradiction with it. Even though it was not possible to change my visual attributes, my further actions did not follow the role expectations of a tourist or a volunteer. I took the local taxi, walked around in the villages talking to farmers with my interpreter, and bought groceries at the market for more than two weeks. This was something tourists in the area rarely did, and people started to understand that I was to stay for a longer period.

Being seen as participating in the local day-to-day life, residing in the area and making conversations with farmers, many people understood that I was working on a research project and thus ascribed me to the researcher status. Before every interview, my interpreter made a short introduction of me and the aim of the project. I had told her to inform the farmers that I was doing a research project without funding and that it was voluntary to participate. Still, after one of the first interviews a informant asked me; "But what do you think we should do, and how can you help us?". My interpreter once again explained that I was not there on a funded project, and that I had no financial means to share with them. The informant then answered; "I know, but thought you were a researcher". It was then made clear to me that the role expectations towards a researcher was that she would be a person with knowledge and financial means to share with informants. I realised that my interpreter had to add to the introduction that

I was a student doing research and put emphasis on the student role. Because of this my status changed from Norwegian researcher to Norwegian student doing a research project. This made the situation easier, and the informants stopped asking for help or financial support.

However, the fact that I was still visually a foreigner clearly affected people and the way they viewed and treated me. In Ghana, you call a foreigner *obruni*, which can be translated into 'stranger' in English. I noticed that before every interview, informants found a plastic chair for me to sit on, while they, and my interpreter, sat on low wooden chairs that they called 'African chairs'. Though I believe this was an act of kindness from their side, I did not want to be treated differently for being an *obruni*. In addition, I felt uncomfortable being placed on a higher chair 'above' my interview objects during the interviewees. Thus, I tried avoiding being placed on these chairs by saying, "No thank you, I prefer the African chair", whenever they wanted to bring me a plastic chair. First, they would laugh at this request, but after a while they accepted my wishes about using the African chairs. If I returned to their house at later occasions, they would offer me that one instead of a plastic chair. When going on farm visits, my status as an *obruni* also affected informants' expectations about my actions and behaviour. Firstly, the farmers were unsecure if I understood what going to the farm would implicate for me; "You will be dirty, you know?", one of my informants said. Secondly, on the way to the farms, people in our proximity would often laugh and ask the farmers who took me why they were bringing the *obruni* to the farm. "What will she do there, it's no place for an *obruni*!" many said. It was clear to me that it was very unusual for foreign people to go to the farmlands in this area. To overcome this, I started to explain to people that I had grown up on a farm, and that I was used to both getting dirty and work hard. I could quickly notice that the farmers viewed me differently when I told them about this, and soon they started to explain farming activities and their difficulties more in detail. The same thing happened to Beverly Mullings (1999) when she was doing research in Jamaica. She found that the way she presented herself was highly influential on the data production. Focusing on different aspects of her identity, she created different *positional spaces* where the situated knowledge of both her and her informants encountered, and a level of trust and co-operation engendered (Mullings, 1999:340). I believe that explaining to the farmers that I had a farming background was a way of creating such a positional space.

Even though I was prepared that my skin colour would mark me as an outsider and be a factor that would influence the data production, the extent to which this was influential came as a

surprise. In addition to affecting how people viewed me, being a visual outsider ended up having great impact on being granted or denied access to knowledge production. One of the first thing I noticed was that despite the fact that farmers had a very busy schedule, they all found time to talk to me when we approached them. Because of this, we always asked people if they were busy and what they were doing before asking them if they were willing to be interviewed. During interviews, another obvious obstacle that prevented me from being granted full access to knowledge was my limitations in understanding the language of my informants. My interpreter did a great job with the translation, but not being able to communicate directly with my informants certainly played a role in establishing me as an outsider. In order to help me, my interpreter encouraged me to learn some basic phrases in the local language Fante, something that this turned out to be very useful. People were much friendlier and eager to converse with me when I could introduce myself and ask how they were in the local language. It also made it easier for me to maintain the relationship with the people I had already interviewed when I was able to greet and ask them basic questions also when my interpreter was not around.

In addition to my skin colour, other visual attributes of my identity such as my gender and age affected the interaction with my informants. During one interview, the informant kept saying "but you would not understand this, you are too young", when she talked about financial constraints and paying for all the expenses of her children. After a while, I found at that she compared me to her son, who was the same age as me. Some men were also pointing out my gender during the interviews, saying things like "You are a woman, so you should understand why a woman can't clear the land and burn the forest" when we were discussing gender roles and agricultural tasks. I tried to solve these issues by saying that I was interested in their full explanations or I tried presenting other parts of my identity to make them understand why I was interested, but it was not always successful.

In total, my position as insider/outsider in the field was not fixed, but I was always treated as an outsider because of my skin colour. However, because I learned basic phrases in the local language, showed initiative and interest to participate in farming activities and other daily activities of the people in the area, I believe their image of me shifted. I would not say that I gained an insider position as I believe that would be impossible with my positionality, but I was able to approach the people in a different way and I felt that they were more open to tell me about and show me their way of living after being there for a while. This substantiates the

37

arguments saying that prolonged investment in the field opens up new opportunities and helps the researcher gain a greater understanding (Kapborg and Berterö, 2002).

3.3.2. Working with an interpreter

I met my interpreter the first day I arrived in my study area. She was a previous student of one of my local contacts, and because of this early connection, we were able to start the research right away. She was a twenty-year-old woman from Essiam, who was currently living at home with her mother, waiting for enrolment to tertiary education. She came from a farming household and was therefore very familiar with farm work and the life of farmers in the region. She knew both the area of Essiam and Denkyira well from having worked a trader, walking around in these villages selling her mother's agricultural products. The latter years she had been living in another village to attend school, and therefore she did not have a strong relationship with the inhabitants in the area. This can be seen as a positive element in the research process, as the introduction to informants was not biased and based on her previous acquaintances. Her English skills were sufficient for the project and even though she had no previous experience from interpreting, she was quick to take instructions and understand the aim of the research and her role in the data production. Before performing the interviews, we went through the questionnaire together to make sure we had the same understanding of the questions. We also agreed upon what we would do if different situations occurred.

In addition to my positionality, the positionality of my interpreter had an influence on the field research and data production. When using an interpreter during research, the knowledge is first interpreted and valued by the interpreter before it is presented to you. Through this process, meaning can be lost in translation and the statements and opinions expressed can be affected by the interpreter's positionality. It was thus important for me to find an interpreter who understood my rationale for performing this study, and to whom I could develop a good relation. My interpreter was a young woman like me, and despite growing up in very different contexts, we had several things in common that was not related to the research project. We developed a close friendship, spending time together both when we were working, and in weekends and evenings. Even though this did not give me the full insight of her understanding and influence on the data production, I do believe that our close relationship made it easier for us to communicate and discuss the data production, and thus to a certain agree give me an understand of how her positional and world view affected her in the process of producing data.

The local knowledge and the characteristics of my interpreter was beneficial during the study, and she eventually became one of my key informants. This location was completely unknown for me, but my interpreter knew the area well and since she was considered an "insider", it was easy for her to approach potential informants. From the start, I told her about the importance of speaking to a diversity of farmers and she made sure these requirements were fulfilled. She had a greater understanding of what questions that were suitable and not to ask than I had, something which was very useful. During one of the interviews with a female pastor, I wanted to ask a question about the pastor's income from the church. When I posed this question, my interpreter said: "That is a question I can't translate for you. It's rude and not something we ask about". I believe that in this situation she saved me from insulting the informant.

In addition to her local knowledge and understanding of the social norms in the area, I believe it was beneficial that my interpreter was a woman. According to feminist epistemology, the social constructions of gender norms, values and relations have an impact on the knowledge production, and gender influence what is considered as knowledge, how knowledge is legitimised, reproduced and represented (Cope, 2002:44-45). Since an important aspect of my thesis is to investigate gender, and especially women's role in agriculture in this location, making sure that the interpreter considered the statements and voices of the women as legitimate was very important for me. Taking to two women might also have made it easier for female interviewees to discuss certain topics.

It is always difficult for a researcher to know if the translation made by an interpreter is a direct translation or modifications or summaries of informants' answers (Kapborg and Berterö, 2002:55). I was very clear about wanting direct translations without modifications before I started the work, and even if my interpreter was made aware of this, certain things might have been left out or modified during the translation. Not all sayings or words are easily translatable, something that posed a challenge in some of the interviews. My interpreter would occasionally struggle to find the right words when translating. When this happened, I made her explain the context and meaning of the sayings/words that she struggled with, something which helped clarify what she wanted to convey. For instance, a young, female farmer, told us that she did not want other people in the village to know that she was a farmer. When I asked why, she gave an explanation, which by my interpreter was summarised as the farmer feeling shy. According to my understanding of her explanation, however, the feeling the she displayed was not shyness, but rather embarrassment over her work. My interpreter did not agree, but after a long

discussion, we realised we had the same understanding of the feeling that was expressed, but we used different words for defining it. This did not pose a major challenge in this case, but it might have impacted other situations of which I am not aware.

3.4. Sampling

My main sampling method during this study was *snowballing*. Snowballing is a method where one contact helps you recruit another, who again can put you in touch with someone else (Valentine, 2005 in Longhurst, 2016:148). This might have impact for research by leading to a sample of relatively similar informant, whom might display similar meanings, feelings and attitudes. However, this sampling method was chosen as to easily access a large sample size. In this study, most of the informants were selected either through my interpreter or through other local contacts. In total, the sample for this study consists of 65 informants, 56 of them being farmers, and 9 being other stakeholders.

According to feminist theory and epistemology, legitimate knowledge is knowledge that includes the several viewpoints, especially those of the marginalised and oppressed. Cope (2002:47) argue that knowledge can be said to be valid from the standpoint of the producer. According to Donna Haraway (1988), it is therefore important to include multiple standpoints from different groups to ensure a knowledge production with a *stronger objectivity*. When doing so, the knowledge produced is considered more valid. This led me to strive for a diversity of types of informants and trying to obtain this, even though a relatively random sample method like snowballing was applied.

Table 1: Overview over sampled informants by gender.

Category	Gender		Total number
	Female	Male	
Farmer	32	24	56
Youth	4	1	5
Agric. official	-	2	2
Chief	-	1	1
Pastor	-	1	1
Total	36	29	65

Source: Field data 2017.

3.5. Means of data production

In the production of the data for this study and to obtain a deeper understanding of the research topic, different data production tools have been used. These tools include semi-structured interviews with youth and key informants, a household survey, observation and field conversations.

3.5.1. Household survey

A household survey with 56 sampled households constitute an important data production tool in this study. The aim of performing such a survey was to gain an overview of the research topic, and to collect data about farmers characteristics; age, sex, birthplace, land ownership etc. A goal was also to understand the variety of household activities and the decisions and interactions related to these.

The survey was performed as face-to-face interviews with individuals from the different farming households. These interviews were semi-structured and included a mix of open-ended and fixed-response questions which were structured in a questionnaire (see appendix I). Open-ended questions allow participants to use their own words to answer, while fixed-response questions offer a limited set of responses (McLafferty, 2016). The interviews lasted from 15 minutes to one hour depending on the informants, and most of them were done with assistance from my interpreter. The informants' answers were written down and all the interviews were recorded.

According to Doss (2014:67), two criteria need to be fulfilled when producing data for gender analysis in agriculture. First, female farmers need to be included in the sample, and their voices need to be considered. Second, the knowledge should identify which people are involved in various activities, both with regard to ownership, work, management and decision-making. The household survey fulfilled both of these, by both including female farmers in the sample, and examining whom in the household performed different tasks, made decisions about different issues and had ownership of different assets.

Table 2: Gender, location of residence and age group of the sampled informants in the household survey.

	Female		Male	
	Essiam	**Denkyira**	**Essiam**	**Denkyira**
Age				
20-29	3	1	-	2
30-39	3	3	2	2
40-49	7	6	3	2
50-59	3	3	4	3
60+	1	2	-	6
	17	15	9	15
Total	**32**		**24**	

Source: Field data, 2017

Which household member that was interviewed in the household survey depended on availability at the time of the interview. A sample consisting both men and women for different age groups were sought to be included, and as shown in Table 2, this was to a certain extent obtained. In some cases, the interviews began with one member of the household, but were taken over by other members of the household during the interview. In these cases, the person who took over identified him/herself as the one in the household who was most involved in the farming activities and thus the most appropriate to answer these questions. Some interviews were also interrupted by people gathering around us. This could be problematic, because in some settings the informants might have felt obligated to answer in a way that was accepted by the surrounding audience. For instance, during an interview with a female farmer, the husband returned from the farm in the middle of the interview. He took a highly active part in the interview, answering all the questions prior to his wife. Her role was then reduced to agreeing with what her husband saying, the sincerity of which is unknown. In an attempt to solve the situation, I tried to encourage the wife to answer to the questions based on her own viewpoint, and I altered the wording of some questions to make them relevant to only her. Despite this, the husband continued to participate in, and shape the interview.

I experienced that some of questions I had prepared in advance of the fieldwork were not relevant to the context I was performing the research in. Because of this, I did a revision of the questionnaire after 10 interviews. For example, one of the questions asked whom in the household that performed ploughing. After a couple of interviews, I was told that farmers do not plough in this area and I realised that this question was not relevant for the farming system

in this location. Instead of ploughing, land is cleared by cutting down trees, and subsequently dig holes in the ground to plant. The question was thus replaced with one asking whom in the household that performed the clearing of the land. After the revision, the initial 10 informants were asked to re-answer to the new questions, something which proved to be successful and yielding valid data.

Because the household survey was performed as face-to-face interviews, it formed the basis for developing personal contact with many farmers. It was a way of reaching out to many informants, and for me to become familiar with the farmers and the area. In addition, these interviews helped me present me and my work to many people, familiarising them with both me and my project. In the end of every interview, I asked the informants if they were willing to take part in follow-up interviews. The household survey was thus a way of finding informants for further interviews and farm visits, which later became an important arena for observation.

3.5.2. Observation: direct and participating?

One of the benefits of conducting fieldwork is that the researcher gets to experience and observe the social context, phenomena and research subjects of the study in their natural environment. As Aase and Fossåskaret (2014) argue, there is a difference between observation and participant observation. A researcher is automatically an observer when she is present in the study area. However, she is not necessarily a participating observer. For this to happen, she has to be an actor in the arenas she is observing; she needs to be a participant. This is also discussed in an article by Eyles (1988), where its argued that researchers are involved in different 'degrees' of participant observation. According to Eyles, there are four degrees of involvement that shape the insight a researcher gets through observation; complete participant, participant-as-observer, observer-as-participant and complete observer. Before entering the field, I had many ideas and thoughts about farming tasks I would participate in, and how I would be able to sit in small cafés and observe people doing their everyday tasks. I pictured myself being somewhere between complete participant and participant-as-observer. This ended up being a bit different than expected, and in the end, I believe I ended up being more an observer-as-participant, as the distinctiveness of my role as a researcher was obvious and hence influenced the degree of participation.

Being able to perform participating observation was much harder than expected. As Aase and Fossåskaret (2014) states, the researcher actively need to participate in the activities she is observing for the observation to be participatory. For me, this meant actively participating in the work the farmers do at their farms. In my study area, having farms adjacent to houses is rare and many of the farmers have to travel far to get to their farms. Hence, going to a farm required thorough planning, something which was difficult. Many of the farmers said that they wanted to take me to their farms, but we failed to make concrete plans for this to happen. After several interviews and attempts to join farmers to their farms, I realised that the traveling costs are high, and that this could be the reason for farmers being reluctant in letting me join the travel. Attempting to overcome this challenge, I offered to cover the transportation costs as well as food expenses related to the farm visits. Doing this made the farmers much more willing to make arrangements with me.

Joining farmers to their farms was, however, time consuming and not always a good approach for observation. Each farm visit took a whole day, and it was evident that the farmers were not able to do the work they normally did when being observed and 'researched'. They might have felt obligated to show me their practises, or they felt responsible for not making me bored or tired. I explained that such efforts were not necessary, but despite this, my presence was clearly affecting their work and practices. Because of this I only conducted three full day farm visits, in addition to some short visits to fields that were located close by.

As previously mentioned, taking the role of a neutral observer was difficult in this area due to my alien appearance. Many people held a set of certain ideas and believes about foreign people which were automatically ascribed to me. Wherever I went, people would notice my presence and be affected by it. However, I noticed that my prolonged stay in the area made people used to having me around, and this to a certain extent made observation easier.

Despite the difficulties, I tried to participate as much as possible in the daily activities of the people living in the area. I lived in a guesthouse that hosted many local people, and helped with cooking of local dishes, buying of food at the local market and house tasks. I had access to Ghanaian food and ate with local people every day. I went to church every Sunday, and I attended meetings at the debate grounds in the villages. Living in the study area for two months and participating in all of these everyday activities influenced and enhanced my understanding of the research topic and context.

3.5.3. Semi-structured interviews and field conversations

In addition to performing the household survey and (participant) observation, several semi-structured interviews were conducted with farmers, key informants and other important stakeholders. Semi-structured interviews are organised but have some degree of flexibility which give the researcher the opportunity to allow for diversions from the planned topics and questions (Dunn, 2010). Before the interviews, I made interview guides with the questions I wanted to discuss. During the interviews, I added or left out questions depending on the answers of the informants.

The farmers sampled for interviews were recruited through the household survey, while other interview objects were introduced to me through other contacts. For instance, I was introduced to the chief on first day in Denkyira, as I was brought to his palace by a local contact. Similarly, the pastor included amongst the informants was the pastor in the church one of my friends attended to. To include several perspectives in data material I decided to include the viewpoints of younger people. Hence, I interviewed four women (seamstress, student, shop owner and provision store keeper) and one man (teacher) in the age of 20-25. They were all acquaintances I got during my stay.

Table 3: Description and gender of key informants.

Description of informant	Gender
Agriculture officer: Management Information Systems (MIS)	Male
Agriculture officer: Women in Agricultural Development (WIAD)	Male
Chief in Denkyira	Male
Pastor	Male

Source: Field data 2017.

Most of the interviews were performed by myself, but my interpreter was always present. When I performed the interviews on my own I felt more in control, and it was easier to ask follow-up questions than when my interpreter led the interview. Because of this, I decided to do the follow-up interviews with one female and one male farmer who I knew could do the full interview in English, in addition to two farmers who could do parts of the interview in English. Their English skills might suggest that they have a higher level of education or other life experiences than the rest of the informants in the sample, and it is therefore possible that some biases have occurred because of this selection of in-depth informants.

In addition to formal interviews I had several informal conversations about my research topic with different people I met and knew, ranging from the woman who worked in the shop where I bought my mobile credit units to teachers, taxi drivers and students from Secondary High School that lived in my house. Such informal conversations are often called field conversations (Aase and Fossåskaret, 2014). Almost every evening, I would sit down with my friends to talk about things I had experienced during the day and ask them about their opinions and understandings of these experiences. These conversations were important for strengthening my understanding of the research topic and context. The field conversations were more relaxed than interviews, and I did not make any notes or recordings during the talks. It is possible that the informal setting of the field conversations made it easier for people to express their true beliefs and opinions.

3.5.4. Additional methods

Throughout the fieldwork I wrote down thoughts and reflections in a field journal. In this journal, I made short summaries of every interview I did, focusing on the interview situation and my experiences. I also wrote about situations, events and activities that I did not mention in the notes from the interviews. After finishing the fieldwork, I continued writing in the journal, now focusing on the process and reflections about working with the thesis.

In the beginning of each household interview, a household map was sketched up in collaboration with the informant. The household map included a household chart giving an overview of the household members and their relations, gender, age, civil status and occupation. Several informants were asked to assist in the drawing of an agricultural calendar, focusing on variations of crops and the agricultural work around the year. In addition to this, I performed a small 'market survey' to get an overview of the marketplace and the people who worked in the market. On a market day, where many traders come from distant locations to sell their produce, I asked everyone selling agricultural products about their age, place of residence, and what products they were selling. All of the traders I talked to were women.

3.6. Data analysis

Data are observations that are categorised and conceptualised by a researcher (Aase and Fossåskaret, 2014:36). Hence, observations from a fieldwork cannot be considered data until

they are interpreted, put in a system and analysed. The process of analysis is thus the refinement of the everyday process of making sense of the situations and events we encounter; it is the process of giving meaning to observations within the framework of your worldview (Stake (1995) in Taylor, 2016:590).

After the fieldwork, I was left with a substantial amount of observations that I needed to make sense of through analysing them. The quantitative data derived from the household survey was analysed by gathering and categorising the data in excel. The analysis of the qualitative data was somehow a more extensive process, by transcribing and coding of recordings and notes made during interviews. Coding is the process where all the observations is put in a system by identifying important segments, observations, quotes or information found in the data material (Cope and Kurtz, 2016). After doing this, the coded data are further organised into categories. The aim of coding and categorisation is to be left with a few categories or themes that inform and provide answers to the research questions. Categories can be seen as mental containers that organise and give meanings to the data; and because of this, we can call them cognitive categories (Aase and Fossåskaret, 2014). As cognitive categories can be seen as a function of the observed object, the biological senses of the observer, the abilities of the observer and culture, the ways in which observations are categorised is therefore to a large extent influenced by the researcher and the researchers understanding of the world (ibid.:111-113). This fieldwork was performed in a culture different than the one I am familiar with, and thus is possible that my cognitive categories and understandings of the data contradicts or deviate of those of the informants. However, I tried to be aware, and establish and understanding of, how locals understood the concepts and categories of this study by discussing the topic with them in various ways, both through formal interviews and informal conversations.

3.7. Data quality

All methodological choices made in a study have an effect on the study's quality (Busch, 2013). Thus, to ensure good quality of the data produced in this thesis, three key concepts need to be addressed and discussed; reliability and validity and transferability. It has been claimed that it is difficult to ensure high data quality in qualitative studies because of the interpretative nature of the data. However, Mullings (1999) argue that this is possible, through the process of *reflexivity*, where the researcher are aware of how she is affecting the research process. During the fieldworks and in the process of analysis I was constantly trying to be reflexive and aware

of how my positionality and worldview had an effect on how I understood and analysed the data. The process of reflexivity has been elaborated on throughout this methodology chapter.

Reliability is related to the trustworthiness of the data produced in a research project (Busch, 2013). As both Mullings (1999) and Järvinen (2005) argue, interviewing is a process where the researcher and the subjects of research try to present themselves in certain matters and by doing this, create versions of themselves that are re-interpreted in different ways. This was something that I was aware of when conducting the fieldwork. As a means to strengthen the reliability of a research project I thus decided to use triangulation as a research strategy (Bryman, 2012). In this study, a household survey, interviews with key informants, observation and field conversations/informal discussions have been applied as methods to produce data and highlight the research topic. This gave me the opportunity to cross check findings, and hence strengthen the reliability of the findings. Further, an element important in ensuring the reliability of a research project is to make sure the study is transparent, by describing the research design in a detailed manner (Silverman, 2014). This is what I have tried to do in this methodology chapter.

Validity is concerned with the extent the findings of a study represent the social phenomena aimed to study (Hammersley, 1990 in Silverman, 2014:90). In other words, its related to the extent the empirical findings of a study is adequate, relevant and valid for the research questions it aims to address (Busch, 2013:62). Something that can pose a validity threat in a research project is that the researcher and the informants do not have the same understanding of the questions that the researcher tries to address. In this study two issues related to this occurred; that some meaning was 'lost' in the translation of questions and that there was an inconsistency in how the researcher and the informants understandings of the concepts or topics of the interview (see chapter 3.6 about cognitive categories). One way of strengthening the validity is then to ask follow-up questions. For instance, during household interviews, I often experienced that when I asked the informants about what crops they produced, they tended to mention only one or two of their main crops, often cocoa. This could be because they tried to present themselves in a certain matter, or because they misunderstood the question. When this happened, I asked a follow up question where I asked them to mention all the various crops they produced. By doing this, the validity of the study was strengthened.

According to Kapborg and Berterö (2002) two forms of validity exist in qualitative research; internal validity and external validity. *Internal* validity is achieved when the researcher

demonstrates the reality of the participants by the use of quotations and statements from interviews in the study (ibid.). This is done throughout this thesis. As Busch (2013:74) argue, the use of short quotes to strengthen the analysis and discussion presented by the researcher, sometimes mean that the quote is presented outside its original context. However, this is not necessarily a threat to the validity, as long as the researcher is aware of this issue. A way of reducing this threat can be to include longer quotes, so that the reader themselves can establish if the interpretations made by the researcher are correct (Kapborg and Berterö, 2002). In this study, both long and short quotes are included and used actively, and thus I argue that the internal validity is strong. *External* validity is on the other hand related to the study's *transferability* and the extent the data produced in this study can be applicable in other similar situations (Busch, 2013:62). Reaching external validity is often seen as an issue in qualitative studies, as it is difficult to draw generalisations from studies with relatively small samples that are specific to a particular setting or place (LeCompte and Goetz, 1982 in Bryman, 2012:390; Kapborg and Berterö, 2002). However, it is possible that some of the findings of this study can have relevance or be valuable for other studies on similar topics or situations, but which findings that can be valuable is not easy to define.

3.8. Ethical considerations

All research based studies should include a section devoted to the discussion of research ethics (Busch, 2013). The most important ethical aspect when conducting research is to make sure the research does not negatively affect those being studied; the work should maximise benefits and minimise physical, emotional, economic and environmental harms and discomfort (Hay, 2016).

All informants included in the sample were informed about the aims of the study and the reason why they were asked to participate. They were informed about the possibility to withdraw from the study at any time, and that answering to the questions were optional. Before recording interviews or taking pictures, I asked for their permission. As I mentioned earlier, people were always eager to let me talk to them. To make sure that the interview did not have negative consequences for the informants and their livelihoods, we always tried to not interrupt them from something they were doing. However, some informants wanted to do the interviews while preforming other tasks; one informant was doing the laundry while being interviewed, another informant was peeling the skin of cassava to make it ready to produce cassava dough. Sometimes, the informants told us that they were about to go to the farm when we approached

them. In these situations, we always made agreements about coming back to do the interview at a later time.

During the fieldwork, certain situations that could be considered as ethical dilemmas occurred. One day, when my interpreter and me were on our way to a scheduled interview, we were accompanied by a man my interpreter knew. He was a teacher and with his English skills he was able to communicate with me without the help from my interpreter. He asked several questions about me and my project and seemed very interested in what I was doing. When we arrived at the house of the informant, this man was still walking with us. My interpreter started the interview with the introduction of me, but suddenly the man who had joined us interrupted her and started talking to the informant. He made several gestures towards me while talking, but since he was speaking in Fante I could not understand what he was saying. When I asked my interpreter to stop him, she just ignored me and let him continue. After he was done, he told me that he had presented me and my project, and that he had explained that in the future, I would be the agricultural minister of Norway. I was very upset by this and had to take him to the side to explain to him that I was not planning on being an agricultural minister, and that it was wrong of him to present me in that way to my informant. I had to ask him to leave, so that we would be able to perform the interview in peace. When returning to the informant, my interpreter had to explain all of the details about me and my project all over again, in addition to explaining that my role was not a political one. This was important, to make sure that the informant did not participate in the interview on the basis of the false information that had been presented earlier. The informant seemed a bit confused about the whole situation, and to a certain extent, I believe this affected the interview. After the interview, I asked my interpreter why this situation occurred and why she did not stop it. She then explained it was difficult for her to stop the man from saying what he did because he was older and held a higher status than she holds. In some ways, this was understandable, but we agreed that if similar situations occurred later we would have to solve it at an earlier point.

To make sure none of the informants in the study is negatively affected by this thesis, all of the quotes and sayings used in the thesis have been anonymised, and the cases where names are used, the names used are pseudonyms in the form of traditional Ghanaian names. The people who are present in the pictures used in the thesis have given consent to the pictures being used. Some of the quotes used in this thesis have been modified to strengthen the language and make it grammatically correct. The modification has not changed the meanings of the quotes.

CHAPTER 4: GENDER IDEOLOGY IN CONTEXT

The previous chapters have elaborated on the theories and methods that have been used to produce this study. This chapter is related to the research question *"How does the local gender ideology shape gender roles in the study area?"*. As mentioned, gender ideology is assumptions about gender appropriate behaviour in a given context (McDowell, 1997). In every location, these ideas vary and depend on culture, norms, tradition and existing institutions. Through social practices and everyday activities men and women are thus placed into social positions that hold certain expectations about what is considered 'masculine' and 'feminine', and this further influence the alignment of rights, duties and responsibilities. This chapter therefore seek to present and discuss how gender ideology can be seen as shaping the gender roles and responsibilities in Ghana, and more specific in the study area, Essiam and Denkyira. Exploring explanations of the gender appropriate behaviour in this specific location is meant to further set the frame for understanding the gendering of the local farming system. Such gender ideologies should be seen as underlying traits, contextualising the gendering and hence this is seen as relevant to elaborate on before the empirical findings and discussion of the farming system of Essiam and Denkyira will be presented in the two subsequent chapters.

In the study area there can be identified clear divides between the appropriate 'masculine' and 'feminine' behaviour. There are large differences in what kind of activities and spheres men and women participate in and dominate, and what tasks and duties are considered their main responsibility. Men and women in Ghanaian society are seen as opposite and different, but still equally necessary and valuable (Overå, 1998). This indicate a gender complementary thought. However, as patriarchal structures exist, a power asymmetry that give men prominent positions within society dominate and shape the everyday life. For instance, women cannot, according to tradition hold positions as family heads, clan heads or chiefs (Brydon, 1996 in Lambrecht, 2016:195). The highest official position a woman can hold in the Akan political system is the title as Queen Mother. This position holds considerable power, as she is seen as the leader of women's affairs as well as having the power to select who select whom is to be the next male Chief (Lambrecht, 2016). However, the power of a Queen Mother is less than that of the male Chief: While the Queen Mother takes care of women's affairs, the Chief have the responsibility and authorize power over the community as a whole. These systems, where women execute considerable power and autonomy, but within their respective domain, represent a so-called *dual-sex systems* (see Okonjo, 1976), or a *gender duality discourse* (see Overå, 1998).

4.1. The matrilineage

Essiam and Denkyira are matrilineal villages, where descent is through the maternal line and kinship is transferred through the mother. A matrilineage is made up by the descendants of one woman; her children, her daughters children, and her granddaughters children (Clark, 1999). When a child is brought into the world it is thus considered a member of the mother's lineage and *abusua*. According to Clark (1994:98), the meaning of *abusua* is 'those of the same stomach' or 'womb'. Within an *abusua*, a strong sense of cohesiveness and group responsibility exists, and it is common to give absolute priority to your extended family.

One's affiliation to the matrilineage is considered strong in the study area. In matrilineal societies, living with members of the extended family on the woman's side is commonly practiced. This is also the norm in Essiam and Denkyira. 36 of the informants in the sample reported that they live in compounds and shared housing units, where their 'nuclear family' (parents and children) occupies one or two rooms, and other family members with their nuclear families occupy other rooms. It is also common for people to take on the responsibility to care for children from other members of their *abusua*, if needed. As one male informant explained during a field conversation: "Because of the matrilineal system, the children of my sister is also considered my children. My sister is alone, and if the children need help, I must contribute".

4.2. Parenting and the upbringing of children

Bearing forward children is something highly cherished in Ghanaian society, as it is seen as a way of extending the family tree and strengthening the lineage. In addition, children are considered a main source of labour, prestige, marital stability and support for elders (Nyarko, 2014). Being a parent is thus considered an essential element of both the male and female gender identity in Ghana (Clark, 1999). According to Akan belief, humans are made up by two elements; the blood *(mogya)* of the mother and the spirit *(ntoro)* of the father (Nukunya, 1992:31). However, even though children are seen as equally made up by both parents, parenting is a gendered process, with different expectations from mothers and fathers.

Motherhood constitute a central gender ideal for women in the study area and the ability to bear forward children largely influence how women are perceived. Women with children are highly appreciated for their positions as mothers, and for their role in the upbringing of future generations. Thus, being a mother is a major motivation for female participation in economic

activities, and as one of the informants stated; "I became a farmer because of my children. I don't want a situation where my children go somewhere else to get food. I have to take care of them, and therefore I farm" (Female farmer, 34). When talking about a woman in the area that did not have children, one informant said: "She doesn't like people, and she is cruel as well. She was married, but the husband left before any children came" (Female student, 20). This illustrate the importance of children in how women are perceived.

However, even though a child is considered as belonging to the lineage of their mother, the role of the father in a child's life is not insignificant, and spouses tend rely on each other for the upbringing of their children. As a father transmits his *ntoro* to the child, the child's personality is considered to be determined by the father's personality (Nukunya, 1992). While the bond between a mother and her child is almost seen as 'naturally' strong - as the child comes from the 'womb' and follows the bloodline of the mother - the bond between a child and its father is largely determined by the involvement of the father throughout the upbringing of the child. Subsequently, different financial responsibilities regarding children are often held by different household members: Several informants in the sample reported that it was the fathers who had the responsibility to pay for larger expenses for the children, like school fees, while mothers were to provide the children with care and support; "He do his part, and I do mine. He provides money for school and their pockets, while I care for them" (Female farmer, 42). Another informant said: "My husband takes care of the financial aspect of childcare, while I make sure they are fed" (Female farmer, 42).

In Ghana, and more specifically in the study area, it is common that children take care of parents and older family members as they turn old. This was mentioned as a motivation for men to create and maintain a relationship with their children. In the interview with the pastor, the value of a strong bond between parents and children were discussed; "As a father I have a role to play, and if I am able to play out that role well, it will be difficult for my children ignore me when they grow up". He continued;

> *If a man fails take care of their children, the mother will struggle. That is something the child will always remember, and they will always put their mothers first. We have families here, in this village, where the children have gotten employment and earned the big money. Their mothers are rich, but their fathers don't get anything because they left them when they were young.*

As Lorber (1994) states, the process of gendering of an individual begins at birth, and this influence how you are perceived and treated throughout your life. Once it is evident what gender a child has, people start treating those in one gender different than those in the other, and the child responds to this by feeling and behaving differently (ibid.:55). Thus, the early upbringing of boys and girls further influence the social relationships, roles and responsibilities they hold when they grow up. Several informants pointed out that there were differences in the parenting and upbringing of boys and girls. What became evident was that within the household, there are specific tasks which are considered tasks for young girls and boys. "Boys are expected to participate, but they have less house chores than girls. Boys are responsible for fetching water, while girls need to learn how to sweep, cook and clean" (Female farmer, 45). Children participating in household duties is considered necessary in the process of socialization and learning – and participating in household tasks from a young age is expected to be a valuable lesson for later in life. This especially applies to young girls, which from a young age are expected to learn how to make traditional dishes like *banku* and *fufu*. This is seen as something that women need to know, as it constitutes an important part of their responsibility for household duties.

4.3. Household and domestic duties

Norms about gender appropriate behaviour (gender ideology) enables men and women to take control and acquire authority in various social spheres in society. Traditionally, the roles of household head and primary income provider have been assumed to be men's responsibilities, while domestic matters, such as preparing family meals and caring for children, have been considered women's domain (Clark, 1994:285). In the study area, the household duties are the responsibility of women. They perform most of the domestic tasks like cleaning, cooking and childcare, something which gives them authority and power. As a male informant said: "I don't know how to make any food, I only depend on my wife" (Male farmer, 37). Performance of domestic duties are thus considered 'female' tasks which are not appropriate for men. As it is frowned upon, male participation in the household is rarely a part of community conversation, and thus informants in the study reporting the occurrence of this was rare. When discussing this with the pastor, he said:

> *Even if a man helps his wife in their house, he would never tell you. If your neighbours see you helping out in the house, they will all laugh of you, especially the women. It is a sign of "weak masculinity", and not something you want people to know about.*

This description of participation as a sign of 'weak masculinity' clearly indicates that household duties are not seen as a male-appropriate behaviour, and to characterise men who participate in household duties as having a weakened masculinity can be seen as a social sanction of men that act outside the established norms and rules for appropriate behaviour. In fact, during interviews with women it was mentioned that women do not want help from men with regards to household duties. "When my husband come back from the farm, I don't expect him, and I don't allow him to be in the kitchen. Feeding of the family is my responsibility and the kitchen is my place" (Female farmer, 34). The male WIAD-officer at the agriculture office claimed that this was due to the pride women take in performing housework. Delegating it to their husband is thus seen as 'wrong':

> *Cooking is my hobby, and I often go to the kitchen to make food. One time my mother was visiting me, and when she saw me in the kitchen her response was; ah, where is your wife? You see, she was not just shocked that I was in the kitchen, she also wondered how my wife let me be there.*

Instead of leaving domestic duties to their husbands, it is common that women delegate household duties to younger girls/women in their family (daughters or other female relatives) to relive themselves from the workload. This also partly explain why girls from a young age are raised to perform important household tasks like cooking, cleaning and washing.

The main reason for the gendered divide of household tasks is reported to be tradition. "Our forefathers taught us that the role of women is to be in the kitchen, and the role of man is to bring home the money", one male informant argued during field conversation. In addition, the domestic duties are seen as something 'natural' and 'inherent' in the female gender. As one male informant expressed, "I have tried to cook some food, but I cannot do it! It's too difficult. My wife is a natural!" (Male farmer, 37). Because of this, we can thus identify a clear gendered division of household tasks in the study area, being explained by both natural, traditional, and cultural causes.

55

4.4. Income-generating labour outside the household

Even though the household is considered a female arena, seeing it as the only arena of strong female participation and the only arena where women hold important roles would be a misconception. Economic activity and participation in income-generating labour outside the household is to a large extent considered a culturally accepted activity for both men and women in the study area. In addition, as previously mentioned, the economic activity of women is connected to their roles as mothers and the expectations about mothers' financial contribution to enhance their children's well-being.

There are, however, variations in what kinds of economic activities that are perceived as suitable and appropriate for the different genders. To a large extent, these views are based on perceived physical differences related to differences in gender, something which is reflected in the distribution of labour in various occupations. As men are seen as physically strong, they are employed in activities like construction, mechanics, driving and public services in the police or fire department. Women, on the other hand, are perceived as physically weaker, and are involved in trading and activities associated with domestic duties such as food businesses, care-work or other informal occupations. In sum, then, even if influencing what types of economic activities women can participate in, gender ideologies do not prevent women from working outside the home. Rather, it can be seen as encouraging women to participate in income-generating labour.

CHAPTER 5: THE FARMING SYSTEM OF ESSIAM AND DENKYIRA

Having elaborated on the gender ideologies in Ghana, and the study area in particular, this chapter seeks to explore the findings related to the following research questions; *"How does gender shape the division of work tasks, responsibilities and resource access in the local farming system"* and *"To which extent to women in farming households have decision-making power to influence decisions regarding agricultural production"*. In order to do this, a comprehensive description of the farming system of Essiam and Denkyira will be presented. Here, the various units of the farming system are identified and explained in detail. An agricultural calendar with an overview of the cropping patterns will also be put forward, and a farming system model will be visualised. The aim is to identify the characteristics and relations among units of the farming system of Essiam and Denkyira, rather than investigating each farm per se. Since this study is oriented around aspects of gender, a focus will be put on the description of how the farming system is gendered.

The farming system of Essiam and Denkyira is a complex and diverse system, where units are interlinked in various ways. The resources available and the practises that are used vary among households and depend on their internal structure and external relations. The system is clearly gendered, as men and women perform different tasks at various stages of the agricultural production. The goal for the farmers involved in agricultural production in this area is to secure their livelihoods by producing crops for both sale and home consumption. The most common crops grown in the area are subsistence/food crops like cassava, maize and plantain, and cash crops like cocoa and oil palm. The production of these crops is mainly based on tradition and traditional skills, and sufficient amount of rain during the rainy season is essential for a good harvest. Use of external inputs like fertilizer is limited but increasing. Mechanical equipment like tractors is not used. As a result of this, the agricultural production in the area is highly labour-intensive. This lead farming households to mobilise several of its members to fully or partly be involved in the farm production. In addition, hire of external wage labour is common.

5.1. Agricultural calendar

According to the Dixon et al. (2001), participatory methods have gained importance in farming system approaches. During the fieldwork for this study, an agricultural calendar was produced

in cooperation with farmers through interviews and informal conversations, to gain an overview over the agricultural production in the area. The focus in this calendar is put on the main crops in the area, and the calendar presented is based on my interpretations of the responses from farmers and agriculture officials interviewed.

This calendar provides an overview of the cropping patterns for some crops in the agricultural year in the study area. The agricultural calendar should not be interpreted as fixed and static – due to seasonal and annual variations in the natural environment and weather conditions, as well as economic, social and strategic differences among farmers, the cropping patterns and agricultural activities vary from year to year and farm to farm. The agricultural calendar should therefore only be interpreted as a presentation of the main cropping pattern of certain crops produced in the study area.

	J	F	M	A	M	J	J	A	S	O	N	D
				RAINY SEASON								
Maize				P				H	P			H
Plantain	H	H		P					H			H
Cassava			P / H									
Cocoa					P					H		
Oil palm	H				P						H	
Tomato	P				H	P			H	P		H
Garden egg[1]			P			H	P			H		

Figure 1: Agricultural calendar for Essiam and Denkyira. Source: Field data, 2017.

Note: P=planting/sowing, H=harvest.
Dark green: major season, light green: minor season

Since most agricultural production in the study area is rain-fed, the rainy season is decisive for the timing of agricultural activities in the agricultural year. Many crops are planted in the beginning of the rainy season, and most of the harvest is done in the late/after the rainy season. The fieldwork of this study commenced in the end of June, when the rainy season had just had just peaked. By this time, most of the crops had been planted, and in the period that followed, much of the work done to increase the harvest, like weeding, spaying of weedicide and pruning of the tree-crops, were performed by farmers.

---

[1] Eggplants are called garden eggs in Ghana.

Maize, cassava and plantain are the three main food crops planted in this area. Maize have two growth periods, from April to August and from September to December. During the dry season maize is scarce and the price rises. Plantain is planted and harvest throughout the year, but the main harvest season is from September to January with a peak in December to January. During the rainy season, there is less plantain available on the market. Cassava has its main planting season in March to May, but it is possible to plant it throughout the whole year. Six months after planting cassava are ready to be harvested, but farmers reported that they generally leave the cassva in the ground for a longer period. The reason for doing this is decrease the risk of being left with harvested produce that turns bad because no one wants to buy it. Cassava is the most common crop in the area, and due to this, it can be difficult to sell large bulks of cassava products at the same time. The solution is either to gradually harvest the crops, or to 'sell' the whole field to certain traders that for a certain period of time are allowed to harvest all the cassava from the field.

The two main cash crops in this area, cocoa and oil palm, can be harvested throughout the year. Both have their main planting period in May, and after being planted, they have a growth period of three to five years before yielding their first harvest. Cocoa's main harvesting season is in October and November and oil palm from December to February. In addition to food- and cash crops, some vegetables are grown in the area. Most vegetables follow the crop pattern of tomatoes and garden eggs, with a growth period of three months and the main harvesting season during, or right after, the rainy season. In this period, the vegetables have had a long period with sufficient amount of water supply. However, it is possible to grow vegetables throughout the year, especially with the use of irrigation facilities.

As the calendar indicate, the most labour-intensive period is during the rainy season. At this time of the year, farmers have little income from cash crops, which constitute their largest income source. In the periods of low income from cash crops, farmers try to compensate by having other crops ready for harvest. By doing this, they ensure the farming households income throughout the year, even if varying.

5.2. Model of the farming system in Essiam and Denkyira

According to Turner and Brush (1987:27), five major aspects are crucial when you are to describe a farming system: goals, boundaries, activities and their relations, external relations

and the function between internal and external relations. In order to do this, a farming system model has been made. This model seeks to present a general overview over the units of the farming system in Essiam and Denkyira, their boundaries and the way they are interconnected. In the farming system model, the units in enclosed squares constitute the internal units, while the units in dotted squares are external units. All of these units have influence on the farming system in the area.

It is important to note that farming systems are just as fluid as other social institutions, and because of this, the units and functions of the farming system are not consistent (Berry, 1993). They are rather adapting to changes in the economic, political, environmental and social conditions that together constitute and shape the farming system. This model therefore represents my interpretation of the farming system of Essiam and Denkyira at the time the fieldwork was conducted.
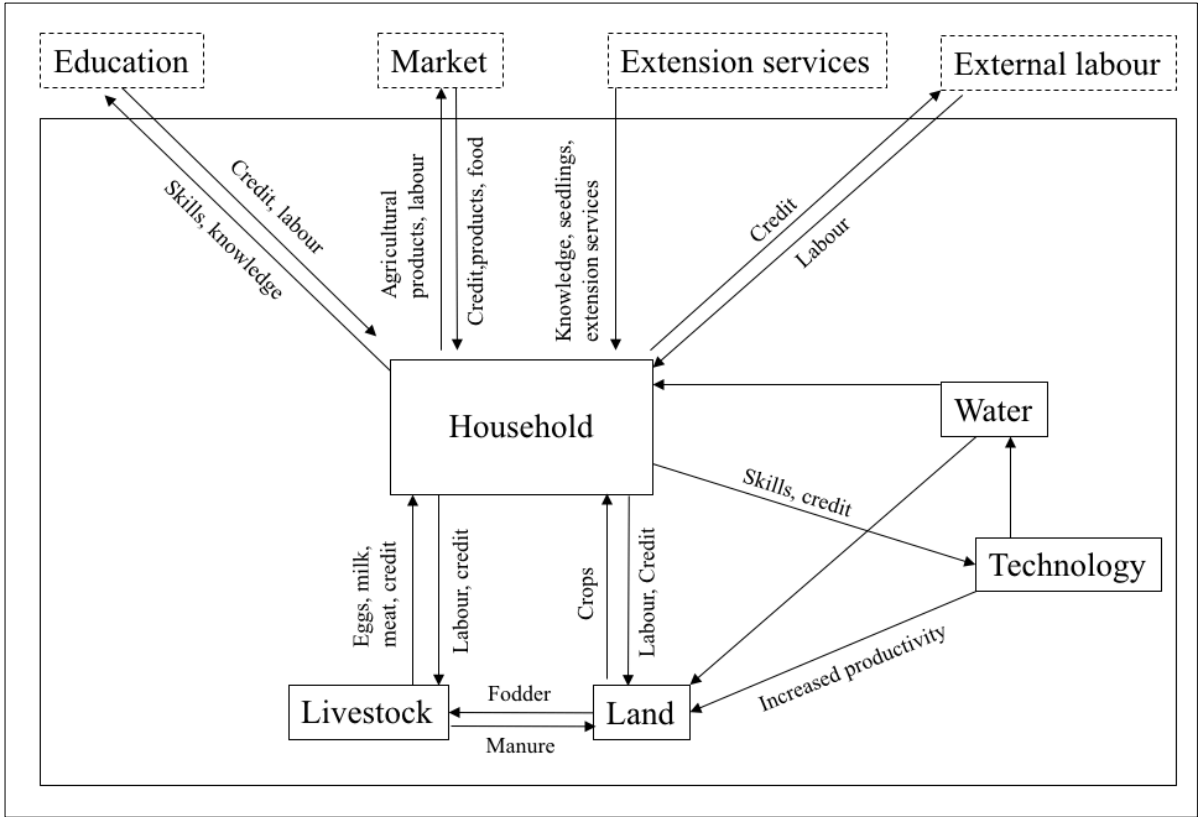

Figure 2: Farming system model of Essiam and Denkyira. Source: Field data, 2017.

Models are often used to visualise complex system is a simple way. However, when doing so, details are often lost. The following sections of this chapter will thus elaborate in writing the units visualised in Figure 2 and their interconnectedness in a more detailed manner.

5.3. The household unit

"The family is like the forest: if you are outside it is dense; if you are inside you see that each tree has its own position."

Akan proverb sited in Yaa Guyasi, *Homegoing* (2016:vi).

The family and the household are important institutions for agriculture, and the household is seen as the main production unit in the farming system in Essiam and Denkyira. Even though not all members of a farming household are involved in all of the farming activities, the household affects, and is affected by, the agricultural production. As mentioned, there are many ways of defining a household, but in this thesis, household is understood as a "group of people (both related and unrelated) sharing the same housekeeping and eating arrangements" (Nukunya, 1992:47). This definition is applied because it corresponds with the answers informants provided when asked if they could define their household. The household is seen as an arena for both cooperation and negotiation, and household members both share and have separate resources.

Picture 2: Farming household in Denkyira.

The households sampled for this study ranged from 1 to 19 members. On average, the household size was 5,8 persons. The relationship between the household members vary. Some households are constituted by parent(s) and children, some include other relatives or unrelated members. Out of the sample of total 56 households, 32 if the informants were female and 24 were male.

23 out of the 32 female informants were married, and only one out of the 32 women did not have children. 12 of the 32 female informants had previously been married but were now divorced or widowed and living alone with their children. 26 out of the 24 male informants were married, and here the same two males who were not married did not have children.

Several elements might influence a household's capacity to perform agricultural work. The number of members in a household have a clear impact on the labour capacity. The more members, the more hands available for work. During the most labour-intensive periods of the year, it is common that all household members are mobilised to participate in the farming activities. In addition, all household members are expected to be available to participate during weekends.

The household dynamics also affects agricultural production. Such dynamics is shaped by elements such as gender, age and position of the various household members. These factors shape both which activities that are performed and the amount of farm work that can be done by the different household members. As a result of gender norms in the area, men and women are aligned different duties and responsibilities in the household, which in turn can influence the household's agricultural potential. Seeing this in relation to the concept of the household cycle presented by Ingrid Rudie (1969/70), households that are able to mobilise and direct the available labour to fit to the resources and set premises for agricultural production within the household, have a greater potential for increased agricultural production. In the agricultural production in Essiam and Denkyira, children are important when it comes to carrying of produce in and out of the farms, as well as selling farming products in their spare time. When parents delegate these tasks to children, they have time to perform other tasks. A teacher in one of the schools in the area was worried about how farmers active involvement of children in the agricultural production was disrupting the children's education; "It is a problem for the children. Their parents want to take their children out of the school in certain periods of the year, because they need more hands on the farms. In the long run this is not good for them" (Male teacher, 24). However, by involving children households are able maximize their agricultural production according to its internal labour capacity.

Other factors like off-farm work and migration is also determining for the agricultural productivity. In total, 22 of 56 informants stated that farming was the household's only source of income, and several households had members (seasonally) moving to distant locations to

seek other employment. Both men and women participate in off-farm work, but when it comes to migration for work, men more commonly migrate, while women commonly stay, taking responsibility for the household and farm. According to one of the female farmers interviewed off-farm work was something she and her husband were interested in, but there were no jobs available for them to take. "If there were available work outside the farm, my husband would take that work and I would stay home and take care of the house and the farm. But the situation is not like that, there is no other job" (Female farmer, 48). Even though off-farm labour and migration can be important for the household's income, it can also make it more difficult to keep up the productivity level on the farms, as important human labour is 'lost'.

5.3.1. Division of tasks

In most households, farming is seen as an area of cooperation where various members have the responsibility for different tasks. One of the household members is usually considered the 'main farmer', but they depend on other family members to fulfil all the tasks on their farm. The gender of the main farmer varies from household to household, but in a household where both the husband and wife have farming as their main/only occupation, the husband usually takes on this role. In other cases, where the husband has off-farm work, he might still consider himself the main farmer, but in reality, the wife is doing most of the agricultural work and decisions; and hence she also has a greater overview of the farm. Such tensions would sometimes become apparent during interviews: such as in situations where one of the farmers were interviewed, and another household member 'took over' the interview, as he/she saw him/herself as the one mostly involved in farming activities (as mentioned in chapter 3.5.1).

Data produced through the household survey made clear that there are gendered patterns of work tasks within the farming system of the area. Some of the tasks in the farming system is done almost exclusively by either men or women, however, many tasks are performed both by men and women in cooperation. In the table presented below, the gender division of work tasks are presented. In the table, the values of responses are presented in number of informants performing a particular task. Percentages of number of these informants are presented in brackets. In the total column, the total number of informants performing a particular task are provided. The reason why the value is not 56 in all rows is because not all of the households perform all tasks. For instance, only 7 households reported that they were using irrigation facilities and manure on their fields.

Table 4: Gender division of work tasks within the sampled farming household (n=56).

Activity	Women	Men	Both	Total
Cooking	53 *(95)*	2 *(3)*	1 *(2)*	56 (100)
Processing	32 *(87)*	2 *(5)*	3 *(8)*	37 (100)
Cleaning	48 *(86)*	2 *(3)*	6 *(11)*	56 (100)
Marketing/sale on the market	45 *(85)*	3 *(5)*	5 *(10)*	53 (100)
Carrying	33 *(60)*	4 *(7)*	18 *(33)*	55 (100)
Childcare	25 *(47)*	4 *(8)*	24 *(45)*	53 (100)
Planting/sowing	20 *(37)*	9 *(16)*	26 *(47)*	55 (100)
Irrigating	2 *(29)*	4 *(57)*	1 *(14)*	7 (100)
Harvesting	8 *(14)*	19 *(35)*	28 *(51)*	55 (100)
Manure fields	1 *(14)*	5 *(72)*	1 *(14)*	7 (100)
Weeding	7 *(13)*	37 *(67)*	11 *(20)*	55 (100)
Clearing of land	5 *(9)*	39 *(74)*	9 *(17)*	53 (100)
Applying fertilizer	1 *(5)*	15 *(75)*	4 *(20)*	20 (100)

Source: Field data, 2017.

Note: Values are numbers of informants performing a particular task. Percentages in brackets. The table is organised after the women's highest to lowest participation in tasks. The total column reflects the number of households for which a particular question was relevant.

Looking at table 4, we identify a clear division of labour, as the tasks with a high percentage of female participation, have a low percentage of male participation, and *vice versa*. The tasks that are located on the middle of the table have a high percentage of shared participation.

Both men and women were consistent in their answers about men doing most of the "heavy" work that require physical strength. Men have the sole responsibility for clearing the land (cutting down trees and burning the fields), weeding the fields and harvesting heavy produce. These tasks are to a large extent performed pre-harvest, and they are reported to be the most 'essential' tasks for farming production. "You cannot grow food if the land is not cleared", one man said during a field conversation. The most common female tasks are processing, marketing and carrying of produce and firewood. This indicates that women play the leading role in the post-harvest work. Women are also involved in harvesting and planting, but generally in cooperation with men. According to the Chief of Denkyira, a perception amongst some of the residents in the area is that the role of women in the agricultural production is merely to 'assist' their husbands. The tasks that women perform are thus seen as 'less important'. However, as

he argued, the contributions of women must be seen as just as essential for the agricultural production as the tasks men perform, as farming is as an area of cooperation, where everyone is working together to reach a common goal. "The farm is for the families, not only for the man. Therefore, everyone works together", he said.

Picture 3: Gender division of tasks. Burning is an essential part of the process of clearing land, which is a 'male task'. Carrying of produce and firewood is a 'female task'.

In addition to the farming related tasks, cooking, cleaning and childcare are also tasks performed by women, as visualised in Table 4. As mentioned earlier, the gender of household members can have an impact on the household' potential for agricultural productivity. As women perform much of the 'invisible' reproductive and domestic activities within the household, the time available for farm work is limited. During the interviews, my interpreter felt that there was no need to ask questions about who perform the cooking in the household, because she said it was obvious that only women performed these tasks. As we continued to ask this question, the result showed that two out of the 56 informants responded that in their household men had the responsibility for cooking. Both of these household were constituted by unmarried men under the age of 30. When asked if they believed the situation would change if they got married and they both said it would; their wives would then perform the household duties.

After answering to questions about the division of work tasks within their household, all the informants were asked if there were any tasks men and women could not perform or were restricted from performing. No one answered that there were restrictions on certain work tasks, but 35 informants claimed there were tasks women could not perform, and seven said there were tasks men could not perform. In other words, there is a perception that there are more limitations in what work women can do, than what men can do.

The limitations on women's work tasks largely corresponded with the tasks that were considered the main male tasks in the farming system: clearing of land, burning of fields, weeding and harvesting of heavy produce. When asked why women could not perform these tasks, physical limitations, social norms, the nature of the work, lack of knowledge and danger was mentioned as reasons. The tasks that were considered to be unsuitable for men was planting of vegetables and the removal of small weeds after the main weeding, in addition to household duties. The only reasons why men could not perform these tasks, were social norms. One farmer said; "To plant garden eggs, pepper, tomato and plantain. That's women's work. We know how to do it, but it's their job" (Male farmer, 59). By stating this, the farmer implied men *could* do these tasks, but the nature of the work and the social norms connected to these tasks led them not to do it.

A young, divorced female farmer explained that the fact that she was a farmer was something that made her embarrassed and 'shamed' by the community. She felt like people expected her to 'do something else with her life', and by acting in contradiction to this expectation, she was being sanctioned. As a way of reducing the 'shaming', she explained that whenever she was going to her farm, she put on clothes that made it look like she was going to the market or into the city. When she came to her farm she changed into her work clothes. She said:

> *Many people tell me I should not do farming because of my age and gender. A man in my situation would never hear that. I have two children to take care of, but since farming is seen as a 'last way out' and a job for old men and women, I am told to do something else.*

(Female farmer, 33)

In sum, tradition, difference in physical abilities, knowledge and lack of experience were mentioned as reasons to why there are differences in the work performed by men and women in Essiam and Denkyira. However, cases where individuals disrupted the gendered pattern of work tasks and responsibilities and performed tasks that were seen as 'outside' their space of appropriate behaviour were also found. This indicate that there is a form of flexibility in the gender division of agricultural tasks. One female farmer stated that: "People say women cannot harvest the cocoa and palm fruit… But I do, so other women can also do it. It's hard, but possible" (Female farmer, 33). Another said: "Even men clap for me, because I'm more than a man! They say women cannot clear the fresh farm, but I do it. You have to work hard, but I

can" (Female farmer, 45). According to them, women have the ability to perform tasks that are seen as outside the female domain, but to do so, much effort need to be made. Another woman reported; "If you are a woman with experience you can do anything on your own. I used to weed at the school plot when I was younger. That was the punishment for coming late to school. I did not like it, but it gave me experience" (Female, 63). Because of previous experience, she was able to do weeding, and even though this task was considered outside her domain, she was the one performing it in her household.

5.3.2. Decision-making in farming households

Within a farming household, decisions about the used amount of productive inputs (land, labour, capital), the allocation of the outputs (how much to sell and consume) and the use of the profit/income (spend, invest, save) are continuously being made. Similar to the division of work tasks, decision-making in farming households is a gendered process where different members of the household negotiate with each other to achieve various outcomes.

When asked who took different decisions within the household, men would occasionally answer something like: "Oh that's easy: It's me, because I am the man of the house" (Male farmer, 59). However, when being asked more specific questions regarding agriculture and the household, it became apparent that the gendering of the decision-making processes was more variated than first indicated.

In the household questionnaire, ten questions regarded agricultural and household decisions was included. The informants were asked if the decisions were mainly made by men or women in the household, or if the decisions were shared between them. The responses are presented in tables 5 and 6. Here, the responses are divided into categories of single-headed and two headed households to emphasize how such decision-making processes are gendered. The reason why this is done, is because if put together, it looks like there are no clear gendered differences in the decision-making processes within a household. However, when separating the single-headed and two-headed household, the differences are more visible. As with the questions about division of tasks, not all questions were relevant for all households. For instance, only 25 households reported to make decisions about vegetable production, as only 25 households produced vegetables. The total column thus reflects the number of households for which a particular question was relevant.

67

Table 5: Gender division of decision-making within single-headed farming households.

Who decides:	Single-headed households (n=15)		
	Women	**Men**	**Total**
What vegetables/fruits to grow?	11	-	11
What the household eats?	13	2	15
What to do with produce? (sale or home consumption)	13	2	15
What food crops to grow?	13	2	15
When to harvest?	13	2	15
What cash crops to grow?	13	1	14
The rent/use of new machines/tools?	13	2	15
What to use household income for?	13	2	15
Hire of labourers	13	2	15
How much chemical fertilizer to use?	4	1	5

Source: Field data, 2017

Note: Values are the number of informants making various decisions. The tables are organised after highest to lowest participation of women in decision-making in two-headed households. The total column reflects the number of households for which a particular question was relevant.

Table 6: Gender division of decision-making within two-headed farming households.

Who decides:	Two-headed households (n=41)			
	Women	**Men**	**Both**	**Total**
What vegetables/fruits to grow?	14 *(56)*	6 *(24)*	5 *(20)*	25 (100)
What the household eats?	13 *(32)*	15 *(36)*	13 *(32)*	41 (100)
What to do with produce? (sale or home consumption)	10 *(24)*	13 *(32)*	18 *(44)*	41 (100)
What food crops to grow?	6 *(16)*	20 *(51)*	13 *(33)*	39 (100)
When to harvest?	6 *(15)*	23 *(58)*	11 *(27)*	40 (100)
What cash crops to grow?	6 *(17)*	21 *(58)*	9 *(25)*	36 (100)
The rent/use of new machines/tools?	5 *(13)*	31 *(79)*	3 *(8)*	39 (100)
What to use household income for?	3 *(7)*	13 *(32)*	25 *(61)*	41 (100)
Hire of labourers	3 *(7)*	30 *(75)*	7 *(18)*	40 (100)
How much chemical fertilizer to use?	2 *(11)*	13 *(68)*	4 *(21)*	19 (100)

Source: Field data, 2017

Note: Values are the number of informants making various decisions. Percentages in brackets. The tables are organised after highest to lowest participation of women in decision-making in two-headed households. The total column reflects the number of households for which a particular question was relevant.

Looking at table 6 there are clear patterns indicating that men hold a leading position in most of the decision-making processes in two-headed households. How much fertilizer to use and the rent/use of new machines and tools are decisions almost made exclusively by men. The same applies to the hire of labour. When asked why men were responsible for this, most informants claimed that men are better suited to negotiate over labour, due to gender norms. Some informants also reported that men had better knowledge of the use of fertilizer and which labourers were hard working, while women did not have time to go out and search for labourers, because they were busy with other tasks.

Women are found to only be in charge of decisions related to vegetable production. As seen, vegetable production is mainly performed by women, and this is probably the reason why this decision is taken by women. Women having the responsibility for cooking might also be a reason for this decision being largely female: since they administrate the growth of the ingredients needed for the cooking. However, women are not found to be the main decision-makers regarding decisions about food crops, which also is important in the household consumption. Thus, this explanation is perhaps not valid.

Even though there is a division between decisions made by men and women, the percentage of joined decision-making is also relatively high for many of the decisions. Some farmers reported that it was difficult to say who made the various decisions, because; "the one who go to the farm make the decision" (Female farmer, 42). This indicates that, just like division of tasks, decision-making is in some households' flexible processes. Farmers reported that they face minor challenges and difficulties that they have to find quick solutions to every day, but that decisions about how to cope with these difficulties are made continuously. Sometimes, they consult other members of the household, other times they make the decisions on their own. For instance, one female farmer said; "My kids come running asking for food and money all the time. I cannot always wait until my husband is there to decide if I give something to them or not" (Female farmer, 46).

The only two decisions that have a higher percentage of joint decision-making rather than individual decision-making are those related to the handling of produce and household income. What to do with household produce is by 44 percent of the informants reported to be a shared decision. The decision regarding what to sell and what to keep are reported to be balanced by three factors: the ability to sell the produce, the need for credit and the need for crops for

consumption. One female farmer said that during some periods of the year, the price for certain crops are so low that rather that spending time finding someone to sell the crops, she keeps the crops, and consume as much as possible within the household. The leftovers are given to other family members. Another farmer said that they sometimes have to sell crops for a lower profit than usual, because they are in need of cash. The evidence that women are almost exclusively responsible for marketing/trading should maybe have indicated that they held the sole responsibility for this decision. This is however not the case, as it is mainly shared.

61 percent of the informants' report that the decision regarding what to do with household income is made jointly. In the study area, it is common for both men and women in a household to participate in economic activities. It is also common that the income they provide to the household is kept separate. Some resources are pooled, like farming earnings in two-headed farming households. Other resources however, are often kept separate, such as the income women earn in small-scale trading activities. This seems to be influential in the decision-making processes regarding income. Some also said that there was some sort of negotiation around the use of income, but that men had the final say:

> *It is my husband who take decisions about what we use our money for. I have more control over the income that comes from the farming since I am the farmer. But no matter what, he has the final word.*
>
> (Female farmer, 45)

Obviously, when households are not consisting of more than one individual making decisions, the decisions are not shared or reflect a gendered pattern. However, four two-headed households in the sample also reported that only one member of the household makes decisions. In three of these households, men make all the decisions, but one household differed. This was the household of Adwoa, Kweku and their children. Adwoa and Kweku have a large farm (15 poles) where they produce mainly cocoa, but also other crops like cassava, plantain, oil palm, coconut and yam. They decided to invest fully in farming and cocoa production about 7 years ago, when Kweku retired from his job in the military. Adwoa have always been a farmer, but she used to combine agricultural activities with being a trader, selling provisions from her own container in town. When asked about decisions related to the farming production, she said;

I make all the decisions in our household now. I decided that we would go all in for the farming production, and I manage everything. My husband doesn't know anything about agriculture, so I have to teach him. If you were to ask him, he would tell you we make the decisions together, but that's not the reality.

According to Adwoa's statement, knowledge is the reason why she took all decisions regarding agricultural production and household duties. Her indication that, if he was asked, her husband would have given me other information about the decision-making process is something that should be kept in mind when analysing these findings. Decision-making is a difficult process both to measure and to observe. Through observation of farmers performing their everyday duties, I was able to get an impression of the division of tasks. However, processes of decision-making are not easy to observe. Therefore, as a way of strengthening the validity of these data, I asked follow-up questions to learn more about the reasoning for such divisions of decision-making in the various households.

The reasons for the gendered division of decisions are reported to be the same as the reasons explaining the gendered division of labour; tradition and norms, differences in abilities and knowledge and lack of experience. A plausible hypothesis would thus be that there is some correspondence between male and female participation in tasks and participation in decision making. Comparing the data presented in table 4 and 6 indicate that there is some correspondence between the gendered division of tasks and the gendered division of decisions. However, there seem to be a greater correspondence between male tasks and male decisions than female. For instance, applying fertilizer is mostly a task performed by men (75%), and decisions regarding the use of fertilizer is also to ta large extent made by men (68%). The same applies to use and decisions regarding technology; the tasks that demand use of technology or machines (weeding, applying fertilizer) and the decisions taken about use/rent of new tools/machines is dominated by men. Following this pattern, it would be plausible to believe that women, who hold the sole responsibility for cooking, also holds the authority for deciding what the household eat. Looking at the table, this is not the case. Even though 95 percent reported this as a female task, only 32 percent of the two-headed households reported that women made decisions regarding what to eat. In the remaining households it is a decision made by men (36 %) or by both men and women (32 %). Decisions regarding harvesting, which by 51 percent of the households are reported as a task performed in, is said to be a decision made by both men and women in merely 27 percent of the two-headed households. Thus, even though

women are highly involved participants in agricultural production and in domestic duties, their decision-making power are somehow less compared to men.

5.4. Land

Land is considered a basic resource for agricultural production, and the access you have to land largely influences your success as a farmer. According to Benjaminsen and Lund (2003), land an asset with cultural and spiritual value that provide a source of identity, income and employment. On average, farmers in Essiam and Denkyira have access to $6,8^2$ poles of land. When separating the data from the household survey into farmers in two-headed and single headed households, gender differences in the amount of accessed land is identified. The average amount of cultivated land is found to be 8,1 poles in two-headed houses (total 41), 3 poles in single-headed female houses (total 13) and 4,5 poles in single-headed male households (total 2). In most cases, farmers hold separate plots of land, and they produce a variety of crops on these different plots. It is not uncommon that the land is located far away from their homes, and hence traveling to the fields is both a time and cost-consuming activity.

Access to land largely depends on your family (kin) or your economic position. The land in the area is generally held under customary tenure by either the stool or families (*abusua*). The paramount chief *(Omanhene)* is the occupant of the stool and hence also the custodian of the land. Only two informants reported that they produce food on stool land. Production on family land is more common. This land in inherited matrilineally, through the maternal line. This does not, however, mean that only women have access to land through the *abusua*; it can also be transferred to men via the mother's line. The heir of family land is therefore any member of the family that is a descent of the maternal kin, and who becomes the heir depends on the leading family members and family head. As mentioned, these positions are traditionally not held by women.

If you do not have access to stool land, your family do not possess family land, or you are in need of more land than what you already have, there are other ways of acquiring land for agricultural production. In the study area getting access to land though the sharecropping agreements *abunu* and *abusa* is practiced to a great extent. 35 of the informants in the sample

---

[2] One pole = 30m². According to the local agriculture office this definition of a pole varies from location to location, but in this area, farmers operate with this number.

had acquired land through the *abusa*/*abunu* system. Many of the male farmers expressed that they were interested in having land that was not family land, because it is was possible for their children to inherit this land.

> *I have both family land and private land (rent land), but the family land. Well, my children cannot inherit it. My family control it and it will go back to them when I die. So, I put much more effort into the private land because that is my property and I control it. It's like my car or my house. I can give it to anybody*

(Male farmer, 37)

However, even though farmers consider the *abusa*/*abunu* system a good way of acquiring land, there are various opinions about the arrangements. The same farmer that expressed his wish and need for this land, also expressed his discomfort and frustration over the tenure agreement:

> *I don't like the system. It's very cheating. I use all my strength and money to make the land ready, and then the landowner come in and take the best part. But it doesn't matter, this is the only way I can get more land.*

(Male farmer, 37)

When getting access to land through the *abusa*/*abunu* system, you need to go into negotiations with a landowner. Before settling the agreement, the land is measured by labourers and/or elders in the community. This is done to prevent mistakes and conflict around the sharing. The negotiation process can be argued to be gendered: even though men and women have equal opportunities to participate in the negotiation process for land, men commonly perform the negotiation. Because of this, unmarried women reported that they prefer to send a male relative, like their brother or father, to assist them in the process of negotiation, instead of going themselves. One of the officers at the agricultural office said the negotiation process is not necessarily more difficult for women, but since it is the norm that men negotiate, it is believed that you will have better opportunities to succeed if you are a man.

Availability of land is generally not seen as a problem in the area, but famers find it difficult to access to new land because the cost of starting agricultural production on a new field is considered to be very high. You need resources to do the clearing, weeding and planting of crops, and in most cases, external labour need to be hired. In addition, if the land is acquired

73

through the *abusa/abunu* system, a 'start-up rent' can be demanded from the landowner. This rent depends on the size and quality of the land. One female farmer expressed: "I have many children, so I want to buy more land so that all of them can have a portion. But for now, the land is too expensive" (Female farmer, 59). Another farming household interviewed had recently acquired additional land through the *abusa* system:

A new farm means a lot of expenses. We needed to have more land to make sure we could feed all our children, but for the last two years this field have been our major agricultural expense. We have paid labourers to help us, the seedlings and we still pay a lot to get the farm up and running.

(Female farmer, 45)

5.5. Labour

Even though the household composition determines the households' internal labour capacity, most farmers in the area are dependent on hiring external labour, and this thus constitute an important farming resource. In most cases, hire of external labour is required because the farming activities exceeds the capacity of the farming household. Wage labour is hired temporarily, and commonly they are instructed to perform only one or two tasks on parts of the agricultural land belonging to the farmers.

Labourers in the area are either young people with no other occupation, or farmers who need an extra income. Both men and women are hired as labourers, but similar to the distribution of work tasks within the household, the tasks the labourers are hired for often differs according to their gender. According to the farmers, male labourers are hired for the clearing of land, weeding, harvesting, applying of fertilizer and planting, while female labourers are hired for carrying of water or agricultural products in addition to processing and planting of certain crops (maize, cassava). When asked why there is a gender difference in what tasks the labourers perform, most farmers use differences in physical abilities as explanations: "men are stronger than women and because of that, they have to do the hard, physical work. There is no work a woman can do that a man cannot do. That's why I only hire male labourers" (Male farmer, 40). However, when it comes to the aspect of carrying produce, the picture of the 'stronger sex' shifts, and as one of the farmers states; "Women are much stronger when it comes to carrying.

They can carry more and for a longer time than us men. That's why I hire women to do that work for me" (Male farmer, 37).

As with getting access to land, you need to enter negotiations when hiring labour. This process is gendered. Most wage labourers are men. As it seen as more 'appropriate' for men to go into negotiations with men, most men perform this negotiation. As seen, 30 out of 40 two-headed households reported that it was the man in the household who took decisions related to hired labour. This can be related to the finding that hiring of labour is performed by men. One female farmer explained that even though she is the one running the farm on an everyday basis, her husband, who works in another village, has the responsibility for finding workers; "I tell him when there is a need to hire labourers. He checks our money and if we have enough, he makes the arrangements. The next day someone come and work for me" (Female farmer, 34). As with negotiating for land, women in single-headed households reported that even though they can do the negotiation themselves, they prefer to mobilise male family members to do the negotiation for them. The MIS-officer at the agriculture office said there were practical reasons for this:

> *If you are a woman who go into negotiations, the labourers will trick you. They will collect the money for the work, but only do half of what is needed. This can happen if you are a man too, but its more common when a woman hires you. So, for sure it is a big difference in the behaviour of a labourer if they are hired by a man or a woman.*

The hiring of labourers gives the farmers opportunities to reduce the workload for the household members, and/or finish agricultural tasks in a more efficient way. Because of this, available credit for hiring labourers is a factor that has great influence on farm productivity. As one of the farmers stated: "You cannot do farming only with your own strength, you need capital as well" (Female farmer, 48). 42 of the 56 farmers listed labourers as their main agricultural expense, and when asked to mention one factor that would increase their productivity the answer was close to unanimous: "sika (money), in order to hire more labourers". This indicates that the need and wish for labourers are substantial among the farmers. Because finances are limited, labourers are hired temporarily. A general wish expressed by the farmers was arrangements where labourers would be hired for longer periods and for performing more tasks than one, as this would be beneficial in terms of trust and stability. One of the female farmer, Effia, explained how she had started hiring labourers from other villages and for longer periods

because this reduced the risk of her being exploited. By letting the employed labour stay in her house for the work period, sharing food with the other household members, her experience was that the labourers felt more obligated to perform the work 'properly'. Even though this arrangement led to additional expenses, as she had to pay for the transport and extra food for the hired labour, she saw it as beneficial; "In the end, I am the one facing the consequences of his work. If done properly, my benefits are bigger". However, such arrangements are not an option for all farmers in the area, due to limited available credit.

Picture 4: A female farmer making sure the hired labour is doing the pruning of her cocoa trees the way she wants.

The cost of hiring labour depends on the task. In general, male labourers are hired to perform tasks that are paid better than the tasks female labourers are hired for. Men are hired for more physical and long-lasting activities, while women are hired for short-term activities. In more recent times, increasing out-migration of young people – who previously outdid the largest share of the pool of labourers – has led to a labour shortage. This has subsequently led to increased expenses when hiring labourers, as the prices have risen.

In addition to hire of labourers, some farmers participate in a community cooperative practice called *Nnoboa,* where farmers collectively assist each other with different kinds of farm work. When collectively helping each other to clear farm lands, the group visits one farm at the time and clears the land here before moving on to the next farm. This continues until the land of all

the participating farmers has been cleared. In Essiam and Denkyira, the *nnoboa* institution is used exclusively by male farmers, and only for the initial clearing of the land (cutting trees, burning and weeding). Reasoning for women not participating in this scheme varied. Most of the women claimed it would be impossible for them to participate in the *nnoboa*, because the tasks that they help each other with is 'male tasks'. Since women cannot perform these tasks, they are expected to give something else in return if participating. As an example, one female explained: "When I asked my neighbour for help, he said he would help me if I slept with him" (Female farmer, 45).

5.6. Credit

The overall economic situation in Essiam and Denkyira is found to be poor. People struggle to cover their basic needs, and farmer lives by a 'hand to mouth' strategy. Most people are employed in agriculture because there are limited opportunities for other employment, and the amount of economic capital available for farming households is thus largely determined by their productivity and their income from agricultural activities. When talking to youth in the area, most of them reported that the lack of profit from agriculture rendered young people to consider farming as an unviable alternative for occupation.

> *I think farming is unattractive because we see that we don't get anything out of it. There is no money. When you look around in the rural areas, most farmers are poor. They plant alright, and they harvest their produce, but they don't get much money. So that does not compel the other young guys to involve themselves".*
>
> (Male teacher, 20)

To be able to make a living out of farming activities, credit is needed. In the study area, the main agricultural expenses are hiring of labourers, investment in seeds, chemical fertilizers, livestock and transport in and out of farms. One informant said; "I spend money on everything. Food, education, labourers, transport. If I had more money, I could have increased the farm and earned more money*" (Female farmer, 46). In addition, having available credit is considered important in case of emergencies. One farmer told me that she had faced severe challenges when she experienced total crop failure. Because of the limited income from the production, she was not able to save money, and when she experienced crop failure, she "felt like everything fell apart". According to an officer at the agricultural office, farmers' difficulties with saving

credit poses a great challenge to their livelihoods, as credit is necessary for maintaining agricultural productivity.

Farmers in the area get credit from sale of agricultural products, income from off-farm labour or loans. Most of the farmers interviewed reported that they struggled to get loans from the banks, and thus a common practice is to borrow money from friends and relatives. Those who produce cash crops reported that in the harvest season, much of the income generated had to be used to pay back the loans they had to take during the labour intensive rainy season. Having a job outside farming is therefore seen as beneficial, not only because it provides an additional source of income, but also because banks are only willing to give out loans to those who have occupations outside farming.

> *Everything is money here. I am very lucky because I have a job as a teacher and I earn much more from that than farming. (...) I can even get a loan because of that job! A normal cocoa farmer would never get that.*
>
> (Male farmer, 59)

As Huyer (2016) argue, women tend to have less access to productive resources such as credit, compared to men. In the study area, women are employed in additional occupations that traditionally provide less income than the occupations men hold. Even though my field data does not include direct numbers showing the difference between male and female earnings, it was indicated by several informants that there are differences in the income from male and female dominated occupations. Also, as elaborated on earlier, within agriculture, female labourers are paid less than male labourers, because the work they perform are seen as less skill-demanding and physical. This adds to the high expenses caused by need for external labour, and thus put women in a position where they have less available credit than men.

5.6.1. Fertilizer and weedicide

According to Turner and Brush (1987), farming systems should be viewed as goal-driven systems where technology (ideas, behaviour and/or objects), facilitates production to achieve the systems goal. Adoption of fertilizers and other technology are considered crucial mechanisms for maintaining and increasing productivity (FAO, 2011).

The farming system in Essiam and Denkyira is largely based on tradition, and most of the farmers reported that they saw it as important to follow the work of their ancestors: "Our ancestors were farmers and we have observed them and followed their work" (Female, 45).

Picture 5: Farmer with a spraying machine on his back. This machine is used to spray weedicide on cocoa plants.

Farmers indicate that they are, to a large extent, willing and interested in employing new technology like fertilizers and weedicide in the production, and according to the agricultural office, farmers are encouraged to participate in trainings and workshops demonstrating new technology and means of production. However, due to high costs, the use of technology like fertilizers and mechanical equipment continue to be limited in the area. Only 20 of the informants in the study reported that they had used or used fertilizer. Many of these informants said that they used it only in times when they had money, and thus not continuously.

5.6.2. Livestock

The two most common livestock in Essiam and Denkyira are goats and poultry, but sheep and pigs are also found in some households. Livestock constitute a farming resource that can serve different purposes in the agricultural production. In the area, livestock is mainly kept for two reasons; religious purposes (livestock slaughtered for celebrations or events) and emergency. "If something happens, livestock is my back-up. Last year I did not have money for my daughter's school fees, and then I sold a goat and some poultry to get the means to pay" (Female farmer, 45). As such, holding livestock is both something farmers spend and earn credit from.

Even though livestock constitute a source for providing farmers with manure, this is rarely a reason for keeping animals in the study area. Only one farmer mentioned that she used animal manure on her fields. Another farmer said he wanted to use animal manure, but that he struggled finding systems for collecting and transporting the manure to the fields. As the common practice in the area is to let your livestock walk freely around, they do not leave the manure in one place.

This hampers the collection of manure. As an attempted solution, the farmer moved his animals to his fields. However, since his land is located far away from his household, he was not able to supervise the livestock, and as a result they were all stolen.

5.7. Other units

5.7.1. Water

The natural environment has great influence on what agricultural production dominates a farming system. The agricultural production in Essiam and Denkyira is rain-fed and dependant on a rainy season with sufficient amount of rainfall. Irrigation facilities are scarce, and few farmers have water sources close to their farmland. Due to this, most crops are planted before or during the rainy season to make sure they do not dry out in the early phases of their growth period.

Seven farmers interviewed have used, or use, irrigation on their crops. Out of these seven, only two farmers said they irrigated on a regular basis. The reason these farmers irrigated was that their fields were located close to a water source, and therefore it was easy for them to fetch water and bring it to their crops. These farmers had further adapted their production to this, and instead of producing crops that can survive without large quantities of water, they had started to farm vegetables, which grow better when being irrigated. Other farmers said they did irrigate when it was absolutely needed, and that the need varied from season to season: "Some years ago there was no rain and a lot of sun. Then I fetched water and put in on my plantain to make sure it survived" (Male, 42).

In addition to constituting a crucial element in the farming system, water is a necessity for cleaning and cooking. Very few of the households had pipe born water integrated in their house, which means fetching of water is a task that is negotiated between the household members. In most cases, the responsibility for fetching water is put on the young boys in the household.

5.7.2. Crops

55 out of the 56 interviewed farmers in Essiam and Denkyira stated that they performed some sort of crop production on their farms. The average number of crops grown is 6,8. Separating the data into two-headed and single-headed households, its identified that the average number

of crops grown is 7,1 in two-headed household (total 41), 6,6 in single-headed female households (total 13) and 2 in single headed male household (total 2). Since the farming system is largely dependent on the rainfall, which varies from one year to another, many farmers have adapted a high level of crop diversity to protect themselves from crop failure. The most common crops in the area are cassava (96%), plantain (80%), maize (78%), cocoa (69%), oil palm (65%), pepper (51%) and cocoyam (45%) (numbers in brackets represent the percentage of informants who reported producing these crops).

Out of the 56 informants, three farmers only produce for sale, and one farmer produces only for home consumption. The rest of the farmers produce both for sale and home consumption. This indicate that most farmers pursue a production strategy where they produce for the market, while at the same time ensuring that the household have access to food; either from the farm harvest or by the use of cash to purchase food from the market.

The only crop that is produced exclusively for sale, is cocoa. Cocoa is seen as a very profitable crop, as you get 450 Ghanaian cedis[3] (GHS) for a bag of cocoa (67 kg). However, and many farmers reported that there was a struggle to establish and maintain a cocoa farm. The costs are high, and the production is labour-intensive. First, labour is needed to prepare the land for planting in addition to plant, prune and spray the plants several times before the production of beans start. After the cocoa bean is ripe and harvested, the farmer need to ferment the beans for about a week before the beans are dried in the sun for more or less ten days. Subsequently, the beans are packed in bags and delivered to licenced buying points. Thus, even though the crop is profitable, the credit and labour inputs needed for the production are high. Because there has been a large commitment from the government to increase the production of cocoa in Ghana, the local agricultural office gives out free seedlings to all farmers that want to start cocoa production in the area. They also offer extension services like help with weeding and spraying. The farmers reported that the help from the agriculture office was beneficial, but not sufficient to guarantee a stabile production.

---

[3] 100 Ghanaian cedis (GHS) = 177 Norwegian Kroners (NOK) = 22,1 U.S. Dollars (USD)
[Exchange rate of May 15th, 2018]

Picture 6: Female farmers digging for cassava (left) and carrying cassava and firewood back from farm (right). Cassava is the most common crop among farmers in the area, grown by 96 % of all the informants in this study.

Two common farming strategies in this area is *mixed cropping* and *intercropping*. Mixed cropping, which is also known as co-cultivation, involves planting two or more crops simultaneously in the same field. The main purpose with this cropping technique is to minimise the risk of crop failure by letting the two crops assist each other in the growth period. In this area, maize and cassava are often planted together, and vegetables like pepper are often planted in the outskirts of various fields. Intercropping also involves planting two or more crops on the same field, but this is done more systematically than with mixed cropping. In this case, one of the crops is prioritised over the other, and by placing the crops in a specified pattern, the aim is to increase the productivity of the main crop. A form of intercropping that is heavily practised in this area is plantain and cocoa in the cocoa fields. The farmer plants cocoa in rows with one-meter distance from each other, and between the cocoa seeds, plantain is planted with one-meter distance from each other. When the cocoa begins to sprout, the plantain is there to provide the necessary shade the cocoa plant need in the first growth years. When the cocoa plant has become so big that it can sustain without shade from other crops, the plantain trees are cut down and the intercropping stops.

Much agricultural literature state that men and women have different motivations and objectives for farming, and therefore grow different crops (Carr, 2008). This difference is assumed to be caused by a stereotype of men naturally being economically oriented and thus choose to produce cash crops, while women are naturally more concerned with providing food for the household and thus grow food/subsistence crops (Doss, 2001:2077). In Essiam and Denkyira there are no crops that are exclusively produced by men or women, but there are

indications of a gendered variety in the crop production. In additon, men and women in two-headed households tend to hold the sole responsibility for different crops; while men are in charge of the cash crops production, women control the production of vegetables.

One of the informants partly confirmed the idea about gendered differences in the motivations for cropping when she talked about her and her husband's motivations for farming.

> *When a man decides he wants to produce cocoa or oil palm, that's all what's in his head. I have to think about what we need for food, what my family will eat. He thinks about money, I think about what we eat.*
>
> (Female farmer, 34)

However, this does not necessarily indicate that gendered differences in cropping are merely caused by different motivations 'naturally' occurring for men and women. It can also be seen as a result of the local gender ideology and gender roles. Whilst providing the household with income is a shared process for both men and women, it is women's responsibility to cook for and to feed the family. Hence, their motivation will also be directed towards that goal. Another aspect, which might influence choice of crops, is the fact that the production of cash crops as cocoa and oil palm are time, cost and labour demanding. As women hold larger domestic responsibility, have less available finances and are in bigger need of hire of labour than men due to their limitations in performing all agricultural tasks, their starting base for being able to succeed in such a production is less than those of men.

5.7.3. Processed products

In addition to producing crops and other raw materials and selling them on the market, an important source of food supply and economic income for farmers in the area is the processing of agricultural produce into a variety of processed products. The most common processed products in the area are palm oil derived from the oil palm fruit and *gari* made of cassava, but other products as palm kernel oil, *kenkey*, coconut oil and cassava-dough are also mentioned. In total, 31 households in the sample reported that they produced palm oil; seven out of these produced only for sale, four produced only for home consumption and 20 produced it for both sale and home consumption. Palm oil constitute an important ingredient in many traditional and common dishes in the area. Gari is produced by 17 of the households in the sample; two

households producing only for sale, six only for home consumption and nine producing for a combination of sale and consumption.

As with other tasks related to agricultural production, processing is a gendered activity that largely is performed by women in Essiam and Denkyira. Out of the 37 households that reported a production of processed agricultural products, only two informants said men had the main responsibility of processing, and only three informants said the task was a shared responsibility between men and women.

5.8. External factors

5.8.1. Market

In addition to producing food for their households, farmers are economic agents that allocate resources in response to the market to maximise profit (Turner and Brush, 1987:34). Farmers either sell their produce directly on the market, or they sell their produce through a trader that re-distribute the produce on the market. Being responsible for selling your own produce in the market is seen as an unattractive activity among the farmers in the sample, as buyers are not willing to pay the same price for the produce when you sell your own products. In addition, trading is seen as a time-consuming activity that occupies time that could have been used for other tasks, either in the fields or in the household. Because of this, most of the informants reported that they preferred to sell their produce through a trader. However, if they were not able to do this or some members of the family had spare time, selling produce at the market was a task various women or children performed. It was also common that children, both girls and boys, participate in informal trading outside the market place.

Markets are seen as 'female arenas' in Essiam and Denkyira, as most of the traders here are women. In a small market survey conducted at the Essiam Market, all of the crop traders were identified as being women. Only three out of 26 traders had produced the crops they were selling themselves.

It has to be noted that even though it is not common for farmers to be traders of their own produce in the local markets, trading of other forms of goods serves as the main additional occupation for female farmers in the study area. In total 25 of the household included in the

sample reported that women in the household held occupations as traders in addition to being farmers, trading everything from fish, second hand clothes, provisions and sanitation products. Trading thus served as an important activity that provide women with additional cash income.

5.8.2. Extension services

Extension services encompass the wide range of services that are designed to improve the productivity and overall well-being for rural populations (FAO, 2011:32). In the study area, these services are mainly provided by the agricultural office, which is located in Ajumako, Essiam's neighbouring village. The objective of the agricultural office is to act like an 'extended arm' of the government, providing farmers with information, technology and participatory programs implemented by the government at the local level. At the agricultural office in Ajumako there are five district agricultural officers who all have their own responsibility: The Management Information System officer, the Women in Agricultural Development officer, the Crop officer, the Livestock officer and the Extensions officer. In addition, Agricultural Extension Agents (or field officers) are working in different 'operational areas'. Both Essiam and Denkyira are operational areas with field officers.

The agriculture office offers various services related to agricultural production. They arrange information meetings, trainings and workshops, in addition to offer counselling for individual farmers. From the agricultural office you can get free cocoa seedlings and help with spraying of weedicide on the cocoa fields. In addition, the agricultural office is responsible for giving out various award related to farming (best farmer, best cocoa producer, best female farmer etc.). One of the most prominent farmers included in the sample said that contact with the agricultural office was a key determinant for success:

> *To really succeed in agriculture, you should take advice from the agricultural office. They supply fertilizers to the farmers, and they generally advise us on how to run and maintain our farms.*
>
> (Male farmer, 54)

In general, the farmers who mentioned that they used the services of the agricultural office were farmers with specialised (mainly cash crops), large-scale (compared to other farms in this locality) production. Many of these had been given awards for their production sometime

during the last 10 years. However, not all farmers were as pleased with the services of the agricultural office. Many were even oblivious of their existence. Researchers have pointed out that extension services often fail to reach female farmers (Lastarria-Cornhiel et al., 2014). Indeed, few of the female farmers included in the sample were aware of the agricultural office and the services they provided.

Gender issues related to farming in Essiam and Denkyira are addressed by the agricultural office through the Women in Agricultural Development (WIAD) officer. According to him, the primary task for the agriculture office regarding gender issues, is to focus on questions of domestic and reproductive tasks. Through trainings and information meetings, information about family planning, health, sanitation, waste disposal and nutrition are distributed; "In these meetings, we discuss anything that is concerning the home and the maintenance of the household" (WIAD-officer).

5.8.3. Farming associations

A general frustration expressed by the employees at the agriculture office was people's lack of interest in being involved in the local farming associations and community groups related to farming. When asking informants about participation in these groups, their answers were fairly similar to with this statement; "Some farmers groups exist, but we don't participate in them. They don't help us anyway" (Female farmer, 46). As both male and female farmers are faced with limited available time, 'getting something in return' is presented as a requirement for community participation. If you are to invest time and resources in associations or groups, you also need to be assured that you are benefiting from it. According to the informants, this is not the case with local farming associations in the area.

5.8.4. Education

Throughout history, girls and women's access to educational opportunities have been restricted because of beliefs that their social roles and responsibilities are limited to bearing and caring for children and other reproductive activities that demand little, or no education (Opare, 2005:90). However, this seems to be changing, and all informants in the sample explained that they sent all of their children to school. One of the teachers at a private primary and secondary school in the area explained that they experienced a gendered pattern in the duration of

children's school attendance. Even though it is expected that girls and boys both attend school, as this is seen as important for bettering their future, his experience was that girls were taken out of school earlier than boys: "I believe there is a fear among parents that their daughters fall pregnant before marriage. Or a fear that their daughters will be too educated and therefore not get married", he said.

Sending family members to school was considered a big expense for farming households, but nonetheless a huge priority. When asked to rank various household's expenses (food, school fees, transport, rent, electricity and agricultural inputs) 23 of 56 farmers ranked school fees as their biggest household expenditure. A female farmer explained that the reason for working hard on her farm was to be able to send all of her children to school, so they did not have to grow up to be farmers:

> *How can I let my children become farmers? No! I will make sure they stay in school, so they can get some other work. Therefore, I am forcing myself to do the farm work well. I don't want them to become farmers, but maybe they can become government workers. Then they will be free.*
>
> (Female farmer, 46)

Only 8 out of the 56 farmers in the sample reported having an agricultural education. A common perception was that such agricultural education was excessive: "I learned everything I need to know to do farming from walking together with my parents to the farm when I was a kid", a female farmer said during a field conversation. This substantiate the argument that farming in the area is based on tradition. However, the farmers who reported that they had an agricultural education argued that this education had given them new knowledge and skills that they actively used to make their production easier or more profitable. In general, these farmers had specified their production down to one or two crops and focused on cash crops with high earnings.

CHAPTER 6: DISCUSSION

In the previous chapter, the empirical findings related to the farming system, which constitute the basis for a discussion, have been put forward. Seeing the local gender ideology in relation to the farming system approach, the study has investigated the gendered nature of the farming system of Essiam and Denkyira, in terms of tasks, decision-making, resource access and production strategies. It has been identified that both cash crops like cocoa and oil palm and subsistence crops like cassava, maize and plantain is produced both for sale and home consumption in the farming system. Production strategies like mixed and inter cropping is often applied, meaning cash crops and food crops are grown together. Looking at Dixon et al. (2001) classifications of farming systems in sub-Saharan Africa, the farming system of Essiam and Denkyira could therefore be seen as falling under the category 'Tree Crop Farming System".

This aim of this chapter is to discuss the empirical findings of the study in light of the theories presented in chapter two. This chapter will identify various gender barriers that women face in the farming system and discuss how these barriers affect female farmers' access to, and utilization of, various resources essential for agricultural production. In addition, the possible strategies that women use to overcome the barriers will be elaborated on.

6.1. The gendering of the farming system

This study identifies the farming household as the main arena for the performance of agricultural tasks and decision-making regarding the agricultural production. Each household, depending on the household personnel, have various strategies and aims when being involved in agricultural activities. As such, the findings support feminist scholars' arguments about households being diverse entities consisting of different people with competing goals. The study also identifies that farmers involved in agriculture in Essiam and Denkyira are not a homogenous group. Their gender and age differ, and there is great variety in what households they belong to, what tasks they do and what crops they produce. Some are occupied only as farmers, other have additional occupations. This demonstrates how not only the composition of the household, but also the intersecting identities of farmers can shape their involvement in agricultural production. As every household and farmer represents individual and different experiences, the process of analysing the gender division of tasks and decision-making was not

easy. However, the study identified some main characteristics, which will be discussed in the following section.

6.1.1. Gender division of agricultural tasks

One of the key findings of this study is the identification of a gender division of labour of agricultural tasks in the farming system. The study identifies that the gender division of labour results from differences in physical abilities and socially constructed norms and ideas about appropriate and inappropriate work for men and women; men hold the leading position in pre-harvest tasks (clearing of land, weeding), and women dominate post-harvest (carrying, processing, marketing).

The socially constructed norms about appropriate 'male' and 'female' tasks in agriculture are related to, and can be seen as a reflection of, other culturally accepted norms and ideas about gendered behaviour in society. This corresponds with findings from other studies with the same focus (see for example Bergstedt, 2012). Men are perceived as physically strong individuals that are able to participate in 'manly', physical tasks. They hold the positions of authority in various social spheres, due to patriarchal structures that justify male domination. As many of the tasks related to agricultural production are physically demanding, partly due to the limited use of machines, farming constitute an 'appropriate' occupation for men. Women are seen as physically weaker and more 'tender' compared to men, and hence they are seen as less suited to perform physically demanding agricultural tasks. They play out their most important role as mothers; which constitute a major gender ideal in Ghana (Clark, 1999). Due to this role, women are expected to perform all household duties. In addition, they are motivated and expected to participate in economic activities like farming or trading, as economic obligations are seen as a central aspect of motherhood (ibid.). This corresponds with Clark (1999) concept of 'the working mother ideal'. This 'double burden' of household responsibility and economic obligations leads to time constrains, which again limits their ability to participate in farming activities. Men, on the other hand, are able to direct all their attention to the farm work, as the main expectation held towards them is to provide the household with income. This produce and reproduce local gender norms of men being the main farmers, whilst women should assist them by participating in agriculture tasks that are seen as suitable and possible for them to perform. This supports the arguments of Duncan (1997), who argue that women, according to Ghanaian tradition, are responsible for assisting their husbands in agricultural work, and as a consequence tend to abandon their fields or cultivate smaller plots.

Even though there are cases where men and women perform tasks that are seen outside their gendered domain, this is not found to be a common practice. On the basis of this, gender is found to act as a differentiating and organising principle in the farming system of Essiam and Denkyira, shaping the roles and responsibilities of men and women with regards to agricultural tasks. Using the concepts of Lorber (1994) gender as a *stratification* and *structure* create a distinction where men and women are aligned to responsibilities that are seen as holding unequal value in the farming system. This further re-produce the unequal evaluation of genders and the ideas and norms about gender differences.

6.1.2. Gender division of decision making

According to Doss (2001:2085), the process of decision-making is determined and affected by the household structure, the power relations and the preferences of the individuals in the household. It is also a process shaped not only by the intra-household structures, but social norms and institutions that exist outside the household. The study shows that farmers have different opportunities and power to influence decision-making in farming households in the study area. In single-headed households, the process of decision-making is simple, as there is only one person in charge. In two-headed households however, the situation is more complex, and it is identified that most decisions are made either by the husband or by the husband and wife together. Decisions made solely by the wife are less common and generally does not comprise important decisions about strategic moves for the agricultural practice of the household.

The differences in decision-making is reported to depend on the household composition and the gender, education/knowledge and income of the household members. While the gender division of agricultural tasks is seen as a reflection of both physical differences and social norms, the division of decision-making can be seen as solely based on socially constructed norms about whom in the household that are seen as most 'suited' to make decisions. In most cases, due to their leading position in the performance of agricultural tasks, men are seen as most suited. The study identifies that there is a certain correspondence between the agricultural tasks and decisions regarding these tasks, but that men in general tend to be the main decision-maker of most agricultural decisions.

91

However, the role women have as mothers in the study area, shape the household dynamics and influence decision-making processes. As the empirical data of this study show, women have power to influence decisions regarding household consumption; what vegetables they grow, what food crops they grow and what the household eats. This can be seen as related to their responsibilities for the household duties. In addition, women tend to have the power to influence decisions regarding what to do with household income, as this decision is most commonly shared between men and women. Through the participation in economic activities, women earn an income, and as this income most commonly is kept separate from other income in the household, they gain a form of autonomy that give them power to influence decisions regarding household expenditures.

Participation in decision-making is an important aspect of empowernemt. As Alkire et al., (2013 in Akter et al., 2017:271) argue, empowerment in agriculture is generally defined as a person's ability to make decisions on matters related to agriculture as well as the persons access to the material and social resources needed to carry out these decisions. This indicates that women's abilities to participate in decision-making can be affected by the access they have to various resources in agriculture. The following section will therefore discuss this, in light of the discussion of gender division of task and decision-making.

6.2. Negotiation for resources: the gendered variations in access to capitals

When investigating the human sub-system of a farming system, the focus is put on farming households' mobilisation and accessing of the productive resources land, labour and capital (Turner and Brush, 1987:14). As several researchers have indicated, the process of getting access to these productive resources is greatly influenced by an individual's abilities to negotiate through the existing social institutions in the farming system (see for example Berry, 1989; Leach et al., 1999; Scoones, 1998). A key finding of this study is that negotiation processes with regards to resource access, especially in terms of land and labour, is governed by men. This can be explained as a result of the societal patriarchal structures that give men the authority to occupy positions of power. This correspond with Sens argument about bargaining power being skewed in favour of those with greatest power in society (1990, in Awanyo, 2001:103). As processes of negotiation is seen as a part of the male domain, such processes constitute gender barriers for female farmers in the access to productive resources or capitals.

To be able to overcome such barriers, women have to find legitimate ways to access these resources within the confines of the local gender ideology.

Using the concepts of capitals derived from the Sustainable Livelihood Approach (SLA), the following discussion will concentrate on the gender barriers female farmers face in access to *human capital* (labour), *natural capital* (land) and *economic capital* (credit and technology) within the farming system of Essiam and Denkyira. A focus will be put on the differences in male and female farmers ability to utilize and take advantage of various forms of *social capital* (social networks and relationships with others) in order to access the productive resources.

6.2.1. Accessing land

According to Doss et al. (2018) several myths about gender inequalities in agriculture exist, many of these related to women's limited access to land. For instance, it is often claimed that women own only 1 % of the land in the world (ibid.:1). Many of these myths are false. However, even though the gender differences not always are as extreme as indicated, several scholars have showed that there are differences in land access, and that women hold substantial less amounts of land compared to men (see for example Duncan, 1997; Quisumbing et al., 2001; Doss, 2001; Morrison et al., 2007)

Land tenure systems in Ghana are shaped by local rules and norms, and there is therefore no uniform model of land tenure that can be applied to the country as a whole. The ways in which people in Ghana are able to access land is rather contextually determined and shaped by the institutions and norms present in the existing location. In Essiam and Denkyira, customary land laws and the matrilineal kinship system are the two main institutions that regulate access of land. Findings of this study show that land is accessed through three main avenues in the study area; the *abusua*, the stool and sharecropping agreements. In general, there is little competition for land, as much land is available and uncultivated. This is explained to be due to the labour intensity of the agricultural production. As the production is labour intensive, the amount of land accessed by farmers is regulated by how much land they are able to cultivate with the existing amount of human and economic capital they possess.

Both men and women access land though the three avenues presented above. Hence, there are no notable gender differences in the formal rights to land access. Such gender equality is not

the reality of all customary land tenure systems. In a study from Malawi, Bhaumik et al. (2016) found that men and women in matrilineal societies owned approximately the same amounts of land. However, in patrilineal societies, men owned considerable more land than women. These differences were explained by looking at the ways women acquired land through the different kinship systems. In matrilineal societies *de facto* control rights were given to women through their lineage. In patrilineal societies, women gained usufruct rights only through their husbands. Further, in the case of divorce or widowhood, women in matrilineal societies maintained the rights to their land, while women in patrilineal societies lost their user rights (Green and Baden, 1994 in Bhaumik et al., 2016:243). Women in matrilineal societies thus had better opportunities to access land, in addition to stronger land rights compared to women in patrilineal societies. As the matrilineal system in Ghana is similar to the system in Malawi, it can be argued that the matrilineal kinship system of Essiam and Denkyira act as a gendered institution that provides women with opportunities to access land independently, and hence this institution contributes to the equality of the land tenure system.

As Hodgson (2006) notes, institutions are systems of established and embedded rules that structure social interaction. As both men and women have the same rights to access land through the formal and customary laws that together make up the land tenure institution of Essiam and Denkyira, the institution can be considered gender equal. However, we find gender differences in the *governing* of the system, as men are in charge of the social interactions and negotiations processes that control the access rights of land. For instance, with regards to family land, is the family head has the final say in whom becomes the heir of the land. The position as family head is in most cases held by men (Brydon, 1996 in Lambrecht, 2016:195). Further, the Chief acts as the custodian governing stool land, and as identified, being the chief is exclusively for men. Finally, sharecropping agreements and the negotiations regarding these agreements are governed by men; the landowners who lease out the land are men (family heads) and the individuals who measure the land and witness the agreements are men (male labourers or elders in the traditional council). The land tenure system can therefore be argued to represent a *gender duality discourse* (see Overå, 1998), where women have the opportunity to access land, but their access rights are controlled and governed by men.

This indicates that, with regards to land, women depend on *social capital* in the form of relationships to men in governing positions or to men who can assist them in negotiation processes. The study identifies that women who are not married sometimes mobilise male

94

members of their matrilineage to perform negotiation processes for them, and this is seen as appropriate behaviour according to the local gender ideology. Their positions are seen as 'lower' than those of men, and they therefore risk reaching poorer conditions through the negotiations than a what man could obtain. In a study on male-dominated fisheries in Moree, Ghana, Overå (2005) found that the relationship to male partners, either through marriage or kinship, appeared to be women's keys to participate in the sector. In this area, women were traditionally responsible for the marketing of the fish. However, through these relationships, women were able to become canoe owners by having male relatives (sons) as captains on the canoes. In addition, she found that actors that she calls *brokers* (derived from Barth, 1963 in Overå, 2005:144), were important for their access to external resources. By providing a link between the women and foreign trawlers, these brokers provided female canoe owners with the opportunity to purchase by-catch from trawlers as an additional source of fish supply for their fish smoking business. This further contributed to female success as canoe owners. Even though the context of negotiation for agricultural resources in the farming system of Essiam and Denkyira is quite different from that of the fishery sector in Moree, there are similarities between the situations. When men assist women in negotiation processes, they act in the same ways that the brokers did in Overå's study; providing women with a greater opportunity to access resources even though it is through a male dominated sphere. When female farmers are able to utilize social relationships to male brokers, such as husbands or male relatives, for their benefit, they can in this case have greater opportunities to access natural capital like land. Female farmers who do not have access to such relations are disadvantaged in terms of *social manoeuvring* (see Overå, 2003; Boamah and Overå, 2016); even if having access rights, their opportunities are limited due to their lack of male brokers.

As land is abundant in the area, the competition is small. This can be one explanation to why the land tenure system does not express gender differences in the formal land rights various individuals have. However, as there are gender differences in the governing of the system, it is plausible to assume that if the competition for land were greater, gender inequalities with regards to land rights would be more visible. If so, this would share similarities to the situation Goldstein and Udry (2008) observed in Awapim in Eastern Region, where the land of women were found to have a greater chance of being expropriated (in other words lost), because women held lower positions in the political and social networks. Regarding access, the study however identifies a gender inequality with regards to land as women in single-headed households tend to cultivate smaller landholdings than men. This corresponds with previous studies, which

indicate that even though women have access rights to land, they control smaller parcels (Duncan, 1997; Quisumbing et al., 2001; Doss, 2001). This can be caused by a situation where the women in single-headed households does not have relationships to male partners that they are able to utilize for assisting them in the negotiation process for land. However, the amount of land that women control might also be regulated by the amount of labour that women are able to mobilise.

6.2.2. Mobilising labour

As the gender division of labour illustrate, there are many tasks in the farming system that women are not able to perform due to physical abilities and norms about appropriate behaviour. In addition, women face time constraints because of their various livelihood activities and childcare responsibilities. This time burden is addressed by various scholars (see for example Quisumbing and Pandolfelli, 2010; Blackden and Wodon, 2006; Morrison et al., 2007). Due to this, tasks that women are not able to perform constitute gendered barriers that women need to find strategies to overcome. While men hold human capital that make them able to perform all tasks on their own, women depend on mobilising labour that can assist them in the performance of the agricultural tasks that are seen as outside their domain. This form of labour can either be mobilised through social relations (social capital) or through the local labour market.

As the main avenue for mobilising labour through social relations is through the household, the conjugal unit act as the predominant source of labour for women in the study area. The amount of human capital in the household determines how much labour women are able to mobilise through their social relations, and thus the concept of household cycle presented by Rudie (1969/70) is relevant for the analysis. Those women who reside in two-headed households together with their husbands can rely on their spouse in performance of certain agricultural tasks. Duncan (2010) have for instance noted that cocoa production in Ghana, especially in matrilineal societies, is perceived as a form of 'conjugal business' where husbands and wives are expected to assist each other with the performance of various tasks. The un-married women living in single-headed households depend on the mobilisation of other household members. As they live in single-headed households they have less male labour available than those in two-headed households. However, in the case of divorce or widowhood, children are left with the mother, due to the matrilineal kinship system. Because of this, children can constitute important human capital that can be mobilised for farm work, depending on their age, gender

and abilities. Even though it can be an economic burden for women to take care of children by themselves, the children can also contribute to the agricultural production, especially when they reach a certain age. This indicate that unmarried women who have children, due to the matrilineal kinship system, have some available human capital in the household that can assist them.

However, as indicated in the previous chapter, the farming activities exceed the capacity of human labour in all the households in the study area, regardless of the household composition. Farmers thus depend on mobilising labour through the local labour market. There are two forms of labour available through the labour market; exchange labour through the *nnoboa* institution and hired/wage labour. Participation in labour exchange networks constitute another gender barrier in the mobilisation of labour for female farmers. While exchange of *nnoboa* labour is common for men, cultural norms about gender appropriate behaviour makes it impossible for female farmers to obtain male labour through this institution. Because the tasks that are exchanged through *nnoboa* are outside the female domain, and because women cannot ask men they are not related to for help without being expected to give something in return (e.g. sex), negotiating for this type of labour is seen as 'inappropriate' for female farmers. Thus, whereas men farmers are able to use social capital to mobilise exchange labour through this institution, female farmers are to a great extent being excluded due to gender ideologies. Concequently, the only strategy they have left to overcome the gender barriers of labour mobilisation is to use economic capital in order to hire wage labour.

Similar findings related to the *nnoboa* institution to this were identified by Hill and Vigneri (2014) when investigating cocoa production in Ghana. However, in this study they found that women did participate in *nnoboa*, but to a lesser extent than men. The reason for this was that male and female farmers formed separate exchange labour groups; men exchanging 'male tasks' and women exchanging 'female tasks'. However, as women's ability to exchange labour were still limited to the female domain and female tasks, this did not solve the issue with assistance of 'male tasks', which in the study area is the main reason why female farmers need to mobilise external labour. The gender barriers in task performance were still present due to norms about appropriate behaviour and the exchange of gender appropriate tasks within the female domain. This indicate that even though it would be possible for women to exchange female labour, they would still be short of labour to perform 'male tasks'. Hence, this can act

as explanation to why women in the study area do not exchange tasks with each other, and rather hire wage labour by using economic capital.

There are other limitations related to gender that make the strategy of hiring labour through economic capital difficult for female farmers. Due to the burden of care and economical obligations that women face as mothers, women have less available economic resources to invest in agriculture production. In addition, this study has identified that the level of trust between workers and employer is lower when the employer is a woman. This can be seen as related to the social capital that men possess due to their role as 'leaders' in society, caused by the gender ideology. One way that female farmers have to compensate for this lack in trust, is by further investing economically in the relationship they have to their workers. This was identified in the case of Effia, who let her employees live in her house during the time of hire. Even though this strategy is something that women can employ, it constitutes another economic burden that men do not face. As such, female farmers are in greater need of hiring wage labour, they have less economic capital to actually hire the labour, and they have to spend more economic capital to establish and maintain the relationships to the workers in such a way that they benefit from their work. As economic capital already is a limited resource, this pose a great challenge for female farmers.

However, female farmers can, as with negotiations for land, mobilise labour through male relations (husbands or male relatives), in the way that these male relations act as brokers who assist them in the negotiations for labour. As it seen as more appropriate that men perform this negotiation, this might reduce the amount of economic capital women have to invest in the relationship to the workers. This form of social capital is thus essential, as those who have such social relationships thus have a benefit, while those who lack this form of social relations have less opportunity to mobilise labour for the agricultural production. This can again can influence the amount of land and other productive resources they can access. This finding correspond with an argument presented by Whitehead and Kabeer (2001:11), stating that women's access to labour and to cash and other resources to mobilise labour are more important and determining for the size of land that women farm on than their land rights, and show the importance of social capital in the mobilisation of labour.

According to Doss (1999:9) access to labour may have an effect on the adaption of technology and the distributions of its benefits. In Scoones (1998) definition, technology is seen as a form

of *economic capital*. In studies on technology adaption in Malawi and Cameroon, Gladwin (1992) found that lack of access to cash and credit, rather than the gender, was the critical factor that significantly limited application of fertilizer. Similarly, Doss and Morris (2001) found that technology adoption and decisions regarding this adoption did not depend on gender per se, but rather on access to productive resources, in maize production in Ghana. In this study, the use of technology like fertilizers and weedicides is found to be limited, but slowly increasing. The reason for the limited use is found to be limited access to economic capital to finance such investments. The study does not include gender segregated data about the use of such technology, but men are found to be the prime decision-makers regarding the use of fertilizers. Comparing the data from this study on the gendered access to resources and following the argument of Doss and Morris, it is possible to argue that as men have better access to resources like land and labour, they are more likely to adopt new technology. However, as the use of fertilizers and other technology is limited, it is not possible to find such gender differences in this study.

Another finding is that the gender issues that the agricultural office deal with are issues related to the domestic sphere, and not agricultural production per se. In addition, those who reported to use the services of the agricultural office were mainly male farmers with specialized, large-scale productions. This corresponds with Doss and Morris (2001) argument about extension agents might more frequently approach farmers with better access to land, labour and capital as well as farmers with a history of adopting technological innovations.

6.3. Summarising

The model of the farming system of Essiam and Denkyira (figure 2) presented in chapter 5.2, identified all the units of the farming system, and their interconnectedness. Summarising the analysis of the findings of this study, we see that access to all of the units in the farming system model is important for agricultural production, and that are gender differences in access to these resources.

According to Leach et al. (1999) putting emphasis on, and investigating access and command over resources highlight two issues; that within existing power relations some actors' claims towards resources are likely to prevail over those of others and that certain social actors may not be able to mobilise some rights and resources (capitals) that are necessary in order to make

effective use of others. This statement seems highly relevant to the discussion presented. First, both men and women have access rights to various kinds of capitals within the farming system of Essiam and Denkyira, but due to norms about appropriate behaviour and men's leading position in society, male farmers tend to be able to access more resources than female farmers. In the case of land, which constitutes a natural capital essential for agricultural production in the area, there is little competition, but due to the fact that men have the leading position in the governing of land rights, it is plausible to believe that in the case of more competition men would have stronger land rights than women. Secondly, women have less opportunity to mobilise human and economic capital that are necessary to make effective use of the land they control. This is due to the gender ideology and gendered barriers that limit the manoeuvring space of women within the farming system. As they face more difficulties with mobilising the other capitals necessary for production, this limit the amount of natural capital they are able to hold and make effective us of.

What therefore stands out as the most important factor for how intensive agricultural production in the farming system can be, is access to labour. The intensity of the agricultural production of female farmers in Essiam and Denkyira is thus largely determined by the amount social capital in the form of male social relations that these women have, as these social relations influence how much credit female farmers need to use on labour, and the total amount of labour that they are able to mobilise to perform male tasks. With reference to this, a modified version of the farming system model presented in chapter 5.2 is presented below. In this model, the importance of external labour and male social relations for female farmers is highlighted.
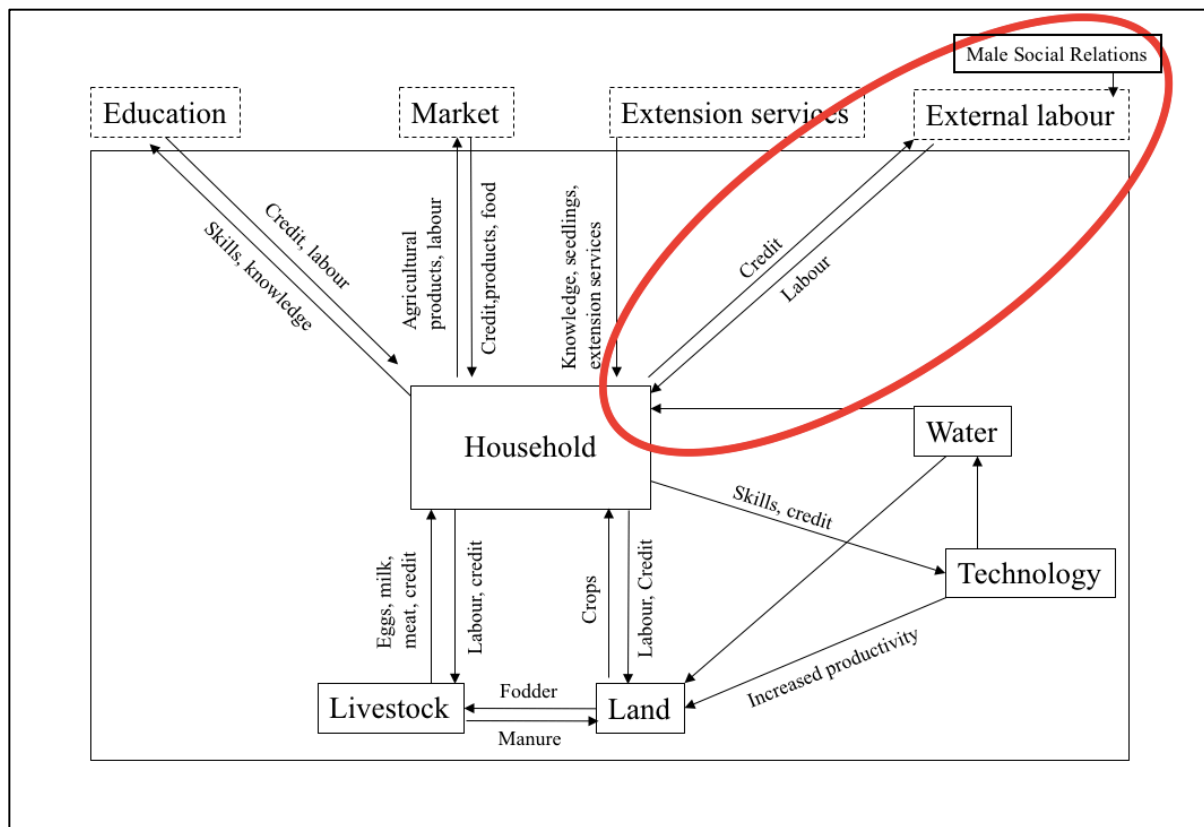
Figure 3:Modified version of the model of the farming system where the key factor influencing female agricultural production in the study area is highlighted within the red circle. Source: Field data, 2017.

To summarise the situation which is the fundament for this model, gender division of labour, caused by differences in physical abilities and norms about appropriate behaviour, in addition to time constraints, lead female farmers to be more dependent on mobilising labour than male farmers. This labour can either be mobilised through social relations within the household, or through the local labour market. If the household labour is not sufficient, women need to hire labour with the use of economic capital, as they are restricted to participate in labour exchange networks. In the process of hiring labour, women are limited, and as the result, they might need to invest additional capital in the relationship to labourers. However, they can also mobilise male social relations to hire labour for them. As such, the relationship to male social relations become an essential form of social capital that influence how much labour female farmers are able to mobilise, and further how much land and other resources they are able to control and maintain.

Turner and Brush (1987:27) note that due to the connections between the units in the farming system, altering of one unit will be likely to spur changes in the others. As now identified, the amount of one type of capital that a social actor in the farming system hold, can greatly influence the access to other types of capital. This can again influence the role this social actor

gets in the performance of, and decision-making about, agricultural production. The performance of tasks and decision-making is related to resource access and wider societal norms about appropriate and inappropriate behaviour, and thus the processes that occur intra-household are influenced by the institutions and social norms that exist outside the household. This correspond with the arguments of Doss (2001), presented in chapter 6.1.2. It is therefore plausible to believe that changes in gendered norms about appropriate behaviour would have an influence on gendered institutions and the dynamics in households and the farming system per se.

CHAPTER 7: CONCLUSION

The objective of this study has been to describe the farming system in Essiam and Denkyira and investigate how gender is a factor influencing roles, responsibilities, decision-making and resource access within this system. The thesis has used the farming systems approach, elements from the sustainable livelihood approach, as well as theories on institutions and gender as a theoretical framework for analysis. The methods used to produce data consisted of a household survey, semi-structures interviews, field conversations and observation. These methods produced both qualitative and some quantitative data that have been used to address the research topic in this specific context.

As illustrated in chapter 1.5, four research questions were formulated to examine the case of gender in the farming system of Essiam and Denkyira. The main research question was "*How does gender influence the agricultural production in farming households in Essiam and Denkyira?*". Chapter four, five and six of this study have addressed various findings and discussions related to this research question, and the three sub-questions. A summary of the key findings and some concluding remarks will now be presented.

7.1. Key findings

The study addressed the gendered norms about appropriate behaviour in this specific location through the research question: *'How does the local gender ideology shape gender roles in the study area?'*. The study finds that there are divides between the appropriate 'masculine' and 'feminine' behaviour in Essiam and Denkyira, but the roles of both men and women are acknowledged and valued in society. The matrilineal kinship system confers inheritance rights and a significant status to women, as future generations are considered to be following the bloodline of their mothers. In the upbringing of children, however, both mother and father are nonetheless seen as important. Men and women hold different roles within the household, women being the main performers of domestic duties, men holding key economic responsibilities. However, both men and women are able (and expected) to participate in income-generating labour like farming or other employment. Because of this, both men and women are found to have a considerable manoeuvring space within the confines of the local gender ideology. Still, patriarchal structures exist, and these structures has an influence on women's manoeuvring space, and the farming system.

The farming system of Essiam and Denkyira is identified as a diverse and complex system, consisting of several units that are interconnected. Farmers are mostly focused on crop production, and the production is intensive with high demands of labour due to limited use of technology. The overall economic situation in the area is poor. The amount of land that farming households are able to cultivate is regulated by their access to economic capital and labour. Because of limitations in economic capital and high demand for labour, there is little competition for land in the study area. The second research question looked more into how gender shapes the farming system: *How does gender shape the division of work tasks, responsibilities and resource access in the local farming system?"*. The study identifies is a clear gender division of labour in the farming system of Essiam and Denkyira. This division of labour is caused by male and female differences in physical abilities and social norms about appropriate behaviour for men and women. Male farmers hold the sole responsibilities for the pre-harvest task, more spesifically for land clearing activities like cutting trees, burning and weeding. Female farmers perform the most important pre-harvest tasks, being responsible for carrying, processing and marketing. Some tasks, like harvesting and planting of crops are more or less shared. Women are also found to be responsible for domestic duties like cooking and cleaning. These duties influence the time women have to perform income-generating labour like farming, which again influence how much money they are able to earn from their production.

Access to the important productive resources land and labour is found to be governed by processes of negotiation. These negotiation processes are controlled by men. Women are limited in the participation of such negotiation processes, due to norms about gender appropriate behaviour. They thus tend to depend on relationships to male social relations who can assist them in negotiations. If they do not have such relationships, they risk facing poorer conditions through the negotiations, both in access to land and labour. With regards to land, men and women have the same formal rights, and this indicate that the institution of land tenure in this specific context is gender equal in terms of land rights. As competition for land is found to be limited, access to external labour is therefore identified as the most critical factor in the farming system, as the amount of labour determine how much land you are able to cultivate. Women face gender barriers in what tasks they are able to perform, and because they face a double burden due to their responsibility for domestic duties, their need for external labour is larger than those of men. In addition, they are excluded from labour exchange networks. Female farmers' ability to mobilise external labour thus depend on economic capital and/or male social

relations that can assist them in the mobilisation of external labour. Social capital in form of male social relations is found to be key, as economic capital is limited.

With reference to the fourth research question *"To which extent do women in farming households have decision-making power to influence decisions regarding agricultural production?"* the study identifies a gender division in decision-making within farming households. The process of decision-making is shaped by gendered norms about appropriate behaviour and access of resources. Men are found to be the main decision-makers of most agricultural decisions, women being in charge only of decisions regarding vegetable production. Decisions about what to do with produce and income is shared. Based on this, it can be concluded that women in farming households have some level of autonomy to influence decisions regarding agricultural production, but their decision-making power is limited.

Looking at the presentation of the key findings in relation to the first research question *"How does gender influence the agricultural production in farming households in Essiam and Denkyira?"*, it is clear that gender influence agricultural production in farming households in a range of ways, both in terms of labour division, decision-making and resource access. Households are identified to be complex and diverse units, and the household composition that is determined by the gender, age and position of the household members have great influence on agricultural production. Farmers in the area is not found to be a homogenous group, as they have intersecting identities, holding varying characteristics.

Gender is found to act as a differentiating principle in the farming system, creating a distinction between the genders and their roles, both in agricultural households, but also in society in general. This is reflected through the gender division of labour and decision-making in farming households. Gender also act as an organising principle creating a social order where the actions of one gender perceived as more 'essential' for agricultural production than the other. As male farmers are being perceived as holding the highest position in this social hierarchy, this further leads them to hold positions where they can control and govern access of various productive resources essential for production. As a consequence of all of these factors, the manoeuvring space for female farmers within the farming system is affected by the social relations they have to men who can assist them in accessing these productive resources.

7.2. Concluding remarks

This study makes it evident that gender is an important factor that can, and should, be included when performing studies on agricultural production and farming systems. According to my understanding, agriculture is a gendered process, and this is something that cannot be overemphasized. Citing Doss (1999:21), it is evident that "gender matters" - also in agriculture. In studies addressing the gendering of agriculture, the voices of women need to be actively included, but it is important to emphasize more than just the female experience, as it is the interplay between men and women and the social institutions that exist in society that largely governs processes of agriculture. Identifying gender barriers and how such barriers influence farmers opportunities and disadvantages in agriculture, seems highly relevant for being able to create positive outcomes of agricultural production, both for men and women. Hopefully, this research project from Essiam and Denkyira might contribute to an enhanced understanding of how gender is an influential factor shaping the agricultural production. As agriculture is highly important for the livelihoods of the people in this area, an understanding of some of the findings presented in this study might be of importance for potential strategies directed towards creating a positive development of the agricultural sector, and thus also the livelihoods, in this location.

CHAPTER 8: REFERENCES

Adichie, C. N. 2014. *We Should All Be Feminists.* London: HarperCollins Publishers.

Agbosu, L., Awumbila, M., Dowuona-Hammond, C. & Tsikata, D. 2007. *Customary and Statutory Land Tenure, and Land Policy in Ghana.* Legon: Institute of Statistical, Social & Economic Research, University of Ghana. Technical Publication No. 70.

AGRA. 2016. *Africa Agriculture Status Report: Progress Towards Agricultural Transformation in Africa* [Online]. Alliance for a Green Revolution in Africa. Available from:< https://agra.org/aasr2016/public/assr.pdf> [Accessed 09.05. 2018].

Agrawal, A. & Gibson, C. C. 1999. Enchantment and Disenchantment: The Role of Community in Natural Resource Conservation. *World Development,* 27**,** 629-649.

Akter, S., Rutsaert, P., Luis, J., Htwe, N. M., San, S. S., Raharjo, B. & Pustika, A. 2017. Women's empowerment and gender equity in agriculture: A different perspective from Southeast Asia. *Food Policy,* 69**,** 270-279.

Awanyo, L. 2001. Labor, Ecology, and a Failed Agenda of Market Incentives: The Political Ecology of Agrarian Reforms in Ghana. *Annals of the Association of American Geographers,* 91**,** 92-121.

Benjaminsen, T. A. & Lund, C. 2003. *Securing land rights in Africa.* London: Routhledge.

Bergstedt, C. 2012. *The Lie of the Land: Gender, Farm Work, and Land in a Rural Vietnamese Village.* [Doctoral dissertation]. Gothenburg: University of Gothenburg.

Berry, S. 1989. Social institutions and access to resources. *Africa: Journal of the International African Institute,* 59**,** 41-55.

Berry, S. 1993. *No condition is permanent: The social dynamics of agrarian change in sub-Saharan Africa.* Wisconsin: University of Wisconsin Press.

Berry, S. 1997. Tomatoes, land and hearsay: property and history in Asante in the time of structural adjustment. *World Development,* 25**,** 1225-1241.

Bhaumik, S. K., Dimova, R. & Gang, I. N. 2016. Is women's ownership of land a panacea in developing countries? Evidence from land-owning farm households in Malawi. *The Journal of Development Studies,* 52**,** 242-253.

Blackden, C. M. & Wodon, Q. 2006. *Gender, Time use, and Poverty in sub-Saharan Africa.* World Bank Working Paper. Washington D.C.: World Bank Publications. Available from: <http://siteresources.worldbank.org/INTAFRREGTOPGENDER/Resources/gender_time_use_pov.pdf> [Accessed 08.05.2018]

Boamah, F. & Overå, R. 2016. Rethinking Livelihood Impacts of Biofuel Land Deals in Ghana. *Development and Change,* 47**,** 98-129.

Boserup, E. 1970. *Women's role in economic development.* New York: St. Martin's Press.

Bryman, A. 2012. *Social Research Methods* Oxford: Oxford University Press.

Busch, T. 2013. *Akademisk Skriving for Bachelor- og Masterstudenter.* Bergen: Fagbokforlaget.

Butler, J. 1990. *Gender Trouble: Feminism and the Subversion of Identity.* New York: Routledge.

Carr, E. R. 2008. Men's crops and women's crops: The importance of gender to the understanding of agricultural and development outcomes in Ghana's Central Region. *World Development,* 36**,** 900-915.

Clark, G. 1994. *Onions Are My Husband: Survival and Accumulation by West African Market Women.* Chicago: University of Chicago Press.

Clark, G. 1999. Mothering, work, and gender in urban Asante ideology and practice. *American Anthropologist,* 101**,** 717-729.

Clifford, N., Cope, M., Gillespie, T., French, S. & Valentine, G. 2016. Getting Started in Geographical Research: How This Book Can Help. In: Clifford, N., Cope, M., Gillespie, T. & French, S. (eds.) *Key Methods in Geography.* 3rd ed. Thousand Oaks, California: SAGE Publications Inc.

Collins, P. H. 2009. *Black feminist thought: Knowledge, consciousness, and the politics of empowerment.* New York: Routledge.

Cope, M. 2002. Feminist Epistemology in Geography. In: Moss, P. (ed.) *Feminist Geography in Oractice: Research and Methods.* Oxford: Wiley-Blackwell.

Cope, M. & Kurtz, H. 2016. Organizing, Coding and Analyzing Qualitative Data. In: Clifford, N., Cope, M., Gillespie, T. & French, S. (eds.) *Key Methods in Geography.* 3rd ed. Thousand Oaks, California: SAGE Publications Inc.

Cornwall, A., Harrison, E. & Whitehead, A. 2007. Gender myths and feminist fables: The struggle for interpretive power in gender and development. *Development and Change,* 38**,** 1-20.

Crenshaw, K. 1991. Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stanford law review,* 43**,** 1241-1299.

Cresswell, T. 2013. *Geographic Thought: A Critical Introduction.* Hoboken: Wiley-Blackwell.

Crook, R., Affou, S., Hammond, D., Vanga, A. F. & Yeboah, M. O. 2007. *The Law, Legal Institutions and the Protection of Land Rights in Ghana and Côte d'Ivoire: Developing a More Effective and Equitable System.* IDS Research Report 58. Brighton Institute of Development Studies, University of Sussex. Available from: <https://www.ids.ac.uk/files/Rr58.pdf> [Accessed 03.05.2018]

Daré, W. s. & Venot, J. P. 2017. Room for Manoeuvre: Users participation in water resources management in Burkina Faso. *Development Policy Review,* 36**,** 175-189.

De Haan, L. & Zoomers, A. 2005. Exploring the frontier of livelihoods research. *Development and change,* 36**,** 27-47.

Debevec, L. 2015. *Setting the record straight: Matrilineal does not equal matriarchal* [Online blog]. CIGAR Research Program on Water, Land and Ecosystems. Available from:< https://wle.cgiar.org/thrive/2015/10/15/setting-record-straight-matrilineal-does-not-equal-matriarchal> [Accessed 07.05. 2018].

Dixon, D. P. & Jones, J. P. 2006. Feminist Geographies of Difference, Relation, and Construction. In: Aitken, S. & Valentine, G. (eds.) *Approaches to Human Geography.* London: SAGE Publications Ltd.

Dixon, J., Gulliver, A. & Gibbon, D. 2001. *Farming Systems and Poverty: Improving Farmers' Livelihoods in a Changing World.* Rome: FAO & the World Bank.

Doss, C. R. 1999. *Twenty-Five Years of Research on Women Farmers in Africa: Lessons and Implications for Agricultural Research Institutions: With an Annotated Bibliography.* CIMMYIT Economics Programme Paper no. 99-02. Mexico D.F.: CIMMIT. Available from: <https://pdfs.semanticscholar.org/1758/0101d22476be5ad1655abb48d967c78a3875.pdf> [Accessed 09.05.2018]

Doss, C. R. 2001. Designing Agricultural Technology for African Women Farmers: Lessons from 25 Years of Experience. *World Development,* 29**,** 2075-2092.

Doss, C. R. 2002. Men's Crops? Women's Crops? The Gender Patterns of Cropping in Ghana. *World Development,* 30**,** 1987-2000.

Doss, C. R. 2014. Data Needs for Gender Analysis in Agriculture. In: Quisumbing, A. R., Meinzen-Dick, R., Raney, T. L., Croppenstedt, A., Behrman, J. A. & Peterman, A. (eds.) *Gender in Agriculture: Closing the Knowledge Gap.* Dordrecht: Springer.

Doss, C. R., Meinzen-Dick, R., Quisumbing, A. & Theis, S. 2018. Women in agriculture: Four myths. *Global Food Security,* 16**,** 69-74.

Doss, C. R. & Morris, M. L. 2001. How does gender affect the adoption of agricultural innovations? *Agricultural Economics,* 25**,** 27-39.

Duncan, B. A. 1997. *Women in agriculture in Ghana.* Accra: Friedrich Ebert Foundation

Duncan, B. A. 2010. Cocoa, Marrige, Labour and Land in Ghana: Some Matrilineal and Patrilineal Perspectives. *Africa: Journal of the International African Institute,* 80**,** 301-321.

Dunn, K. 2010. Interviewing. In: Hay, I. (ed.) *Qualitative Research Methods in Human Geography* 3rd ed. ed. Oxford: Oxford University Press.

Ellis, F. & Allison, E. 2004. *Livelihood Diversification and Natural Resource Access.* LSP Working Paper 9. Norwich Overseas Development Group, University of East Anglia. Available from: <http://www.fao.org/3/a-ad689e.pdf> [Accessed 24.04.2018]

Eyles, J. 1988. Interpreting the Geographical World. Qualitative Approaches in Geographical Research. In: Eyles, J. & Smith, D. M. (eds.) *Qualitative Methods in Human Geography.* Cambridge: Polity Press.

FAO 2011. *The State of Food and Agriculture. Women in Agriculture: Closing the Gender Gap for Development.* Rome: Food and Agriculture Organization of the United Nations.

FAO. 2018. *National Gender Profile of Agriculture and Rural Livelihoods - Ghana* Country Gender Assessment Report. Rome: Food and Agriculture Organisation of the United Nations. Available from: <http://www.fao.org/3/i8639en/I8639EN.pdf> [Accessed 10.05.18]

Ghebru, H. & Lambrecht, I. 2017. Drivers of perceived land tenure (in)security: Empirical evidence from Ghana. *Land Use Policy,* 66**,** 293-303.

Gladwin, C. H. 1992. Gendered Impacts of Fertilizer Subsidy Removal Programs in Malawi and Cameroon. *Agricultural Economics,* 7**,** 141-153.

Goldstein, M. & Udry, C. 2008. The profits of power: Land rights and agricultural investment in Ghana. *Journal of political Economy,* 116**,** 981-1022.

GSS. 2013a. *Provisional Gross Domestic Product 2013.* Accra: Ghana Statistical Service. Available from: <http://www.statsghana.gov.gh/docfiles/GDP/provisional_gdp_2013.pdf> [Accessed 09.05.2018]

GSS. 2013b. *Regional Analytic Report - Central Region.* 2010 Population and Housing Census. Accra: Ghana Statistical Service. Available from: <http://www.statsghana.gov.gh/docfiles/2010phc/2010_PHC_Regional_Analytical_ReportsCentral%20Region%20.pdf> [Accessed 01.05.2018]

Guyer, J. I. 1981. Household and community in African studies. *African studies review,* 24**,** 87-137.

Gyasi, Y. 2016. *Homegoing.* New York: Knopf Publishing Group.

Haraway, D. 1988. Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective. *Feminist Studies,* 14**,** 575-599.

Hay, I. 2016. On Being Ethical in Geographical Research. In: Clifford, N., Cope, M., Gillespie, T. & French, S. (eds.) *Key Methods in Geography.* 3rd ed. Thousand Oaks, California: SAGE Publications Inc.

Higgins, T. & Fenrich, J. 2012. Legal Pluralism, Gender, and Access to Land in Ghana. *Fordham Environmental Law Review,* 23**,** 7-21.

Hill, R. V. & Vigneri, M. 2014. Mainstreaming Gender Sensitivity in Cash Crop Market Supply Chains. In: Quisumbing, A. R., Meinzen-Dick, R., Raney, T. L., Croppenstedt, A., Behrman, J. A. & Peterman, A. (eds.) *Gender in Agriculture: Closing the Knowledge Gap.* Dordrecht: Springer Netherlands.

Hodgson, G. M. 2006. What Are Institutions? *Journal of Economic Issues,* 40**,** 1-25.

Huyer, S. 2016. Closing the Gender Gap in Agriculture. *Gender, Technology and Development,* 20**,** 105-116.

IDRC. 2012. *Globalization, Trade and Poverty in Ghana.* Accra: International Development Research Centre. Available from: <https://www.idrc.ca/sites/default/files/openebooks/736-0/index.html#ch10> [Accessed 09.05.2018]

Johnson, R. B., Onwuegbuzie, A. J. & Turner, L. A. 2007. Toward a Definition of Mixed Methods Research. *Journal of Mixed Methods Research,* 1**,** 112-133.

Järvinen, M. 2005. Interview i en interaktionistisk begrepsramme. In: Järvinen, M. & Mik-Meyer, N. (eds.) *Kvalitative metoder i et interaktionistisk perspektiv.* Köbenhavn: Hans Reitzels Forlag.

Kapborg, I. & Berterö, C. 2002. Using an interpreter in qualitative interviews: does it threaten validity? *Nursing Inquiry,* 9**,** 52-56.

Kasanga, R. K. & Kotey, N. A. 2001. Land Management in Ghana: Building on Tradition and Modernity. London: International Institute for Environment and Development.

Kilic, T., Winters, P. & Carletto, C. 2015. Gender and agriculture in sub-Saharan Africa: introduction to the special issue. *Agricultural Economics,* 46**,** 281-284.

Lambrecht, I. & Asare, S. 2016. The Complexity of Local Tenure Systems: A Smallholders' Perspective on Tenure in Ghana. *Land Use Policy,* 58**,** 251-263.

Lambrecht, I., Schuster, M., Asare, S. & Pelleriaux, L. 2017. *Changing gender roles in agriculture?: Evidence from 20 years of data in Ghana.* IFPRI Discussion Paper. Washington, D.C.: Available from: <http://ebrary.ifpri.org/utils/getfile/collection/p15738coll2/id/131105/filename/131316.pdf> [Accessed 09.05.2018]

Lambrecht, I. B. 2016. "As a Husband I Will Love, Lead, and Provide." Gendered Access to Land in Ghana. *World Development,* 88**,** 188-200.

Lastarria-Cornhiel, S., Behrman, J. A., Meinzen-Dick, R. & Quisumbing, A. R. 2014. Gender Equity and Land: Toward Secure and Effective Access for Rural Women. In: Quisumbing, A. R., Meinzen-Dick, R., Raney, T. L., Croppenstedt, A., Behrman, J. A. & Peterman, A. (eds.) *Gender in Agriculture: Closing the Knowledge Gap.* Dordrecht: Springer.

Leach, M. 2007. Earth Mother Myths and Other Ecofeminist Fables: How a Strategic Notion Rose and Fell. *Development and Change,* 38**,** 67-85.

Leach, M., Mearns, R. & Scoones, I. 1999. Environmental entitlements: dynamics and institutions in community-based natural resource management. *World development,* 27**,** 225-247.

Linton, R. 1936. *The Study of Man: An Introduction.* New York: Appleton-Century-Crofts.

Longhurst, R. 2016. Semi-structured Interviews and Focus Groups. In: Clifford, N., Cope, M., Gillespie, T. & French, S. (eds.) *Key Methods in Geography.* 3rd ed. Thousand Oaks, California: SAGE Publications Inc. .

Lorber, J. 1994. *Paradoxes of Gender.* New Haven: Yale University Press.

Malapit, H. J. L. & Quisumbing, A. R. 2015. What dimensions of women's empowerment in agriculture matter for nutrition in Ghana? *Food Policy,* 52**,** 54-63.

McDowell, L. 1997. *Capital culture: Gender at work in the city.* Oxford: Blackwell Publishers.

McLafferty, S. L. 2016. Conducting Questionnaire Surveys. In: Clifford, N., Cope, M., Gillespie, T. & French, S. (eds.) *Key Methods in Geography.* 3rd ed. Thousand Oaks, California: SAGE Publications Inc.

MFL. 2003. Ghana - Emerging Land Tenure Issue. Country paper presented at conference organised by the Permanent Interstates Committee for Drought Control in the Sahel (CILSS) in Accra. Ministy of Land and Forestry. Available from:< http://www.hubrural.org/IMG/pdf/cilss_praia9_ghana_rapport_national.pdf> [Accessed 09.05.2018]

MOFA. 2015. *Agriculture in Ghana: Facts and Figures* [Online]. Accra: Ministry of Food and Agriculture. Available from:< http://www.agrofood-westafrica.com/fileadmin/user_upload/messen/agrofood-Westafrica/Brochure/AGRICULTURE-IN-GHANA-Facts-and-Figures-2015.pdf> [Accessed 05.05. 2018].

Morrison, A., Raju, D. & Sinha, N. 2007. *Gender Equality, Poverty and Economic Growth.* Policy Research Working Paper. Washington D.C.: World Bank. Available from: <https://openknowledge.worldbank.org/bitstream/handle/10986/7321/wps4349.pdf?sequence=1&isAllowed=y> [Accessed 08.05.2018]

Mullings, B. 1999. Insider or Outsider, Both or Neither: Some Dilemmas of Interviewing in a Cross-Cultural Setting. *Geoforum,* 30**,** 337-350.

Norman, D. 2002. The farming systems approach: A historical perspective. Presentation held at the 17th Symposium of the International Farming Systems Association in Lake Buena Vista, Florida, USA. Available from:< https://www.researchgate.net/profile/David_Norman5/publication/251791709_The_farming_systems_approach_A_historical_perspective/links/00b7d529fb19097266000000.pdf> [Accessed 07.05.2018]

North, D. C. 1990. *Institutions, Institutional Change and Economic Performance.* Cambridge: Cambridge University Press.

Nukunya, G. K. 1992. *Tradition and Change in Ghana: An Introduction to Sociology.* Accra: Ghana Universities Press.

Nyarko, K. 2014. Childrearing, motherhood and fatherhood in Ghana. In: Selin, H. (ed.) *Parenting Across Cultures: Childrearing, Motherhood and Fatherhood in Non-Western Cultures.* Dordrecht: Springer.

O'Laughlin, B. 1995. Myth of the African Family in the World of Development. In: Bryceson, D. F. (ed.) *Women Wielding The Hoe: Lessions from Rural Africa for Feminist Theory and Development Practice.* Oxford: Berg Publishers.

Okonjo, K. 1976. The Dual-Sex Political System in Operation: Igbo Women and Community Politics in Midwestern Nigeria. In: Bay, E. G. & Hafkin, N. J. (eds.) *Women in Africa: Studies in Social and Economic Change.* Stanford: Stanford University Press.

Opare, S. 2005. Engaging women in community decision-making processes in rural Ghana: Problems and prospects. *Development in Practice,* 15**,** 90-99.

Overå, R. 1998. *Partners and Competitors. Gendered Entrepreneurship in Ghanaian Canoe Fisheries.* [Doctoral dissertation]. Bergen: University of Bergen.

Overå, R. 2003. Gender ideology and manoeuvring space for female fisheries entrepreneurs. *Institute of African Studies Research Review,* 19**,** 49-62.

Overå, R. 2005. When Sisters Become Competitors. Coastal Women's Innovative Utilization of Trawler By-Catch in Ghaa. In: Neis, B., Binkley, M., Gerrard, S. & Maneschy, M. C. (eds.) *Changing Tides: Gender, Fisheris and Globalization.* Halifax: Fenwood Publishing.

Overå, R. 2007. When men do women's work: structural adjustment, unemployment and changing gender relations in the informal economy of Accra, Ghana. *The Journal of Modern African Studies,* 45**,** 539-563.

Poats, S. V., Schmink, M., Spring, A. & University of Florida Women in Agricultural Development, P. 1988. *Gender Issues in Farming Systems Research and Extension.* Boulder, Colorado: Westview Press.

Quisumbing, A. R., Meinzen-Dick, R., Raney, T. L., Croppenstedt, A., Behrman, J. A. & Peterman, A. 2014. Closing the Knowledge Gap on Gender in Agriculture. In: Quisumbing, A. R., Meinzen-Dick, R., Raney, T. L., Croppenstedt, A., Behrman, J. A. & Peterman, A. (eds.) *Gender in Agriculture: Closing the Knowledge Gap.* Dordrecht: Springer Netherlands.

Quisumbing, A. R. & Pandolfelli, L. 2010. Promising Approaches to Address the Needs of Poor Female Farmers: Resources, Constraints, and Interventions. *World Development,* 38**,** 581-592.

Quisumbing, A. R., Payongayong, E., Aidoo, J. & Otsuka, K. 2001. Women's Land Rights in the Transition to Individualized Ownership: Implications for Tree-Resource Management in Western Ghana. *Economic development and cultural change,* 50**,** 157-181.

Rudie, I. 1969/70. Household Organization: Adaptive Process and Restrictive Form. A Viewpoint on Economic Change. *Folk,* 11-12**,** 185-200.

Sarpong, G. A. 2006. *Improving Tenure Security for the Rural Poor: Ghana, Country Case Study.* LEP Working Paper 2. Rome: Food and Agriculture Organisation of the United Nations. Available from: <http://www.fao.org/3/a-k0783e.pdf> [Accessed 09.05.2018]

Scoones, I. 1998. *Sustainable rural livelihoods: a framework for analysis.* IDS Working Paper 72. Brighton: IDS, University of Sussex. Available from: <https://opendocs.ids.ac.uk/opendocs/bitstream/handle/123456789/3390/Wp72.pdf?sequence=1> [Accessed 09.05.2018]

Selasi, T. 2014. *Ghana Must Go.* London: Penguin Books.

Silverman, D. 2014. *Interpreting qualitative data.* London: SAGE Publications Ltd.

Takyi, B. K. & Gyimah, S. O. 2007. Matrilineal family ties and marital dissolution in Ghana. *Journal of Family Issues,* 28**,** 682-705.

Taylor, L. 2016. Case Study Methodology. In: Clifford, N., Cope, M., Gillespie, T. & French, S. (eds.) *Key Methods in Geography.* 3rd ed. Thousand Oaks, California: SAGE Publications Inc. .

The Constitution of the Republic of Ghana. 1992. *The Constitution of The Republic of Ghana* [Online]. Available from:< http://www.ghana.gov.gh/images/documents/constitution_ghana.pdf> [Accessed 01.05. 2018].

Turner, B. L. & Brush, S. B. 1987. *Comparative farming systems.* New York: Guilford Press.

Udry, C., Hoddinott, J., Alderman, H. & Haddad, L. 1995. Gender differentials in farm productivity: implications for household efficiency and agricultural policy. *Food policy,* 20**,** 407-423.

Valentine, G. 2007. Theorizing and researching intersectionality: A challenge for feminist geography. *The Professional Geographer,* 59**,** 10-21.

West, C. & Zimmerman, D. H. 1987. Doing gender. *Gender & society,* 1**,** 125-151.

Whitehead, A. 2002. Tracking livelihood change: Theoretical, methodological and empirical perspectives from north-east Ghana. *Journal of Southern African Studies,* 28**,** 575-598.

Whitehead, A. & Kabeer, N. 2001. *Living With Uncertainty: Gender, Livelihoods and Pro-Poor Growth in Rural sub-Saharan Africa.* IDS Working Paper 134. Brigthton: Institutetof Development Studies Available from: <https://www.ids.ac.uk/files/Wp134.pdf> [Accessed 11.05.2018]

Whitehead, A. & Tsikata, D. 2003. Policy Discourses on Women's Land Rights in Sub–Saharan Africa: The Implications of the Return to the Customary. *Journal of Agrarian Change,* 3**,** 67-112.

Winchester, H. & Rofe, M. 2010. Qualitative Research and Its Place in Human Geography. In: Hay, I. (ed.) *Qualitative Research Methods in Human Geography.* 3rd ed. ed. Oxford: Oxford University Press.

World Bank 2001. *Engendering Development: Through Gender Equality in Rights, Resources, and Voice.* New York: Oxford University Press.

Yin, R. K. 1981. The Case Study as a Serious Research Strategy. *Knowledge,* 3**,** 97-114.

Aase, T. H. & Fossåskaret, E. 2014. *Skapte Virkeligheter. Om Produksjon og Tolkning av Kvalitative Data.* Oslo: Universitetsforlaget.

APPENDIX

I: Questionnaire for household survey

Household number: _____   Date: _____

Name (Voluntary): _____

Age: _____ Place and region of birth:_____

Gender: _____ Ethnicity: _____

HOUSEHOLD

1. Create a household map (household members, gender, age, kinship relation, activities):

EDUCATION

2. What is your highest level of education?

None - primary - JHS - SHS - O-level - A-level - middle school - vocational - HND -

Diploma - University (BA) - Postgraduate (MPhil and above)

3. Have you got any agricultural education or training?

Yes ☐   No ☐

4. How many of the children attend/have attended school? _____

_____

RESOURCES AND PRODUCTION

5. How much land does your household cultivate? _____ acres

Who cultivate this land?

You ☐   Your spouse ☐   Both ☐   Other ☐

What kind of land is cultivated?

Private land ☐   Family land ☐   Communal/chief land☐   Other ☐

6. What livestock does your household own?

Cattle: _____ Sheep: _____Goats: _____ Poultry: _____ Pig: _____

Other: _____

7. What agricultural products does your household produce and what is the main use?

(If both for home consumption and sale on market, mark both boxes)

Crops/agricultural products:	Home consumption	Sale on market
☐ Maize	☐	☐
☐ Cassava	☐	☐
☐ Plantain	☐	☐
☐ Cocoa	☐	☐
☐ Oil palm	☐	☐
☐ Yam	☐	☐
☐ Cocoyam	☐	☐
☐ Coconut	☐	☐
☐ Pepper	☐	☐
☐ Tomato	☐	☐
☐ Papaya/pawpaw	☐	☐
☐ Pineapple	☐	☐
☐ Citrus	☐	☐
☐ Egg	☐	☐
☐ Meat	☐	☐

Processed products:	Home consumption	Sale on marked
☐ Gari	☐	☐
☐ Kenkey	☐	☐
☐ Palm kernel oil	☐	☐
☐ Palm oil	☐	☐

What is your main crop? _____

_____

Where do you sell your products? _____

_____

_____

Who is responsible for selling your products?

You ☐   Your spouse ☐   Both ☐   Other ☐

TASKS

8. Who mostly perform these tasks? (if fifty-fifty, mark both boxes)

	Men	Women
Clearing of land	☐	☐
Planting/Sowing	☐	☐
Weeding	☐	☐
Irrigating	☐	☐
Harvesting	☐	☐
Manure fields	☐	☐
Applying chemical fertilizer	☐	☐
Processing	☐	☐
Carrying	☐	☐
Marketing/Sale on the market	☐	☐
Cooking	☐	☐
Cleaning	☐	☐
Childcare	☐	☐

9. Are there any agricultural activities women cannot perform?

Yes ☐　　　　　　　No ☐

If yes, what activities and why? _____

_____

_____

10. Are there any agricultural activities men cannot perform?

Yes ☐　　　　　　　No ☐

If yes, what activities and why? _____

_____

_____

DECISIONS

11. Who decides? (if fifty-fifty, mark both boxes)

	Men	Women
What food crops to grow?	☐	☐
What cash crops to grow?	☐	☐
What vegetables to grow?	☐	☐
How much chemical fertilizer to use?	☐	☐
The use/rent of machines	☐	☐
The hire of labourers	☐	☐
When to harvest?	☐	☐
What to do with the agricultural products? (home consumption or sale)	☐	☐
What to use the household income for?	☐	☐
What the household eat?	☐	☐

CHANGES

12. Have you planted some new types of crops/vegetables the last 5 years?

Yes ☐   No ☐

If yes, what crops/vegetables? _____

If yes, why did you choose to do this? _____

_____

_____

13. What are your household's biggest expenses?

       Rank them accordingly (1 – biggest expense, 6 – smallest expense)

EXPENSE	RANKING
Food	
School fees	
Transport	
Rent	
Electricity	
Agricultural inputs	

What other major expenses does your household have? _____

_____

_____

What are the main agricultural input expenses? _____

_____

_____

OTHER

14. Is agriculture your household's only source of income?

Yes ☐   No ☐

If no, what other source(s) of income do the household have? _____

_____

_____

_____

_____

_____

15. Other comments:

Thank you for your time!

Would you be interested in a follow up interview?

Yes ☐   No ☐

If yes, please provide a phone number: _____

II: Interview guide youth

The experience of gender

- Do you believe it is different to grow up as a girl/boy? What are the differences?

- Differences in raising?

- Differences in school?

- What is the main expectation towards young women/men – and older women/men?

- Do you think your gender gives you benefits or disadvantages?

- Women and male main tasks/gender roles?

- Are there any tasks in the community that are only for men or women?

- Why do you think it is like this?

- Do you experience any change in these gender roles?

Farming

- How do you view farming as an occupation?

- Is farming an occupation you would like to have? Why/why not?

- What do you think need to happen to make farming a more attractive occupation for young people?

III: Interview guide farmers

- Why did you become a farmer?

- What major challenges do you face?

- What challenges do you face in farming related to gender?

- Do you believe it's any difference in being a male farmer or a female farmer? What difference? Why?

- What are the main male/female tasks in farming?

- Are you a part of a union?

- Do you know about the agriculture office?

- Do you use any of the services of the agricultural office?

- What do you think need to happen to make farming a more attractive occupation?