



**Gendered Irrigation Management**  
**The Case Study of Ashaiman Irrigation Scheme in the**  
**Greater Accra Region**

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## List of Acronyms

AIFCS	Ashaiman Irrigation Farmers' Cooperative Society
CMB	Cocoa Marketing Board
FAO	Food and Agricultural organization of the United Nations
FGD	Focus group discussion
GIDA	Ghana Irrigation development Authority
IMF	International Monetary Fund
IMT	Irrigation Management transfer
JICA	Japan Technical Cooperation Agency
MDGs	Millennium Development Goals
MOFA	Ministry of food and agriculture
NCWD	National Council on Women and Development
PIM	Farmers Participatory Irrigation Management
PIM	Participatory Irrigation Management
SAP	Structural Adjustment Programme
SSIAP	Small Scale Irrigated Agricultural Promotion Project
WB	World Bank

## **Abstract**

It has become a global concern to involve women in decision making and leadership roles at the local and national level. However, women participation in decision making at the Ashaiman Irrigation Scheme is very low even though women are the highest producers of food crops in Ghana. The intent of this study was to critically investigate the underlying reasons for the low representation of women at management level in the Ashaiman Irrigation Scheme located in the Greater Accra Region of Ghana since not much research had been done on women in irrigation in Ghana. The government policy framework on agriculture with the help of international support provided irrigation infrastructure for adequate supply of water to the irrigation farmer's association for all year round agriculture. The Farmers are supposed to be in charge of the operation and management of the scheme while the irrigation developers act as supervisors. It is assumed that the management of the scheme will involve equal participation of men and women in decision making but the study revealed that women were not represented in leadership positions of the irrigation projects.

The research also revealed that lack of education, gender, social norms, the multiple roles of women, long distances from the farms and the large numbers of men against that of women together with inconvenient times for meetings, were most of the factors that militated against women representation in management positions on the Ashaiman Irrigation Scheme. It is hoped that when these concerns are addressed through for example initiating literacy programmes for women and recognizing them as partners whose contributions were necessary in the total development of the scheme; the objectives of the project would be achieved.

## **Relevance to Development Studies**

Women play an important role in agriculture because they continue to represent a higher proportion of the labour force in the world. In recent times international, regional and policy makers are focussing on gendered irrigation management to ensure equal participation of men and women in decision making. This study conducted in the context of Ghana is a contribution to other studies conducted.

## **Keywords**

Participation, Gender, Women in decision making, Irrigation management, Irrigation management transfer

# Chapter 1

## Introduction and Problem Statement

### 1.1 Introduction

The issue of women in decision making and participation has received a lot of attraction from governments and international organizations. Despite the efforts of the Ghana Irrigation Development Authority to promote the participation of women in decision making on the scheme, their involvement is very low. This research seeks to investigate the perceived underrepresentation of women farmers at the management of the Ashaiman Irrigation Scheme in the Greater Accra region of Ghana which is scanty and underexplored. The purpose is to understand the role of women in decision making concerning the management of the Ashaiman irrigation Scheme.

The guiding question in this study was, “why women who are represented in various aspects of irrigation farming are underrepresented in the management of the irrigation scheme to which they are subscribed? To answer this question the researcher adopted a mixed method approach drawing from both quantitative and qualitative data. A descriptive statistics was generated to explain gender participation. This was supported by qualitative interviews using two focus group discussions organized separately to solicit the views of male and female farmers. Relevant literature was obtained from the Irrigation Development Authority, the Ministry of Food and Agriculture, Ghana and other sources were also reviewed. Further, the researcher participated at three of their meetings to observe how men and women interacted and contributed to decisions. After the necessary data was gathered, the researcher analysed and discussed the findings using Scott’s framework of gender operates in four different but interrelated levels.

The first chapter of the research provides the background of the research with emphasis on the contribution of women to agriculture for the economy, households and their contribution to decision making. It also states the problem of non-involvement of women farmers in decision making in the irrigation management to addresses the relevance of the study. The objectives of the study are also stated in addition to challenges and the limitations of the study.

Chapter two explored the concepts of gender and participation. This approach was used as an analytical tool to bring out clearly reasons for the underrepresentation of women on the scheme. Chapter Three gives a general background of irrigation in Ghana. It also gives the reasons for irrigation management transfer which led to the partial transfer of the operation and management of the scheme from government to beneficiary farmers. The transfer expected the equal participation of men and women. It further stated rules and regulations for the structure and the composition of the Ashaiman Irrigation farmers’ cooperative society AIFCS.

Chapter Four, presents discusses and analyses the field data. The research findings point out the major factors for underrepresentation of women in participation and management. The results mainly show the culture, time, age,

sex, and education in the determining the position of women in management. Chapter five is the conclusion and recommendation section. It sums up the findings, revealing how the government realises the potential of both men and women as both deserving equal support in their agricultural production. Men need to be concertized on recognizing the roles of women as important and the women also rose to the task and change perceptions society had imposed on them.

## **1.2 Background**

Studies have shown that the low representation of women in national and local level decision-making had retarded the progress of many nations. This has been of grave concern to international and local institutions in many countries of the modern world. (UN, 2009:165). The Global trend about women's participation in the public sphere led to various efforts towards increasing women's participation in public office and decision-making. The 1995 Beijing Conference Platform for example, called for equal gender balance in decision-making as a necessary condition for achieving equality, development and peace (Mukhopadhyay and Meer, 2004). These occurrences have opened opportunities for women to participate in politics and leadership positions. As a result 'countries such as Mozambique, South Africa, Rwanda and Uganda have reached the target set by the Beijing Platform for Action (BFA) of 30% or more of women's representation in Parliament, Rwanda has a higher record of 48%' (UN, 2009:167).

Over the years there has been an increasing awareness on the role of women in agriculture. According to the FAO (2011:4) women plays very crucial roles in agriculture because they continue represent a large proportion of labour force in the world. Women in Sub-Saharan Africa contribute about half of the agricultural labour force and play the role as farmers, labourers and entrepreneurs. Studies by FAO (2006:1) further state that the agricultural sector plays an important role in many developing countries it contributes to export earnings and is also a source of employment for a large number people. It is also very important because it ensures food security which is the principal priority in many developing countries.

Even though the roles of women vary in other parts of the world, rural women in agriculture seem to engage in similar multiple roles. These are the household tasks of productive duties (child birth, caring for the family members and their home) and the production of food crops, livestock rearing, working for wages in agricultural enterprises, and marketing of farm produce (FAO, 2011:1).

In Ghana women produce 70 per cent of food crops and constitute 52 percent of the agricultural labour force and 90% of the labour for post-harvest (FAO, 2006:8). They produce 70 per cent of food crops and constitute 52 percent of the agricultural labour force and 90% of the labour for post-harvest (FAO, 2006:8). Women continue to provide a larger proportion of labour force that goes into agriculture in Ghana. It is for this reason that Soraja Rodriguez Ramos, the Spanish Secretary of State for International Development, commended the hard work of Women in Agriculture in Ghana, when she said that 'women producers in Ghana are the same as men producers

and that the yield of sectors of production in cereals has most women.' This was at the 3<sup>rd</sup> European Forum on Rural Development at Palencia, Spain in March 2011. Ms Ramos requested developing nations to formulate appropriate policies that will build capacities and empower rural women for food production and security (Yeboah, 2011).

Despite the enormous contribution of women to the development of agriculture, the sector is not without challenges. Agriculture has for a long time been dependent on rainfall Chamberlins (2008) which is not all year round. In view of the need to feed the ever growing population in the midst of the challenge of addressing the recent water scarcity globally, Ghana, like other developing countries, is pursuing irrigation farming. Irrigation is the artificial application of water to the soil usually to assist the proper growth of crops in dry arrears and in times inadequate rainfall (Hillel and Vlek 2005:55). While this is considered appropriate to curb the challenges associated with rain fed agriculture, irrigation farming is not without questions in Ghana. Successive governments instituted some irrigation schemes to provide livelihood for both men and women without giving preference to a particular gender. It was envisaged that both men and women would participate and have access to irrigation facilities while at the same time contributing to decisions regarding the operation and management of the scheme.

Programmes on irrigation in Ghana had mainly focused on inadequate maintenance of the schemes, for example, the poor management of the irrigation systems, potential of irrigation to improve farm income, reduction of poverty and farmers' welfare among others (GIDA and JICA, 2004). Also policy makers and international donors have shown keen interest in developing irrigation farming and were ready to support women participation but the lack of reliable information on women involvement in irrigation as water users and planners seemed to undermine progress in irrigation farming in Ghana. Despite the interventions, little effort was made to research into gendered irrigation issues. It is envisaged that both men and women would participate and have access to irrigation facilities while at the same time contributing to decisions regarding the operation and management of the scheme.

### **1.3 Statement of the problem**

Irrigation agriculture is not a recent phenomenon in Africa and Ghana. However it is given an impetus and modernization with more resources pumped into it. Although both men and women are involved in irrigation farming, irrigation farming has been categorized as men's work (Wahaj et al.:2007; Hulsebosch and Ombara 1995) because women are not perceived as the direct stakeholders (Zwarteveen 1995:8). As a result studies on irrigation have mainly focused on men. The subject of gendered irrigation management associations however is the least to have been studied in Ghana.

In addition to their productive activities as farmers, Goetz (1995) asserts that women perform reproductive duties whereas men are only associated with productive work. This view has been attributed to as the reason for which women were exempted from productivity enhancing technologies. Apart from women being ignored or denied participation or allowed any or access to bodies aimed at making decisions concerning water use and irrigation farming,

there is also limited information, in terms of literature on women participation in irrigation Mehra and Esims (1998:5) to allow for systematic analysis and policy decisions on women in irrigation management. This delinking of women's major role in agriculture production and their lack of participation and decision-making power in such irrigation projects/schemes is critical and worthy of study as it links to what is happening globally.

Until recently, many irrigation schemes in most parts of Africa were controlled and managed by state institutions. These agencies have been blamed for the poor state of existing irrigation schemes, poor maintenance, poor management and inability of farmers to realize their full potential in irrigation schemes. In view of these criticisms, management and control of most irrigation schemes in Ghana has been transferred to the actual users of water on such schemes, while state agencies act as supervisors. Irrigation users form associations through which management operations and water charges or fees and rights to water and land are controlled.

The World Bank reports states that such Water Users Associations (WUAs) have been effective, in increasing farmers' productivity, improving accountability and performance and improving the financial sustainability of irrigation systems in developing countries (World Bank: 2004). In spite of this, the new system of water and land management is not without challenges. This includes poor representation of women in the management of such associations and therefore the schemes (Agarwal, 1981). While the new system of irrigation management encourages participatory irrigation management based on gender lines among others, and the approach perceived as opportunity for a more equitable access to use and management of water, they have often excluded women in management positions (World Bank, 2004)

Agarwal (1997) points out that as new institutions, new property rights and new social relations are being fostered, many gender inequities are not just being perpetuated, they are becoming more deeply entrenched and additional ones being created In view of this finding, Shilpa (2005) questions why women who find themselves in irrigation schemes are involved in several aspects of the schemes, and yet remain just ordinary members of irrigation farmers associations and therefore play little or no role in decision-making processes. In view of the fact that women constitute a considerable number of the farming population in Ghana FAO (2011), this research intends to study the reasons underlying such low participation of women in irrigation management schemes. Of particular interest to this study is the extent to which women are able to participate in irrigation management in Ashaiman. This is a significant area to explore because of the considerable number of women farmers who are also tasked with multiple roles and also want to be involved in irrigation management.

## **1.4 Objectives of the Study**

Specifically, the study's objectives were about women's participation in irrigation project management which was assumed to be limited and underexplored in many cases. It aims at contributing empirical data to the debate about women's involvement in irrigation project management.

## 1.5 Research Questions

As stated earlier, despite government's efforts to promote women participation in irrigation management in Ghana, fewer women are supposedly involved in the management of the Ashaiman irrigation scheme. The overarching question in this study is:

**Why are women who are involved in various aspects of irrigation farming under-represented in the management of the irrigation scheme to which they subscribed?**

- What were the factors that contribute to or otherwise hinder the participation of women in the management of irrigation projects or schemes?
- What were the criteria and processes by which the management team is selected (written and non-written rules)?
- How did the structures of power relations (particularly gender relations) within the irrigation Farmers Association influence women's participation?
- How did the gender relations (within the farmer's families) influence women's participation in the farmers' association

## 1.6 Relevance and Justification

Women form the majority of food crops producers in developing countries. They manage household production, farming production and reproduction activities. Women, because of these roles are therefore the majority of water users and they suffer most during the scarcity of water (UN, 2005:7). Hence they will be able to manage water efficiently putting all things together. Yet, except for women-headed households, women are least represented in irrigation agriculture (Lynch, 1991). With the focus of government of Ghana to increase production and food security through irrigation, GSDGA (2010) there is the need to focus on women farmers not only as producers but also as both managers and part of the decision making body of such schemes.

Several factors have been attributed to the failure or non-performance of irrigation schemes including design, lack of training of farmers for the use of the facility and also the inability to address the needs of men and women who are the beneficiaries of the project. Previous studies state irrigation is a male-dominated Adeoti (2009) area and as a result most project implementations have not factored in any gender dimension during the design and implementation. Ghana Irrigation Development Authority is not an exception. This study would capture women's involvement in irrigation project and their managerial roles as opposed to their counterpart men since women's role in irrigation project management is least explored.

## 1.7 Research Process and Methodology

The study is focused on the underrepresentation of women in irrigation schemes, specifically on the Ashaiman Irrigation Scheme in the Greater Accra

Region of Ghana. To gain insight into these areas, the research collected both primary and secondary data. This section covers study sites, the various methods and techniques of data collection and analysis used to carry out this research.

### ***1.7.1 Study Site***

Ashaiman Municipal is one of the ten Regions in the Greater Accra region of Ghana. Its capital is Ashaiman which is situated about four kilometers to the north of the port of city of Tema and about 30 kilometers from Accra, the capital city of Ghana (Nunoo, 2008). The Ashaiman Municipality is a diverse community with people from diverse ethnic groups and religious backgrounds. Nunoo(2008) states that there are about 50 different ethnic groups from the 10 regions of Ghana and other neighboring countries.

The most prevalent ethnic groups found in the district are Ga-Dangbe, Ewes and Dagomba's (ibid, 2008) .The migrants from neighboring West African countries are from Togo, Baukina Faso and Mali. Population of municipal is dense over 150,312 out of which 7183 are males and 75129 females. (Population Census, 2000). It has an average household size of 5. The main source of occupation is agriculture (food crops, livestock, poultry and fishing), commerce (most of which is buying and selling, and hawking). Many of the youth are illiterate and unskilled and thy work as carpenters and mansions. Apart from them there are other workers such as teacher's health worker, the police among others. Accommodation in the Municipality is relatively cheaper than the Tema municipality so many skilled and unskilled workers live there and work in Tema. It has 17public schools and about and only one public health center. It is s a deprived and marginalized community with poor sanitation problems such as indiscriminate dumping of refuse and poor disposal of liquid waste among others (Nunoo, 2008).

### ***1.6.2 Selection of Case Study***

Selection of (a) case(s) depend on factors such as pragmatics, intrinsic interest, purposiveness (typical-extremely good/bad) and access (O'Leary, 2010:176-7; Yin, 2003). With regard to this paper the selection of the case is based firstly on the fact that it is considered as typical (extremely good case). This is because there are a significant number of women farmers participating in the Ashaiman Irrigation Scheme. Secondly I chose it on the basis that I could easily accessed information and data since it is based in the national capital they would have better information management systems and records.

### ***1.7.3 Respondents Selection***

All respondents who participated in this study were drawn from the Ashaiman Irrigation Scheme or are people who have in one way or another have to do with the Ashaiman scheme. I had to trek cautiously in order to get people who are willing to respond to my questions.

### ***1.7.4 Techniques Employed To Collect Data***

I employed a mixed method approach using both quantitative and qualitative techniques. For the quantitative technique I adopted the survey method to

enable me to capture the characteristics and attributes of the respondents through a questionnaire (O’leary, 2010:181, Creswell, et al. 2004). Aside this, interviews, focus group discussions, observations and informal conversations were also employed. These different data collection methods were used with the objective that the methods would complement each other in order rich and insightful information could be collected.

A well-structured questionnaire was used to interview a total of 54 farmers out of which were 38 men and 16 women. Male respondents were randomly selected from a sample size of 73. A conscious effort was made to interview all the women farmers since the research was centered them and also to illicit their views to the fullest. To achieve this, interviews were held on their on farms. The survey was used to collect information on farmer’s socio-economic and demographic features on the types they cultivated crops. Further information gathered included resources and entitlement of farmers, such as land ownership and holding structure, rights to land, structure and constitution of women and men in irrigation scheme itself as well as participation in meetings and discussions. Since not all the variables could be measured, people’s perceptions were captured qualitatively.

The qualitative aspect involved the use of focus group discussions, informal conversations, observations and telephone calls. The telephone calls was either to confirm or find out further information and also to reach those respondents that were difficult to reach (O’Leary 2010:195).

Two focus group discussions were conducted from the same community to obtain information from both men and women. 8men and 8women were selected out of the 54 respondents for the discussion. The reason for the focus group discussion was to get rich information that was not captured during questioning (ibid: 196) It was separately conducted to enable the women who were not able to speak in the presence of men to contribute effectively. According to Chancellor (1997) the inability of women to participate fully at meetings in the presence of the men is as result of cultural constraints. The approach was used to gather information about how some concepts such as women, gender and participation were locally framed. As part of the observation process I attended three different meetings, an emergency meeting, management meeting and a general meeting to observe how men and women interacted and participate during discussions. I also observed their sitting positions and the proceedings of the meetings and the power relations that were exposed. Informal or casual conversations were also employed in order to understand the nuances of women’s roles in irrigation maintenance, managements, and operations.

### ***1.7.5 Secondary Data***

Further Information obtained was from thee archives of the Ministry of Food and Agriculture Ghana (MFA) and Ghana Irrigation Development Authority (GIDA). The information obtained was basically secondary data on the establishment of GIDA, the irrigation policy document and the Constitution of the AIFCS, History and establishment of Irrigation Development and the Irrigation the transfer policy. The above literature was reviewed to get a better understanding of the research to in the Ghanaian context

### ***1.7.6 Scope and Limitation***

I used the mixed method approach namely, quantitative and qualitative data collection to capture information during the research period. However the major part of the analysis is drawn from the use of qualitative data because of the variables involved. Due to the wide use of qualitative data the study could not be applied universally in other areas. Most of the female respondents which the research is centered on were not literates hence I had to talk to them on one on one basis. This demanded that I transcribe into English the data collected because the informants spoke in their local languages which I understand.

## **1.8 The Challenges of the Data Collection Process**

While the whole research process was interesting, it was also very demanding. I anticipated a few challenges but others also came my way and I dealt with them depending on the situation as occasion demanded. I discuss some of the notable steps I took to go through successfully my field work schedule as I planned. It was very difficult to meet the farmers during the research period because most of them started work on their farm early as 5 O'clock in the morning and closed around 6pm in the evening. I therefore had to go to the individual farmers on their farms for the survey.

From the above daily farmers' schedules, it was also very difficult getting farmers as a group for the focus group discussion. And for this reason I had reschedule meeting times that favored them. Another problem was that information obtained from the Ministry of Agriculture was also scanty and scattered so I had to spend more time than anticipated to put the relevant documentation on the subject together. On the other hand, farmers the farmers showed much interest in my research work they enthusiastically cooperated with me to gather the necessary information.

## **1.9 Organization of the paper**

The paper is organized into five chapters. The first chapter gave an outline of the research topic on gendered irrigation management. The second chapter provides a conceptual frame work that will be used to analyze the low representation of women in decision making. The third chapter discusses information on the irrigation and overview of irrigation and a description of the Ashaiman irrigation scheme and the structure and composition of the irrigation farmers association. The Fourth chapter gives a presentation of research findings and analyses the factors that contributed to the underrepresentation of women in leadership positions. The last chapter concludes and summarizes the research findings and also gives some policy recommendations.

## **Chapter 2**

### **Theoretical Framework**

#### **2.1 Introduction**

This chapter looks at the theoretical concepts employed in this study. It explains separately the relevance of each concept and how they fuse together or interrelate. It further provides relevance for using a participatory gendered approach to explain the extent and form of participation within irrigation the irrigation farmers association. In addition, it focusses on literature review on women in decision making.

#### **2.2 Participation as a Contested Concept**

Participation is not a new concept and it has been used in different arrears over the past years, for example the democracy theory, political empowerment and colonial development planning (Campbell and Salagrama, 2001:2). Although this concept has been used by several writers or authors, the concept of participation still continues to be highly contested. It has recently dominated development work (ibid: 2) and has become a necessary condition for development interventions (Oakley, 1991:6). It generally may be referred to as an act of getting people to take part in a process or activity of any kind and in any environment. It may take different forms including picking people by popular acclamation by what is known or said about a person or group, political elections, selection of people from a group, as result of information based on what people or leaders know about someone among many other processes. Even though there have been various efforts to differentiate between the definitions of participation.

According to Oakley (1991:8) participation can be seen as a means and an end. Participation as means is a way of using participation as a way of controlling the 'physical, economic and social resources of rural people to achieve developmental objectives', in this case priority is given to the achievements obtain rather than the act of participation. Whiles participation as an end is the ability to build up the potential of the rural people to get involved in developmental projects (ibid, 1991:8).

Generally, participation can either be a bottom-up or the other way around. An important aspect of participation which is often neglected is decision making (Agarwal, 2001). Participation in development intervention in most sectors of economy including irrigation encourages the formation of groups where farmers can work together for the benefit of the community. In spite of this a considerable number of the group, particular women are excluded during decision making processes. Such forms of exclusion are often founded on the rules, norms, perception of people and society in addition to their endowments (ibid, 2001). Policies enacted by government can also block women's access or participation in management decision making processes. A policy which does not show neutrality can become a weapon for the male population to exclude women from gaining access to a resource or position in

such management areas (Whitehead and Tsikata, 2003). These factors affect women negatively and their ability to change them depends on the negotiation power between the state, the community and the family (Agarwal, 2001)

The typology adopted by Agarwal (2001:1624) below shows the levels of participation showing movements from a lower level to a higher level. The ability to move from a low level to higher level of participation depends on how active the person is within the group.

**The typology of participation by Agarwal (2001:1624)**

Level/ Participation	Form of	Characteristic Features
Nominal Participation		Member in the group
Passive Participation		Being informed of decisions ex post facto: or attending meetings and listening in on decision making without speaking up
Consultative Participation		Being asked an opinion on specific matters without guarantee or influencing their decisions
Activity/ participation	Specific	Being asked to (or volunteering) to undertake specific task
Active Participation		Expressing opinions, whether or not solicited
Interactive(Empowerment) Participation		Having voice and influence in group's decision

Source: Adopted from (Agarwal, 2001)

Former typologies place self-initiated activities as the topmost. However those whose voices are not important may withdraw from the group to form another but their absence will not be recognized because they do not control the resources of the previous group. It also does not solve all problems as it is being portrayed, for example interactive participation has limits because of socioeconomic inequalities and power relations existing in communities (Agarwal 2001).

In her study in South Asia Agarwal maintains that in a group a woman's effective participation involves the consideration of her influence in decision making and not just being a member. This is low in most developing countries because most households in the farming communities are represented by one member of the household, mostly men (Zwarteveen and Meinzen-Dick 1998:340). Those women who are represented are only members because their

contributions are not recognized. Also men who attend meetings hardly pass on the information to their wives. On the other hand women who are able to attend the meetings are not recognized because their contributions are not taken into consideration. As a result most women do not see the need to attend these meetings.

The concept participation was adopted as an analytical lens to understand how the members of the Ashaiman irrigation scheme participate or not participate in decision making. This can be done through observation and discussion with members to see how members both men women take part in and contribute to discussion at meetings and categories them into the exact levels. Their opinions on important matters will also be solicited to determine who is able to participate or not.

Women and men participate in the institution of the irrigation farmers association which is gendered. The rules and regulations (both written and unwritten) of the irrigation farmers association will be taken into consideration. This will determine the rules of entry and also determine who is able to participate or not participate. The knowledge of social norms of the people of the Ashaiman community will also be used to determine who is able to speak up at meetings or in public. While members interact to either participate or not participate some of the interaction are either direct or indirect but may affect the

### ***2.2.1 Women's Participation in Water Users Associations***

Research on Water Users Associations in Sri Lanka, Nepal, Pakistan and India have revealed that women's participation is low though a large number of women are involved in irrigated agriculture. This because irrigation farming is perceived as occupation for men and for that matter woman are not seen as stakeholders (Zwarteveen 1995:8)

There is however limited information of larger number of female participation in waters users associations where there are organizations made up of only women that manage underground pumps. (Koppen and Mahmud 1995 cited in Meinzen- Dick and Zwarteveen 1998: 340). Even if there is such information it is mostly found in arrears were men do not want to be part of irrigation farming or are not attentive to irrigation farming (Dalwai,1997 ). In addition 'studies conducted in Indonesia also revealed that water users associations are not able to function properly because of the lack of women in the association'. (Zwarteveen and Neupane 1996:1). As a result, the interest of women cannot be represented and can lead to poor performance in management.

## **2.3 The Concept of Gender**

According to Scott (1988: 42), gender is constitutive of social relationships based on perceived differences between sexes and gender is a primary way of signifying relationships of power. She argues that changes in the organization of relationship always correspond to the representation of power but the direction of changes not necessarily one way'. She (ibid) further proposes the need to study the interrelationship of gender among four elements which together make up a gender system, and the way they change. These elements

are the symbols in which gender differences are understood, the normative concepts used, which often operate in systems of binary oppositions, the political and social institutions in which a gender system is embedded, such as kinship and the economy, and lastly the formation of a subjective identity. In the main, Scott suggests that the study of gender should extend beyond that of women as category to encompass gender role in constituting social relationships more broadly and in signifying other relationships of power (ibid).

The concern for gender as a concept of social analysis has been absent from social theories, until the late 20<sup>th</sup> century. While several theories were proposed to deal with the issue, the concept did not look at the social relations between the genders. In order for us to understand the meaning of gender, it is necessary to handle individual ways of looking at the gender in addition to social organization to clarify characteristics of these interrelationships. According to Scott "we need to replace the notion that social power is unified, coherent, and centralized with Foucault's concept of dispersed constellations of unequal relationships, discursively constituted in social fields of force" (Scott,1988:42). She looks the differences in social relationship between gender center's around four different but interrelated levels

The first is level of symbolic these are cultural symbols (images, languages ,and communication) that are attributed to men and women that suggests numerous but more often than not inconsistencies in its representation. Because these symbolic meaning are gendered they reproduce hierarchies.

The second is the level of institution which Scott (1988: 43) asserts that it is not limited to the 'use of institution as the family, kinship and laying emphasis on the household and family as the basic unit for social organization' but also the labour market, political institutions, education and the military all carry gendered meaning. Men are seen to have easy access and dominant in these institutions.

The third aspect of her model is the level of ideology which Scott (ibid) proposes to justify structural inequality. There are some traditional values and norms that justify the exclusion of women. Ideologies also perpetuate and sustain gender hierarchies. For example how ideologies have reduced women to their reproductive duties and sustain their exclusion from public life, where they are also involved in productive activities such as farming.

The fourth level of subjective identity talks about how men and women behave in particular societies, of specific social groups in specific periods of time are framed, What actually makes one a woman or man in a community is crucial in this sense (Scott, ibid). Ascribed and prescribed values of individual sexes is a requirement to defining the woman question. Depending on the cultural and social setting men and women find themselves they will act and behave differently.

Gender relations: The gender relations of power between men and women are difficult to understand because this interaction requires both material and ideological aspect that is found in nature. The material is not only disclosed in the roles played by men and women and the distribution of resources between them but also through 'ideas and representations' (Agarwal,1997:1-2) 'ascribing men and women different abilities, attitudes, desires, personality traits behaviour and patterns.'

### ***2.4.1 Analytical Framework***

This paper draws from Scott's (1988) framework of gender analysis in historical perspective. The historical perspective is an overview of study and the records or account of events that have occurred in the development of a people over a period of time. As pointed out earlier, this looks at gender from four different but interrelated levels namely, level of subjective identity, levels of institutions and organizations, level ideology and doctrine and level of symbolic meaning.

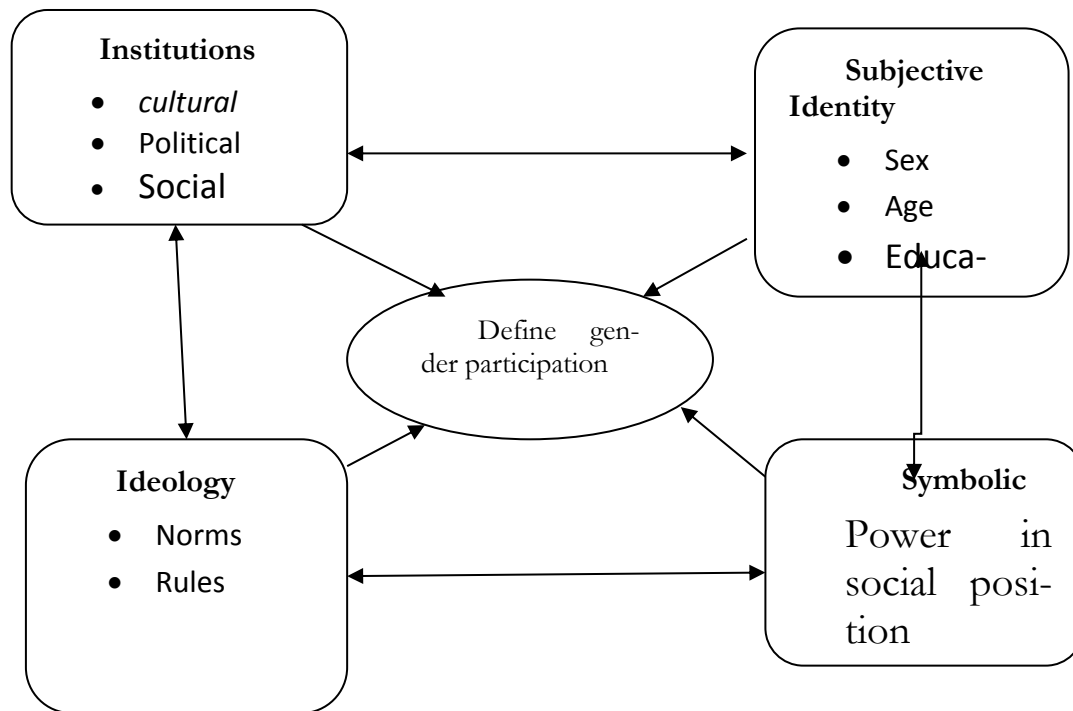
Scott (ibid) says the study of society and gender should go beyond the focus on the latter as men and women who reflect the sex of the individual to embrace their social relations, social differences and social power. She further asserts that relationship of gender are not static but dynamic in the sense that it reflect changes in power relations in different directions. The perceived social differences of the social relationship between gender revolves around four distinct but interrelated elements, level of subjective identity, levels of institutions and organizations, level ideology and doctrine and level of symbolic meaning.

The issue of women in irrigation management goes beyond the sexes of the genders. It involves the social relations and the structure within in which the genders operate. As Okali (2011) pointed out, "women and men are diverse social grouping with multiple identities and they are not only a collection of atomized individuals having interest". They have separate and joint interests even within the same enterprise for example, irrigation agriculture. This raises the question about whether women as a category of gender are actually less powerful and less subjected to the control of men and organization planning or society as depicted by some writers. The perceptions of both categories of gender are critical about addressing issues about the under- representation of women in irrigation project management.

Fundamentally, Scott (1998) argues that analysis of gender should move away from the dichotomous description of sexes, masculinity and feminism and others which only show differences in sex roles. Without disregarding the reality of such sex roles and differences, she proposed analysis based on such categorizations only end up in an opposition perspective between heterogeneous categorization of male and female even in the presence of homosexual discussions. According to her inclusion of the power structure and relations connected to race, ethnicity, nationality and class will give a better explanation of the changes that occur in society. She therefore proposes four interconnected levels by which change can occur.

Based on the above discussion, the diagram below depicts how in practice the four levels that Scott (1998) proposes may function or interact to define which gender is to participate or not participate in management level of Irrigation Farmers Association. The four boxes represent an imagery of the four levels Scott discussed in her paper and the arrows show the interconnections with one another. The circle in the middle represents the effect of the interactions. It shows that while some interactions are direct, others may be indirect, yet an effect of change is produced at the end. The complexity of the processes of change and in this case how and who is able to participate in irrigation projects is illustrated with the figure 1 below.

**Figure 1: Adapted Frame Work of Scott (1998)**



As stated earlier, the study employed Scott's framework shown in figure 1 to understand gender participation in irrigation management. The study investigated whether cultural institutions such as norms on women contribution at meetings, women subordination, women's access to land, political institutions like rules and regulations about women's representation in management team rules and regulations of the Irrigation farmers association.

The study also assessed sources power relations like access to land, women group, and access to information. The Subjective identities like age, sex and education were also investigated for their effect on gender participation in decision making, change.

This frame work is used to argue that women participation in irrigation management is as a result of interrelated factors which act directly and indirectly such as cultural, education, age, ideology of men about women in the society and power play in the society to exclude women.

## **2.5 Women involvement in decision making**

Over the years the decision making power had lied within the domain of men both to make decisions at the public or private sphere of life. (Said-Foqaha, 2011:235) This is due to the "Patriarchal" system that imposes itself at all levels in the society. Patriarchy in the Arab world according to her is built on a certain order where power and authority is given to males and young men over women."(ibid 2011:235)

In Ghana, the impact of gender norms and customary practices permeate all forms of society. In government policy making, fewer women are found and those represented are mainly the highly educated and heads of departments

such as members of parliament, heads of national institutions such as banks and the judiciary who are able to speak their minds out in the company of men. According to Opare (2005) the inability of women to rise up to leadership position is as a result of cultural belief that reduces women to subordinates and men as the dominant group. Hence leadership roles are ascribed to men who are even younger over older women because they are men.

Furthermore Barrie (1982) asserts women's subordination is associated with specific 'household ideology' which excludes women from gaining access to resources such as income and political autonomy. This makes women economically dependent on their husbands. The various beliefs the place of a woman is associated with the domestic sphere where they take care of children and that reproductive work is a woman's sole worlds is used reinforce women's subordination.

In rural communities, women have limited or no voices at all in decision making even if they have, they are given positions as that are not directly influential for example organizers and ordinary executive members (Opare, 2005). In addition, they are not involved in any decision making or development planning processes because they are not able to express themselves in the presence of the heavily dominated males, they are considered as non-literate by the men and they lack the confidence to resist or challenge such actions (Zwarteveen and Neupane 1996:9). Furthermore, women's needs are neglected even though they are specific and different from those of men or are complementary to the needs of men. It is often presumed that women are the subordinate group in society and hence have nothing to contribute when it comes to farming or irrigation agriculture, which they (women) are ignorant about. The dearth of empirical studies on such gender issues related to irrigation has created a vacuum in policy making. Women issues, views and interest in irrigation management have generally been ignored and ill-represented in literature (Athukorala and Zwarteveen, 1994).

Amidst all challenges the government of Ghana does not itself discriminate against women. Article 12 (2) of Chapter 5 of Ghana's Constitution 1992, states that all persons in Ghana (men and women) are guaranteed fundamental human rights. These include the right to life, health and delivery, education and justice and equality of the law such as inheritance. (The State of the Union Report, 2010). According to this report, the responsibility lies on the Government of Ghana to, enforce legislation against obnoxious cultural practices against the dignity of womanhood through national campaigns and education to propagate the laws and draft laws for equal pay for men and women. On the other hand the citizens of Ghana are to sensitize women on their basic rights, encourage women to aspire for position their male counterparts also aim at and educate women on reproductive health issues.(ibid, 2010).

Another action taken to encourage the participation of women is the affirmative action. According to (Tsikata, 2009), affirmative action is a set of measures adopted by governments and private institutions like political parties educational institutions, corporations and companies to attempt solutions to the state of chronic discrimination and side-lining of particular social groups to encourage their efforts in the interest of certain developmental goals. The first generation of affirmative action policies in Ghana, were implemented in the first decade of the first republic (1960-70s). The focus was on regional and

rural-urban differences, education and job placements. The recommendations given were reservation of 10 seats for women in parliament, promotion and participation of women in certain professions, scholarship schemes (Northern Ghana Scholarships, Cocoa Marketing Board (CMB) scholarships, free education, text books and uniforms.

The Second generation of affirmative action policies in Ghana being pursued by Governments is the Girl- Child education policy, science clinic for girls and meals for school children in certain deprived districts (ibid, 2009). The National Council on Women and Development (NCWD) was resourced to be able to handle currently accepted issues involving women. In addition, Political parties are also encouraged to support more female parliamentary candidates.

## **2.6 Conclusion**

The concepts gender and participation were used as an analytical lens to understand the position of men and women in the social setting and the roles played by men and women within the farmers' association. This enabled the searcher to understand the reason for the under representation of women. The literature on women in decision was relevant to understand the position of women in decision making.

## **Chapter 3**

### **Overview of Irrigation Development in Ghana**

#### **3.1 Introduction**

This is an overview of irrigation development in Ghana (GIDA), the sole implementing agency in charge of irrigation. The chapter also gives a description of the Ashaiman irrigation scheme and the structure and membership composition of irrigation AIFCS.

#### **3.2 Background of Irrigation Development in Ghana**

Irrigation farming in Ghana has existed about century ago but formal irrigation started in the early 1960 (Namara et al. 2011:4). The Ghana Irrigation development Authority (GIDA) is the constitutive organization or body in charge of Irrigation Agriculture in Ghana. It is a semi-autonomous institution within the Ministry of Food and Agriculture (MoFA) Since 1960 when it was established, GIDA has moved through several phases and rebranding. It was formally called the Land Improvement and Preservation Unit of the Ministry of Food and Agriculture (MoFA) (GIDA, 2006).

The mandate at that time was Soils and Water Conservation. The unit was later upgraded to the Land Planning and Soil Conservation Unit. GIDA was finally established in 1977 following a decree SMC (Supreme Military Council) Nr. 85 under three main objectives (ibid, 2006). These three broad terms objectives are outlined below:

- To formulate plans for the development of irrigation for farming, livestock improvement and fish culture.
- To execute comprehensive programmes for the effective use of irrigated lands in co-operation with other agencies.
- To carry out land use planning in areas designated for irrigation (ibid, 2004).

The current core functions are to formulate, develop and implement irrigation and drainage plans for all year round agricultural production in Ghana (GIDA, 2009). Specific responsibilities include " Identification and site selection, designing and constructing of irrigation facilities (dams, ponds, dugouts etc.), Disseminating adaptive of irrigation technology to farmers and the provision of technical services to farmers among others" (Namara et al. 2011)

The developments of Irrigation Schemes in Ghana are as a result of 'financial and technical support and bilateral cooperation with China, the former Soviet Union, Taiwan Japan, and the republic of Korea. Funds were also provided by the United Nations (UN), Food and Agriculture Organization (FAO) and the World Bank (WB)' (ibid, 2011:4). These schemes are found in the various regions in the country. GIDA has a vision to explore all water resources for livelihood options in agriculture at appropriate scales for all communities. However it is currently managing 56 public (formal) irrigation

schemes which cover a total area of 12,708 hectares which is about 16% of the total land area.

The core areas of mandate of GIDA are food crop irrigation, water for livestock and aquaculture. Initially the strategy of the government of Ghana was to encourage farmers to participate in irrigation farming. As a result farmers were given free services such as 'free water supply to their plots, no contribution towards running and maintenance of project equipment, vehicles, canals, drains and even farm ditches. Farm inputs such as improved seeds, fertilizers and other agro-chemicals and mechanized services were either heavily subsidized or provided free of charge' (Sam-Amoah and Gowing 2007). Yet farmers failed to increase their yield considerably because of lack of devotion to the state asset. (ibid, 2007) The Government of Ghana was no longer able to finance the operation and management of the increasing numbers of schemes because of lack of funds. As such repair works was also a problem leading to the deterioration of most of the schemes. The introduction of the structural adjustment programme led to the transfer of irrigation scheme from state owned to beneficiary farmers.

### **3.3 Irrigation Management transfer in Ghana**

According (FAO,1995) Irrigation Management Transfer can be defined as a reduction in the Government's role in irrigation management and corresponding expansion of the role of water users and local institutions in irrigation management. This will result in the reduction of responsibility and financial burden on the government and making the water users responsible for the care of the irrigation facility. Over the past years most irrigation schemes were managed by state institutions making the involvement of local users very minimal. However these schemes performed poorly because of the inability of many governments to finance the operation and maintenance of these schemes.

The Structural Adjustment programme or the economic policy introduced by the World Bank and the IMF in the mid-1980s to developing countries to enable them pay for debts that they owed to commercial banks governments and the World Bank. This policy came with certain conditions where governments were required to cut down on government expenditure as part of condition to qualify for the loan. Of which Ghana was not an exception

The World Bank in 1986 reviewed the irrigation sub-sector, as a result of the Structural Adjustment Programme (SAP). In the review, it came out clearly that, the irrigation sector in Ghana was not performing well to produce maximum returns as compared to the amount of money invested in the irrigation infrastructure. As a result the World bank came out with new strategies to make irrigation development in Ghana sustainable. Emphasis was laid on the Government of Ghana focusing on small scale, Low cost irrigation system and to improve the operation and maintenance of existing schemes in order to enhance efficiency and reduce the cost to the Government, Government should implement a water charge that is geared towards full cost recovery and GIDA should pass on the task of management to farmers groups and private investors (GIDA and JICA, 2004).

This suggestion from the World Bank led to the establishment of Farmers Participatory Irrigation Management' (PIM). In this case the management of the scheme became the responsibility of GIDA and beneficiary farmers. The PIM began in 1987 and the legislative instrument LI350 was introduced to restructure the operation, maintenance and management role and include farmer participation in project management. The Dawhenya and Weiija Irrigation Scheme were the two projects that started the PIM. However it was not successful because the implementation process did not take into consideration the concerns of farmers' rather it used a "top down approach" which often makes them recipients and not participants of rules.

Based on the recommendations of the World Bank, in February 1990 the Government of Ghana formulated the Medium Term Agricultural Development Plan (MTADP) to show the focus of agriculture in terms of policy direction. The main focus of policy was directed towards the functional recovery of irrigation facilities and the improvement of output through rehabilitation of damaged irrigation facility and the promotion of operation and maintenance of irrigation facility through small scale irrigated agriculture

This led to a bilateral technical approach between GIDA and Japan Technical Cooperation agency (JICA) agreed to carry out a grant aid project called Farmer participation in Irrigation Management (FAPIM). It was agreed that before the transfer took place there should be series of discussion and practices with farmers before the transfer took place. As a result the name Small Scale Irrigated Agriculture Promotion Project (SSIAP) was adopted to deal with issues from the grass root instead of the top down. (GIDA, JICA, 2004).

In the year 1997-2002 the SSIAP (Small Scale Irrigated Agricultural Project) introduced by the government of Ghana was established with the main focus to set up sustainable irrigation farming under the direction of farmer participatory irrigation management. At the end of the study it was recommended that the success depends more on the involvement of farmers on the operation and maintenance of the schemes. It is based on this background that the ownership of all irrigation schemes in Ghana was partially transferred from state owned to the irrigation farmers association of which the Ashaiman irrigation scheme is not an exception.

### **3.4 Scheme Description**

The Ashaiman Irrigation Scheme is located within the Ashaiman Municipality which is 26 km northeast of the capital city of Accra, in the Greater Accra Region. Construction of the scheme started in December 1965 and completed in July 1968 by the Government of Ghana with support from the Russian Government. The scheme was designed to assist small scale farmers and is one of the 56 public irrigation schemes that are managed by the Ghana Irrigation Development Authority. (GIDA and JICA 2004).

It has a potential area of 200ha out of which an area of 155ha is irrigable. The scheme has a reservoir (dam) of 5.6 million cubic meters cross storage capacity with two main canals. The sources of water for the dam are the Gyorwulu River which has a catchment area of 82.4square meters. The major rainy season in Ashaiman area is between March and June and the minor

season falls between September and November. Irrigation in Ashaiman is by Gravity. A wide range of variety of crops is grown on the scheme and these include rice, maize and vegetables (okra, pepper, tomatoes, cabbage lettuce and onions). However, the most dominant crops cultivated by the farmers on the scheme are rice, fresh maize and okra. The average farm size of farmers on the scheme is 0.6 hectares and produces 262.5 metric tons of rice, 375.2 metric tons of okra and 268.0 metric tons of fresh maize annually (GIDA, 2006).

### **3.5 Current membership and structure of AIFCS**

There are currently a total of 93 farmers farming on the Ashaiman Irrigation Scheme out of which 17 are women. The farmers come together to form the Ashaiman Irrigation Farmers' Cooperative Society (AIFCS). The leadership consist of 9 a member executive board of which currently all are males. They are the President, Vice President, Secretary, Treasure, Organizer and 4 executive members (Annual Report of Ashaiman Irrigation Scheme, 2011). It must be born in mind that even though the scheme was constructed about 44 years ago the (AIFCS) became effective in the year 1997. The Power to decide on important matters concerning the scheme is vested in the domain of the registered members of the association but the men have dominated the position. Similar studies conducted by Zwarteveen and Neupane (1996:8) in 'Nepal revealed that even though the final power to decide on important issues is vested in the general assembly in principle yet in practice only the male irrigators attend meetings as a result are part of the decision making body'.

Information obtained from the field work revealed that men had dominated in the leadership position on the Ashaiman Irrigation scheme since the inception of the project. Even though there are no formal rules of excluding women from participating there is no female representative among the leaders currently. Generally women's participation is very low at meetings.

It is said that only two women participated in the leadership position over the past years. Among these two women one was a treasurer and the other an ordinary executive member. This agreed with an observation by Opare (2005) that women are mostly excluded from leadership positions and if they are able to attain leadership position, they often play roles that are not directly linked with the decision making process such as executive members or organizers. The group meets on the first Friday of every month for its general meeting while the executive meet on the first Wednesday of the month to draw the programme for the general meeting.

### **3.6 Conclusion**

GIDA is the sole implementing agency in charge of irrigation in Development in Ghana and currently manages 56 schemes. The inability of the Ghana government to finance the cost of irrigation led to the adoption of the Irrigation Management Transfer. There is a partial transfer of the ownership of irrigation from the state to the farmers. This led to the formation of farmer groups so farmers can work together to maintain the scheme.

## **Chapter 4**

### **Gender Participation: A case study of Ashaiman Irrigation Scheme**

#### **4.1 Introduction**

This chapter presents analyses and discusses the research findings. In the analyses the researcher explains the reasons for the underrepresentation of women at the decision making level at Ashaiman irrigation scheme using the analytical frame work of Scott proposes gender to operate in four levels that may function or interact to define which gender is to participate or not participate in management level of Irrigation Farmers Association.

#### **4.1 Membership selection criteria into the AIFCS**

The formal way of obtaining land on the irrigation scheme is through the land allocation committee. The land allocation committee is made up of The District Chief executive who is the chairman and at the same time the political head of the area, The chief executive of GIDA or his representative, Two representatives from the (AIFCS), The chief who is the custodian of the land, and assembly man who is a representative of the area at the District Assembly and the Scheme manager who is the secretary of the group and at the same time a staff of the Irrigation Development Authority (GIDA and JICA 2004).

The responsibility of land allocation committee is to determine the farmer's proven ability to manage the irrigated farms. The bottom line is one need to demonstrate his or her ability and interest in farming and must be a resident on the scheme. During the focus group discussion a woman disclosed to me how she was allocated her piece of land to become a member of the association.

Below is her narration:

I became a member by applying to the land allocation committee. I was initially squatting on somebody's land for a number of years. I was well known by GIDA staff and AIFCS members even though I was not a member. I performed very well and was allocated a land. And I have been farming for over 20years and have won various awards. Currently the best rice farmer for my region. Eva Asare 27/072012.

Even though the formal rule of entry into the irrigation farmers association does not give preference to gender this form of land allocation excludes women from having access to irrigated land in the study area because of the culture of the Ghanaian society. In several parts of Ghana women do not own land. Traditionally it is the heads of households and men who own land because it is perceived that women will benefit from the use of land through their husbands by helping them on the farm. The study showed that about 80 percent of the female respondent gained access to irrigated land through their late husbands. The rest of the 20% had the land through their own initiative and others said they rented the land.

Below is a narration from a female respondent.

The land was allocated to my husband about 30years ago I have helping been helping him on the farm ever since he was allocated the land. He died about two years ago so it was reallocated to me. Stella Kumi 15/07/12

The study revealed that majority of the male respondents thus about 90 percent were allocated land by the Land Allocation committee. Whilst the rest of the 10 percent obtained it from to their male relatives or their wives one of the male respondents also narrated to me how was able to gain access to the land he is using now through his wife. Below is his narration

I was in a different village so did not know about the allocation of the irrigated land. My wife was farming on the scheme. She is now very sick and cannot farm so I have taken over her parcel of land. John Mensah 15/07/12

Women are not able to gain access to land as compared to their men because of norm about ownership of land by men in Ghana The. The above agrees with similar studies conducted by Meinzen-Dick and Zwarteveen 1996:340) in Asia where ‘women obtain land through their husbands or head of household’s. In addition the lower social status of women creates power relations as result men have lead over women. Furthermore the sociocultural norms that discriminate against women also have adverse effect on women having access to resources (share-net, 2004) such as land. Also this system of land allocation privileges men than women because of the existing power relations which allows men to be likely close to opinion leaders than women and as a result put women at a disadvantaged position when it comes to allocation of land for irrigation farming. This explains the reason low numbers of females famers on the scheme (17) as compared to the number of males (73).

#### ***4.1.1 Rules of entry into leadership position***

The rules of entry require that only formal holders of irrigated land could attend general meetings and also qualify to apply to be part of the management team. As part of the requirements of the Constitution of AIFCS (1997) elections are held every three years to select new leaders for the group. The formal criterion of selection to occupy the position of an executive member is to apply to incumbent management team. The president of the group sets up an electoral commission which is supposed to ensure smooth running of the election and farmers who are interested in the executive positions are given the option to apply. After the applications are submitted the applicants are vetted. The vetting procedure is to find out whether one qualifies to become a member of the executive committee or not. (ibid, 1997)

To qualify to be a member of the executive one must be a fully registered member of the IFCS. He/She must not be an absentee farmer. The person must attend meetings regularly and also respond to emergency meetings all together, make up 100% for the past 3 years. This will determine one’s regular attendance to meetings. However anybody who is not able to score 60% and above is not qualified to be an executive member. In addition, the person must take part in communal labor regularly since irrigation work is more of community work. He or she must be able to pay the ISC (Irrigation Service

Charge) charges and meeting fees and also be a regular cropper with good performance. (AIFCS, 1997).

The community work is mostly repair of drains and canals and spillways which is basically concrete work. I found out majority of the men and women were aware of the rules and regulations that one will have to observe to become a member of the management team. Hence the inability of the women to participate in leadership position is not as a result of ignorance on the part of the women.

One of the men explained the procedure to me:

To become an executive, one must express interest and then apply for the position which is submitted to an electoral committee. There is a critical vetting process to check performance on the farm, regular attendance of meetings, Payment of membership fees, literacy level, good behavior, no records of violating IFA rules for example: where a member forcibly breaks a blocked lateral following non-payment of ISC and communal labor, Felix Agyekum FGD 14/7/2012

Another woman explained why she was disqualified from being an executive member.

Wanted to be part of the executives but was disqualified at the vetting stage because I was not attending meetings regularly .due to the long distance from my home to the meeting ground and distance and also I have a sick child at home who I always take care of. Akua Bonsu 13/07/12

It was observed that even though the members agreed there was no discrimination during the selection of the management team, some of the rules directly or indirectly excluded women. For example members were aware that most of the women were non literate yet it was one of the criteria for qualification and also most women had children to take care of so they could not attend meeting regularly because their children could be taken ill as in the case discussed above.

## **4.2 Inhibiting factors to women's participation within the management of AIFCS**

The study revealed a number of factors that inhibited women's participation at the management level. These factors were education time sociocultural norms, women's domestic roles, geographical location, corruption on the part of male leaders and age.

### ***4.2.1 Low in qualification low in numbers***

During the discussion some of the respondents did not want to be part of the executive because they could not read and write.

Below is a contribution from one of the women at our focus group discussion meeting:

Most of us women are not educated. We cannot read and write so it will be very difficult to join the management team. This position requires one to be able to read and write. Apart from that if there is any meeting or workshop an executive member represents the group. FGD Veronica Ayeh 3/08/12.

The Level of education was crucial because it determined whether one could become a member of the management team or not. It was necessary for one to be able to express one's self and also be able to read and write to become a member of the management team. The narration from the respondent revealed that one must be able to read and write and to be able to fill the nomination forms and represent the members of the association at meetings and seminars.

Generally, those farmers with more years of education were expected to be able to read and write and also contribute effectively to decision making. Refer to Table 2 appendix :1 which shows that majority of the of the men 17 out of the 38 respondents attained basic education while only 5 of the women out of the 11 women interviewed attained basic education. Majority of the women did not have any formal education.

The literacy level of farmers was also investigated. Literacy level is very crucial factor because it determines the ability of farmers to read and write. It is a necessary condition to become a member of the decision making body of the association. Majority of the male farmers could read and write as compared to the female farmers while only 5 of the females could write. Refer to figure 2 appendixes 2.

Even though some of the men interviewed did not have formal education, the men perceived the women to be illiterates. Some of the men also had wrong perceptions the women are not capable because they lack confidence to become leaders because they were not educated. However the survey showed that not all the women were non literate as result there are potential leaders among the women as far as literacy level is concerned on the scheme. Information obtained from the UN (2007:20) revealed that the inability of women to be able to reach leadership position is as a result of lack of education and training. This agrees with what is happening in Ashaiman

#### ***4.2.2 Sociocultural Norms: A constraint to women's participation***

I observed that none of the women spoke during the three general meetings I attended. When I questioned the reason behind their silence, they said they were not called upon to speak by the male executives. Traditionally, women are neither expected to speak in the presence of men unless they are invited nor are they allowed to criticize a man publicly. This is because of the symbolic male power men have in society.

Below is a personal experience by 54 year old woman who has been on the project for 20 years:

I don't want to be part of the executives because when man does anything wrong the he is not punished. When I complained about it the men said even the men wer not complaining and you a woman want to rebuke a man. I do not want to go through that so I cannot be an executive. Mama Eva 13/ 07/ 2012.

It is very difficult for a woman to speak up or criticize a man in a heavily male dominated society like the Ashaiman Irrigation Farmers' Cooperative Society. According to her women who tend to do that are branded as arrogant and disrespectful.

In the main, the unequal power relations among men and women in the group had put this woman at a disadvantage. It is evident that even though the rules and regulations of the AIFC did not exclude women from participating at meetings, members of the association have used the social norms of the community that prevent women from speaking in public to exclude women from participating in management positions, raising their concerns and contributing to decision making.

#### ***4.2.3 Women's domestic roles a barrier to their participation***

The study revealed women's productive and reproductive tasks prevented them from participating in management positions. Majority of the female respondents gave the excuse of their roles as farmers and mothers taking care of the home as a result they are burdened with greater responsibility. About 70% of respondents female respondents gave dependents as an excuse for not taking up the leadership position. This is what a 45 year woman had to say at the focus group discussion:

I wanted to be part of the executives but was disqualified at the vetting stage because I was not attending meetings regularly which accounted for 60% of the requirement for the past 3 years because of my sick husband who has stroke for four years now. Ama Antwi FGD 3/08/12

This respondent was one of the few females who were interested in taking up the leadership position but was limited by her duties as a mother and a wife. I had an experience with one of the women who I was supposed to meet to discuss in detail an experience she had but her child was suddenly taken ill and was admitted at the hospital on the scheduled date so we could not meet. We had to fix another appointment date

#### ***4.2.4 Negative Experiences: A barrier to women's participation***

One of the respondents recounted a bitter experience she had that had prevented her from becoming a member of the management team. She has been farming on the project with her husband for 25 years. Below is her narration:

I do not want to be part of the executives because of what I went through 2 years ago. I have been farming with my husband since the inception of this project about 40 years ago. The land was allocated to my husband on paper. One day a group of executives approached my husband to allow me to be part of the management team. My husband agreed to their request because there was no woman to represent the interest of women. Two members of the management later started making noise and were against me being handpicked because no woman was coming out. Everybody heard about my story. They said I was not a registered member of the IFA and that it was my husband who was so they would not agree. Now that my husband is dead I do not want to have anything to do with them. Mary Alhassan 25, July 2012.

She was denied the opportunity of becoming a leader based on the rules and regulations of the Association. The rules gave the opportunity to only people who were allocated land on the scheme to become members of the management team to which her husband was. As far as the rules and

regulations of the association were concerned she was not a member because farm plots were not allocated to households but individuals. The rules and regulations could only allow her to attend meetings on behalf of her husband but without contributing to proceedings. Even though she had the potential of becoming leader, her inability to have access to land prevented her. She could only express her interest through her husband. She is currently a member of the group because her husband is dead. This shows irrigated land on the study area reallocated to spouses who lost their partners through death.

#### ***4.2.5 Time as a constraint to women's participation.***

The respondents gave excuse of lack of time as their inability to participate in management. Common among reasons given were unsuitable meeting times and long hours spent at meetings as a result of lateness of some members.

Below is a narration from a 70year old respondent

I do not have time to be part of the management team. I am the head of my clan and have to be present at all gatherings. Richard Cudjoe

FGD 03/08/2012

The head of a clan is the oldest male of a group of related families that claim descent from a common ancestor in Ghanaian community is the oldest man in the extended family. He presides over all family meetings which are usually held in his home to deliberate on issues example, of marriage or death and general welfare of all family members

Majority of women gave the excuse of lack of time as a hindrance to participation than men. 35 male respondents out of 38 found the meeting time suitable. Only two male respondents were not comfortable with the time. While 7 women out of the 17 women interviewed found the meeting time suitable the rest were not happy with the time. Refer to figure 3: Appendix 2.

Women on the other hand are mostly constrained with time because of their usual roles as stated earlier. Majority of the males found the meeting time suitable because traditionally, they are not burdened with extra duties at home.

A female respondent also said she could not have time because of her duty as a wife, a farmer and her engagement in marketing activities on behalf of the irrigation farmers association. She has been associated with the farmers for about 5 years before she became a farmer. She told her experience on how she became a farmer and also her responsibilities that did not allow her to become a leader

I have not been part of the AIFCS for long I have spent only four months. I used to be helping somebody on the farm then I got a land. I market the maize for all farmers on the scheme. I make sure the buyers buy at equal prices. Presently I cannot get the time to be an executive member. I wake up early in the morning and do my household chores before leaving for the farm, I am the last person to leave the farm some times 6p.m before I go to serve my husband food. He is not the troublesome type; he can eat left-over food otherwise I will be in trouble. I always get home late so cannot add additional duties. Veronica Ayeh3/08/12

Apart from spending so much time on the farm, it is evident that this woman is also burdened with household duties that did not allow her to

become a member of the executives. A few respondents were not comfortable with the lateness of members and unduly long meetings. I also experienced it in all the three general meetings and one management meeting I attended. Instead of the meeting starting at 10am, the meetings started an hour or so later and ended about two hours after scheduled time. Most of the women were concerned with the long time spent at meetings

#### ***4.2.6 Socio-economic activities***

Apart from their farming activities and household work the women had other responsibilities. Some farmers were also engaged in extra income generating activities apart from farming such as trading and house rental. As result some of the farmers prefer to use their time to make more money than attending meetings. A female farmer who was very hard to reach personally explained why she did not want to be part of the executive through a telephone conversation.

I cannot attend meeting because I sell some provisions (for example, milk, sugar and biscuits) and foodstuffs for extra source of income. I am a widow. I use the money to take care of my 5 children. I do not have the time to attend general meeting and I will not get the time for the executive meetings. If I go to the executive meeting I cannot get the money I will make in the day. Our leaders are okay they can decide for us and let us know. Akua Boamah 19/08/12.

This woman has taken a position where she thinks her contribution will not affect decision of the executives According to the Agarwal's typology of participation, she is a nominal member of the group her decision does not affect the group. She believes in the capability of the executives to take decisions that will benefit them. She is more interested in making money than attending meetings which she thinks will not earn her any money instantly.

The study recorded a higher number of farmers describing farming as their primary source of income with others engaging in trading and house rental which as the lowest. To find out how much time they would want to give to farming and also determine their interest to be part of the management team, the number of men was likely to be more in activities and decisions regarding farming than the number of women. The latter engaged in other sources of income generation activities. This could further explain the reason for the low participation of women at the management level

#### ***4.2.7 Geographical locations a hindrance to participation***

The geographical locations of the farmers were scatted and very far. Daily, they had to travel long distances to their farms. Also the offices where the farmers met to discuss general and management issues were located on the farm land. Therefore, most of the women who attended the focus group discussion did not find it convenient to attend meetings. They give the long distance as an excuse because they had other household responsibilities apart from farming unlike the men. One wondered whether the women actually benefited from the meeting proceedings whether anybody cared to tell them about proceedings. This is what one woman had to say about the distance:

I had been an executive and stayed in the position of treasurer for two terms. At that time I was living in Ashaiman which is not very far from my farm.

Now I don't want to be part of the management team because I live at Zenu which is very far from the farm. I also have other household responsibilities and dependents who are children. I cannot make it to meetings regularly.  
FDG Agnes Quansah 3/08/12

#### ***4.2.8 Age as hindrance to participation***

Majority of the male and female farmers who were 60 years and above were not interested in taking up leadership positions because of their age. They felt it was tedious task and they did not want to burden themselves with the extra duties. All the female farmers above 60 years were not interested in taking up the position. The age of the respondents was categorized into three groups ages 18-35years as the youth; 36-60years as the middle aged; 60years above were the elderly group.

The survey revealed that the majority of elderly women were not interested in becoming members of the executives. This gives an indication that age is a limiting factor to participate in management position in the study area because it is considered as an extra duty and fatiguing. The researcher thinks the executive could once a while seek the counsel from these old, experienced farmers. In Ghana old age is usually associated with leadership and wisdom

#### ***4.2.9 Corrupt leadership: hindrance to women's participation***

A discussion with a female past executive revealed some of the unacceptable activities that went on among the some male executives. She was an executive member for two times from the year 2001-2006. However this woman did not want to be part of the executive member anymore because of the corruption she witnessed among the executives below is her narration:

During the farming season, farmers will have to fill a request form for fertilizer and every farmer is given based on the size of his or her plot. Some of the male farmers requested for more than what they would use on their farms. They sold the excess to people outside the project so they could make some money since we bought at a cheaper cost. I raised this issue at our executive meeting but the men ignored me and no action was taken against them. Also a male farmer stole some rice and disciplinary action requiring outright dismissal was expected to be taken but the men refused to take any action against him. Agnes Quansah 16/10/2012.

It is evident that the men in the team were corrupt and also kept themselves at the management position because of the privileges over the ordinary members. These were easy access to input and credit and delayed payment period after credit of input, representation of members at workshops and agricultural fairs in and outside the country. In addition, during the reallocation of land they are also given the chance to choose a preferred area and access to water on days other than the normal day's water was given to everybody. The benefits they obtained were as a result of the initiative of the leaders. It was observed that there is a male dominated aspect as a result of their power in social position coupled with a selfish interest and these have kept the men in executive position over the years. It should also be born in mind that the population of men far exceeds that of the women for that matter

their numbers could keep them in management positions over the women as long as the latter are few and subject to their ordinary position.

### **4.3 Gender relations at the irrigation farmer's Association**

The gender relations among the irrigation farmers is based on the gender division of labor where leadership roles were ascribed to males because they were traditionally associated societal control while women assumed subservient positions. This is also based on the ideology which strengthened the decision making power of the men.

The roles played by men and women in the association differed. It came to light that during communal labor, tasks that required a lot of physically for example digging, heavy concrete works and cleaning of the main canals, were considered a male tasks while those requiring less hard work for example sweeping, serving of water and food during communal labor were considered as task for women. This form of classification was based on the ideology of the people (socially constructed).

The study revealed that male farmers used their numbers 73 against the 17 females and their social position in the choice of executive members and decision making. This was enforced by their symbolic power in the society that ascribed leadership to men and put women at a disadvantage. Usually important decisions were taken by means of popular vote and because the male outnumber the females, their majority number always carried the vote. It should be noted however that in the circumstances that the women find themselves, it was difficult for the majority group to favor them thus they were always at a disadvantage unless a larger number of the men supported them. It was obvious that the women might not benefit from voting for issues and positions that a larger number of men did not support them. The survey also confirmed that acceptance on important issues was based on voting and majority of the respondents, about 74.1% attested to that. Refer to Table 3: Appendix 1

It was also observed during the three meetings I attended that none of the women asked a question or made a contribution towards an on-going discussion. I was curious to find out from the women why they did not speak. The answer I received was that they did not speak because they were not called to speak; others said they were not comfortable speaking at meetings, common among reasons given was the men would not listen to them. One would have to raise his or her hand to be called upon to speak. The executive member in charge had power to call whoever he wished; he called the men and ignored the women. From the on-going discussion it was evident that, the men participated in decision making more than the women. The levels of participation adopted by Agarwal (2001) were used to determine the level of participation of both male and female farmers to find out their ability to contribute to decisions. Majority of the males were found in the category of being able to attend meeting and contribute to decision making. This meant their level of participation was very high. While majority of the females recorded very low level of participation meaning they just attend meetings but did not contributed to decision making. Refer to figure 5: Appendix 2

The question is how are the interest of these women represented in a situation where there was no woman representing them at the management position. The women said they could only raise their concerns by approaching friendly or close executive member after the meeting. The men exercised their symbolic power in the social setting and their position as leaders to exclude the women from participating at meetings. It was apparent that, they only benefit the female farmers who attended meeting had was that these were held in *Twi* the popular lingua franca.

Finally, a discussion with the men revealed they did not see the need for women to attain leadership positions. They perceived irrigation farming to be tedious and a domain of men. Besides, women were also multi tasked so they had to concentrate on their domestic activities rather than taking up leadership positions and that they could not be leaders. This ideology is based on the norms of the society.

#### 4.4 Gender relations at the household level

Information from the field perceived men as leaders and they took all major decisions and the women the supporter of their husbands even at the household level. The rules of entry did not recognize the wives of male irrigators as members. Majority of the male farmers had their wives helping them on the farm. Refer to figure 4 Appendix. 2

According to wives of male farmers, the men decided on the type of crop to cultivate and women help with labor and marketing but the decision on how to spend the money from the farm was the prerogative of the men.

Some of the female respondents also said that when they came back from the farm very tired to the kitchen to prepare supper and did other chores, the men went to drink *akpeshie*, a local alcoholic beverage with their friends or play drafts. The role of reproductive work of taking care of the home and that of men being the bread winners are all socially constructed. The women further remarked that the decisions their husbands allowed them to take were associated with their domestic work (washing, cooking, child care and going to the market). All financial and important decisions were taken by the men by reason of the social norms that ascribed leadership roles to them and subordinate roles to women. Only a few women (owners of the irrigated land) also manage the farms with their husbands. For example one woman said:

I manage this farm with my husband. As you can see I am here on the farm with him working together. The man was spraying some insecticide on the farm while the woman was picking out weeds. When it comes to issues concerning the farm and the home, it is my husband who decides. If I am not happy I let him know but the final decision is taken by my (lord) husband.

Ama Fosua 20/08/12

#### 4.5 Conclusion

The entry rules recognize only formal holders of irrigated land as members of the association. Even though the rules are portrayed to be favorable, their interpretation is influenced by the norms of the community. This puts some

women at a disadvantage, for example, men are seen to have easy access to land in the Ghanaian community more than women, the reason being women have access to land through their spouses. This was the reason why only a few women were found on the scheme and was a disadvantage to women since the number of men far exceeded that of women. In addition, the power to decide on important matters rests with all members of the association yet women are excluded from participating based on the perception of men because of their sex and the women were subject to the home. Furthermore, the factors that hindered the women from participating include social perceptions that tend to undermine the capabilities and opinions of women. Literacy levels, time, women's domestic roles, geographical location, and corruption among male executives also played a part. It was also evident that these factors either interacted with each other or worked separately to exclude women from participating.

Finally it is also evident from the study that social norms as discussed above on gender, influences the institutions at community level on irrigation farmers association and at the household level.

## **Chapter 5**

### **Summary Conclusion and Policy Recommendations**

#### **5.1 Introduction**

The study sought to give a critical account of gender participation in the management of the Ashaiman Irrigation Scheme in Ghana. The study did not only focus on the dichotomous category of sexes or differences in sex roles between men and women but the social relations and the structure within which the sexes operate. It also mirrored the power structure among men and women irrigators.

The study argued that women participation in irrigation management is as a result of interrelated factors which act directly and indirectly such as cultural, education, age, ideology of men about women in the society and power play in the society to exclude women.

To this end, the main research question which guided the study was ‘why are women who are involved in various aspects of irrigation farming underrepresented in the management of the irrigation scheme to which they subscribe?’ An attempt was made to answer this and related questions, by noting the factors that obstructed participation of women at the same levels as men, membership selection criteria, gender relations within the irrigation farmers association, gender relations in farmers’ families and the perception of farmers regarding the participation of women.

The findings of the research revealed that women irrigators in the study area were underrepresented both in numbers and in leadership positions. Although the Ghana Irrigation Development Authority (GIDA: 2010) recognized the need for women to enjoy equal access to irrigation services and also partake in leadership roles of the water users association, women's involvement was still found to be very low. Furthermore, the constitution of the Ashaiman Irrigation Farmers’ Cooperative Society (AIFCS) made provision for the allow incorporation of women to be given adequate representation in the executive position; at least two women should occupy executive offices either by winning an election or by appointment (Constitution AIFCS: 1997). This clause had been persistently ignored by management who had mostly been men for two reasons, perceptions that reduce the competence and views of women and corrupt male leadership who want to retain the executive position for personal gains. Even the women who were able rise up to leadership positions could not make any impact because their concerns for example, of disciplinary action against violators of the code of conduct and also hand picking women for managerial roles as stated in the constitution of the rules were not taken into consideration by the men.

Even though the rules of becoming a member of the management team appear to be fair, they exclude women directly or indirectly either by acting singly or interrelated. They have been directly excluded and deemed because of their inability to qualify for the position based on the written rules for example, literacy level, and regular attendance to meetings, proper cropping, and

payment of membership fees. Furthermore, there has been indirect exclusion based on the ideology of women associated with the private and procedure for election which was done by popular vote in an institution where the men far exceeded the women in number.

Various reasons were given by both men and women for the inability of women to attain leadership positions. Referring to the main research question, women were hindered by social norms that gave leadership rights to men and subordinate roles to women. The other yardstick for disqualifying women from holding leadership positions was that of literacy. The double roles of women both (productive) farm work and the reproductive duties such as cooking, cleaning, childbirth and taking care of dependents as well as other chores at home also prohibited them from attaining leadership positions. Other reasons like distance and engagement in other income generating activities were also cited by the women. The study also revealed that social norms as discussed above on gender, influences the institutions at community level, the irrigation farmers association and at the household level.

The study confirmed previous studies that women issues were not only subjected to male control in Ghana but other in countries as well. The above erroneous social perceptions about women had resulted in their exclusion from assuming leadership roles. For example, men perceived uneducated women as incapable of holding leadership positions. They also perceived irrigation farming as a domain for men and expected women to concentrate on their domestic roles.

Clearly if men recognized the role of women as crucial and indispensable in achieving success of the scheme and were given the opportunity to be part of decision making, and others such as have access to irrigated land and other farm resources, agricultural productivity would increase greatly in Ghana. This would contribute to the central goal to Government achieving the Millennium Development Goal of reducing by half the proportion of people living in extreme poverty and hunger by 2015.

## **5.2 Policy Recommendations**

### ***Equal Allocation of Land***

There is need for an equal allocation of land to male and female farmers by the state because women contribute a lot to agriculture. Studies by (FAO, 2006) revealed that women invest 52 percent of their manual labour into agriculture and they produce 70 percent of food crops from rain fed agriculture. It is therefore believed that if women gain access to irrigated land, their farm yield would greatly increase. They would be able to earn a decent living and also take care of their dependants.

### ***Awareness Raising***

It is important to create awareness among all farmers concerning the rights of representation on the management board and also the potential of women when it comes to farming. Besides, the constitution of the irrigation farmers association should be amended to include at least three women on the board.

Probably this will force the decision making body to implement the rules and regulations.

### ***Meeting times***

The meeting times and their duration should be rearranged so that women would be encouraged to participation. Further, there is the urgent need for all the female to get together to form a women's group to share their peculiar problems. This unity will strengthen their bargaining power. Such a move is more likely to be recognized and supported by the government and civil society.

### ***Women Empowerment***

It is time capacity building skills programmes were organized for adult farmers as remarked by Ms Soraja Rodriguez Ramos, the Spanish Secretary of State for International Development at the 3<sup>rd</sup> European Forum on Rural Development at Palencia, Spain (Yeboah, 2011) to empower women in leadership skills and literacy. Additionally, more effort should be put in sustaining the vision of the girl child education to enable younger, educated women to play effective leadership roles in agriculture and other areas of the socio-economic life of Ghana.

## References

- Adeoti, A. I. (2009) 'Factors Influencing Irrigation Technology Adoption and Its Impact on Household Poverty in Ghana', *Journal of the Agriculture and Rural Development in the tropics and Subtropics* 9 (1):51-63.
- Arnett, J.J. (2011) '*Adolescence and Emerging Adulthood: A Cultural Approach*'. Second Edition Pearson Prentice Hall.
- Agarwal, B. (1981) 'Water Resources Development and Rural Women': Delhi India, Institute of Economic Growth.
- Agarwal, B. (1997) 'Re-sounding the Alert: Gender, Resources and Community Action', *World Development* 25(9): 1373-1380.
- Agarwal, B. (2001) 'Participatory Exclusions, Community Forestry, and Gender: An Analysis for South Asia and Conceptual Framework' Elsevier Science Ltd. Vol. (29) (10):1623-1648. Institute of Economic Growth, Delhi, India.
- Agarwal, A. and C. Gibson (1997) 'Community, Resources and Development: Beyond Enchantment and Disenchantment', Bloomington, IN, USA: Indiana University.
- Ashaiman Irrigation Farmers' Cooperative Society, (1997) Arrangement of By-Laws and Articles of Association
- Athukorala, K. and M. Zwartveen (1994) 'Participatory Management: Who participate?' *Economic Review* (6): 22-24. Colombo, Sri Lanka. People's Bank.
- Bagenholm, C. and F. Chancellor (1996) 'Women in Irrigation': (TDR Project)
- Barrie, T. (1982) 'Feminist Rethinking of the Family: An Overview' in Barrie Thorne and Marilyn Yalom (eds.) *Rethinking the family, some feminist questions*. Longman: New York and London. Pp. 1-20.
- Bruis, B. and A. Heijmans (1993) 'Gender Biases in Irrigation Projects: Gender considerations in the Rehabilitation of the Baurha Irrigation System in the District of Dang', Nepal, Kathmandu.
- Campbell, J. and V. Salagrma (2000) 'New Approaches to Participation in Fisheries Research', A Discussion Document Commissioned by FOA and SIFAR
- Chambers, R. (1995) 'Paradigm Shifts and the Practice of Participatory Research and Development, in N. and Wright S. (eds): *Power and Participatory Development: Theory and Practice*. Intermediate Technology Publications, London Nelson
- Chamberlin, J. (2008) 'It's a Small World After All': Defining Smallholder Agriculture in Ghana Development Strategy and Governance Division, IFPRI
- Chancellor, F. (1997) Developing the skills and participation of Women Irrigators: Experiences from Small Holder Irrigation in Sub-Saharan Africa. (TDR Project R 6062) [ftp://ftp.fao.org/agl/aglw/Morini/08\\_DEVELOPING.pdf](ftp://ftp.fao.org/agl/aglw/Morini/08_DEVELOPING.pdf) Accessed June, 18 2012
- Creswell, J.W., M.D. Fetters, N.V. Ivankova, (2004) 'Designing a Mixed Methods Study in Primary Care', *Annals of Family Medicine* 2(1): 7-12.
- Dalwai, A. (1997) 'Can Women do Participatory Irrigation Management' (PIM)? INPIM News Letter 5. Washington, DC: The World Bank

- Dawuni, B. and B. Agbeko (2010) 'An Assessment of Water Users Association: Constitution, Objectives, Financial viability and other Performance Viability', Ghana Irrigation Development Authority, Ghana
- Drechsel, P., S. Graefe M., Sonou and O. O. Cofie (2006) 'Informal irrigation in urban West Africa: An overview', Colombo, Sri Lanka: International Water Management Institute. Research Report 102 IWMI
- [http://www.iwmi.cgiar.org/publications/iwmi\\_research\\_reports/pdf/pub102/rr102.pdf](http://www.iwmi.cgiar.org/publications/iwmi_research_reports/pdf/pub102/rr102.pdf) Accessed July 20, 2012
- FAO (1995) 'Irrigation Management Transfer', Selected Papers from the International Conference on Irrigation Management Transfer, September 20-24, 2012 Wuhan, China
- FAO (2006) Agriculture, Trade Negotiations and Gender, Food and Agricultural Organization Gender and Population Division
- FAO (2011) 'The Role of Women in Agriculture, Agricultural Development Economics Division', ESA Working paper No.11-12 Accessed November 04, 2012 <http://www.fao.org/docrep/013/am307e/am307e00.pdf>
- Ghana Irrigation Development Authority (GIDA) and Japanese International Cooperation Agency (JICA) (2004) 'Technical Guidelines for Irrigated Agriculture: Small-Scale Irrigated Agricultural Promotion Project-Follow UP', Japan International Cooperation Agency.
- Ghana Irrigation Development Authority (2006) 'Historical Development of Irrigation in Ghana from Irrigation Reclamation and Reclamation and Drainage Division to Inception'
- Ghana Irrigation Development Authority (2011) 'Annual on Report': Ashaiman Irrigation Scheme.
- Ghana Shared Growth and Development Agenda (2010) Medium-Term Development Policy Framework, NDPC.
- Goetz, A .M. (1995) 'The Politics of Integrating Gender to State Development Process: Trends, Opportunities and Constraints in Bangladesh, Chile, Jamaica, Morocco and Uganda' Occasional Paper No.2 Geneva Switzerland: UNSRID
- Hillel, D. and P. Vlek (2005) 'The Sustainability of Irrigation for Climate Centre Systems Research', Columbia University, New York, New York 10027, USA, pp.55  
<http://www.sciencedirect.com/science/article/pii/S0065211305870026>  
Accessed on October 23, 2012
- Hulsebosch, J. and D. Ombara (1995) 'Towards Gender Balance in Irrigation Management: Experiences in Kenya South West Kano Project. Irrigation and Drainage Systems' pp.1-14, Kluwer Academic Publishers, Netherlands.
- Lynch, B. D. (1991) 'Women and Irrigation in Highland Peru', Society and Natural Resources.
- Mehra, R. and Esims S. (1998) 'What Gender analysis Can Contribute to Irrigation Research and Practice in developing countries: Some Issues', International Water Management Institute.
- Meinzen-Dick, R. and Zwartveen M. (1998) 'Gendered Participation in Water Management: Issues and Illustrations from Water Users Association in South Asia'. *Agriculture and human values* (15): 337-345. Kluwer Academic Publishers

- Mukhopadhyay, M. and S. M. (2004) 'Creating Voice and Carving Space: Redefining Governance from a Gender Perspective'. Amsterdam: Royal Tropical Institute.
- Namara, R., E., L. Horowitz, B. Nyamadi and B. Boubaar (2011) 'Irrigation Development in Ghana: Past Experiences, Emerging Opportunities, and Future Direction' Ghana Strategy Support Programme (GSSP) Working Paper No. 0027. International Food Policy Research Institute
- Namara, R. E., J., A. Awuni, B., Barry, M., Giordano, L., Hope, E., S. Owusu and G., Forkuor (2011). 'Smallholder Shallow Ground water Irrigation Development in the Upper East Region of Ghana', International Water Management Institute, IWMI Research Report 143. doi: 10.5337/2011.214)
- Ministry of Food and Agriculture; Food and Agricultural Organization (2010) National Irrigation Policy Strategies and Regulatory Measures.
- Nunoo, L. (2008) 'Spotlight-on-Ashaiman': *Ghana News Agency*  
<http://www.theghanaijournal.com/2008/11/05/spotlight-on-Ashaiman/>  
 Accessed September, 20, 2012
- Said-Foqahaa, N. (2011) 'Arab Women: Duality of Deprivation in Decision-making under Patriarchal Authority' *Journal of Women of the Middle East and the Islamic World* (9): 234-272 Birzeit University and Arab World for Development.
- Oakley, P. (1991) *Projects with People: Practice of Participation in Rural* Published by International Labour Office Geneva.
- O'Leary, Z. (2010) *The Essential Guide to Doing Your Research Project* London: Sage
- Okali, C. (2011) 'Integrating Social Difference, Gender and Social Analysis into Agricultural Development', Future Agricultures Consortium, Policy Brief Brighton BN1 9RE UK
- Opare, S. (2005)' Engaging Women in Community Decision-Making Processes in Rural Ghana: Problems and Prospect', *Development in Practice* 15 (1): 90-99 Taylor & Francis, Oxfam GB 2012  
<http://www.jstor.org/stable/4030170> Accessed September 10, 2012
- Pearson, R. (1992) 'Gender matters in development'. In: T. Allen and A. Thomas (eds.), *Poverty and development in the 1990s*. Oxford: University Press in association with the Open University pp. 292
- Republic of Ghana (1992) 'Constitution of the Republic of Ghana 1992': Tema Ghana Publishing Cooperation.
- Sam-Amoah L. K. and J. W. Gowing (2001): 'The experience of Irrigation Management Transfer in Ghana': A case study of Dawhenya Irrigation Scheme. *Irrigation Drainage Systems*, 15 (1): 21-18
- Scott, J.W. (1988) 'Gender: A useful Category in Historical Analysis'. In *Gender and the Politics of History* Columbia University Press, New York, pp.28-50
- Scott, J. W (1989) 'Gender: A Useful Category of Historical Analysis, " in Weed, Elizabeth (ed.), *Coming to Temis. Feminism, Theory, Politics*, Routledge, New York pp.81-101.
- Share-net, (2004) *AIDS, Sex & Reproduction: Integrating HIV/AIDS and Sexual and Reproductive Health into Policies, Programmes and Services*, June 2004, Joint Document of SHARE-NET, WPF and STOP AIDS NOW!

Amsterdam Pp.1-10.

(Download from [www.share-net.nl](http://www.share-net.nl))

Shilpa, V. (2005) 'Mainstreaming Gender Concerns in Participatory Irrigation Management: The role of AKRSP(I) in South Gujarat, in Sara Ahmed (ed.) *Flowing Upstream: Empowering Women through Water Management Initiatives in India*, Ahmedabad: Centre for Environment Education and New Delhi: Foundation Books.

State of the Union Reports (2010) Rights of Women in Ghana.

Tsikata, D. (2009) *Affirmative Action and the Prospects for Gender Equality in Ghanaian Politics*. Published by Abantu, Women in Broadcasting, The Friedrich-Ebert-Stiftung

United Nations (2009) 'African Women's Report': Measuring Gender and Inequality in Africa-Experiences and Lessons from the African Gender and Development Index. Economic Commission for Africa.

Van Koppen, B. and S. Mahmud (1995) Female Irrigation Groups in Bangladesh, Report on Department of Irrigation and Soil and Water Conservation Wageningen Agricultural University, Netherlands and Bangladesh Institute of Development Studies

Wahaj, R. M., Hartl, A., Lubbock, R., Cleveringa, A., Nepveu (2007) 'Gender and Water Securing Water for multiple livelihoods': The multiple users' system approach. [http://www.ifad.org/gender/thematic/water/gender\\_water.pdf](http://www.ifad.org/gender/thematic/water/gender_water.pdf)

Accessed June 15, 2012

Whitehead, A. and D. Tsikata (2003) 'Policy Discourses on Women's Land rights in Sub-Saharan Africa: The Implications of the return to Customary'. *Journal of Agrarian Change* 3 (1): 67-112.

<http://www.ghanaweb.com/GhanaHomePage/features/artikel.php?ID=152649>

Accessed 10/15/2012

Wieringa, S.E. (1998) 'Rethinking Gender Planning: A Critical Discussion of the Use of the Concept of Gender', *Gender Technology and Development* 2 (3): 349 -371.

World Bank (2004) 'Water Resources Sector Strategy: Strategic Directions for World Bank Engagement', World Bank, Washington, DC.

Yin, R.K., (2003) *Case Study Research: Design and Methods*. Sage Publications, Inc.

Zwarteveen, M. (1995) 'Linking Women to the Main Canal Gender and Irrigation Management,' International Institute for Environment and Development, Sustainable Agriculture and Rural Livelihood Programme, Gate keeper Series No. 54 <http://pubs.iied.org/pdfs/6068IIED.pdf> Accessed April, 2, 2012

Yeaboah, S. (2011) The role of women in Agriculture in Ghana acknowledged.

*Ghana Business News* .

<http://www.ghanabusinessnews.com/2011/04/11/the-role-of-women-in-agriculture-in-ghana-acknowledged/> Accessed November 04, 2012

Zwarteveen, M. and Neupane N. (1996) 'Free-Riders or Victims: Women's Non participation in Irrigation Management in Nepal's Chhattis Mauja Irrigation Scheme', Research Report No 7. Colombo, Sri Lanka: International Irrigation Water management Institute

Zwarteveen, M. (1998) 'Identifying Gender Aspects of new Irrigation Management Policies, Agriculture and Human Values' *Kluwer Academic Publishers* (15):301–312,

# Appendices

## Appendix 1 Tables

**Table: 2 Level of Education by Sex**

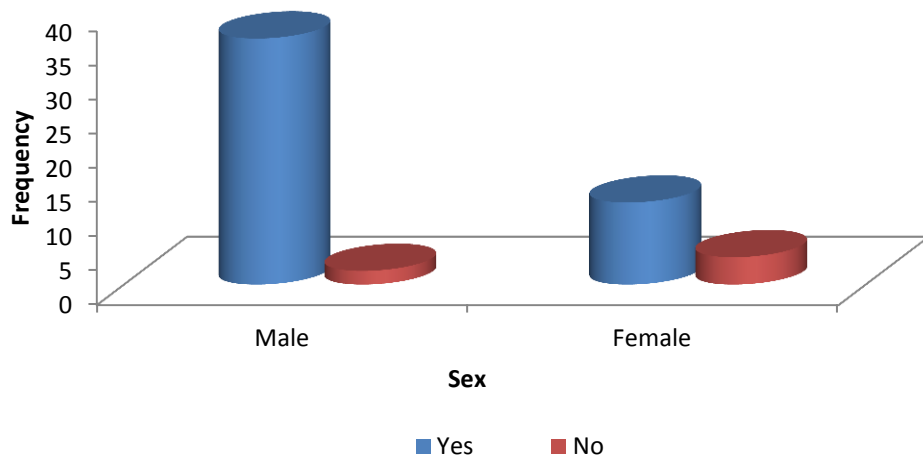
Level of Education	Gender		Total
	Male	Female	
None	2	9	11
Basic	17	5	22
Secondary	10	2	12
Tertiary	2	0	2
Other	7	0	7
<b>Total</b>	<b>38</b>	<b>16</b>	<b>54</b>

**Table 3: Agreement on decisions at meetings**

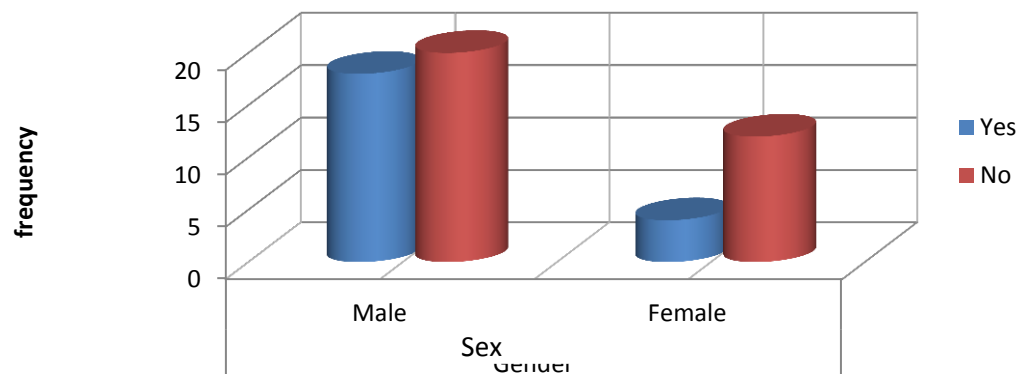
Consensus at meetings	Frequency	Percent
Through executives	10	18.5
Through discussions and balloting	40	74.1
Thru executive, discussions and ballot	4	7.4
<b>Total</b>	<b>54</b>	<b>100.0</b>

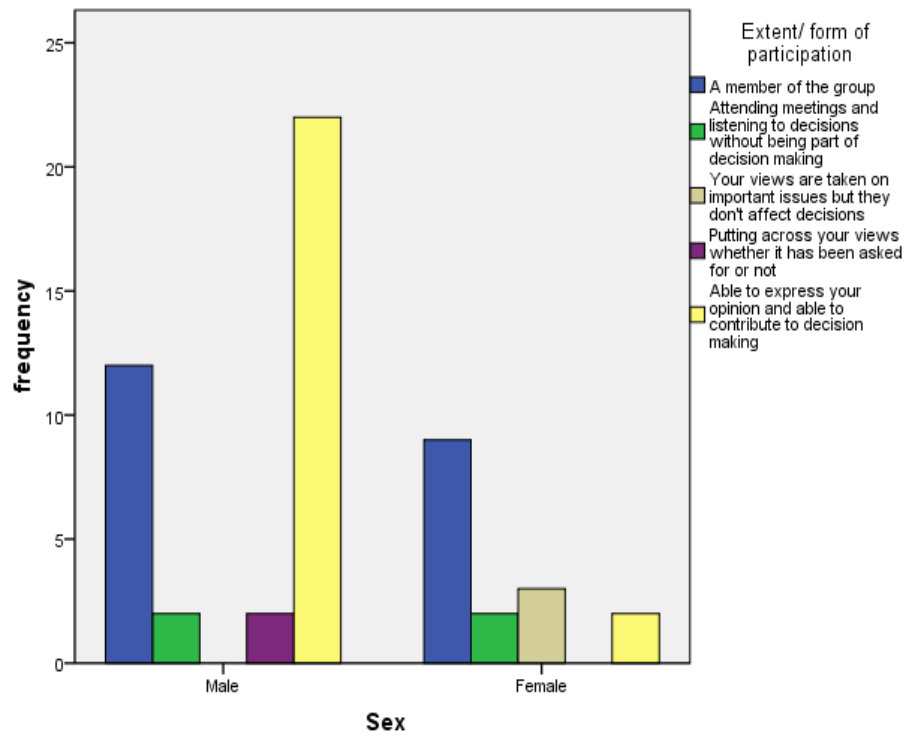
## Appendix 2 figures

**Figure 3: Suitability of meeting time**



**Figure 4 : Co management of farm with spouse.**





An interview with a female farmer on her farm



Figure 7: An interview with a male farmer at the premises of the AIFCS



**Figure 8: Focus group discussion with a group of men at the meeting room of AIFCS**



**Figure 9: Researcher with a group of women irrigation farmers who participated in the focus group discussion**



## Appendix 3

### *Interview Guide*

1. Sex of respondent (a) Male: (b) Female:
2. Age of respondent (a) 18-35years (b) 36-60 years (c) 60 and above
3. Marital Status
  - a) Single
  - b) Married
  - c) Divorced
  - d) Separated
  - e) Widowed
4. Ethnicity:
5. Number of dependants.....
6. Can you read or write ( Literacy level)
  - a) Cannot read and write
  - b) Can sign (write) only
  - c) Can read only
  - d) Can read and write
7. What is your level of education
  - a) None
  - b) Basic ( Number of years)
  - c) Secondary (number of years)
  - d) Tertiary
  - e) Others
- (b) Please specify the number of years
  8. Do you find the times that are scheduled for meetings suitable?
  9. (a)Yes (b) No
  10. If No, please state your reason(s).....
    - a. ....
  11. What is your primary income generation activity?
  12. a) Are you engaged in any other income generation activity /activities?
  13. Yes (2) No
    - b) If yes, please rank in order of relative importance.
  14. Are you an active member of the irrigation farmers' association?
  15. Yes (2) No
  16. How often do you attend meetings?
  17. What roles do you play in the group
  18. What is the extent/ form of participation
    - a) A member of the group
    - b) Attending meetings and listening to decisions without being part of decision making
    - c) Your views are taken on important issues but they don't affect decisions
    - d) Putting across your views whether it has been asked for or not
    - e) Able to express your opinion and able to contribute to decision making
  19. Do you feel comfortable speaking up in public meetings?
    - a. 1) Yes 2) No
    - (b) If No, provide reasons .....
  20. How are decisions arrived at /taken

- a) Through executives
  - b) Through discussions and balloting
  - c) Through GIDA scheme staff
  - d) Other
- (b) If other please specify.....
21. (a) How did you acquire the land?
- a) By Rent
  - b) Land owner
  - c) From an ex-farmer/family member
  - d) Allocated by project
  - e) Other
  - f) If other, please state.....
19. How long have you been farming on the land? Number of years.....
22. (a) Do you co- manage the farm with your spouse?
- a) Yes    b) No
- (b) If yes, what role does your spouse play? Please specify.....
23. What is the area of land cultivated?( In hectares)
24. What have been the major crops you have grown over the years?
25. Who makes decisions regarding the time and duration of meetings
26. What can you say about the time of meeting? What time do you have meetings organized by the associations
27. How often are regular meetings organized
28. What time of the day do you usually have association meetings
29. What time of the day do you have management meetings
30. What time do you have management meetings
31. How does one become a member of the IFA
32. Who is an active member of the IFA?
- a. How are final decisions made?
33. How did you become a member of the Irrigation farmers' association?
34. Are you aware of the rules and regulations of the Farmers association?
35. Can you tell me how one qualifies to be a member of management?
36. How are elections conducted? Describe the process.
37. Do you have any specific reasons why you take part in elections?
38. Do you want to be part of the management team? a. Yes                      b. No
39. Give reasons for your answer
40. Are men and women given equal opportunity to take part in elections?
41. In this community what do you understand by participation?
42. In this community what role do women play?
43. What are some of the roles played by men and women in the society?
44. What are some of the views men have about women in this society?
45. Are women allowed to speak at meetings?
46. Do the men pay attention when women are speaking?
47. Do they take your contribution into consideration?
48. Are you confident to make a suggestion?
49. Why is the number of women few in the association?
- a. (If your interviewee is a woman, she why she did not become a candidate?
  - b. Whom she thinks is good female candidate

- 50 .When you want to go for meetings do you have do you have problem that prevent you from attending meetings.
- 51 Do you have to seek permission from your husband?
- 52 Does your husband help you with your farming?
- 53 History of women involvement in management position
- 54 What are some of your experiences as a woman and a member of the executive?
- 55 Have you had any challenges?
- 56. What are some of the coping strategies you developed?