

Chapter 2

Determinants of Gender Discrimination in Agricultural Sector

2.1 INTRODUCTION

People are born male or female but the connotation “gender” is societal construction which ascribes them to behave women and men bearing feminine and masculine characteristics. In all cultures it’s deeply rooted in different forms or varying degrees, but trying to justify in one way or the other as a universal truth by giving societal justification, as it determines power, and so as the resources.

The domination of women by men has its genesis in the history. The holy text itself proves how everything is gendered and how all the wrong deeds are portrayed for women. In Bible we find that Eve is blamed for the taking the forbidden fruit and compelling Adam to have it. In case of Ramayana, Sita is just thought as a piece of token by Ravana, just to take revenge against Ram. Ram on the other hand abandoned his pregnant wife in jungle without a word just to prove sincerity towards his citizen. In contrast to submissive women there were women who are portrayed to be wicked and they require repression, because their characteristics closely resemble masculine than the feminine. Time and again women are sidelined; their issue ignored. Society has always remained male dominated and mainly patriarchal. All this is done in the name of religion and culture. According to Swain, “Man used power to control everything from nature to animals for its own benefit. So he did same in the case of women, by enslaving them and the tool he used was the ideology of patriarchy” (Swain, 2011).

The discriminatory feeling towards women begins before she is born. She has to undergo numerous challenges for her survival. She is sometimes killed in the womb of her mother through sex selected abortions. In some societies, girl child is least welcomed than a boy. Even when sex selected abortions is a punishable crime but the trend continues, which shows how society is gendered. Especially in rural societies they are just mere burden to their family. When they ought to be playing with toys,

they are given younger brothers and sisters to take care off. A girl child is deprived of toys, education, and health care.

The level of discrimination increases towards girls as time passes. A girl child is the one who is preferred to leave school in early age if there is choice between her and her brothers. They are marginalized at home and society at large at different levels, as daughter, sister, wife and mother. The sacrifices are made by them at each level in different way, at home, in peer groups, schools, colleges, working places, political unrest, etc. Women, either married or single, belong to household, either as daughter, wife or a mother. They hardly bear their self entity. Income earned by them usually belongs to family or generally spent on the family.

Gender differences are deeply rooted in all sphere of life, in all category and all places. Occupation itself is gendered, the maximum earning job is always reserved for men and low wages job is prescribed to women. Women all around the world, from breakfast to dinner, are indulging in kitchen to fulfill the appetite of her family. But, when it comes as commercialization most of the chefs in the world are men. Similar case can be seen in agriculture sector too. Agriculture is the major source of income in mostly South Asian countries and 70% of Indian population depends upon agriculture. The character of Indian economic development reflects in the nature and magnitude of agricultural development of the country. Agricultural labour constitutes an overwhelmingly predominant per cent in the rural workforce.

Women make important contributions to the agricultural and rural economics of all regions of the world. Swaminathan, the famous agricultural scientist describes that it was woman who first domesticated crop plants and thereby initiated the art and science of farming. While men went out hunting in search of food, women started gathering seeds from the native flora and began cultivating those of interest from the point of view of food, feed, fodder, fiber and fuel. Women have played and continue to play a key role in the conservation of basic life support systems such as land, water, flora and fauna (Singh, 2013). The women are the backbone of agricultural workforce but worldwide her hard work has mostly been unpaid. She manages agricultural work, animal husbandry and homes, but she is the one who usually remains unpaid or low paid as compared to her male counterparts.

Women play a significant and crucial role in agricultural development and allied fields including the main crop production, livestock production, horticulture, post harvest operations, agro/ social forestry, fisheries, etc. The nature and extent of women's involvement in agriculture, no doubt, varies greatly from region to region, but even within a region, their involvement varies widely among different ecological sub-zones, farming systems, castes, classes and stages in the family cycle. But regardless of these variations, there is hardly any activity in agricultural production, except ploughing in which women are not actively involved. Studies on women in agriculture conducted in India and other developing and under developed countries all point to the conclusion that women contribute far more agricultural production than men. Recognition of their crucial role in agriculture should not obscure the fact that farm women also continue to be perform their primary functions as wives, mothers and homemakers.

Despite their importance to agricultural production, women face severe handicaps. They are in fact, the largest group of landless labourers with little real security in case of break-up of the family owing to death or divorce; inheritance laws and customs discriminate against them. Land reform and settlement programmes usually give sole title and hence the security needed for obtaining production is credited to the husband. Agricultural development programmes are usually planned by men and aimed at men. Mechanization, for example alleviates the burden of tasks that are traditionally men's responsibility, leaving women's burdens unrelieved or even increased.

2.2 THEORETICAL FRAMEWORK AND CONCEPT OF GENDER

Initially when child is born, they are differentiated as boy or a girl, in their physical or sexual difference. Sex differences are further taken forward into the form of gender differences, the differences in the power relations between male and female resulting into differences between masculinity and femininity. Gender is not something we are born with, and not something we *have*, but something we *do* (West and Zimmerman 1987) – something we *perform* (Butler 2002). Gender is a result of socialization into a male or a female role which ascribes certain behaviour according to socio-cultural norms for one's sex. People always get tangled between the concepts of "gender" and "sex". As gender is societal and cultural distinction between the behaviour followed by men and women in a given setting i.e. masculine and feminine,

and relates to the way each behaves in a given situation. While sex is biologically determined, based upon the sex i.e. male or female and cannot normally be changed. According to Ann Oakley, “gender is a matter of culture”. She argues that gender distinction is constructed by society, based on sex differences, which are biological in nature (Oakley, 1985).

Gender explains the differences between men and women with respect to their problems needs, priorities and proposal for solutions, participation and access over resources and opportunities for development, participation, etc. Gender also defines how power affects the identity, status, roles and responsibilities of both men and women (Demir, 2003).

Gender reflects the uneven distribution of power between men and women in the society which led women to be the private property of the man, by controlling woman at home and society at large. The man became the voice of the women, by saying that it is the man who knows well what is good for the women, sidelining the real issues and problems of the women. All this issues sidelined the position of women in the society and compelled them to remain under the shadow of male members in the society.

The social, cultural and political division of gender or sex has gained less or no importance in the traditional theory. The issue of under-representation of women was taken for granted for a longtime (Kumar and Bhattu, 2011). Later with the advent of the “Feminism” introduced gender as a relevant empirical category and theoretical tool for analysing global power relations as well as a normative standpoint from which to construct alternative world orders (True, 2001). Feminism is divided into three waves, i.e. First Wave, Second Wave and the Third Wave.

First-wave of feminism started in the late 19th Century and the early 20th century. They were concerned with equality the access and equal opportunities of women with men in every sphere of life. They propagated equality and liberty of women. Their main concern was ‘right to vote’. Thus first wave feminists fought for civil and political rights. Mary Wollstonecraft’s “A Vindication of the Rights of Women” (1792), Virginia Woolf’s “A Room of One’s Own” (1929) and Simone de Beauvoir’s “The Second Sex” (1949) gave spaces for the women works and issues to

reach the world through their work, and paved the way for many upcoming feminist theorists.

The first wave feminist did not lead into an elimination of all the forms of inequality but it made the way to change the course of history. The first wave gave birth to Liberal, Marxist and Socialist feminism. **Liberal feminism** believed that people are created equal and their equality should not be denied on the basis of gender. According to Alison Jaggar, “Liberal feminism’s primary goal is gender equality in the public sphere- equal access to education, equal pay, ending job segregation, better working conditions- won primarily through legal changes ” (Lewis, 2015). **Marxist feminism** is the doctrine of Karl Marx revolving around the material aspects of life. According to Marxist feminism social/societal oppression is exposed to men and such discrimination is brought at home leading female oppression, exploitation and discrimination (Anonymous, 2005). Here role of bourgeoisie is played by men and proletariat by women (Lord, Greiter & Tursunovic,nd¹). **Socialist feminism**, emphasis on the private sphere and the role of women in the household. Socialist feminist theory analysed the connection between the oppression of women and other oppression in society, such as racism and economic injustice (Napikoski, 2014).

The term second-wave feminism refers mostly to the radical feminism of the women’s liberation movement of the late 1960s and early 1970s (Richard 2008). This phase began with protests against the Miss America pageant in Atlantic City in 1968 and 1969 (Rampton, 2015). Radical feminism is the outcome of the liberal feminism, and challenges their issue and more strongly placed raced the voice in favor of women. Radical second-wave feminism focused on the sexuality, family, the workplace, reproductive rights, etc. (Feminist movement, 2009). They came forth with the saying “The Personal is Political”. They made the demands of equal rights and recognition of their work both at the private and the public sphere. Feminist scholars such as Juliet Mitchell in *The Subjection of Women* (1970) and Shulamith Firestone in *The Dialectic of Sex: The Case for Feminist Revolution* (1970). Claimed that patriarchy is inherent to bourgeois society and that sexual difference is more fundamental than class and race differences. The second wave created Radical feminism, which criticized liberal feminism.

¹ No date, “Feminist Theory”, Retrieved on 27/04/2-16, from www.soc.iastate.edu/sapp/Feminist.ppt.

Third-wave of Feminism began in the early 1990s and continues. In this phase many constructs were destabilized, including the notions of “universal womanhood,” body, gender, sexuality and hetero-normativity (Rampton, 2015). The movement of third-wave feminism focused less on laws and the political process and more on individual identity. It is said to have arisen out of the realization that women are of many colors, ethnicities, nationalities, religion and cultural backgrounds (Fisher, 2013). They broadened their goals, focusing on ideas like queer theory, anti-racism, woman-ism, girl power, eco-feminism, trans-gender politics, and modern day gender related issues such as pornography, trafficking, rape, etc. Rebecca Walker, Natasha Walter and Judith Butler were the chief proponents of the third-wave feminism. Proponents of third-wave feminism claim that it allows women to define feminism for them by incorporating their own identities into their belief system of what feminism are and what it can become (Fisher, 2013).

The development of feminist theorist over time brought about tremendous effect to challenge the traditional theories and their view towards the society. In some way or the other it provided platform to the people, especially women, to find out the ground realities to come up with the ongoing problems, through writings into the world arena and act like a mirror to the society.

Many writers, social activists emerged both from the developed and the developing country to work on the issue of gender, women, child, and homo-sexual; but still the issues remains and problem continues. The discriminatory attitudes still curtail, and are worst affected in the developing countries. The societies in the developing countries are still gendered. After the child is born and sex is determined than the society starts playing its role to mould the behaviour, attitude and life styles of that particular child in which society has set to behave like a girl and a boy. In the famous words of Simone de Beauvoir, rightly said, “Women are not born, they are made.” From infancy, male and female children are interpreted and interacted differently. And they talk to them differently, for instance, more passive voice is being used for a girl child as compared to boy child. Differential treatment led boys and girls do learn to be different and stereotypes are created on the basis of their sex.

Differences in gender roles and behaviours often creates inequalities, for instance in many societies women are viewed as subordinate to men, as men are having control over the women and enabling greater decision-making power. Often

inequalities in gender increase the risk of acts of violence by men against women. How one learns and interacts with gender as a young child directly influences how the person views world when he or she grows up.

2.3 GENDER STEREOTYPING

Gender stereotyping are organised, consensual beliefs and opinions about the characteristics of women and men and about the purported qualities of masculinity and femininity (Worell, 2011). As defined in a CoE study, gender stereotyping means preconceived ideas whereby males and females are arbitrarily assigned characteristics and roles determined and limited by their sex. Sex stereotyping can limit the development of the natural talents and abilities of boys and girls, women and men, as well as their educational experiences and life opportunities (EPRSLibrary, 2013). It is a belief who men and women are and how they should behave. It is the prescribed gender roles in society where men are supposed to behave like men and women like women (Andersen, 2006). The gender stereotypes are hidden in such a way that if few characteristics are followed by the one or the others it is said to be against the nature or the society, but in reality it's just the imagination or the prescribed notion set by the society.

Gender stereotypes has so engraved in day-to-day life, it seems to be true, and if someone tends to be opposite than for others it would be a matter of shock. Stereotyping has also affected mass media (press, television, radios, magazines, and internet), which is the most important in modern world, basing an assumption that they are well known to everyone and will able to receive the content of the message. Commercials are the vast source of gender stereotyping, because they are adapted to the specific, either male or female target. Wolska (2011) writes women are often the face of the commercials because they are responsible for making everyday purchases. Men generally advertise automobiles, business products or investments, whereas women are shown in the commercials with cosmetics and domestic products. Women are either pot rayed dumb, or seductive, whereas men are pot rayed as protector, knowledgeable, “macho²” types. The commercials of red cliff shoes shows how the manly shoe can play a role of protector with a intense theme in Hindi, “Jutoh mein Mard” meaning “Shoes reflecting manhood”.

² Masculine in an overly assertive or aggressive way.

Table 2.1**Gender Stereotypic Characteristics Associated with Women and Men**

	Traits	Roles	Physical Characteristics	Cognitive Abilities
a. Associated with men	<ul style="list-style-type: none"> a. Active b. Can make decision easily c. Competitive d. Feels Superior e. Independent f. Never gives up easily g. Self confident h. Stands up well under pressure 	<ul style="list-style-type: none"> a. Assumes financial obligations b. Head of household c. Financial provider d. Leader e. Responsible for household repairs f. Take initiative in sexual relations g. Watch sports on television 	<ul style="list-style-type: none"> a. Athletic b. Brawny c. Broad shoulder d. Burly e. Muscular f. Physically strong g. Physically vigorous h. Rugged i. Tall 	<ul style="list-style-type: none"> a. Analytical b. Exact c. Good at abstractions d. Good at numbers e. Good at problems f. Good with reasoning g. Mathematical h. Quantitatively skilled
b. Associated with women	<ul style="list-style-type: none"> a. Able to devote self to others b. Aware of other feelings c. Emotional d. Helpful to others e. Gentle f. Kind g. Understanding h. Warm 	<ul style="list-style-type: none"> a. Cooks the meal b. Does the household shopping c. Does laundry d. Is fashion conscious e. Source of emotional support f. Takes care of children g. Tends the house 	<ul style="list-style-type: none"> a. Beautiful b. Cute c. Dainty d. Gorgeous e. Graceful f. Petite g. Pretty h. Sexy i. Soft voice 	<ul style="list-style-type: none"> a. Artistic b. Creative c. Expressive d. Imaginative e. Intuitive f. Perceptive g. Tasteful h. Verbally Skilled

Source: Kite E. Mary (2001), *Gender Stereotypes*, in Worell Judith (eds.), *Encyclopedia of Women and Gender Sex Similarities and Difference and the Impact of Society on Gender*, A-K (Volume I), Academic Press, California, p. 563.

It has become increasingly clear that children play a very active role in their own development. From the moment they cross infancy societal phenomena starts shaping them and their behaviour. Infants both girl and boy behave in the same manner, for e.g. they cry a lot, but during childhood, boy child is told not to cry, and stop being girly, they are laughed at if they play with dolls on the other hand if girl child rage for being denial of a toy then they are told rage is not an appropriate

feminine feeling, that it should be not only not be expressed but be eradicated. Girls are not allowed to move freely and allowed to be in company, even if the brother is minor. Boy child is taught to play the role of a protector and the girl of a protected. Girl child is said to help in the household work more as compared to that of her brothers.

As Table 2.1 shows, gender stereotypic characteristics associated with men and women. The society is woven in such a delicate thread that characteristic prescribed for them is believed to be the law of nature, but in real it's just a tag set by the society. Gender stereotypes have four different aspects—traits, roles, physical characteristics and cognitive abilities, which further affects the behaviour and occupation. Each aspect may vary independently, but people make judgments about one based on information about another in making deductions about gender-related characteristics.

Even if the person does not believe the stereotype or accept that it applies, the threat of being identified with a negative stereotype can be an ever-present factor that puts a person in the spotlight and creates tension and anxiety about performance which Steele and Aronson labeled this situation as “*stereotype threat*” (Brannon, 2013). Physical features seem to be central; people viewed men and women as differing more in physical features than in psychological characteristics (Deaux & Lewis, 1984). Gender stereotyping has its genesis from the evolution of settlement of mankind and the tool used was the ideology of patriarchy.

2.4 WOMEN IN PATRIARCHAL SOCIETY

The word patriarchy is derived from the word ‘patriarch’, meaning the head of the specific type of male dominated family, which consisted of women, younger men, children, servants, and slaves. Gender and patriarchy have always been part and parcel of politics (Skjesbaek and Smith, 2001). In gender politics, the word patriarchy refers to any form of social power given disproportionately to men (Swain, 2011). It also means a gender hierarchy in which men dominate or exploit women. It simply means the rule of father. Family is the institution, where patriarchy emerged and became a base of dominance, from the home to the society at the large. Kate Millet rightly said that family is the chief institution of patriarchy. Patriarchy deliberately takes a negative view of human nature in order to repress people. Generally patriarchy

refers to male domination over female and their acceptance of that particular dominance.

The rule of patriarchy started since the evolution of mankind. Initially all human beings were dwellers, moving from one place to another in search of food and other materials. Later on they started taming animals, ploughing fields by settling in permanent places where they felt comfortable. They too started getting married, having family. When they gained lots of ideas regarding the use of resources, at the same time they started attaining power, which made them to be powerful and they used power to control those who were weak and mild, such as women, children, and old age person. In the beginning of the settlement those three were the dependent people to male members of the family. The men were said to be the bread winners for those who are weak and mild staying back at home, that gradually developed to be superior being over those staying back at home and felt powerful and started subordinating them and so the trend began and still is found in some section of the society. As the time passed by, patriarchy has influenced all the decision making area whether it may be at home, at educational institutions, workplace, etc.

Fredrick Engels in “Origin of Family, Private Property and the State” (1884) explains the beginnings of the system of subordination of women. According to him the earliest stage of human history has no class or gender division, no marriage or no notion of private property, but later with the permanent settlement made them feel superior by holding land and resources and the female sex to be inferior than them, so the female sex was defeated with the evolution of private property.

According to Gerda Lerner, in account of patriarchy, subordination of women by men begins with men’s appropriation of women’s sexual and reproductive capacities. This led to control over their off-springs as well and this became the basis for consolidation of the institution of private property (Prim, Mennon and Banerjee, 2009).

In the laws of Manu it has been stated that, “A woman belongs to her father when she is born, to her husband when she is married and to her son after she is widowed” (Krishnaraj and Kanchi, 2008). This law of Manu prevails that since ancient age, woman doesn’t hold any self entity rather was attached or known by the male member of the family.

Sylvia Walby (1990) has defined patriarchy as a system of social structures and practices, in which man dominates, oppresses and exploits women. According to Walby, patriarchy is composed of six structures: the patriarchal mode of production, patriarchal relations in paid work, the patriarchal relations in the state, male violence, patriarchal relations in sexuality, and patriarchal relations in cultural institutions. The patriarchal mode of production refers to the household work done by the women, which are unpaid or undervalued jobs. Housewives are the producing class and the husband expropriating class. Patriarchal relations in paid work explain exclusion of women from the better off jobs and are preferred less skilled jobs.

The patriarchal relations in the state refer to the biasness in its policies and actions which is patriarchal in nature. By referring male violence, Walby means that non interference of the state against the men violence towards women through the practices of rape, domestic violence, and sexual harassment. Patriarchal relations to sexuality constitute fifth structure which explains compulsory heterosexuality, meaning indirect denial of homo sexuality. The last structure which is about patriarchal relations in cultural institutions describes the patriarchal (male) gaze within various cultural arenas, such as religions, education and how women traditionally been exhibited via the mass media.

According to Walby, as time passes by forms of patriarchy changes, i.e. from private to public patriarchy. Due to the advent of capitalism and industrial revolution, the domain of patriarchy also shifted from private to public. The change from private to public patriarchy involves a change both in the relations between the structures and within the structures. In the private form, household production is the dominant structure being replaced by employment or the state in the public form. Mode of expropriation also shifted from the individual to the collective (Walby, 1990).

Tanaya Mohanty (2011), in his work, “Gender, Culture and History”, describes that most of the institutions of the society are patriarchy in nature, whether it is the state, religion, educational institutions, family or the media. He further adds that the ideology of patriarchy is so deep rooted in the society that all kinds of violence and women subjugation appears obvious. The system of patriarchy has let men to become powerful, by sidelining the issues and needs of women in the society. This system further paved the way for gender discrimination in the form of gender based violence.

The patriarchal mindset sees women as objects, totally under the control of men. According to the Radical feminist, the cornerstone of male domination is sexism: denying women their full human rights and dignity. Radical feminist like Kate Millet and Shulamith Firestone, argue that opposite sexual intercourse is a tool of male domination (Swain, 2011).

The concept of male being the head of the household and breadwinner of the family is reflected not only in our private laws on family support and inheritance but often also in public laws on taxation, citizenship, pensions, social security, and worker rights and responsibilities (Goonesekere, 2005).

Patriarchy is not only a male domination or rule by men, but an unequal system created where some are benefitted. Some women are in power, and enjoy some benefits, but that does not change the fact that system itself is male dominated. After the advent of capitalism, women workers increased, and many women started taking jobs, but till today they have to undergo lots more challenges and obstacles built in the base of patriarchy, for example even today daughters, and wives are questioned for late entry at home, women are sometimes denied to take jobs in far distance even though it is fetching good amount of salary. Women have to face the problem of sexual harassment at work place. After handling same amount of work at office she has to enter the kitchen after she reaches home, and today's major crime rape has made felt women to be under psychological trauma of being victim of such heinously crime. All these issues are set on the base of patriarchy (male superiority over female).

For a variety of complex reasons women also support and perpetuate patriarchy. This is called internalization of domination. Women often treat their sons better than their daughters, freedom is usually restricted in case of daughters, and mistreating of daughter-in-law is very common issue. This shows the position of male and female members at their homes and society at large. It is both men and women who are preferring patriarchy by direct or indirect means. Nafis Sadik in Global Conference on Women in Agriculture (2012) observed that rights of girls are pre-empted by the family and the society as it is believed that this is the way to protect them. Thus, there are pre-conceived ideas that predetermine girls' education. There are many aspects of women's lives that are not controlled by women themselves but predetermined by the society.

Women are treated as object; in war and conflict situation they are treated as prize to take care of and to be targeted just to prove supremacy over those men who act as a protector. During war and armed conflict, it is the women who suffer the most; they are used as weapon of war. For instance, it is estimated that 20,000 to 35,000 women raped during the war in Bosnia and Herzegovina (Ballis, Smith and Owens, 2011). So, the primary victims of today's armed conflict are civilian women and their children, not soldiers (Baluchamy, 2010). Myth of protection is well played in the case of war. For example, US led war in Afghanistan was justified as a heroic intervention on behalf of helpless Afghani women and children, on the other hand Taliban too justified by proclaiming that they are protecting 'their' women from the outside influence (Balis, Smith, Owens, 2011).

Kamala Bhasin (1993) in her book "What is Patriarchy?" refers patriarchy in particular reference to South Asian context. According to Bhasin, patriarchy or *pitrasatta*³ manifests itself in many ways that includes preference of a male child, discrimination against girls in food distributions, burden of household work on girls and women, lack of educational opportunities for girls, restricted mobility for girls and women, wife battering, sexual harassment at work place, lack of inheritance, rights to women and, of course, no control over fertility.

Patriarchy is linked with property and inheritance rights. Son is seen as the rightful heir of the family and through them their family name continues. Daughter, on the other hand, is seen as temporary members of the family, who would be married to the person of another family and would be bearing the child to continue the lineage of that family. Being thought daughters as temporary member of the family, she is being denied of rights and privileges. Dowry is set to be kind of settlement of the claim the daughter might possess towards her natal family. After marriage she is considered to belong to her husband's family. It is the son who would inherit the family name and the wealth, and daughters are thought as the drain of the wealth. The best and the nutritious food is served to the sons and daughters have to eat left over. This is said that they are being taught or trained in the development of womanly virtues like self-effacement and sacrifice that she would need in her husband's house (Bhasin in Priyam, Menon and Banerjee, 2009).

³ It's Hindi word meaning for patriarchy or rule of father.

In 21st century, more men and women have gained access to education, further leading into increase of participation in the employment sector. From one side it can be viewed that women is actively taking part in gaining education and their presence is being felt in almost all the sectors of employment, on the other side dowry deaths, acid attacks and honour killing is still prevalent. Women achieving in all fields does not signal the end of patriarchy, only the forms has been changed. It might be weakened in some aspects but there are new arenas where it is now in new operation. In case of India Sati and Child marriage may not be followed but advent of technology had led into sex selected abortions. So, one can say that if old forms of patriarchal domination is losing its identity, there are other many new forms emerging. This is done on the basis of discrimination that is gendered or can rightly be said as gender discrimination.

2.5 GENDER DISCRIMINATION

Gender discriminations means any exclusion or restriction made on the basis of gender roles and relations that prevents a person from enjoying full human rights (FAO, 2009). It is the systematic, unfavorable treatment of individuals with the denial of rights, opportunities or resources on the basis of gender (Reeves and Baden 2000). “Not all women are poor, and not all poor people are women, but all women suffer from discrimination” (Kabeer and Subrahmanian, 1996). Women’s differential access to power and control of resources is the central to this discrimination in all institutional spheres, i.e. the household, community, market, and state (Reeves and Baden, 2000).

Gender differences means the biasness made on the basis of gender or can be referred to gender inequality. Inequality arises because of deprivation. A measure of inequality is a summary of all such deprivations. While comparing with one or another or with one group to the other, one should make sure that two groups should get equal share with respect to the given facility. So, in the case of males and females, they should get equal amount of income, if they have equal skills as manifested by their performances, which are initially judged by their qualifications and experiences before being absorbed into the job (Pal, Bharati, Ghosh and Vasulu, 2011).

Children are taught in their early ages about distributive justice in terms of differences in gender and age (Einhorn, 2000), some getting more than the other, in

terms of basic necessities of life. Girl child as compared to her brother are always deprived, less fed, more work to do, compromise in education facilities, and so on. The ways children are taught regarding inequalities in previous ages shapes the behaviour in particular pattern and learn their place in family and society. In some families health differences are also prevalent. Adolescent girls usually suffer from iron deficiency syndrome, anemia. Poor health among girls and women also leads to low birth babies and continued health problems for both men and women. Further, gender inequalities slow the pace of development by minimizing the pace of economic growth, resulting into poverty.

In an inauguration lecture for the new Radcliffe Institute at Harvard University, on 24 April 2001, Amartya Sen illustrated with examples the different kinds of inequality between men and women that exist in most parts of the world. These are (i) mortality inequality; (ii) natality inequality; (iii) basic facility inequality; (iv) special opportunity inequality; (v) professional inequality; (vi) ownership inequality; and (vii) household inequality (Sen 2001 in Pal, Bharati, Ghosh and Vasulu, 2011).

There are basically two kinds of work: paid and unpaid. Men are engaged in those jobs where payment is inherent, in other words they prefer market-oriented jobs. Women, on the other hand, are engaged in domestic drudgery and economic activities which is mostly unpaid or not paid at all. Even when women perform wage-earning jobs, their role cannot be skipped but has to spend longer hours in doing work which has no payment (Mandal, 2011).

Rural adolescent girls face the triple disadvantage of location, gender and age (The Chicago Council on Global Affairs, 2011). They often bear a heavy burden of work, have fewer opportunities to complete their schooling, and face expectations of early marriage, with the attendant risks of poor reproductive health, multiple childbirths and gender-based violence (IFAD, 2013).

Worldwide there are few women who have and had a special position in a society, but most of them had leading a miserable life. According to UNIFEM report of 2003, one in three women is raped, beaten or coerced into sex or otherwise abused in her lifetime at the global level (UNIFEM Report, 2003). There is an imbalance and disparity participation of women in the field of political governing bodies, education,

economic, and in health. There has also been inequality in the formal school education at world level for girls. Among the one billion illiterate adults, two-thirds are women, and out of 130 million children, two-thirds who are not in school are girls at the global level. World-wide, women are increasingly affected by HIV. 20 million unsafe abortions are performed worldwide every year, resulting into the deaths of 70,000 women. Approximately, 585,000 women die every year, over 1,600 every day from causes related to pregnancy and child birth. Globally 43 percent of all women and 51 percent of pregnant women suffer from iron-deficiency anemia (Baluchamy, 2010).

Table: 2.2

Literacy rate, Birth rates and work force participation for the year 2000 and 2013 in respect of World, South Asia and India

	2000						2013					
	World		South Asia		India		World		South Asia		India	
	M	F	M	F	M	F	M	F	M	F	M	F
Youth Literacy Rate (% of Population Ages 15-24)	91	84	80	64	84	68	93	89	87	79	90	82
Sex Ratio at Birth (Male Births per Females birth)	1.08		1		1.1		1.07		1.1		1.11	
Labour Force Participation rate (% of population ages 15+)	79	52	83	35	83	34	77	50	81	31	80	27

Source: World Bank Group (2016), *The Little Data Book on Gender*, The World Bank, Washington D.C, p.p 2, 7, and 104.

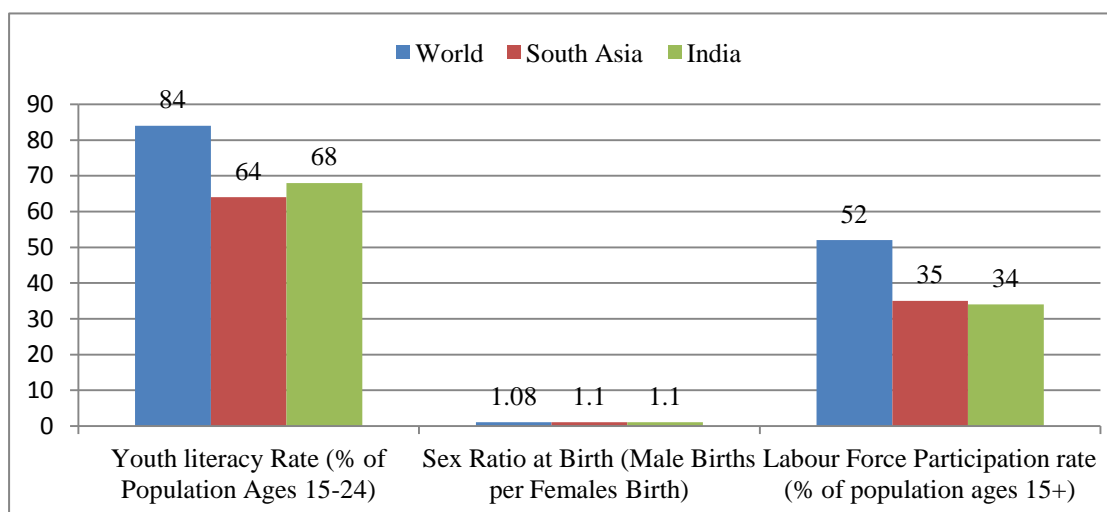
There are gaps between men and women in almost all spheres, be it may be education, health or employment. In some countries, even today women are responsible for household work regardless whether they are engaged in outside work or not. Gender discrimination in the labour market implies women having more limited access to employment and hence having lower earning capacity than men see Table 2.2.

Table 2.2 represents comparative study of youth literacy rate, sex ratio at birth and labor force participation during the year 2010 and 2013 in the context of World,

South Asia and India. As per the data, “youth” represents the percentage of population with the age between 15-24 years; “sex ratio” meaning male births per female birth and the age of “labour force participation” is above 15 years. As per the data, the female position whether in literacy rate or regarding the child sex ratio or labour workforce participation is comparably low than the male, whether be it in global, regional or at state level. The graph in literacy rate and labour workforce participation of women has increased in 2013 as compared to 2000, which is a positive sign of development but the sex ratio at birth to remains constant. In both education and employment sectors, position of women seems to be improving, but the gender gap in all three fields till today seems to be prevalent and is a matter of concern.

Figure 2.1

Female representation on youth literacy rate, sex ratio and labour force participation at World, South Asia and India (2000)



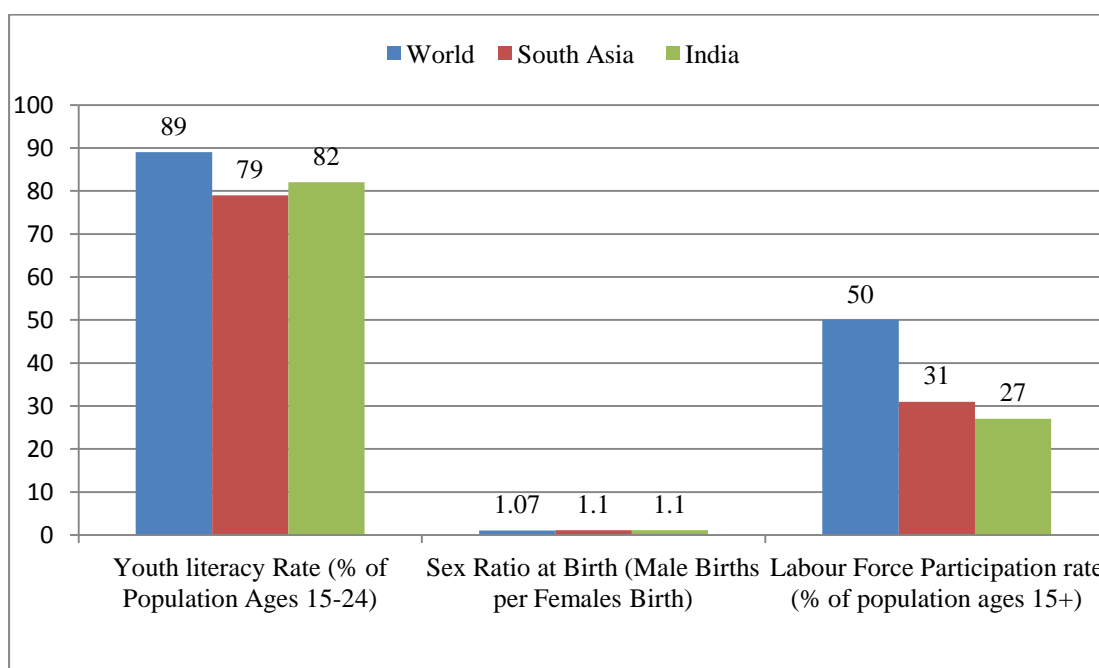
Source: World Bank Group (2016), *The Little Data Book on Gender*, The World Bank, Washington D.C, p.p 2, 7, and 104.

Looking at female representation data on youth literacy rate, sex ratio and labor work force participation at World, South Asia and India level of the year 2000 (Figure 2.1), the percentage of female is lower in all respect. In case of youth literacy rate the female members in the world represent 84%, in South Asia 64% and in India 68% as compared to 91%, 80%, and 84% of male representation respectively. Regarding sex ratio at birth in the year 2000, in case of world there were 1.08 male births per female birth, 1.1 male births per female birth in case of South Asia, and 1.1 male births per female birth in case of India. As per labour work force participation

women in the world represents 52%, 35% in South Asia and 34% in India against male labour work force participation of 79% in the world, 83% in South Asia and 83% in India.

Figure 2.2

Female representation on youth literacy rate, sex ratio at birth and labour force participation at World, South Asia and India (2013)



Source: World Bank Group (2016), *The Little Data Book on Gender*, The World Bank, Washington D.C, p.p 2, 7, and 104.

In the case of 2013 data (Figure 2.2), female youth literacy rate as compared to 2000 data seems to be increasing in all the three levels (world, South Asia, and India), but regarding labour work force participation the position of women seems to be slipping down by 2% in case of world, 4% in case of South Asia and 7% in case of India. The sex ratio seems to be constant.

Sikkim being a part of North Eastern India, to understand the position and conditions of women in the state among the other North Eastern states Table 2.3 has been presented analyzing sex ratio, literacy rate and female work participation of the two consecutive census year (2001 and 2011).

Table 2.3**Sex Ratio, Literacy rate and Female Workforce Participation of North Eastern region (2001 and 2011)**

States	Sex Ratio				Literacy Rate (%)		Female Workforce Participation (%)	
	2001	(%)	2011	(%)	2001	2011	2001	2011
Arunachal Pradesh	893	89.3	938	93.8	43.53	57.70	36.5	39.5
Assam	935	93.5	958	95.8	54.61	66.27	20.7	23.7
Manipur	974	97.4	985	98.5	60.53	70.26	39.0	41.2
Meghalaya	972	97.2	989	98.9	59.61	72.89	35.2	35.0
Mizoram	935	93.5	976	97.6	86.75	89.27	47.5	41.9
Nagaland	900	90.0	931	93.1	61.46	76.11	38.1	52.3
Sikkim	875	87.5	890	89.0	60.4	75.61	38.6	44.6
Tripura	948	94.8	960	96.0	64.91	84.73	21.1	26.3

Source: Census of India (2001 and 2011), Office of the Registrar General & Census Commissioner.

Table 2.3 presents the data of all the eight North-Eastern states in terms of sex ratio, literacy rate and female work force participation of the two census year i.e. 2001 and 2011. Among the eight North Eastern states the highest sex ratio is found to be in Manipur in 2001 with 974 females per 1000 males and lowest being the Sikkim with 875 females per 1000 males; as per 2011 census the highest sex ratio among North Eastern state was Meghalaya with 989 females per 1000 males with lowest being the Sikkim with 890 females per 1000 males. The growth in female sex ratio in all the states has increased from the year 2001 to 2011, so even Sikkim, has the growth of 1.5% from the last ten years, but it still lags behind because it still holds the last position among the eight Northeastern states. As per the Table 2.3, the growth in women literacy rate and women workforce participation is seen vividly with a slight increase in sex ratio.

In 2001, the state of Mizoram holds the first position and Arunachal Pradesh holds the last position in the women literacy rate with 86.75% and 43.53% respectively, and Sikkim being the 5th among the 8 Northeastern states with 60.4%. As 2001, in 2011 also both the state Mizoram and Arunachal Pradesh continue to hold

the first and last position in the women literacy rate with 89.27% and 57.70% respectively, and Sikkim making its leap in the rank from 5th to 4th position with 75.61%, with a growth of 15.21%. Sikkim may not have top the charts in women education but the growth is visible, which is a positive indication of women development.

Regarding the female work force participation, Mizoram stands first with 47.5% and Assam stands last with 20.7% respectively, and Sikkim takes the 3rd position with 38.6% , whereas in 2011 census Nagaland being the 4th in a row with 38.1% jumps to the 1st rank with 52.3% and Assam being the last with 23.7% and Sikkim being 2nd with 44.6%. The growth rate of 6% of female workforce participation from 2001 to 2011 is found.

The forum such as, Convention on the Elimination of all forms of Discrimination against Women (CEDAW) in 1979 brought into international focus the rights of women as human rights, including the right to be free from discrimination. Women activists regard this convention as a key tool to support their struggle against discrimination in all spheres, pushing governments towards attaining these international recognized minimum standards (Reeves and Baden, 2000), and on the other hand the domination on the basis of patriarchy continues.

The patriarchy is evident in almost in all sphere of life, in all sectors. Its presence is felt everywhere, including agricultural sector. Generally speaking, gender inequalities affect rural and agricultural development adversely, and therefore, if the participation of women has a gender-equal effect, then only are the pay offs for society, household and the women concerned positive (Agarwal 2003; Kelkar, Nathan and Walter 2003; FAO 2006; Khandelwal and Deo, 2013).

2.6 WOMEN AND AGRICULTURE

Agriculture is the most important source of livelihood for the majority of the world's people, especially women. In the primitive society, men were hunters and gatherers and women were the one who started growing of crops, so it won't be wrong to say "agriculture has been evolved by women".

Women play a significant role at all the various stages of food production, processing and preparing. Many of the poorest countries have an agriculture-based economy. About three fifth of the world's poor population are women, scores of

whom depend on agriculture for survival (UNFPA, State of the World Population, 2005). Women are major players in the agriculture sector, in household food and nutrition security, and in natural resource management (World Bank, FAO and IFAD, 2009) but they are the one who possess less, minimal or no value of work done by them when it comes to taking a credit, in the form of output. Women as food providers have been invisible in the field of economics because women provide food for the household, not for the commercial purpose. They do not hold profit from the agricultural field as their product is for self sustenance of her family.

Women are usually ignored because of lack of knowledge in agricultural issues and their words are not heard at all or least heard, but in reality women possess lots more knowledge, more than that of male member who are engaged in agricultural work. As per FAO's report, "Women Feed the World", women use more plant diversity, both cultivated and uncultivated, than agriculture scientist's know about. In Nigerian home gardens, women plant 18-57 plant species; in Sub Saharan Africa they cultivate as many as 120 different plants in the species left, alongside the cash crops managed by men; in Guatemala, home gardens of less than 0.1 hectare have more than 10 tree and crop species. In a single African home garden more than 60 species food-producing trees were counted. In Thailand, researchers found 230 plant species in home gardens. In Indian agriculture women use 150 different species of plants for vegetables, fodder and health care. In West Bengal 124 "weed" species collected from rice fields have economic importance for farmers. In the Expana region Veracruz, Mexico, peasants utilize about 435 wild plant and animal species were found of which 229 are edible (Shiva, 2010).

Women are the bio diversity experts of the world. Unfortunately, women are being denied their potential as food producers. While women manage and produce diversified species of fruits, vegetables, crops, and fodder, the dominant paradigm of agriculture promotes monoculture. Mono culture on the false assumption that it produces more, on the contrary they just control more.

Women perform two kinds of tasks. The first kinds of task they perform is necessary for survival but not recognized as economic activities, i.e. domestic work like cooking, cleaning, taking care of children and other family members, it has a clear productive value but are not regarded as economic activities. They are traditionally home makers and care givers. Another, is that women performs post-

harvest processing in agriculture sector, weeding of farm lands, livestock maintenance, labour in the family farm. Ironically, most women are invariably engaged in such activities and there seems no respite from such work. All in all unpaid household labour of women is virtually ignored because it is considered as a used value (Mandal, 2011).

For many decades, agricultural policy makers also turned a blind eye to women farmers because they think of farmers as men, thus denying women's claim to participation in farming and other activities which directly affected their lives. As a result, rural women have lagged visibly behind men by most social and economic criteria (FAO, 1994). Increasing opportunities for women can have a powerful impact on productivity and agriculture-led growth. Their denial on participation in farming made them inferior to men; women are just as efficient agricultural producers as men and can achieve similar yields when given equal access to resources, including training and services. This has been proved by the research conducted, Kenya, where researchers found that women could increase their crop yields by approximately 20 percent if given the same access to the same resources as men (World Bank, 2011). In Burkina Faso, it has been estimated that overall household production could increase by about six percent by more equitably distributing fertilizer and labor between male and female-farmed plots (Gupta & Verma, 2014).

As per the estimation of Food and Agriculture Organization (FAO), if women had the same access to productive resources as men, they could increase yields on their farms by 20–30 percent. This increase could raise total agricultural output in developing countries by 2.5–4 percent and reduce the number of hungry people in the world by 12–17 percent, up to 150 million people (FAO, 2011).

The Food and Agriculture Organization (FAO) reports that the yield gap between farms run by men and those run by women averages about 20-30 per cent, and attributes this largely to inequalities in accessing productive resources rather than ability. Closing the gender gap in women's access to productive inputs has proven to have a major impact on agricultural output, particularly in countries where women are most involved in agricultural production, for crops that are mainly grown by women, and where the gap between what women do and the inputs and assets they require is greatest (IFAD, 2012).

Table 2.4
Employment by sector and sex, globally and by region (2012)

WORLD	Total agriculture (lakhs) (%)	Male agriculture (lakhs) (%)	Female agriculture (lakhs) (%)	Total industry (lakhs) (%)	Male industry (lakhs) (%)	Female industry (lakhs) (%)	Total services (lakhs) (%)	Male services (lakhs) (%)	Female services (lakhs) (%)
	9,909 (100.00)	5,780 (100%)	4,129 (100.00)	7,147 (100.00)	5,044 (100.00)	2,103 (100.00)	13,969 (100.00)	7,941 (100.00)	6,029 (100.00)
Developed Economies and European Union	172 (2.00)	112 (2.00)	59 (1.00)	1,066 (15.00)	826 (16.00)	239 (11.00)	3,495 (25.00)	1,643 (21.00)	1,852 (31.00)
Central and South-Eastern Europe (non-EU) and CIS	331 (3.00)	189 (3.00)	142 (3.00)	395 (6.00)	257 (5.00)	138 (7.00)	921 (7.00)	459 (6.00)	462 (8.00)
East Asia	2,548 (26.00)	1,318 (23.00)	1,230 (30.00)	2,544 (36.00)	1,554 (31.00)	990 (47.00)	3,134 (22.00)	1,732 (22.00)	1,401 (23.00)
South-East Asia and the Pacific	1,185 (12.00)	667 (12.00)	518 (13.00)	599 (8.00)	391 (8.00)	208 (10.00)	1,243 (9.00)	678 (9.00)	565 (9.00)
South Asia	3,002 (30.00)	1,923 (33.00)	1,079 (26.00)	1,372 (19.00)	1,101 (22.00)	271 (13.00)	1,813 (13.00)	1,537 (19.00)	276 (5.00)
Latin America and the Caribbean	429 (4.00)	327 (6.00)	103 (3.00)	577 (8.00)	442 (9.00)	135 (6.00)	1,726 (12.00)	846 (11.00)	880 (15.00)
Middle East	99 (1.00)	72 (1.00)	27 (1.00)	180 (3.00)	168 (3.00)	12 (1.00)	383 (3.00)	318 (4.00)	65 (1.00)
North Africa	183 (2.00)	130 (2.00)	53 (1.00)	131 (2.00)	116 (2.00)	15 (1.00)	293 (2.00)	228 (3.00)	66 (1.00)
Sub-Saharan Africa	1,959 (20.00)	1,042 (18.00)	917 (22.00)	284 (4.00)	189 (4.00)	95 (5.00)	962 (7.00)	499 (6.00)	463 (8.00)

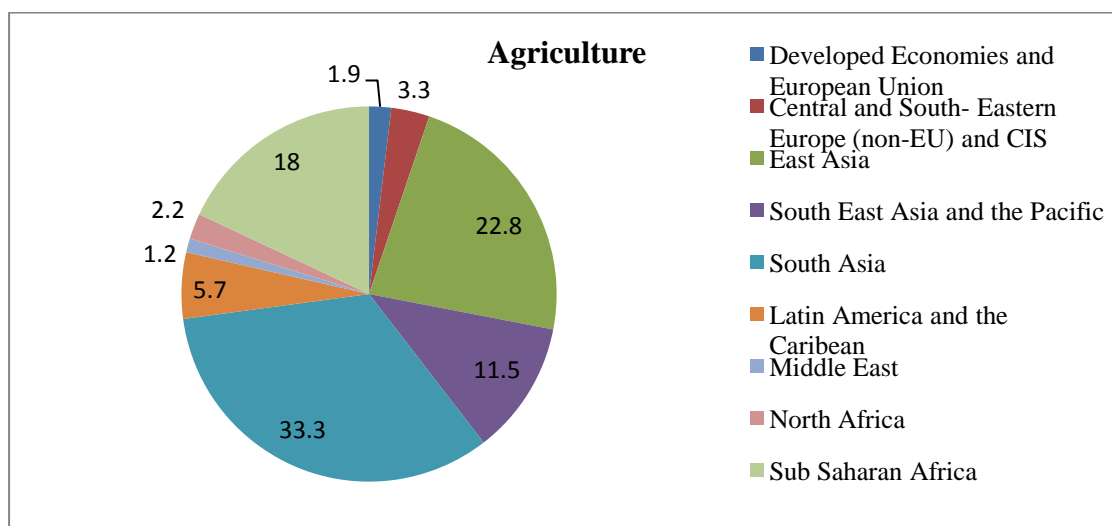
Source: International Labour Organisation (ILO) (2014), *Global Employment Trends 2014: Risk of a jobless recovery?*, International Labour Office, Geneva, p. 97

Generally employment or labour force has been divided into three broad categories, i.e. Agriculture sector, Industry sector and Service sector. Initially, agriculture sector has been driving force in economic generation, but with the advent of industrialization and globalization, in 21st century agriculture has occupied a 2nd position after service sector.

Table 2.4 represents that 45% of world population is dependent on service sector, 31.9% in agriculture and at last 23% is dependent on industry sector for the livelihood purpose. If we see each sector in isolation the largest percentage of population dependent in agriculture sector is South Asian region with 30.3% and least being the Middle East region with 1%. Out of total male employed in agriculture sector the highest percentage is in South Asian region with 33.3% and least being in the Middle Eastern region with 1.2%. On the other hand female employed in agriculture sector is highest in East Asian region with 29.8% and least being in the Middle Eastern region with 0.7%.

Figure 2.3

Male employment in agriculture sector by region



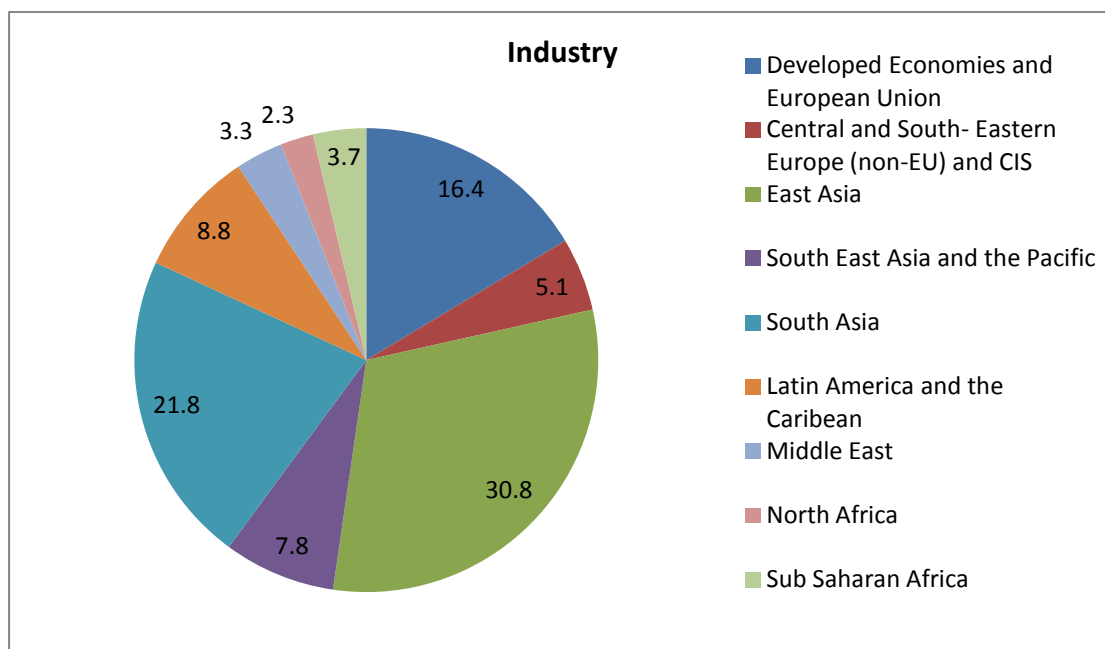
Source: International Labour Organisation (ILO) (2014), *Global Employment Trends 2014: Risk of a jobless recovery?*, International Labour Office, Geneva, p. 97.

South Asian region has the highest percentage of employment in agriculture sector along with highest percentage of male employed in agriculture sector but when it comes to female employment in agriculture sector it stands second after the East Asian region with 26.1%. The data has been further illustrated as region wise

employment of men and women in all the three sector of employment from Figures 2.3 to 2.8.

Figure 2.4

Male employment in industry sector by region



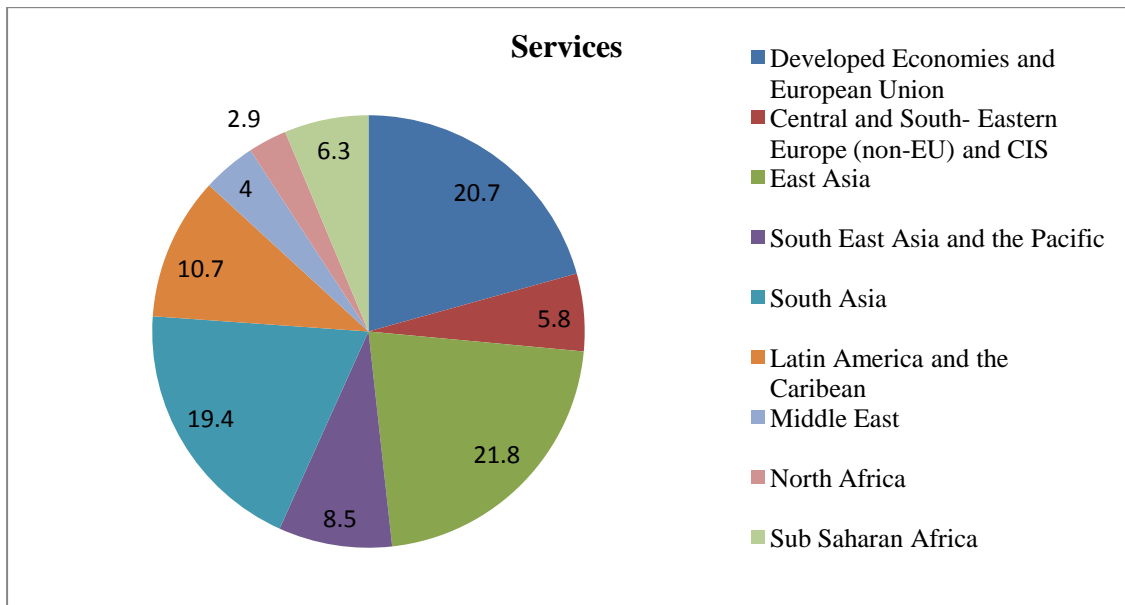
Source: International Labour Organisation (ILO) (2014), *Global Employment Trends 2014: Risk of a jobless recovery?*, International Labour Office, Geneva, p. 97.

Sub-Saharan Africa region has the highest share of population in agriculture sector with 61.1%, but the highest share of women engaged in agriculture sector in South Asian region with 66.4% against 42.2% men (see Table 2.4). As per the sector wise division of employment the highest percentage of male population dependent on agriculture sector is in South Asian region with 33.3% and least being in the Middle Eastern region with 1.2% (see Figure 2.3). In case of industry sector the highest percentage of male population is in East Asian region with 30.8% and least in the North Africa region with 2.3% (see Figure 2.4). In case of service sector the highest percentage of male population is in East Asian region with 21.8% and least being the North African region with 2.9% (see Figure 2.5).

On the other hand highest percentage of female population in agriculture sector is in East Asian region with 29.8% and least being the Middle Eastern region with 0.7% (see Figure 2.6). In case of Industry sector the highest percentage of female population is in East Asian region with 47.1% and least being the Middle Eastern

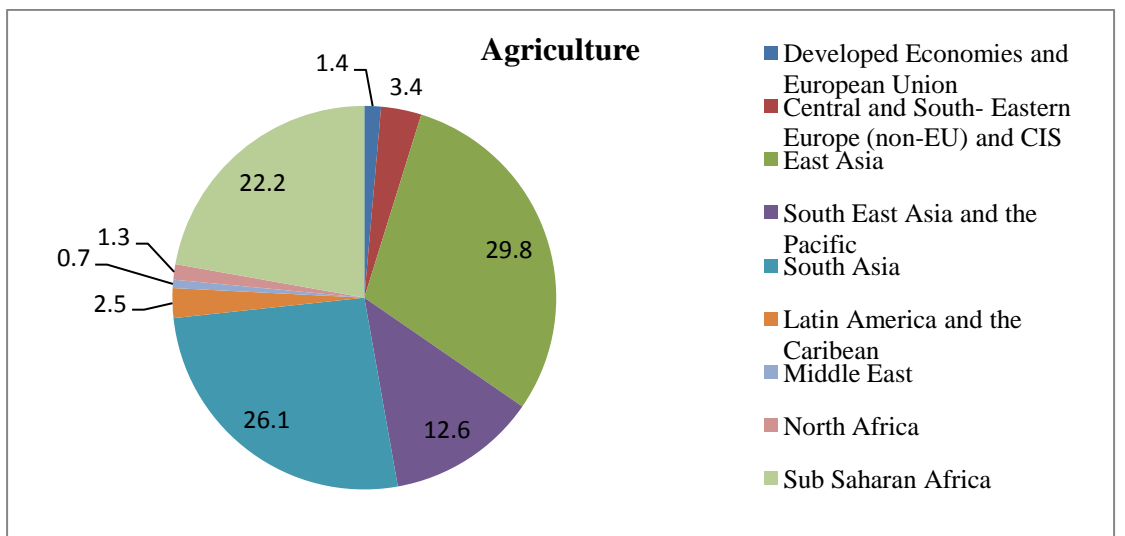
region with 0.6% (see Figure 2.7). In case of services sector the highest percentage of female population is in East Asian region with 23.2% and least being the Middle Eastern and North African region with 1.1% each (see Figure 2.8).

Figure 2.5
Male employment in services sector by region



Source: International Labour Organisation (ILO) (2014), *Global Employment Trends 2014: Risk of a jobless recovery?*, International Labour Office, Geneva, p. 97.

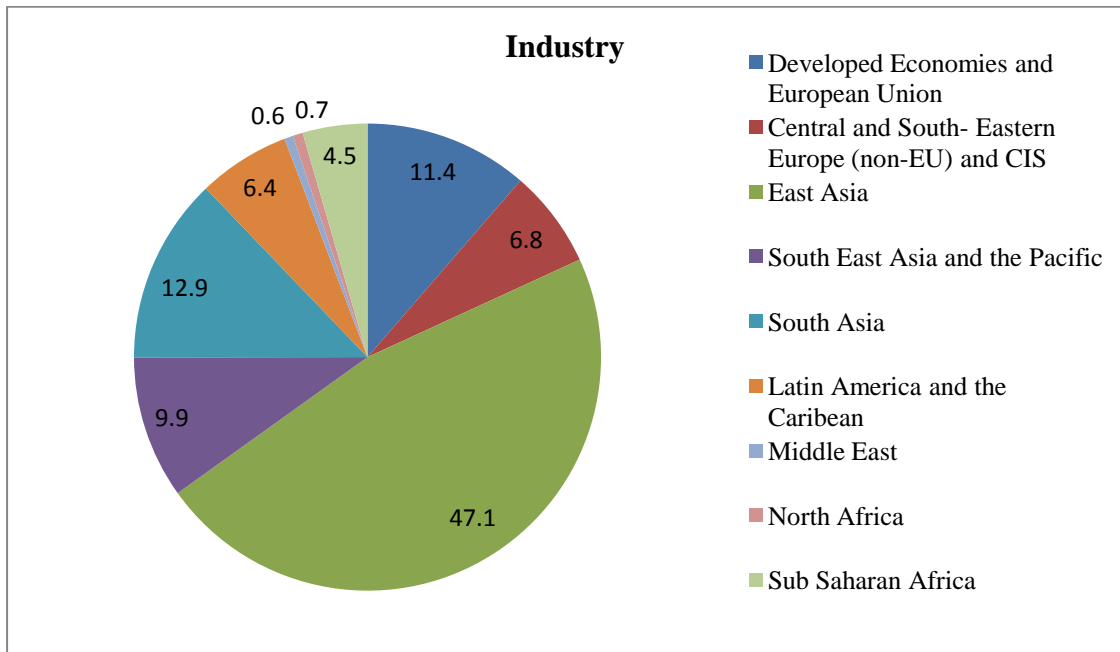
Figure 2.6
Female employment in agriculture sector by region



Source: International Labour Organisation (ILO) (2014), *Global Employment Trends 2014: Risk of a jobless recovery?*, International Labour Office, Geneva, p. 97.

Figure 2.7

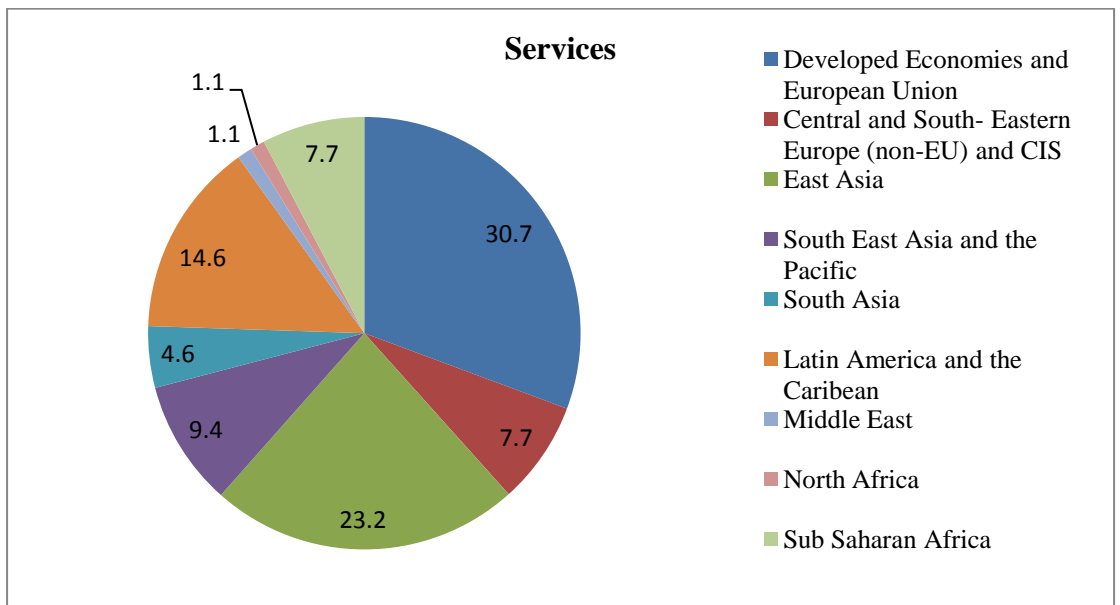
Female employment in industry sector by region



Source: International Labour Organisation (ILO) (2014), *Global Employment Trends 2014: Risk of a jobless recovery?*, International Labour Office, Geneva, p. 97.

Figure 2.8

Female employment in industry sector by region



Source: International Labour Organisation (ILO) (2014), *Global Employment Trends 2014: Risk of a jobless recovery?*, International Labour Office, Geneva, p. 97.

Out of nine regions mentioned in Table 2.4, two regions, i.e., South Asia and Sub-Saharan Africa, majority of population are engaged in agriculture sector for

employment, whereas in other seven regions, majority are engaged in service sector or dependent in service sector for employment.

The presence of female employees in agriculture sector is usually low as compared to their male counterparts because their involvement in agriculture sector are not considered as employment as they are unpaid workers on family or else low paid or unpaid labourers on other agricultural farms. They produce food and cash crops and manage mixed agricultural operations including agricultural work, livestock, poultry and fish farming. All of these women are considered part of the agricultural labour force.⁴ Rural women are especially vulnerable and have lack of access to education, information and resources, social inequalities and gender-discriminatory ideologies about agricultural roles and rights (FAO, 2011). About 493 million women worldwide are illiterate, and more than half of them are in South Asia (UNESCO, 2013). In some rural societies, commercial agricultural production is mainly a male responsibility. Men usually prepare land, irrigate crops, and harvest and transport produce to market. They own and trade large animals such as cattle, and are responsible for cutting, hauling and selling timber from forests (FAO, 2009).

Women and girls on the other hand play largely role of unpaid family work resulting in generating family income, by providing labour in various activities in agriculture sector from planting, weeding, harvesting and threshing of crops, to processing, stocking the produce for sale. Usually they are responsible for taking care of smaller animals. Rural women holds primary responsibility such as for maintenance of household, raising children, grows and prepares food, manage poultry, and collect fuel wood and water (FAO, 2015). Time allocation studies has shown that women across regions work significantly more than men if care-giving is included in the calculations (Ilahi, 2000). The combination of commitments often means that women are more time-constrained than men (Blackden and Wodon, 2006).

Although women make substantial contributions to agricultural production and household well-being, men largely control the sale of crops and animals and use of the income. The failure to value their work limits women's bargaining power in economic transactions, the allocation of household resources, and wider community

⁴The agricultural labour force includes people who are working or looking for work in formal or informal jobs and in paid or unpaid employment in agriculture. That includes self-employed women as well as women working on family farms. It does not include domestic chores such as fetching water and firewood, preparing food and caring for children and other family members.

decision-making (FAO, 2009). The gap, especially economic gap, between rural men and women is steadily widening, with men taking over the handling of crops and taking the credits and women being poor and destitute.

Rural women suffer systematic discrimination in the access to resources needed for agricultural production and socio-economic development. Male member or the head of the household is preferred for the beneficiary of the development projects in the field of agriculture, but when work burdens increase, girls are removed from school more often than boys, to help with farming and household tasks (FAO, 2009), with inadequate education they remain ignorant about the rights and opportunities that solemnly belongs to them, further leading into inferiority and then dominance.

Rural women generally have more limited access than men to inputs, services, rural organizations, productive infrastructure and technologies. Women in almost all rural societies face specific challenges in accessing productive inputs, land and natural resources, technologies and produce markets. Lack of security with regard to assets – especially land – often makes women less willing, and less able, to take risks and innovate. An absence of clarity regarding property and inheritance rights makes them less interested in investments with long-term benefits.

Rural women are often de-motivated because they do not fully share the benefits of their endeavors. Men control the bulk of the proceeds from cash crop and livestock production, even though women provide a substantial amount of labour. Men traditionally play a greater role in producing crops and livestock for the market, negotiating prices, transporting large volumes and handling cash sales, even for enterprises developed by women. Women's weak integration into value chains also reflects time availability and mobility constraints. When an enterprise becomes commercialized, women may find that they bear a disproportionate burden of additional work, without sharing in the additional benefits generated, or that men take over enterprises, which was once falling within women's domain. Alternatively, the development of independent income streams by women can sometimes be seen as result of men experiencing a loss of status in the home.

Rural women lack voice in decision-making. Cultural norms and practices, lack of education and self-confidence, and a shortage of time inhibit women's ability to contribute to decision-making at all levels – from household and community to

national. They are overburdened by their daily workload. They usually work longer than men. They multitask to combine a wide range of productive and household duties, including care-giving to the young, the elderly, people with disabilities and the chronically ill. Sanitation and drinking water are often relatively low priorities for domestic budget allocations and official development assistance, despite the huge benefits for public health, gender equity, poverty reduction and economic growth. The health and well-being of rural women are also compromised by poor nutrition, poor maternal health care and greater vulnerability – biologically, socially and economically – to the risk of HIV infection and the impacts of AIDS.

Majority of the rural women are uneducated, unskilled and tradition- bounded, therefore, their productive capacities are also low, and counted as unskilled labour. Though rural women also help to produce the staple crops like rice, wheat, and maize, but her contribution is secondary in staple crop production, however, in legumes and vegetables, her role is instrumental.

Rural women have very hectic life. Her work starts from dawn and ends at dusk. The daily routine work begins from cleaning house, fetching drinking water, washing dish, laundry, preparing food for family, care of children, tailoring and sewing clothes. She manages these activities very smartly. Women farmers are frequently ignored in development strategies and policies. In most of the developing countries, both men and women farmers do not have access to adequate resources, but women are even more constrained because of cultural, traditional and sociological factors.

Agriculture and allied activities are very important to women, but they have less access to the productive resources and services required for the agriculture production. Women are less likely to own land, adopt new technologies, labour, and receive education, and use credit or other financial services, as these are the determinant of agricultural productivity (FAO, 2011).

As lots of reason has been listed for inequality position of women as compared to men, but out of the all, determinants behind it is the lack of land holding capacity, unequal distribution of labour, lack of education, lack of credit facility, and lack of technology.

2.7 DETERMINANTS OF GENDER DISCRIMINATION IN AGRICULTURE SECTOR

2.7.1 Land

Land is the most important asset and basic requirement for agriculture purpose. It is a symbol of wealth, status and power. Holding of land is a symbol of ownership, where owners have right and privileges to take decision and outcomes by self. Land is not just a productive asset and a source of material wealth, but equally a source of security, status and recognition (N & Kusakabe, 2015). In case of land holding, the majority of farm is held by the head of the household (father or husband) who is usually the male member. As per the analysis by Food and Agriculture Organisation (FAO), the evidence illustrating gender inequalities in access to land is overwhelming. Women across all developing regions are less likely to own or operate land, less likely to have access to rented land, and even they have access, the land is often of poor quality and in smaller and less productive plots as compared to men (FAO, 2011). Gender disparities in land holdings are apparently globally. The existing social and cultural biases had distorted the intent of inheritance laws and the adequacies of government policies that exclude women from or limit their landownership. Non-governmental organizations (NGOs) have also ignored women's rights to own land (Agarwal in Sinha, 2013).

Women represent few as agricultural holders⁵; on the other hand men control larger land holdings than women. The male headed households operate larger agricultural land holdings on average than female-headed households. Due to no access of land by the women, they don't have say in any issue or matter related to the land, either buying or selling of land or any such decision related to agricultural work. In some societies women hold agricultural land, but they are just a mere care taker, until and unless male member comes and take up his duty. As women access to and control over land is an important means of raising their standard and status within household and communities, lack of access to land has proven major obstacles in increasing women's contribution and benefits in almost all the economic sphere and especially in agricultural sector. According to Chadha (1992) land generated much

⁵ Person or group of persons who exercise management control over an agricultural holding. The holding may be owned, rented or allocated from common property resources and may be operated on a share-cropped basis.

higher non-farm earnings from self employment than the totally landless (Ramachandran, 2009).

Land is one of the important determinants or key factor in agriculture sector and the disparity in holding of land is the common feature between male and female members. Table 2.5 to 2.8 provides overview of land holding division from the past four consecutive censal years (1995-96 to 2010-11), in national level (India), in region level (North East India), and in state level (Sikkim).

Table 2.5

Number of Individual Land Holding

Year	India		North East India		Sikkim	
	Number (thousand) (%)		Number (thousand) (%)		Number (thousand) (%)	
	Male	Female	Male	Female	Male	Female
1995-96	90372.48 (90.00)	10208.22 (10.00)	3539.65 (98.00)	62.23 (2.00)	38.25 (94.00)	2.51 (6.00)
2000-01	91856.26 (88.00)	12090.33 (12.00)	3706.47 (95.00)	181.72 (5.00)	58.40 (99.00)	0.73 (1.00)
2005-06	97891.76 (88.00)	13819.86 (12.00)	3873.86 (95.00)	192.92 (5.00)	65.13 (94.00)	4.16 (6.00)
2010-11	102611.67 (87.00)	15980.65 (15.00)	3838.36 (94.00)	235.23 (6.00)	70.67 (96.00)	3.21 (6.00)

Source: Agriculture Census Division, Department of Agriculture and Cooperation (DAC) (2014). Accessed on June, 07, 2015. An extracted data from webpage <http://agcensus.dacnet.nic.in/statesummarytype.aspx>.

The numbers of both male and female having individual land holding in India, North East India and Sikkim is presented in the Table 2.5 and the area of land held by them is presented in Table 2.6, which clearly shows the remarkable difference in the land holding pattern between male and female members. It is the same case in joint land holding represented in the Table 2.7 and 2.8. The scenario of land distribution pattern is similar being it in national or at state level, where the marginal gap between the male and female members are huge.

As per Table 2.5 and figure 2.7, the number of female members having land individually or jointly is being seen increasing from each census year to another,

which provides us some positive signs of improvement in women's position and status, but the growth, is very minimal and the gap difference as compared to male members is really huge.

As per the census year 2010-11, in India 86.5% of male member have individual land holding and 89.7% are having joint land holding whereas 14.5% of female are holding individual land and 10.3% are having joint land holding. In North East India 5.8% of female are having individual land holding against 94.2% of male members and 8.1% are having joint land holding as compared to 91.9% male members. The same is in the case with Sikkim, 95.7% of male member are having individual land holding. On the contrary only 6.3% of female member are having individual land holding.

Table 2.6
Area of Individual Land Holding

Year	India		North East India		Sikkim	
	Area (^{'000} Hectare)		Area (^{'000} Hectare)		Area (^{'000} Hectare)	
	(%)		(%)		(%)	
	Male	Female	Male	Female	Male	Female
1995-96	125444.75 (92.00)	10435.07 (8.00)	4486.59 (98.00)	107.56 (2.00)	57.83 (95.00)	3.09 (5.00)
2000-01	120400.56 (91.00)	12017.2 (9.00)	4950.79 (96.00)	226.24 (4.00)	89.83 (99.00)	1.11 (1.00)
2005-06	118056.89 (90.00)	12937.42 (10.00)	4893.68 (95.00)	253.19 (5.00)	94.06 (95.00)	5.25 (5.00)
2010-11	116540.87 (89.00)	14312.62 (11.00)	4766.77 (93.00)	334.55 (7.00)	98.93 (96.00)	4.21 (4.00)

Source: Agriculture Census Division, Department of Agriculture and Cooperation (DAC) (2014). Accessed on June, 07, 2015. An extracted data from webpage <http://agcensus.dacnet.nic.in/statesummarytype.aspx>

Table 2.7
Number of Joint Land Holding

Year	India	North East India	Sikkim
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	Number (thousand) (%)		Number (thousand) (%)		Number (thousand) (%)	
	Male	Female	Male	Female	Male	Female
1995-96	13981.44 (94.6)	803.39 (5.4)	40.15 (97.9)	0.85 (2.1)	2.13 (91.4)	0.2 (8.6)
2000-01	14812.33 (94.3)	899.82 (5.7)	47.78 (90.4)	5.08 (9.6)	6.69 (99.3)	0.05 (0.7)
2005-06	14812.33 (92.00)	1295.36 (8.00)	31.22 (91.6)	2.86 (8.4)	2.60 (85.8)	0.43 (14.2)
2010-11	14812.33 (89.7)	1702.13 (10.3)	26.05 (89.6)	3.04 (10.4)	0 (0.00)	0 (0.00)

Source: Agriculture Census Division, Department of Agriculture and Cooperation (DAC) (2014). Accessed on June, 07, 2015. An extracted data from webpage <http://agcensus.dacnet.nic.in/statesummarytype.aspx>.

As per the distribution of land, area is concerned between male and female members as mentioned in the Table 2.6 and 2.8, it can clearly be seen that major chunks of land is held by male member in the society and the gap is huge. In India as per the 2010-11 data the 89.1% of the individual agricultural land is under male domain and the female members have only 10.9% of the land, in case of North East India men holds 93.4% of individual land and women on the other hand holds only 6.6% of land. In case of Sikkim male members have 95.9% of individual land holding and female member has 4.1% of individual land holding (see Table 2.6). The scenario is similar in case of joint land holding too (see Table 2.8).

The census data clearly shows how our society is having unequal land distribution pattern. The Indian society being patriarchal in nature the property immovable or movable has been passed unto sons. Even after having rights and law a daughter to claim inheritance property, she is unable to access. Either no land is given at par to the sons. This has further widened the gap in land holding pattern among male and female members in a society.

Table 2.8
Area of Joint Land Holding

Year	India	North East India	Sikkim
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	Area (’000 Hectare)		Area (’000 Hectare)		Area (’000 Hectare)	
	Male	Female	Male	Female	Male	Female
1995-96	24774.05 (95.00)	1280.72 (5.00)	68.25 (99.00)	0.77 (1.00)	5.5 (93.00)	0.41 (7.00)
2000-01	23855.48 (95.00)	1355.76 (5.00)	76.52 (94.00)	5.03 (6.00)	10.71 (100.00)	0.04 (0.00)
2005-06	23804.25 (93.00)	1830.34 (7.00)	48.77 (93.00)	3.75 (7.00)	4.86 (93.00)	0.38 (7.00)
2010-11	24999.48 (92.00)	2196.96 (8.00)	37.79 (94.00)	2.52 (6.00)	0 (0.00)	0 (0.00)

Source: Agriculture Census Division, Department of Agriculture and Cooperation (DAC) (2014). Accessed on June, 07, 2015. An extracted data from webpage <http://agcensus.dacnet.nic.in/statesummarytype.aspx>.

The agriculture being solely depended upon land, the female members has remained in the back foot because of no power or no say in the agricultural field, which the family is being holding. It is either in the name of her husband or in the name of his father or brother. She (women) just has to act as labourer in the field with less paid and in most cases remains unpaid.

2.7.2 Labour

Women are much more over-burdened than men due to enormous work they perform, from field activity to household work. They work from early morning to late night. It has been observed that farm works which are labour intensive, monotonous, drudgery prone are usually performed by women folk.

In female headed household labour constraint can be more acute than the male headed household. In agricultural field there are some works which are labour intensive in nature, which men perform. Women generally face gender-specific constraints as agricultural labourers and hired labour. Low levels of human capital – education, health and nutrition – are a constraint on women’s labour productivity in agriculture and other sectors (Behrman, Alderman and Hoddinott, 2004).

There also difference lies in the men headed and women headed household. In men headed household, the female members perform the job prescribed for her on the other hand in the female headed household, male helps in the farm only after they have taken care of their own plots or farm lands. Often there is a pronounced gender

division of labour for particular agricultural tasks, with the result that male and female labour cannot be easily substituted. Moreover, works of women are time constrained by indulging in domestic tasks such as care giving and collecting firewood and water (Koolwal & Walle, 2010) and other allied agriculture activities.

Female-headed households face more severe labour constraints than male-headed households because they typically have fewer members but more dependants with very less or no income to pay the male workers. In some areas, male out-migration further adds to the constraint already imposed by gender specific farming tasks (Peters 1986 in FAO, 2011). Depending in some cultural norms, some of the farming activities such as ploughing and spraying of pesticides rely on access to male labours, so the female headed households often lack male family members who can do the work and they may not have the cash needed to hire male labour. As, a result, women cultivate smaller plots and achieve lower yields (Gilbert, Sakala and Benson, 2002, FAO, 2011).

There is gender division of work in agricultural sector; such as women do not plough land and work such as weeding and sowing are prescribed to them. The work which women perform is time consuming and the amount of wage they received is very less as compared to their male counterparts (see Table 2.9 and 2.10).

Table 2.9 represents, men average daily and Table 2.10 presents, women average daily wage rate for agricultural occupations in rural India during November, 2013, where clear gender division of work and wage differential is seen. As per working profile in agriculture is concern table 2.8 clearly shows that representation of women are none or very less in ploughing/tilling workers and plant protection workers or those engaged in applying pesticides, treating seeds, etc. Very few women are engaged in such occupation with very low daily wage rate, majority being less than five rupees. Higher women representation can be seen as sowing (including planting/transplanting/weeding) workers; harvesting/ winnowing/ threshing workers; and general agricultural labourers including watering and irrigation workers, etc.

The table 2.9 and 2.10 clearly shows the gender division of work in agriculture sector. The major two works of agriculture that's preparing land for cultivation and treating seeds or applying pesticides is under the male domain, which has further created the problem for those household headed by women. In such scenario, women

has to find out the male labourer to plough or prepare their land which is an initial and important phase to began the agriculture process, in most cases they do not find because of male labourers themselves being busy engaged in their own land and if they in case finds, the daily wage rate are really very high, which the women headed household are unable to fulfill. As per Table 2.9, the average daily wage rate for ploughing ranges from Rs. 661.33/- to Rs. 174.62/-.

Apart from gender division of work table 2.9 and table 2.10 also indicates the gender division of daily wage rate for agricultural occupations. Male ploughing/tilling workers gets highest wage rate as Rs. 661.33/- that's in the state of Kerala and lowest of Rs. 174.62/- in the state of Madhya Pradesh, on the other hand no engagement of female workers in the same kind of job can be seen in the graph with exception of Maharashtra which provides Rs. 152.14/- for the female workers.

The scenario is same in case of others too, in sowing, male workers earns Rs. 594.62/- highest in the state of Kerala and Rs. 164.10/- lowest in the state of Madhya Pradesh, female on the other hand earns Rs. 424.52/- highest in the state of Kerala and less than five as lowest in the states like Himachal Pradesh, Jammu & Kashmir, Punjab & Tripura. Male workers engaged in harvesting earns Rs. 535.14/- highest in the state of Kerala and lowest being less than Rs. 5 in the state of Meghalaya, whereas women workers earns Rs.431.28 as highest in the state of Kerala and lowest being less than Rs. 5 in the state like Jammu & Kashmir, Meghalaya, and Tripura (see Table 2.9 & 2.10).

Picking male workers (including tea, cotton, tobacco & other crops) earns highest of Rs. 336.89/- in the state of Haryana and women workers earns highest of Rs. 327.5/- in Haryana too. Horticulture male workers' including nursery growers earns highest of Rs. 309.64/- in Tamil Nadu and women earns highest of Rs. 163.88/- in Karnataka. The inland fisherman earns highest of Rs. 341.33/- in the state of West Bengal and women highest income is less than Rs, 5/- per day (see Table 2.9 & 2.10).

TABLE 2.9

AVERAGE DAILY WAGE RATE FOR AGRICULTURAL OCCUPATIONS IN RURAL INDIA DURING NOVEMBER, 2013 (MEN)

Sl.No	States	Ploughing/Tilling Workers	Sowing (including Planting /Transplanting/ Weeding Workers	Harvesting/Winnowing /Threshing Workers	Picking Workers (including Tea, Cotton, Tobacco & Other Crops	Horticulture Workers (including Nursery Growers)	Fisherman Inland	Fisherman Coastal/ Deep Sea	Loggers & Wood Cutters	Animal Husbandry Workers: including Poultry Workers, dairy Workers & Herdsman	Packaging Labourers	General Agricultural Labourers including Watering & Irrigation Workers, etc	Plant Protection Workers (applying pesticides, treating seeds, etc.)
1	Andhra Pradesh	278.90	243.47	218.66	188.30	@	246.67	-	269.20	160.74	@	219.48	330.64
2	Assam	254.65	217.94	241.11	-	-	@	-	241.88	@	@	204.50	240.43
3	Bihar	230.99	216.67	213.48	@	166.25	288.89	-	254.94	161.52	169.23	201.20	241.67
4	Gugjarat	217.14	191.67	185.17	181.25	192.60	@	-	195.00	158.57	157.14	168.81	166.15
5	Haryana	380.00	342.22	349.00	336.89	-	-	-	@	284.40	@	346.55	331.67
6	Himachal Pradesh	359.25	312.38	319.57	-	@	-	-	@	@	@	312.43	@
7	Jammu & Kashmir	377.50	368.89	372.22	-	@	-	-	495.00	418.33	@	377.86	@
8	Karnataka	283.13	227.04	221.35	226.36	228.46	233.75	-	277.30	205.53	238.24	202.32	250.00
9	Kerala	661.33	594.62	535.14	-	@	-	-	940.68	548.57	-	578.81	684.76
10	Madhya Pradesh	174.62	164.10	172.26	151.43	155.00	-	@	150.43	110.47	133.33	151.27	176.05
11	Maharashtra	246.82	215.74	205.98	185.38	231.25	@	@	234.76	180.25	212.50	193.41	256.43
12	Manipur	287.50	276.67	297.14	-	@	-	-	@	248.57	@	@	-
13	Maeghalaya	@	194.29	@	@	158.33	-	-	190.00	144.44	@	176.25	@
14	Orissa	216.49	187.54	194.71	@	146.67	@	-	217.78	133.86	@	183.57	@
15	Punjab	346.67	299.62	289.58	291.88	285.00	-	-	@	246.40	@	290.07	302.42
16	Rajasthan	292.22	288.00	336.25	@	@	-	-	242.86	178.00	@	272.00	270.00
17	Tamil Nadu	541.87	345.60	376.87	@	309.64	@	-	397.75	349.00	360.00	338.05	554.05
18	Tripura	210.00	210.00	210.00	-	-	-	-	287.78	210.00	-	208.89	-
19	Uttar Pradesh	196.53	198.96	201.81	@	@	@	-	268.64	194.09	@	193.96	206.00
20	West Bengal	290.23	209.05	207.55	-	281.80	341.33	@	269.36	163.66	259.50	221.83	198.97
21	All India	272.00	233.93	231.37	209.41	219.68	273.88	303.43	306.76	181.5	220.62	227.21	288.13

-- indicates that the particular categories of workers, were not engaged in that operation either because of their non-availability; or the activity connected with the occupation was not undertaken in the state; or the activity was out of season in the state, etc.

@= Number of quotations are less than five.

Source: Labour Bureau, *Wage Rate in Rural India*, Accessed on December 23, 2014, An extracted data from the webpage http://labourbureau.nic.in/WRII_Nov_2013.pdf

TABLE 2.10
AVERAGE DAILY WAGE RATE FOR AGRICULTURAL OCCUPATIONS IN RURAL INDIA DURING NOVEMBER, 2013 (WOMEN)

Sl.No	States	Ploughing/Tilling Workers	Sowing (including Planting/Transplanting/Weeding Workers)	Harvesting/Winnowing/Threshing Workers	Picking Workers (including Tea, Cotton, Tobacco & Other Crops)	Horticulture Workers (including Nursery Growers)	Fisherman Inland	Fisherman Coastal/Deep Sea	Loggers & Wood Cutters	Animal Husbandry Workers: including Poultry Workers, dairy Workers & Herdsman	Packing Labourers	General Agricultural Labourers including Watering & Irrigation Workers, Etc	Plant Protection Workers (applying pesticides, treating seeds, etc.)
1	Andhra Pradesh	-	176.21	158.91	147.97	@	@	-	-	@	-	143.52	@
2	Assam	-	184.5	202.74	@	-	-	-	-	-	@	203.75	-
3	Bihar	-	185.53	194.17	@	155	-	-	@	133.5	@	160.58	@
4	Gujarat	@	183.21	180.34	175.87	@	-	-	@	163.33	@	158.21	-
5	Haryana	-	320	348.89	327.5	-	-	-	-	@	-	347.14	-
6	Himachal Pradesh	-	@	316.4	-	@	-	-	-	@	@	312	-
7	Jammu & Kashmir	@	@	@	-	-	-	-	-	-	-	@	-
8	Karnataka	@	158.44	146.61	147.5	163.88	-	-	-	151	163.33	149.25	-
9	Kerala	-	424.52	431.28	-	@	-	-	-	-	-	410.17	-
10	Madhya Pradesh	@	154.71	163.59	148.57	142	@	-	@	93.5	130	133.6	-
11	Maharashtra	152.14	153.24	152.56	167.29	150	@	-	@	158.33	150	133.94	@
12	Manipur	-	240	263.89	-	@	-	-	-	-	-	-	-
13	Maeghalaya	@	145	@	@	123.33	-	-	-	105	-	128.75	-
14	Orissa	-	148.72	171.21	@	140	-	-	@	113.33	@	163.04	-
15	Punjab	-	@	228	201	@	-	-	-	@	@	@	-
16	Rajasthan	@	208.75	266.82	@	-	-	-	@	@	@	202.5	-
17	Tamil Nadu	-	204.85	232.88	177.86	156.98	-	-	@	@	@	189.84	@
18	Tripura	-	-	-	-	-	-	-	-	-	-	-	-
19	Uttar Pradesh	@	169.05	174.84	@	@	-	-	@	@	@	168.21	@
20	West Bengal	@	193.35	193.57	@	@	-	-	-	187.17	@	191.33	166.15
21	All India	207.95	189.72	196.05	173.4	162.77	180	@	170.63	135.74	180.31	175.55	167

-- indicates that the particular categories of workers, i.e. men/women were not engaged in that operation either because of their non-availability; or the activity connected with the occupation was not undertaken in the state; or the activity was out of season in the state, etc.

@= Number of quotations are less than five.

Source: Labour Bureau, *Wage Rate in Rural India*, Accessed on December 23, 2014, An extracted data from the webpage http://labourbureau.nic.in/WRRI_Nov_2013.pdf

In case of animal husbandry workers the highest earning a male workers receives is Rs. 548.57/- per day in the state of Kerala on the other hand the highest amount a female workers is Rs. 187.17/- in the state of West Bengal. The male workers those who are engaged in packaging labourers earns highest of Rs. 360/- in the state of Tamil Nadu and female workers earns highest of Rs. 163.33/- in the state of Karnataka. The general agricultural labourers including watering and irrigation male workers earn highest of Rs. 578.81/- in the state of Kerala and female workers earns highest of Rs. 410.17/- in the state of Kerala too. Plant protection male workers, those engaged in applying pesticides treating seeds, etc earns highest of Rs. 684.76/- in Kerala and women on the other hand earns highest of Rs. 166.15/- in the state of West Bengal (see Table 2.9 & 2.10).

The uneven daily wage rate between male and female workers presented in table 2.9 and table 2.10 gives a view that agricultural occupation in rural India is gendered. Wage gap between male and female workers has further enhanced socio-economic differences. Female workers in almost all the agriculture sectors receives low wages as compared to male workers so in female headed household they are economically backward as compared to male headed household. In certain areas of agriculture such as ploughing and plant protection workers women being no or rarely employed in such cases women headed household had to search male workers where wages are high and pocket are really empty. The wages which women earns by working as agricultural labourers are too low pay for those male workers deployed in their agricultural field. So, wage gap differences led women to suffer in all respect.

2.7.3 Education

It is one of the determinant factors that are closely linked to the productivity of the household. It is strongly correlated with measures such as agricultural productivity, household income and nutritional outcomes – all of which ultimately affect household welfare and economic growth at the national level (FAO, 2011). Gender differences in education are significant and widespread. Female heads have less education than their male counterparts in all countries (Adamu, 2014). This evidence reflects a history of bias against girls in education. Being less educated the female headed agriculture farmers has to face lots more challenges from sowing the seeds in the field till selling of their crops.

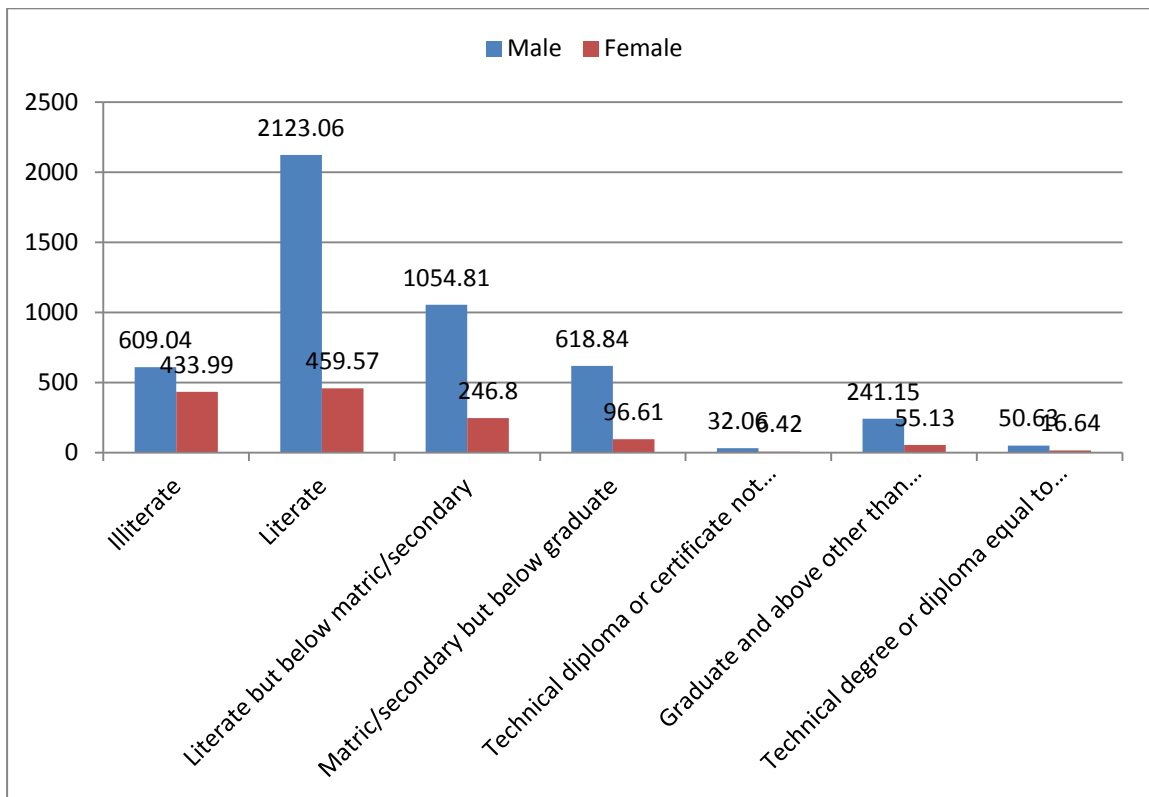
Table 2.11
Main Workers, Marginal Workers, Non-Workers of India Classified by
Educational Level and Sex- 2011

Educational Level		Main workers (lakhs)	Marginal workers (lakhs)	Non-workers (lakhs)
Total	Persons	3625.66	1193.23	7289.67
	Male	2732.1	587.3	2913.3
	Female	893.56	60.59	4376.36
Illiterate	Persons	1043.03	510.87	2918.27
	Male	609.04	170.67	1105.36
	Female	433.99	340.2	1812.91
Literate	Persons	2582.63	682.37	4371.4
	Male	2123.06	416.63	1807.94
	Female	459.57	265.73	2563.45
Literate but below matric/secondary	Persons	1301.61	433.93	2914.17
	Male	1054.81	255.18	1243.87
	Female	246.8	178.76	1670.3
Matric/secondary but below graduate	Persons	715.455	154.09	980.01
	Male	618.84	103.04	387.89
	Female	96.61	51.04	592.11
Technical diploma or certificate not equal to degree	Persons	38.48	4.16	29.74
	Male	32.06	3.16	18.32
	Female	6.42	0.1	11.43
Graduate and above other than technical degree	Persons	296.27	33.38	231.84
	Male	241.15	22.78	77.82
	Female	55.13	10.6	154.02
Technical degree or diploma equal to degree or post-graduate degree	Persons	67.26	5.75	48.39
	Male	50.63	3.73	25.09
	Female	16.64	2.01	23.3

Source: Open Government Data (OGD) Platform India (2016), Ministry of Home Affairs, Government of India. <https://data.gov.in/catlog/marginal-workers-and-non-workers-seeking-available-work-classified-educational-level-age-a-0>.

Education does develop confidence, and especially plays an important role during selling of their crops. They are more likely to get cheated, as they will know nothing about then price value and proper management of selling of their crops. Being uneducated they lack in information too. Beyond general educational attainment, higher education for women in agricultural science and technology is particularly relevant in regions where women comprise large part of the agriculture sector. There is an urgent need for a greater representation of women in agricultural research (Adamu, 2014).

Figure 2.9
Main Workers by Educational Level and Sex- Census 2011



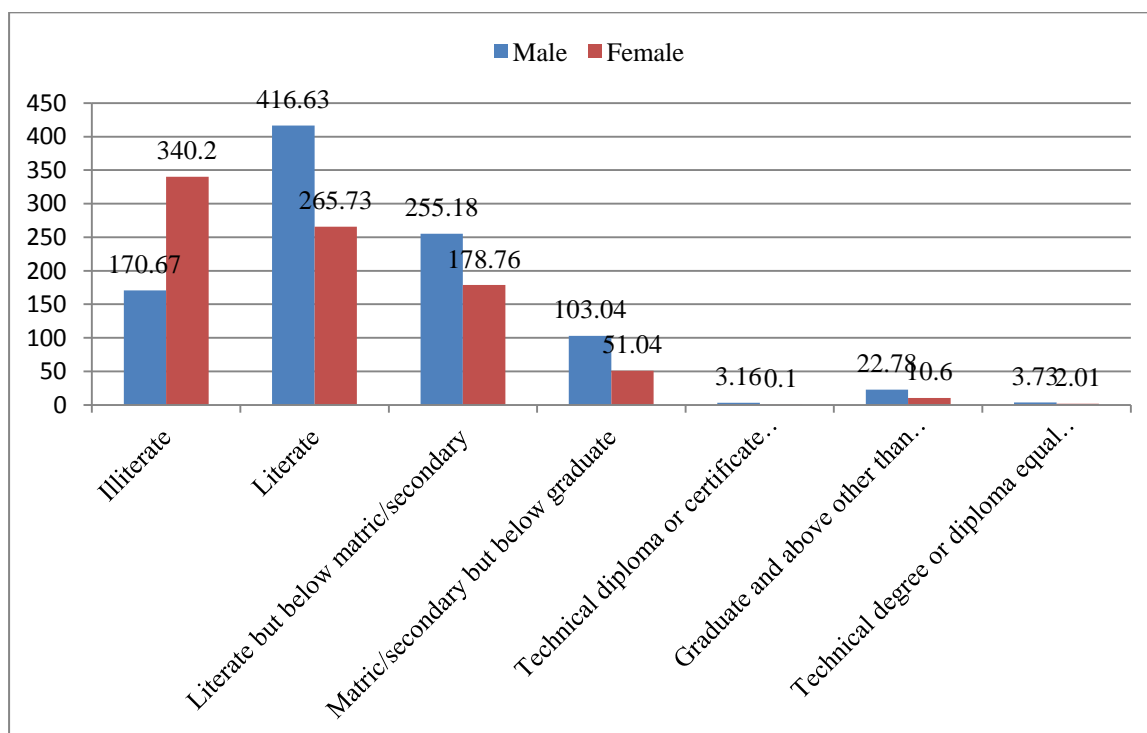
Note: Numbers denote in lakhs. Source: Open Government Data (OGD) Platform India (2016), Ministry of Home Affairs, Government of India. <https://data.gov.in/catlog/marginal-workers-and-non-workers-seeking-available-work-classified-educational-level-age-a-0>.

In India farmer basically means “men”. Most of the facilities such as training facilities are mostly targeted to men or are male centric in nature. Female members those engaged in agricultural process are rarely educated and on the top rare focus are given in imparting training facilities too, whereas majority of the farmers in India are women.

Figure 2.9 represents main workers, figure 2.10 represents marginal workers, and figure 2.11 represents non workers by educational Level and Sex (India) for the census year 2011. The highest male and female illiterate are in the group of non workers with 1105.36 lakhs and 1812.9 lakhs in numbers respectively. But looking at the comparative between the two the illiterates among females are more than in male non workers group. In the case of main workers the number of males’ illiterates is higher than that of females and in the case of marginal workers the female ratio is higher than that of male. In case of main and marginal workers there is higher number

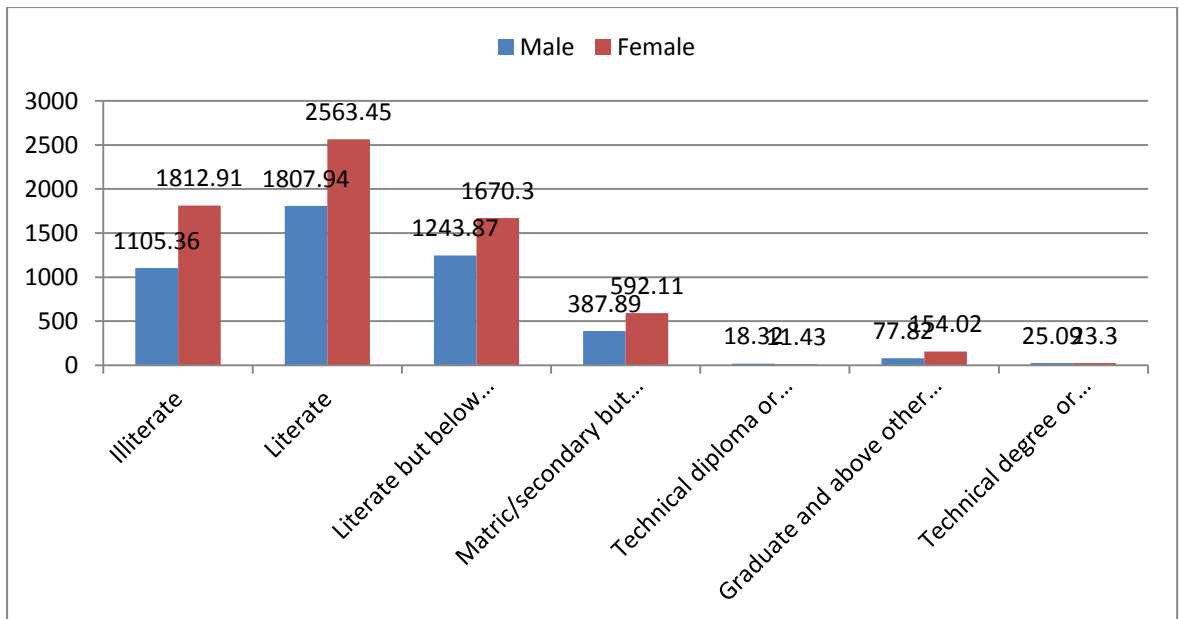
of male literates' workers than the female workers but female literate non working population is larger than the male population.

Figure 2.10
Marginal Workers by Educational Level and Sex- Census 2011



Note: Numbers denote in lakhs. Source: Open Government Data (OGD) Platform India (2016), Ministry of Home Affairs, Government of India. <https://data.gov.in/catalog/marginal-workers-and-non-workers-seeking-available-work-classified-educational-level-age-a-0>.

Figure 2.11
Non-Workers by Educational Level and Sex- Census 2011



Note: Numbers denote in lakhs. Source: Open Government Data (OGD) Platform India (2016), Ministry of Home Affairs, Government of India. <https://data.gov.in/catlog/marginal-workers-and-non-workers-seeking-available-work-classified-educational-level-age-a-0>.

2.7.4 Financial Services

Financial services helps in betterment and impoverished agriculture output by various schemes facilities with special focus on farmers, such as savings, credit and insurance for economic vitality at the household, community and at national levels. For large scale production money is needed, either savings they hold or through credit, so that they can yield their crops. Credit markets are common when it comes to agriculture in the form of local village money lender or through banks and governmental institutions. Credit markets are not gender neutrals, rather legal barriers and cultural norms sometimes bar women from holding bank accounts or entering into financial contracts in their own right. Women generally have less or no control in the fixed assets, that are usually necessary for seeking loans. Institutional discrimination by private and public lending institutions often either ration women out of the market or grant women loans that are smaller than those granted to men for similar activities. In seven out of nine countries in the Rural Income Generating Activities (RIGA) dataset, rural female-headed households are less likely than male-headed households to use credit (FAO, 2011). As per Global Gender Gap Report (2015) India ranks 136th with 0.408 scores among 144 countries in women economic participation and opportunity.

Micro credit approaches has served the rural women regarding financial needs for their livelihoods, but sometimes they are just being victims of men by keeping women in forefront and accessing the economic assets. In most cases loan facilities are provided against land or source of income, so it is more problematic for the female headed household or single women to access the loan, as in most cases land is in the name of her husband, father, or son.

2.7.4 Technology

Access to new technology is crucial in maintaining and improving agricultural productivity. Green Revolution has brought technology in agriculture sector to impoverish and increased the growth level of agricultural output. Looking at the overall scenario technology has helped the farmers in minimizing the time and labour that needed to deployed in traditional mode of farming. Advent of technology has replaced or minimized the job that was prescribed to male farmers but the women work still remained the same with continuous and rigorous employment. So, the gender gaps exist for a wide range of agricultural technologies, including machines and tools, improved plant varieties and animal breeds, fertilizers, pest control measures and management techniques.

Number of constraints and gender gap in the agricultural sector has lead to gender inequalities in access to and adoption of new technologies, as well as in the use of purchased inputs and existing technologies. Advent of technology rather improving worsens the position of women. Small land holder's women started to be wage workers. It simplified and mechanized the work of men and women continued to perform manual work and suffer from drudgery. Lack of training of women in agriculture techniques has also back lashed women. In spite of losing the burden of women by the advent of technology, it is rather worsening the conditions. The needs of women are simply been ignored. The daily routine of household and farm is not reduced.

The use of purchased inputs depends on the availability of complementary assets such as land, credit, education and labour, all of which tend to be more constrained for female-headed households than for male-headed households. The adoption of improved technologies is positively correlated with education but is also

dependent on time constraints (Anaglo & Muniru, 2013). In large land holding and for good productivity capital is required for purchasing inputs such as fertilizers, machineries , improved seeds and other various inputs are required. In the case of technology, women face more obstacles relative to men in their access to credit and lack of education also led them to remain backward. Adoption of improved technologies and inputs may also be constrained by women's lower ability to absorb risk.

There has also been found the gender differences in adoption of improved technologies and the use of purchased inputs across regions (Anaglo & Muniru, 2013). For example, male- headed households show much wider use of fertilizers than their female counterparts. Women farmers are less likely to use modern day technology and fertilizers because they have less access to land, credit facilities due to no hold in fixed assets, lack of education facilities, etc.

If there are no gender specific differences in input use or determinants in agricultural sector than female farmers could also achieve the same yields as male farmers, the production gains could be substantial. The gender productivity gap could increase agricultural output in the developing world by a significant amount.