

An Assessment of the Working Conditions of Flower Farm Workers: A Case Study of Four Flower Farms in Oromiya Region

By

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Workers: A Case Study of Four Flower Farms in Ormiya
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Declaration

“This thesis is my original work and has not been presented for a degree in any other University, and that all sources of materials used for the thesis have been duly acknowledged.”

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Chapter One

1.1 Introduction

The floriculture industry is one of the emerging sectors of the Ethiopian economy and is contributing to the country's national income. Compared to other industries, the floriculture industry attracts large amount of foreign direct investment. In addition, the industry has created job opportunities for many people who would otherwise be jobless due to the underdevelopment of the Ethiopian economy.

The flower industry is currently expanding all over the world. According to the Journal of Environmental Health Perspectives, the floriculture industry currently employs about 190,000 people throughout the developing world. Every year, about 30 billion dollar is generated from the International flower industry (EHP.org (2002).

The Ethiopian floriculture industry was started in the early 1990's. It created job opportunity for about 25,000 workers and when the total licensed floriculture development projects between July 1992 and July 2006 become operational, the total number of employees is expected to be 72,000. Eighty-three of the proposed flower farms are at the pre-implementation stage, 23% at implementation stage while 17% are reported to be operational. Fifty farms are fully operational and over 30 are fully engaged in export of products to European markets. At the beginning of March 2005, it was reported that 176.1 ha of land was covered with greenhouses (ILO, 2006).

According to the report of the Export Promotion Department of Ministry of Trade and Industry (MoTI), flower export has generated 42.5 million USD. The export volume has increased from 1.6 million stems in 1999/2000 to 32 million stem in 2003/04. In value terms, the increase was from 382,346 USD in 1999/2000, to 2.9 million USD in 2002/2003, to 5.1 million USD in 2003/04 and 21.9 million USD in 2005/2006 (ILO, 2006).

As it is stated by (Sepulveda, 2004:3) the majority of the workforce in the global flower industries consists of women. We mostly find women on jobs that require flexible labor. In addition to this, when jobs are not permanent and short term, women are the ones who are mostly vulnerable to different problems.

1.2 Statement of the Problem

The newly emerging flower industry in Ethiopia undeniably can mitigate the prevalent unemployment problem in its own way. However, there may be problems which workers face. There is no code of conduct used to govern the working conditions of the workers.

The flower production uses different chemicals like pesticides and insecticides that can potentially cause harsh problems specifically on women. The chemicals can cause skin problems and other reproductive illnesses, which can be risky to women's lives. Women may fear that if they become pregnant, the chemicals may have a side effect on their babies. In addition, female flower farm workers may not have adequate pregnancy and maternity leave and can suffer from lack of health and safety insurances.

According Mena (2005) to Female flower farm workers are burdened with heavy workloads that affect their physical and mental health condition. They have to try to keep their jobs by showing that they are equally competent as men. Therefore, a woman will choose to work even in worsened conditions than to leave her job that may affect the life of her families too.

Flower workers are not organized in trade unions. This limits their right to bargain and stand for their rights (UWEA, 2006:6). If they are not organized under unions, they will lose their collective bargaining powers that may enable them to stand for their rights in adverse working conditions they are likely to face.

This paper attempts to examine the socio-economic conditions of flower farm workers in four flower farms. Namely Joy Tech, Dugda, Jo Flowers and Agri Flowers. The research

especially assesses the working conditions and the problems women face while working in the flower since women constitute the majority of the workforce.

1.3 Objectives of the Study

The major objective of this study is to explore the working conditions of flower farm workers in the flower industries of Ethiopia with a special focus on women flower farm workers.

The specific objectives of the study are:

- To assess the socio-economic conditions of flower farm workers.
- To examine the problems flower farm workers are facing while working in the flower industries.
- To assess the working conditions of flower farm workers.

1.4 Hypothesis

Although the flower industry has created employment opportunities for flower farm workers, the working, health and safety conditions of workers call for serious improvement.

Research questions:

- What are the socio-economic conditions of flower farm workers in the flower farms selected for the study?
- What are the problems that flower farm workers face while working in the industry?
- What mechanisms are available for flower farm workers that enable them to put forward their grievances?
- Are the working conditions of the Ethiopian flower farm workers consistent with the working standards indicated in the International Code of Conduct?

1.5 Limitations of the Study

This study investigates some aspects of the working conditions of flower farm workers in the Ethiopian flower industry with a focus on women flower farm workers. For this purpose, four flower farms are selected and studied. This in itself becomes a source of difficulty to generalize about women flower farm workers by a mere inspection of the selected flower farms only.

The other challenge was that the problem of accessing flower farm workers for interview due to the difficulty of gaining permission to enter to the farms as an inquirer because of the suspicion by flower farm owners that this would disclose their companys' secrets. Therefore, the researcher was forced to conduct interviews outside of the farm areas. That is, in their homes or in other places. Furthermore, some of the workers especially women appeared reluctant to tell their real experiences, abuses and harassments in fear of losing their jobs and other possible reasons. The other problem was that although the researcher planned to conduct focus group discussions, because of the sensitive nature of the topic workers were reluctant to tell their problems in front of their collogues. In addition, though the researcher aimed to conduct interview the flower farm owners, some employers were not willing to participate in the interview.

As this research is the first of its kind, it is intended to give an insight into the conditions of flower farm workers focusing on women flower farm workers, who constitute the majority. It is hoped that with this study as a background, future researches can be initiated along similar or related lines of inquiry.

1.6 Significance of the Study

This research is hoped to contribute to the understanding of the experiences of flower farm workers in Ethiopia. Especially, the study tries to explore the situation of women flower workers by raising the concerns of women flower farm workers. In addition, further effort should be made to understand the dimension and complexity of the problem.

This study can increase the awareness about problems that flower farm workers face and will give an insight into whether the floriculture industry in Ethiopia is operating according to the standards set by the International Code of Conduct (ICC). The findings of the study may encourage concerned bodies and farm owners to be more conscious of the issue and it can initiate the formation of a National Code of Conduct that governs working conditions at flower farms. Flower workers will benefit from the research since the proposed recommendations allow workers to address the existing problems and help find solutions so that their conditions will be improved.

A feminist research should be action oriented otherwise it cannot be said feminist (Reid, 2004:175). In line with this, the aim of this research is to contribute to social and individual change of flower farm workers.

Chapter Two

Methodology and Data Gathering Instruments

2.1 Research Design

A research design is a plan on how the study will be undertaken (Berg, 1995). The design indicates the type of information to be collected and kinds of data collection methods. The research design indicates whether to use one type of data collection method or a combination of two or more methods-triangulation method. Accordingly, this study has used both qualitative and quantitative research methods and to the extent possible the research was informed by a feminist perspective.

2.2 Data Sources

In gathering relevant data, the study has utilized different sources of data, including primary and secondary sources. These are described below.

Primary Sources

The researcher uses primary data sources because it gives first hand information about the working conditions of flower workers. Primary data was obtained by conducting face-to-face interviews with flower farm workers. As a female interviewer, conducting an interview with women workers encouraged them to speak more about their experiences. Fifteen women and five men participated in giving information through face-to-face interview.

Berg (1995) notes that interviews allow the researcher to gather detailed information. Especially the face-to-face interview helped the participants to express their ideas freely. In addition to the interviews, questionnaire method was used and administered to 80 flower farm workers (15 men and 61 women). The sampling technique used was convenience sampling.

2.3 Instruments and Methods of Data Generation

For the purpose of this research, qualitative and quantitative data gathering tools were used to get in-depth information about flower farm workers (for the different research instruments used see Annex I). The use of qualitative and quantitative approaches encourages data triangulation – use of multiple data collection technique (DeVault, 1996:35). In addition, feminists resist the division of qualitative and quantitative methodologies. Reinharz (1992) indicated that there is no single method of doing feminist research and there is very little elitism of methodologies.

Qualitative Method

In qualitative research, the researcher is an important element of the research process; the researcher enters into the lives of the participants (Marshall and Rossman, 1995:59). Qualitative research is aimed at discovering new experiences.

According to Berg (1995) qualitative research closely examines the social setting and the participants. It therefore investigates the relation between a given natural setting and its inhabitants. Qualitative research helps the researcher to deeply explore and understand the experiences of the participants. Olson (2005) identifies qualitative research as it is holistic, contextual and it uses the involvement of the object of the research. The separation between the researcher and the respondent is minimal where the object becoming active participant in the knowing process. In the same way, this research has made the participants active participants.

In addition, qualitative methods provide rigorous, reliable, verifiable data which helps to test an empirical hypothesis Olson (2005). Qualitative research tries to explain a phenomenon that occurs in a natural setting through the eyes of the participants. Qualitative research is described as discovery research– trying to explore the working conditions and experiences of women flower farm workers.

Qualitative methods are preferred since they provide a way to study a phenomenon in its natural setting. In addition, qualitative research involves a set of empirical documents such as personal experience, case studies, observation and life history (Thomas, 2003).

Qualitative research involves interpreting a certain phenomenon in a naturalistic way (Cresswell, 1998). In addition to this, Marshal and Rossman (1995) stated the good side of a qualitative approach is that it is flexible and opens a way for the researcher to explore and discover a phenomenon. Two qualitative methods are employed here. These are interview, case study and participant observation.

In-depth Interview

From the perspective of feminist research, interview is a tool by which both the researcher and the researched assume to have an equal status for at least the time being (Fontana, 1994).

Interviewing women by a woman researcher has advantages. This kind of situation presents a woman-to-woman talk and makes the interview process friendly (Reinharz, 1991). This semi-structured interview used pre-prepared interview-guide containing the topics and issues the researcher wished to find out. The interview was conducted in an informal and conversational way by adjusting the questions to each interviewee's situation. Bernard (1994) noted that semi-structured interview fits best when the researcher does not get more than one chance to interview the participants.

Berg (1995) indicated that semi-structured interview is effective when the researcher uses probing. Probing provides the interviewee to speak out more so that the interviewer would be successful in getting more detailed answers. In this research, the investigator used probing method to let the participants speak more about their experiences.

The semi-structured interview consisted of open-ended questions. This helped the researcher to widely investigate the experiences of the women. Open-ended questions are mainly used in exploratory researches where the researcher cannot predetermine the responses that will be given (Remenyi, 1998:152).

Using semi-structured questions, in-depth interviews were conducted with 20 informants (15 women and 5 men). Marshall and Rossman (1995) explained the nature of qualitative depth interviewing in terms of conversation rather than formal interviews that require precise responses.

The researcher has also utilized observation as one research instrument for gathering relevant information. Using observation as one data gathering tool, the researcher was able to watch how workers in the flower farms accomplish their tasks, the protective tools available for them and the overall working conditions of workers.

Case Study

There are many flower farms in Ethiopia. Some of them have gone operational in the last 5 years. However, for the purpose of this research four flower farms located in Oromiya regional state are selected based on their geographical proximity. Two of them are from Debre Zeit (Dugda and Joytech) and the other two are from Holleta town (Jo flowers and Agri Flowers).

Some workers working in the selected farms were research targets for this study. The target groups consisted of women and men who are working in the four flower farms. As this study was informed by feminist perspectives, diversity in gathering data was encouraged. Accordingly, diverse groups of women and men were included. For

example, women having different ethnic and religious backgrounds were part of the study.

For an in-depth treatment, five case studies of flower farm workers were selected and presented. Reinharz (1992:164) described feminist case studies consisting of sole description of an event, person or group. In addition, feminist case studies help to explore untouched issues by starting with a limited case.

Quantitative Method

Quantitative methods enable the researcher to put facts in numeric terms. Quantitative data puts human behaviors in numerical terms so that there is an accurate measurement (Jones, 2005). It is a way of putting a specific aspect of a phenomenon in numerical measurement by reducing personal involvement with the research subjects.

In this study also the quantitative method is applied through questionnaire survey, as described below. The researcher tried to present existing facts in flower farms in numerical terms

Questionnaire

According to Marshal and Rossman (1995) the aim of administering a questionnaire is to gain knowledge about the quantitative distribution of characteristics, attitudes and beliefs. With questionnaires, the reliability of the information gathered depends upon how accurately the responses of the participants are given.

According to Thomas (2003:66) there are two major intentions to undertake questionnaire survey: To get facts and opinions. Facts are reflections of the participants' knowledge while opinions are expressions of attitudes.

In this study a total of 80 flower workers (20 from each of the four flower farms) have been selected for the administration of survey questionnaire. Out of the 80 questionnaires, 76 were filled and returned. The group consisted of 61 women and 15 men working in

four flower farms, namely Joy Tech, Dugda, Jo Flowers and Agri Flowers. The purpose of collecting quantitative information was to complement the qualitative data gathered through in-depth individual interviews.

The structured questionnaire is intended to provide numerical information about rights, work conditions, experiences and safety situations regarding flower farm workers. Remenyi (1998:150) noted that the use of questionnaire survey helps to get opinion and attitude information not easily observed or is not already available in written or computerized form.

Secondary Sources

Available books, research reports, journals, articles, newspapers, electronic materials and other publications related to the issue are used as secondary sources of data. In addition, unpublished documents are also referred.

2.4. Method of Data Analysis

Recording and Processing Data

In organizing and interpreting the qualitative data, a tape recorder is the major tool of interviewing used in this research. The cassettes were labeled with each participant's code number to avoid mixing up. During recording, the researcher took notes of major points.

The recorded information was transcribed and major themes were developed around certain major issues impacting flower farm workers. The recorded data were detailed as much as possible, including each informant's biography. This would make easier when making references to recorded notes when needed at a later stage.

The analysis method is grounded in inductive data analysis where attention is given to searching for categories and patterns present in the transcribed data. Whereas, the quantitative data was analyzed using percentages.

In analyzing and interpreting results of the semi-structured interviews, the researcher developed certain themes centering on the working and living conditions of flower workers. Such issues include availability of facilities, chemicals and pesticides, wage, health conditions and the like. Therefore, each issue was analyzed in relation to the relevant questions asked and responses obtained.

2.5 Fieldwork and Study Setting

Fieldwork

This study was conducted between March and January 2006. The researcher spent a total of 30 days in the field collecting both qualitative and quantitative information.

Study Setting

This study is conducted among flower farm workers located in Oromiya regional state, in Debre Zeit and Holleta areas. These sites are selected because of accessibility and proximity issues.

Four flower farms are included in this study. These are Dugda, Joe flowers, Agri Flowers and Joy Tech. Each of these farms is briefly described below.

Dugda Farm

The Dugda floriculture development was established in January 2005. Ato Adugna Bekele, the owner, established the farm with an initial capital of 35 million Birr. It is located in East Shoa Zone Ada Liben Woreda. The farm has a general area of 20 hectares where 14 Ha are covered by green house and buildings and green area cover the remaining 6 Ha. There are different varieties of flowers grown on the farm like: High Society, Kiwi, N-joy, Olympia, Top-Sun, Tucan, Wana-Hava and Kalhari, Valentino. Dugda farm exports its flowers to Holland- Amsterdam, Germany-Berlin, Japan-Tokyo and Russia-Moscow. The farm created employment opportunities for 467 people. There

are 38 men and 146 women permanent workers while the number of temporary workers is 47 men and 112 women. In addition, there are 51 men and 73 women daily laborers.

Joy Tech P.L.C

Joy Tech flower farm is found in Debre Zeit town. It is a share company between an Israeli and Ethiopians. There are 600 workers where the 400 are permanent and temporary while 200 are daily laborers. The company started operation with an initial capital of 48 million Birr. The total hectares of land in the farm, which is under operation, is 13 Ha while the farm is currently doing a construction work to expand its production. The company provides about 15 different flower types and it exports its products to Holland, Germany, England and Russia. The farm produces about 22,500,000 stems of roses yearly.

Jo Flowers

Jo flower farm was established with a capital around Birr 20 million Birr and is owned by an Ethiopian investor. It is only about two years since the farm started work. Jo flowers has a total area of 10 ha where the 2.3 ha is under production while the remaining 1.5 ha is under expansion. There are different varieties of flowers produced in the farm. However, the farm's specializations of flowers are Sweet Candia, Indian Sunset and Dwertt. Jo Flowers' export destinations are Holland and sometimes Germany. The farm employs 51 women and 36 men workers out of which permanent workers are only 14(1 woman and 13 men).

Agri Flowers

Agri seft flower has a total area of 7 ha where the 5 ha is under production and the 2 ha is in expansion. The initial capital of the farm is not known. The varieties of flowers that are grown by the farm are Sweet Candia, Indian Sunnset, Duett, Sunyilionles, Teracota, Soraya, Josi and Shanti. The farm exports its flowers to Holland. The owner is an Ethiopian. The farm employs 152 temporary and daily laborers (92 women and 60 men) and the permanent workers are 30(26 men and 4 women).

2.6 Ethical Considerations

Undertaking human-focused research such as this requires that attention to be given to individual feelings and emotions during the process of data gathering as well as presentation of results. According to Marshal and Rossman (1995), ethical considerations are needed to be ensured that the participants of the research are informed about the whole research process. This includes adhering to confidentiality. Confidentiality refers to an attempt to hide the participants' identities from being revealed in the recorded information.

Informed consent refers to getting the permission of the participants without fraud, deceit and manipulation in the use of data for analysis and reporting purposes (Berg, 1995). It also includes explaining the potential risks and benefits of participation in the research using a written slip. Anonymity - not indicating the names of the participants – is also strictly adhered.

As part of explaining important ethical issues to the participants of the study, the following ethical considerations were given:

- ❖ The purpose of the study was explained for the study subjects (both respondents and key informants) and their consent to participate in the study was sought. It was indicated that participation is voluntary.
- ❖ It was explained to the participants that the information given by informants and their identities would be kept confidential. There would be no negative effect participating in this study. No physical or other kinds of harm would be caused to the research participants. Rather, the moral satisfaction of responding to the questions is given due attention.
- ❖ The right of respondents/informants to walk away at any stage of the interview was fully explained and respected.

DeVault (1996), mentions that a qualitatively oriented feminist research needs to bring up the voices of the ignored ones. This research had also the aim of reflecting the concerns of flower farm workers by focusing on women workers. Moreover, this research proposed to bring the attention of farm owners and concerned government authorities and flower farm workers by creating awareness. Their voices would be heard and their situations given due attention. Acker (1996) summarizes principles of feminist research by saying it contributes to the liberation of women by developing a feminist critical perspective. In addition, a feminist research can bring emancipation for both the researcher and the researched. For the researchers, their work will be revealed in the patriarchal world.

A feminist research methodology focuses on making the subjects as active participants (Smith, 1987). This research also used the participation of flower workers in order to point out the situations that need to be improved. In addition, personal experience of the flower farm workers is integrated as important component. A feminist research prefers to investigate specific groups of people, whose concerns have not been properly addressed (Reinharz, 1992:217). In the same way this research has chosen to investigate women flower farm workers who have not been previously studied. As such, it is a new area of research that needs to be explored further in the future.

Chapter Three

Review of the Related Literature

3.1 Theoretical Framework

Feminist theory has become the dominant theoretical perspective in the study of women's contemporary condition, both within and outside the workplace (Reinharz, 1992:249). The use of feminist theory in feminist social research is important since it helps us understand the interaction between gender and power. Therefore, for the purpose of studying issues surrounding flower farm workers of whom women constitute the majority of the labor force, the researcher has employed Marxist theory with an emphasis on Marxist-Feminist theory to understand the working conditions of flower farm workers. As pointed out by Humm (1992), feminist theory gives a better explanation for the subordination of women in society.

3.1.1 Marxist Theory

According to Donovan (2000), Marxist Feminists state that the bourgeoisie is the owner of basic means of production and dominates employees' wage labor. The proletariat has no entitlement to means of production and earns their living by selling their labor. It is here that Marx introduced the issue of alienation as a key factor affecting workers. For Marx, workers become alienated from the product of their labor and they become dissatisfied with their job. As a result, they do not develop a sense of ownership of the profit that goes to the owners – the capitalist. Coser (1977: 50) described alienation as a condition where men [*sic, and women*] are under the influence of forces of their own creation.

Marxists stress the fact that women's subordination is the result of capitalism and the division of labor (Donovan, 2000). Women are subjected to dual duty. They work for wages in the public sphere and also constitute the unpaid domestic labor. Marxists include women as members of the working class and understand women's oppression within the perspective of class oppression. Therefore, identifying women as part of the working class helps us understand women in relation to men as workers are related to capital.

3.1.2 Marxist-Feminist Theory

Chodorow (cited by Donovan, 2000) indicated that capitalism has been a major factor that broadened the division between the public and private spheres. As a consequence of this, women's domestic work became devalued, as it is not measured in terms of money. Unpaid domestic labor has contributed to women's inferior status in the society. According to Humm (1992), Marxist Feminists relate capitalism with the oppression of women. That is, women's oppression increased with the expansion of capitalist relation of production. The sexual division of labor and results in the inferior status of women in the labor market which by itself is the result of the interaction between patriarchy and capitalism. Barrett (cited by Beechey, 1993) noted that capitalism has exacerbated the reproduction of cheap women's labor by providing cheap and flexible reserve of women workers at a low cost.

As explained above, Marxist Feminists relate women's exploitative relations with the issue of class (Humm, 1992). They argue that women are part of the working class and hence the struggle to overcome capitalism should be paid attention. For women to be able to improve their social positions and to establish a less exploitative system, they need to cooperate with working class men (Jaggar and Rothenberg, 1993:120).

According to (Donovan, 2000:82) Marxist Feminists go for raising awareness of the working class consciousness and encourage women to involve in the working class movement for their emancipation. Feminists with socialist leanings focus on the need for women to develop true consciousness of their oppressed position in order to overcome the ideology to serve ruling class interest. Mitchell (cited by Humm, 1992) suggested the radical transformation of reproduction, production, socialization of children and sexuality in order to liberate women.

3.2 Women's Work and Employment

3.2.1 Employment and Income Situation

In the 1980s and 1990s, many developing countries have experienced cutbacks in government subsidies that resulted in increased socio-economic burdens for women since they have to support their families by intensifying their engagement in the informal sector (Sweetman, 1996). Women became the major victims of economic liberalization forced upon third world governments by such financial institutions as the World Bank and IMF. The World Bank imposed Structural Adjustment Programs; this therefore led to the expansion of women's unpaid work, and consequently their conditions aggravated than their male counterparts.

Privatization and deregulation of the labor market led to a widespread loss of relatively well-protected jobs and opened room for the expansion of female employment in low paid and insecure jobs (such as the floriculture industry). Here, female labor is preferred because it is cheaper and flexible and allows employers to hire workers who are willing to work in temporary, casual, or sub-contract conditions. Many women are joining the

labor market and are becoming the breadwinners of their families. In recent times, this trend has been also encouraged by globalization, of which the expansion of the floriculture industry has been made possible.

According to Flew et al. (1999), globalization has witnessed the emergence of multinational corporations. With globalization, women are regarded as mobile and cheap sources of labor. Jobs created for women in the globalizing world are highly insecure. Besides, Structural Adjustment Programs and withdrawal of government subsidies reduced women's access to education and employment opportunities and health facilities. As a result women are forced to search for job opportunities mainly in the informal sector.

According to YesheEmebet (1969), women have been active participants in the social and economic development in the society since human existence. However, their role was unrecognized and unrewarded. Leacock and Safa (1986) also noted that women are in a subordinate position, though their contribution is very important. Women's labor both in production and reproduction is very critical to the maintenance of economic and political systems.

During the epoch of Christian civilization and the Middle Ages, women had more economic independence than recent years (Yeshe Emebet, 1969). They had been active participants in many activities. However, their participation did not seem to help improve their status. For example, for many years they did not enjoy their human rights such as the right to elect and to be elected as office holders. The situation did not improve after the industrial revolution when both men and women had to work under very harsh conditions.

Women in developed and developing countries experience different employment conditions (Burrows, 1988). In developed countries, women are increasingly participating in the public arena, including holding government positions. While in developing countries, women's jobs are still largely confined at home. It is estimated that women in

the developing world contribute two-thirds of all the total working hours and much of this work is done by rural women.

In NOP (1999), it is mentioned that the traditional sexual division of labor that exists in Ethiopia puts domestic responsibility on women. Joeke (1987) indicated that women's responsibility to accomplish the domestic household chores made them to confine in the private arena that contributes to their exclusion from getting regular wage employment. This is why many women have been forced to generate income from small-scale informal activities.

Women often take part in part-time and less skilled employment in order to take care of their children (Humm, 1992). When they enter into the formal labor market, they are usually underpaid.

According to Anderson (2006) jobs that are mostly occupied by women are characterized by absence of promotion, less job security, low wages, few or no fringe benefits, poor working conditions, high turnover, and low chances for personal advancement. It is believed that sex stereotypes play a significant role in the type of jobs that women and men occupy (Chammertin, 2002).

Game (1984) argued that changes in the organization of work and composition of the workforce in modern society are the result of sexual division of labor in the society. Men occupy most of well-paid positions while women remain at the lower level of the job strata. According to Beechey (1993) women's participation in employment is based on the unequal nature of male-female experiences in terms of pay and promotion and also devaluation of 'traditional female occupations'. In the course of their careers, many women have at least one interruption due to maternity, or child raising. Pennington (1989: 15) indicates that women's employment choices are significantly influenced by the attitudes and perception towards women's work at home. The expectation that married women would work unpaid for their husbands has been one major factor that undermines the level of women's earnings (Lewenhak, 1980).

3.2.2 Problems Women Encounter in the Workplace

Workplace violence can happen on workers (Rogers, 2003) and it has many forms. Some are physical in nature and some are non-physical. Usually less attention is given to non-physical violence, which includes psychological, emotional violence, verbal abuse and the like. Of the most common type of violence women face in the workplace sexual harassment stands out.

Sexual harassment occurs when a person, usually a man, takes advantage of his/her authority to suggest or demand sexual acts from the other person, using any form of coercion, intimidation, or violence (Mena, 2005). Hadjifotiou (1983) defined sexual harassment as a male behavior that claims a woman's sex role over her duty as a worker. This means that men are considered as main harassers over women. Sexual harassment would include repeated and unwanted statements or sexually discriminating remarks, which cause the worker to feel threatened, humiliated, patronized or harassed or which interfere with the worker's job performance, undermine job security or create a threatening or intimidating work environment. Sexual harassment can take many forms. These include embarrassing remarks or jokes, unwelcome comments about dress or appearance, deliberate abuse, the repeated and/or unwanted physical contact, demands for sexual favors, or physical assaults on workers.

Harassed women feel guilty and keep it secret. Because they think they are going to be accused of it. Even though sexual harassment is common at work places, women usually try to keep quiet. Sexual harassment can have psychological and physical effects (Anderson, 2006). Related to sexual harassment is sexual abuse which is a sexual approach involving force, deceit, coercion or violence to intimidate, dominate, submit, or assault and hurt a person's body and integrity.

Another serious problem affecting women's health is the intensive application of chemicals and pesticides which are often forbidden in the North but dumped in Southern countries (Homborgh, 1993:70-71). Women in particular because of their reproductive roles are likely to be primary victims. Besides, women are less likely to get health and

medical care especially if they are poor. Even if they are employed, it is said that women are less likely to get healthcare services. This is because their salary is not that enough to cover medical expenses (Anderson, 2006). Another factor that affects the health of women and their families is related to environmental degradation like pollution contributing to reduction in quality of water, soil fertility and genetic wealth (Mies, 1993:73).

3.3 Other Countries Experience in the Floriculture Industry

This section reviews the experience of flower farm workers in other countries where the floriculture has been operating for quite some time.

Examples, in Ecuador reveal that flower farm workers suffer from human right violations (Mena, 2005). However, workers tend to ignore their problems for fear of losing their jobs. Some of the problems they face are:

- Exposure to toxic chemicals without enough protection wears and training
- Late payments, unpaid overtime work, non-affiliation to social security
- Pressure to fulfill their company's excessively high production rate
- Sexual harassment

Because of widespread poverty, they do not have an alternative means of making a living. Mostly, it is women who suffer since they are increasingly becoming the breadwinners of their families. In the greenhouses, workers are required to work until a desired production level is met. They have to stay late or work on Saturdays and Sundays without overtime payments.

Typical of the floriculture industry in Ecuador, like in other countries, is the tendency of some flower farms not to hire workers who try to form unions and/ or pregnant women. Women who join unions are sometimes strictly excluded (Mena, 2005). Such women are considered problematic and hence require close supervision by employers or their

delegates. Once expelled from their jobs, they lose their chances of being hired in another flower farms.

Sepulveda (2004) discusses the experience of Columbia in the floriculture industry. Columbia is the second largest flower exporter after Holland. It supplies 13% of the flowers to the world market and contributes to 60% of the flowers destined to the USA. Despite its world standing in the sector, flower farms do not seem to comply even with minimum labor rights. Some of the problems in the flower farms include: unfair dismissal, failure to pay salaries, failure to comply with precautionary measures for pesticide handling and application, high workload, illegal sanction procedures, ill treatment of pregnant workers and lack of pension and provident funds. Employers may add some sanctions imposed on workers without being part of the work regulations. It is common for workers to be suspended from work, three to twenty days.

The situation of the floriculture industry in East Africa is not different from the rest of the world. The Kenyan floriculture industry is the oldest and most successful flower industry in Africa. The industry has expanded from a small scale to one of the most important “off-season” suppliers of cut flowers in the world. There are over 500 producers and exporters growing flowers in Kenya (Dolan et al. 2002).

According to the study made by Dolan et al. (2002), there are a number of problems affecting Kenyan flower farm workers. These include: employment insecurity, lack of overtime payment, non-representation, absence of complaint procedure, low wages, lack of promotion, poor health and safety issues, inadequate transportation, lack of support for pregnancy and maternity leave, and lack of awareness of rights and codes. Especially, for women lack of adequate maternity leave creates anxiety about securing women flower farm workers’ income. As a result, pregnant workers may hide their pregnancies or be forced to abort.

Similarly, Uganda’s floriculture industry dates back to the early 1990s (UWEA, 2006). By 1999/2000, the flower exports were valued at US \$ 22 million from approximately 85

ha production of only 2 varieties. Though the flower industry creates employment opportunities, workers are not fully enjoying their rights as workers. Workers' health and safety conditions, lack of recognized workers' union, lower wages, lack of medical facilities, and sexual harassment are issues in which problems are visible.

Overall, the floriculture industry as an export-oriented sector started in the 1990s and has been expanding since then with EU being the major destination (Table 1). However, its record of human rights issues has not been impressive as the above brief review shows.

Table 1: Value of flower imports into EU countries from non-EU countries (in Million Euro)

Suppliers to EU	1994	1995	1996	1997	1998	1999	2000
Kenya	65.9	75.4	84.2	99.1	110.8	130.1	153
Colombia	88.1	94.6	94.3	104	102.5	93.4	104.3
Israel	109.7	110.5	139.1	132.2	145.8	103.1	100.6
Equador	15.1	21.7	26.9	38.5	54.9	62.5	78.1
Zimbabwe	27.7	36.0	40	45.3	50.4	51.2	66.1
Thailand	20.7	20.5	18.4	18.9	16.6	16.1	18.3
Zambia	3.4	4.4	6.8	8.5	12.2	16	17.5
Uganda	1	2.1	3.2	4.4	4.8	5.6	10.6
South Africa	7.6	8.3	8.1	8.6	8.2	8.3	9.1
Tanzania	2.3	3.2	3.9	5.1	5.4	7.6	8.4
Total Non EU	402.5	441.8	488.5	518.9	565.7	540.1	612.3
Total ACP	108.1	128.6	145.1	169.8	191.9	217.3	263.8
% ACP	27	29	30	33	34	40	43

Source: (Dolan et al, 2002-4:13). ACP= African Caribbean and Pacific.

3.4 Floriculture in Ethiopia

The Ethiopian Floriculture is showing a rapid growth in the recent years. The industry grows mainly roses. According to ILO (2006), the floriculture industry is being one of the investment sectors that are growing rapidly. The industry has started in the early nineties. Until June 2006, the total number of licensed projects was over 235 with an aggregate capital of 7.5 billion Birr out of which 171 floriculture projects with an aggregate capital of 5.3 billion Birr are owned by foreign investors and 64 projects with an aggregate

capital of 2 billion Birr are owned by local investors (Table 2). See Annex II for a complete list of the different types of investment in the floriculture sector in Ethiopia.

Table 2: Distribution of flower farm projects by type of investment and region

Type of Investment	Investment Region							
	Addis Ababa	Afar	Amhara	More than one region	Oromia	SNNPR	Tigray	Total
Domestic:								
# Projects	6	1	2		45	9	1	64
Capital	96,789.70	95.10	13,484.80		1,532,340.36	347,434.30	1,300	2,018,444.26
# people employed	1,181	88	511		11,943	3,248	44	17,015
Foreign:								
# Projects	5			9	156	1		171
Capital	81,419			543,853.60	4,659,626.75	17,638.40		5,302,537.75
# people Employed	775			2,927	61,430	250		65,382
# Projects	11	1	2	9	201	10	1	235
Total: Capital	178,208.70	95.10	13,484.80	543,853.60	6,191,967.11	392,072.70	1,300	7,320,982.01
Total No. Employed	1,956	88	511	2,927	73,373	3,490	44	82,397

Source: Interior Trade Promotion Agency (2006)

Ethiopia exports most of its flower products since there is little domestic need. The Export Promotion Department of Ministry of Trade and Industry, (MoTI) reported that in the past four years Ethiopia has generated 42.5 million USD from flower export. The export volume has increased from 1.6 million stems in 1999/2000 to 32 million stem in 2003/2004. In value terms, the increase was from 382,346 USD in 1999/2000, to 2.9 million USD in 2002/2003, to 5.1 million USD in 2003/04 and 21.9 million USD in 2005/2006. Major export destinations have increased from two in 1996 to ten destinations by 2003/2004, mainly in EU and the Middle East, and also Djibouti (ILO, 2006).

The Ministry of Trade and Industry indicated that the floriculture industry has created employment opportunity for more than 25,000 people and is experiencing annual flower production increment rate of 4.8. Up to June 2006, the land covered by greenhouse is about 519 ha, with over 35 farms exporting their products to different countries, mainly to the Netherlands. Flower farms are expanding in Oromia regions particularly in Holleta,

Menagesha, Awash, Melkasa, Adama, Sebeta and Zeway. There is also a move to expand flower production to the South and other areas (Wondimu Geda 2006).

3.5 The International Code of Conduct

The International Code of Conduct (ICC) is an International guideline designed to promote the socially and environmentally responsible production of cut flowers, ferns, plants and foliage cultivation both in the northern and southern countries. ICC aims to improve the working conditions of workers focusing on freedom of association and collective bargaining, equality of treatment, living wages, working hours, health and safety, pesticides and chemicals, security of employment, protection of the environment, compliance to non-use of child labor (International Flower Coordination, 2004).

Currently, Ethiopia does not have a National Code of Conduct that complies with ICC. However, an attempt is underway to develop Ethiopia's National Code of Conduct and this researcher has participated in some of the workshops organized for this purpose. As documented in this thesis (chapter 4) the Ethiopian floriculture industry needs to seriously consider the working conditions of the workers and their human rights issues. To this end, the introduction of a National Code of Conduct for which all flower farms will adhere to will be an important step in the right direction. It is hoped that the results of this study will provide some inputs, which can be used in the formulation of the National Code of Conduct for the floriculture industry.

Chapter Four

Analysis and Presentation of Survey Data

4.1 Introduction

This chapter presents results of survey data collected from sample of 76 (15 men and 61 women) respondents of flower farm workers and from results of qualitative interviews

with 15 key informants. The respondents come from the four flower farms covered by the study. The presentation is organized as follows: First, results of five case studies are presented; Second, socio-economic characteristics of the respondents focusing on sex, age, marital status, education and number of working years as flower farm workers are described; Third, respondents working and living situations focusing on their working conditions, working hours, division of labor, equality and security of employment, living wages, freedom of association, and training and personal development are discussed; Fourth, health, safety and environmental issues are explained and presented, and finally, a summary of main points of the findings of the study is given.

4.2 Presentation of Selected Case Studies

In this section, an attempt is made to present results of selected case studies. Here, descriptions of five cases are presented. The purpose of presenting these case studies is to complement the quantitative information present and discussed in this chapter.

Case 1

This is about a 27 year-old woman who is working at the Joy Tech flower farm in Debre Zeit town. She has completed grade 9 and is unmarried. Her work assignment is in the greenhouse and entails growing, taking care and harvesting flowers. Her main task is to grow flowers on a bay area, which is 64 meters long and 9.6 meters wide.

Regarding her 6 months experience in the flower farm, the informant said that working in the flower farm has been a very difficult experience because of the heavy workload and very low wage not enough to cover daily food expenses. 7 Birr per day is not enough to cover the high cost of living currently hitting the urban population. According to her, flower farm workers are going to work daily hoping wages will increase to reflect the recent rise in the cost of living. But, this has not materialized in the last 6 months.

She also added that some of the supervisors do not have skills and experience to work with workers. Their education may be below the education of the average worker and

they tend to mistreat and abuse workers. Her supervisor, for example, who does not have formal education beyond grade 10, is an arrogant person who often prefers throwing indecent words at workers. Workers who are not in good terms with him are reprimanded or dismissed at his recommendations.

However, the informant acknowledged some of the strengths of Joy Tech, which include the following: most of the tasks in the flower farm (e.g. de-leafing) are done by machines, not manually; there is equal treatment of both men and women flower farm workers although the farm lacks some facilities specially designed for women such as toilets and showers, and there is also good work discipline (e.g. punctuality) although workers might be subject to reduction in their wages if they come late or are absent for one day due to reasons beyond their control. She concluded that the floriculture sector needs to do improve workers working conditions, including respect for human right issues.

Case 2

This is the case of a 29 year-old man who works in Dugda flower farm near Debre Zeit town. The informant holds a degree in Horticulture and has been working as an irrigation supervisor for two years. Asked about the nature of work in the flower farm, he indicated that workers in the flower farm are burdened with heavy workload including preparation of seedbeds, planting seedlings; removing weeds from time to time; harvesting, transporting and packing as well as loading flowers. Women who constitute the majority of the work force in the farm do most of the work. The informant also discussed the problem of working in the greenhouse where the average temperature ranges from 29-35⁰C.

Regarding wages, the informant said that workers are paid one of the lowest wage rates (Birr 7 per day) that is untypical of the formal business sector. This is surprising, according to him, since the industry brings millions of dollars for the owners and yet the workers are not getting wages enough to cover their daily subsistence. He indicated that workers are paid overtime during Sundays and on holidays. But, one worker is made to cover the work of two thereby facing an excessively high workload. Based on year of

service there may be pieces and bits of salary increments for the workers but the effects of such increments on workers' living conditions are very negligible. Because of this there is a high worker turnover, making a supervisor's job difficult. The management is not willing to listen to workers' concerns such as low pay as a result supervisors are finding it difficult to get stable and dependable workers.

According to the informant, the absence of workers association on the farm can be in part explained by the lack of time for the workers to organize and form association. This is because workers do not have time to organize that and workers get day offs only once in fifteen days that is not enough to get organized with other workers and discuss about forming trade union. In addition the owners are reluctant to help workers form trade unions.

Case 3

A 20 year-old pack house female worker from Menaye Flowers in Debre Zeit. She was a student before started working in the farm. Her tasks include: de-leafing, grading and packing the flowers. Although in principle both women and men are equally treated in the workplace, there is a wage difference between the two because of differences in the kinds of jobs they do so that women do most of the packing while men are assigned to undertake construction and maintenance work, which attracts better wages. Like other informants, she feels that workers receive wages that are not adequate to cover food expenses. This is especially difficult for women who have to support children and old people.

Asked about the negative effects of pesticides on women's health, the informant argues that women who are exposed to chemicals are likely to experience shorter menstruation cycle (like every two weeks instead of every 28 days). She also noted that women working in the pack house are vulnerable to kidney infection and swollen legs as a result of long hours of standing. Chemicals have also bad smells and also cause itchy. With regard to waste management, the informant indicated that although the company has a practice of burning waste materials, there is a fear that the soil may become contaminated

and will become infertile in future years. She also mentioned that flower farms are being established by clearing farmland and this will have long term effects on the livelihood of the surrounding community, which is dependent on farming.

Case 4

A 20 year-old woman from Mekia flowers has agreed to be interviewed regarding her experience in the farm. She worked at Holleta Research Center before and is now working as assistant supervisor in the greenhouse. The informant complained about the inadequacy of wages not commensurate with the heavy workload workers are facing. She is paid at the rate of Birr 7.50 per day and this is not enough to support her younger brother and a sister who are left behind by her deceased mother. She has been working in the greenhouse for two years and she is still getting the same rate as when she was first employed.

The informant is very bitter about employers who are more interested in caring for a single flower rather than for a worker. She is of the opinion that employers seem to reflect an attitude something like: *“If a worker leaves the farm, another worker will come and work. No problem of finding workers. But if one flower is broken, they lose money – it is a big loss for them”*. This approach characterizes employers’ attitude towards workers, according to the informant, which is affecting the relationship between workers and management.

Another health issue affecting the workers is the absence of proper exit and re-entry procedures when pesticides are sprayed, according to the informant. Managers and supervisors usually encourage workers to return to work as soon as chemicals are sprayed. The spray team does not have enough protective wears. There is no soap for washing hands after conducting spraying. Besides, spray workers do not understand the instruction written in English regarding the application of chemicals. She also indicated that intensive use of chemicals might contaminate the atmospheric air and in the long run threaten the health of the surrounding community, according to the informant.

Case 5

This last case is about a 22 year-old female worker who is working in the Joe flower farm. She was a student before working in the farm. She dropped out of school and was forced to seek a farm job in order to support her 2 year-old child. Like many other girls in the area, this informant became pregnant while practicing unsafe sex. As her parents were not in a position to support her and her baby financially, she has to feed her baby by working as greenhouse worker in the flower farm. She gets Birr 8 per day, which is not enough to meet their daily basic expenses such as food – according to her. She tries to supplement her meager farm income by selling tea and bread at home during her spare time (e.g. when she returns from work).

She acknowledged that the farm provides workers with basic facilities like toilets, showers, clean water supply and first-aid. This shows, according to her, that Joe flower farm cares for workers better than other flower farms in the area. But workers do not get medical treatment unless they are injured while working. The informant claimed that temporary workers are not entitled to annual leave and this discrimination is not good for the future of the company since it depends mostly on temporary workers. Besides, there is no clear guideline for a worker to become permanent as it depends on the wishes of the manager who usually recommends workers for permanent positions on the basis of personal or friendship acquaintances.

The informant also described some of the problems that workers face while working on the farm such as high temperature in the greenhouse (sometimes reaching 40⁰C or above), heavy workload during certain times of the year (like during harvesting) and sometimes managers demand workers to work more beyond the 8-hour limit. When a worker quits his/her job, it is very likely that the work will be distributed among current workers. She also raised concerns regarding the possible negative effects of chemicals on workers' health due to the absence of proper protective wears (such as lack of chemical proof wears). Employers are not willing to take precautionary measures to protect those workers (mainly the spray team) from being affected by chemicals. She mentioned headache, vomiting, skin rashes and anxiety as common health issues affecting workers.

4.3 Socio-Economic Characteristics of the Respondents

Table 3: Distribution of respondents by sex

Sex of Respondents	Name of the flower farm				Total
	Dugda	Joy Tech	Jo Flowers	Agri Flowers	
Male	-	2	7	6	15
Female	19	17	13	12	61
Total	19	19	20	18	76

Table 4: Distribution of respondents by education

Sex of Respondents	Education level of respondents						Total
	Unable to R/W	Able to R/W	Primary (1-6)	Junior (7-8)	Secondary (9-12)	Post. Secondary	
Male	-	3	5	-	7	-	15
Female	2	7	13	11	24	3	60
Total	2	10	18	11	31	3	75

As can be seen from Tables 3 & 4, the overwhelming majority of the respondents (80.3 %) are young females. Many of them have completed secondary education in the last few years. In all the flower farms surveyed, women constitute the single majority of the work force. This is very typical of the flower industry where females provide the major source of labor. This shows that the flower industry is very selective with respect to both sex and age so much that women are primary targets. This might be due to the fact that women are believed to be less demanding in terms of asking their rights and privileges and can be easily handled by the management. The age factor is important because the flower industry requires active and energetic workers who can perform such heavy tasks as packing, picking and carrying flowers in the green house, for which only young workers can meet that challenge.

Table 5: Distribution of respondents by age

Age of	Sex of Respondents	Total
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respondents	Male	Female	
16-20	9	24	33
21-25	2	20	22
26-30	3	11	14
30+	1	6	7
Total	15	61	76

Table 6: Distribution of respondents by marital status

Sex of respondents	Marital Status of Respondents			Total
	Single	Married	Divorced	
Male	11	4	-	15
Female	33	24	3	60
Total	44	28	3	75

Most of the sample respondents are young women who are not married (Table 6) and hence do not have children and are willing to work long hours under variable working conditions. Most of the workers are below the age of 25 (Table 5). The majority of the respondents have been working in the farm in the last 2 years (Table 7) and this roughly corresponds to the period in which the flower industry has taken roots in Ethiopia.

Table 7: Distribution of respondents by length of year of service in the farm

Sex of respondents	Year of service				Total
	< 6 months	6-12 months	1-2 years	> 2 years	
Male	6	4	5	-	15
Female	17	18	22	3	61
Total	23	22	27	3	76

Respondents were asked how they got information when they first applied for employment and got the job. The majority (77.3 %) indicated that friends were the primary source of information for potential flower farm workers (Table 8). This implies that informal contacts are useful in accessing information about employment in the flower farm industry. In addition, results of key informant interviews revealed that employers from time to time also use other strategies (e.g. on-the-spot selection of daily laborers at selected locations as the need arises – this presupposes the availability of

young and unemployed people who are keen to be hired as daily laborers) in their practice of hiring workers.

Table 8: Distribution of respondents by source of information during job seeking

Source of Information	Name of the flower farm				Total
	Dugda	Joy Tech	Jo Flowers	Agri Flowers	
Media	2	6	-	-	8
Relatives	1	6	2	-	9
Friends	16	7	18	17	58
Total	19	19	20	17	75

4.4 Respondents Working Conditions and Availability of Facilities

In this section attempt will be made to describe and present the working conditions (focusing on employment conditions, working hours, division of labor, equality and security of employment, living wages, freedom of association, and training and personal development) and availability of facilities (with special emphasis on toilet, shower, clean drinking water, first-aid, medical care, housing and washing facilities). This presentation together with the section that follows, which is to assess the living and working conditions of flower farm workers based on a case study conducted among four flower farms (Dugda and Joy Tech from Debre Zeit town, and Jo Flowers and Agri Flowers from Holleta area).

4.4.1 Employment Condition

From the four surveyed flower farms, most of the workers (where women constitute the majority) are daily laborers (52.6%) and temporary workers (32.9 %) (Figure 1). Only few (14.5%) are permanent workers. This shows that most workers do not have job security since they can be told to stop work and go home any time if the manager is not happy with their work performance. As women constitute overwhelming majority of workers in the four surveyed flower farms, they are the ones who are likely to suffer as a

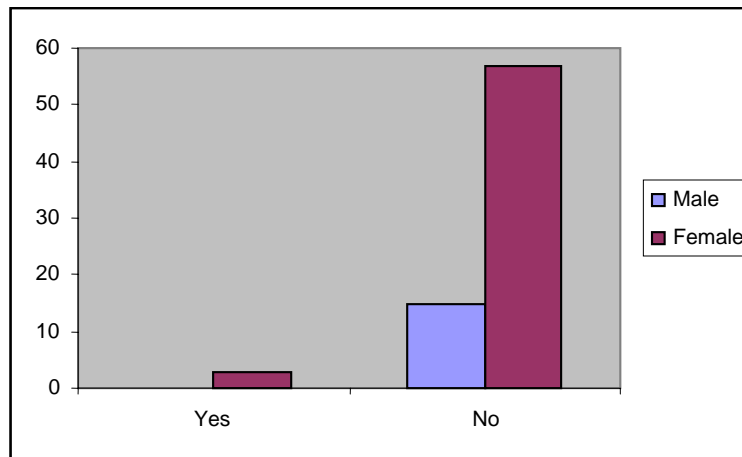
result of being employed as temporary workers. Of the four flower farms surveyed, the Jo flower farm does not have a single permanent worker based on the results of the survey.

Figure 1: Distribution of respondents by employment status



Regarding whether workers have signed contracts and if so, they have received it, the majority of the respondents answered 'no' (Figure 2). Only 3 out of 76 have signed contracts. However, none of them received a copy of it. One of the ICC guidelines is that all employees must enter into contract with employers and receive the legally signed document so that workers bargain with employers with regard to pay in times of overtime, or illness or in some other similar situations. The contract gives workers security of their jobs and provides them with legal basis to deal with employers when their rights are violated or not respected.

Figure 2: Distribution of respondents by whether they have signed contract



On the other hand, if the workers have not signed a contract with employers, they can be easily fired out of their jobs without sufficient legal reasons at the wish of their employers. Temporary and daily laborers, who seem to constitute the overwhelming majority of the labor force, are likely to face even harsher working conditions such as arbitrary dismissal or mistreatment in the work place by employers. It is precisely for this reason that owners usually prefer to hire workers on daily or temporary basis fearing that if they become permanent they are likely to raise human right issues.

4.4.2 Working hours

Table 9: Distribution of respondents by number of working hours across farms

Sex of Respondents	Length of working hours per week				Total
	48	54	56	64	
Male	6	2	7	0	15
Female	19	3	36	3	61
Total	25	5	43	3	76

As can be seen from Table 9, the majority of the respondents (out of which women constitute 47.3%) indicated that they work 56 hours per week on average. Such extended working hours is in breach of the International Code of Conduct for the flower farm workers, which stipulates the normal working hours per week to be 48 hours. Assuming 8 hours per day, this means that most of the workers are likely to work seven days straight per week (in this case day off might be given every fortnight). Although, most of them are supposed to get day off on Sundays.

Some key informants stressed that in the case of heavy workload or when someone is absent or unexpectedly quits work, workers would have to cover their workmates tasks and consequently they might be forced to postpone their day offs. This may go on for weeks or even for a month without getting any break between weeks. In some cases, we can also observe that some flower farms (e.g. Joy Tech) require their workers to work more than 8 hours per day although The Ethiopian Labor Law Article 69, sub title 1

states that “A worker shall be entitled to a weekly rest period consisting of not less than twenty-four non- interrupted hours in the course of each period of seven days.” It is also indicated in paragraph 61-sub title 1 indicates, “Normal hours of work shall not exceed eight hours a day or forty-eight hours a week.”

4.4.3 Wages and benefits

Table 10: Distribution of respondents by average wages (in range)

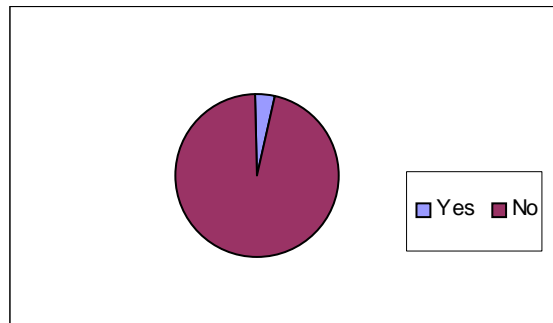
Sex of Respondents	< 210	210-250	251-350	> 350	Total
Male	3	8	4	0	15
Female	1	46	12	1	60
Total	4	54	16	1	75

The distribution of respondents by the amount of wages they get is shown in Table 10. It is evident that the amount of wages flower farm workers receive is very low compared to the number of hours they work per week and the strenuous nature of the work they perform. On average, workers working in the green house and packing workers earn only seven Birr per day though some farms may pay eight Birr. This is unfair when compared to the amount of effort and time that the workers put into as well as the difficult nature of the work they do (e.g. picking and packing flowers requires workers to stand the whole day). The unfairness of the payment can be also explained in terms of the profits some of these flower farms make while underpaying their workers.

For example, one of my informants from Dugda flower farm (Debre Zeit) revealed that the Joy Tech flower farm recently earned a net profit amounting to nine million Birr in just six months time. Joy Tech is also the only flower farm (among the four covered by this study) where respondents reported the longest working hours per week (that is 64 hours). And yet, most of the respondents from same flower farm reported that they are the ones who receive lower wages. From this we can understand that the wages and length of working hours do not go hand in hand – long hours of work do not seem to translate into good pay for the workers.

In the survey questionnaire, respondents were asked if the income they get from the flower farm is adequate enough to support themselves and their families. The overwhelming majority (94 %) of them responded by saying that it is **not adequate** at all (Figure 3). Considering the fact that some (if not most) of them are principal income earners for the household working on the flower farm can only support a hand-to-mouth existence. This is especially worrying in view of the recent rising cost of living in the country where the workers' monthly pay cannot even buy half a quintal of teff. Looked from another angle, since most of these flower farms bring to the owners in hundreds and thousands of dollars the workers deserve at least minimum living wage to be able to survive and be productive. Especially in countries like Ethiopia where the National currency is devalued from time to time, the dollars flower farms owners get from flower exports tend increase in value while workers' wages remain unchanged.

Figure 3: Distribution of respondents by whether their incomes are adequate



Marxist Theory focusing on the exploitation of workers by the owners of capital indicates that workers do not enjoy the fruits of their labor. It means it is the capitalist who accumulates the profit. By the same token, since flower farm workers are not paid well, and it is the owners that collect the profit from flower exports, workers are not enjoying the fruits of their labor. The way the owners manage to keep wages at very low level is because of the presence of large reserve of young women who are waiting to be hired with minimum wages because of widespread poverty.

The International Code of Conduct has set a guideline that wages and benefits paid for a standard working week shall meet at least minimum living standards and should always be sufficient to meet basic needs of workers and their families. However, this was not found to be the case with the four flower farms where, in addition to results of the survey discussed above, most of the key informants indicated that the income they get is not sufficient to meet the minimum basic needs. Most workers are dissatisfied with their payment.

Table 11: Distribution of respondents whether they have got wage increments

Sex of Respondents	Wage Increments		Total
	Yes	No	
Male	8	7	15
Female	27	34	61
Total	35	41	76

Respondents were also asked if they received pay raise since their employment (Table 11). 44.7% of the women respondents and 9% of men respondents which all in all constitutes about 54 % indicated that they did not receive any increment although their monthly wage is inadequate. Those workers who received increment are only 46%. Interview results indicate that no single worker from Joy Tech has received increment and Agri Flowers' workers seem to have enjoyed more pay raise than any other farm.

The researcher was also able to find out that wage increments and promotion were not satisfactory. Some informants indicated that their wage increment was only fifty cents in five or six months time. In some cases, women workers are paid less than men in some farms. This is because women are assigned for low paying activities such as working in the greenhouse rather than being a supervisor at a higher level or a manager that pays more.

The ICC contains provisions indicating that the management should discuss with the workers' union committee and must have a plan to increase workers' salary and other benefits such as bonuses, educational support for flower farm workers' children.

However, none of the farms studied has the workers' union and the management does not seem to allow workers to form unions in the near future let alone discussing with the workers about their wage increment.

Another important component of workers' wages is whether workers have provident fund. From the survey questionnaire it became clear that none of the respondents are provided with provident fund schemes. Monetary reserves for injuries and old age benefits are not also available.

4.4.4 Division of Labor

Table 12: Distribution of respondents by division of tasks across gender

Tasks	Sex of Respondent		Total
	Male	Female	
Packing	-	2	2
Greenhouse worker	2	39	41
Spray	3	2	5
Cleaner	-	2	2
Irrigation	2	-	2
Supervisor	1	8	9
Assistant supervisor	-	1	1
Clerk	-	1	1
Time controller	-	1	1
Flower transportation	4	-	4
Daily laborer	2	4	6
Total	14	60	74

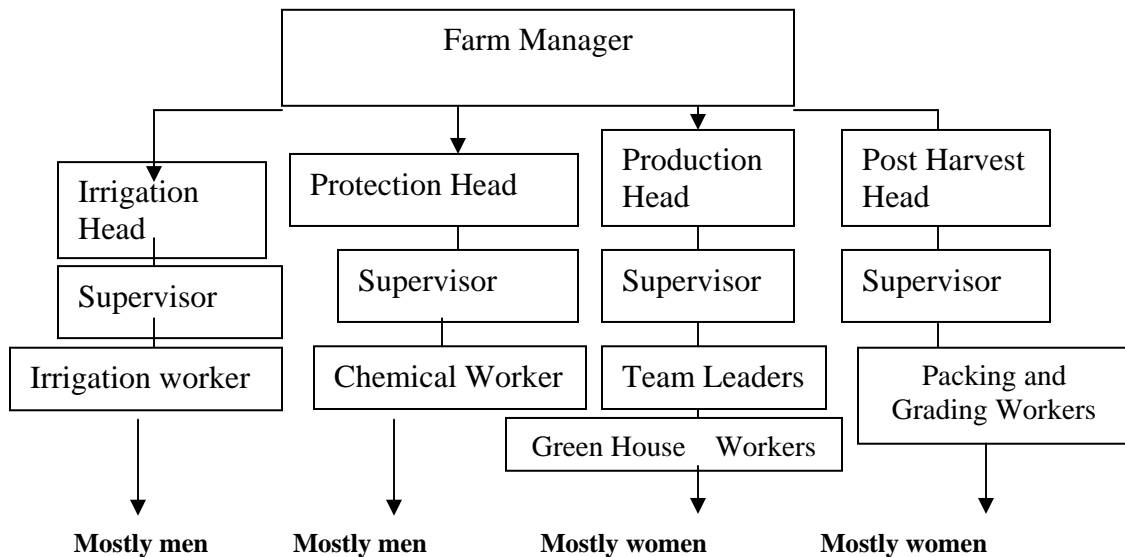
In the four flower farms investigated, there exists a clear-cut division of labor by sex. This means that tasks are divided according to women and men's roles where the latter are responsible for activities that require physically demanding labor (Table 12).

Picture 1: Men are responsible for preparing beds for seedlings.



Some of the works undertaken by men are like digging and preparing beds for seeding (Picture 1), carrying and transporting flowers from the green house to the packing house, construction work involving lots of lifting, undertaking construction activities of the entire greenhouse and carrying and transporting construction materials (e.g. heavy metals) (Figure 4).

Figure 4: Organizational structure and division of labor within the Jo flower farm



One of my informants from Jo Flowers stressed that men are entirely responsible for preparing beds for planting flower which require lots of digging and moving soils.

According to the informant, only men can perform such heavy task because of their physical strength. Another key specialization of men in the surveyed flower farms is spraying chemicals and undertaking pump house activities related to irrigation and application of chemical fertilizers. Hundred percent of the workers in the transportation sector are also men.

Women on the other hand are assigned in picking and packing flowers that also require long hours of standing, sometimes kneeling to remove weeds between flowers, stretching arms to reach flowers. The greenhouse (involving planting seeds, growing and taking care of flowers) is entirely run by women who are considered very caring and soft in handling the flowers (Picture 2).

Picture 2: A supervisor supervising women's work in the greenhouse



In the packing house (i.e. where flowers are de-leafed, graded, bunched, packed and labeled) women are also responsible for sorting, bunching and packing and even sometimes de-leafing the flowers while men are assigned to grade and label and also to transport the flowers from the packing house to the cold room (Picture 3).

Picture 3: Women are responsible for packing flowers while standing



Differences in the assignment of tasks result in different pay scale between men and women. Most of the tasks that require heavy physical labor (performed by men) are paid more than those requiring long hours of standing as in the packing house where the standard pay per day is not more than Birr 8. According to one of my informants, men who are undertaking construction work (e.g. building the greenhouse) can be paid up to Birr 15 per day. As stated above, it is men who are engaged in construction activities and as a result they get paid more than women do. The differential treatment in terms of payment is partly justified because women tend to be assigned to low paying jobs such as cleaning and clerical.

In the flower farms there is the division of labor where men control well-paying and high promotional jobs. This is the result of patriarchy - a position taken by Marxist Feminists as described in the literature review. The division of labor at flower farms in addition to the household chores made women fit only for pre-defined and low-paying tasks that are assigned to women only.

4.4.5 Availability of work facilities

The survey questionnaire also included questions dealing with workers' working conditions including whether the flower farms provide workers with the necessary working facilities such as availability of pure drinking water, toilet facilities, showers, medical care, housing, working clothes, and transportation. The results are shown in Table 13. A number of observations can be made from the Table.

Table 13: Availability of facilities across flower farms

Facilities	Name of farm				Total
	Dugda	Joy Tech	Jo Flower	Agri Flowers	
Toilet:					
• Yes	19	13	-	17	49
• No	-	6	19	1	26
Clean water:					
• Yes	19	18	-	18	55
• No	-	1	20	-	21
Shower:					
• Yes	-	4	-	-	4
• No	19	15	20	18	72
First-aid:					
• Yes	19	5	-	13	37
• No	-	14	20	5	39
Housing:					
• Yes	-	-	-	-	-
• No	19	19	20	18	76
Free medical care:					
• Yes	-	-	-	1	1
• No	19	19	20	17	75
Transportation:					
• Yes	19	19	20	18	76
• No	-	-	-	-	-

Firstly, it is evident that in almost all the four flower farms surveyed free transportation is provided for the workers. This is because most of the farms are located far away from where workers live and for them to be able to start work on time they absolutely need free transportation. During the course of the fieldwork, the researcher had to rent carts or use private transportation to visit each of the four farms. It would be difficult for the workers to be able to go to work in time in the absence of free transportation service.

Secondly, each of the four farms surveyed are deficient in basic facilities like shower, washing facilities (e.g. soap, towels), housing and free medical care. The lack of shower is particularly worth noting in view of the fact that the workers had to work for 8 or more hours in an environment with temperature in the greenhouse running up to 37 or even more Degree Celsius. Added to this is the apparent location of some of the farms, which are found in the rift valleys where the temperature tends to be normally high. Therefore, absence of shower service likely to have an impact on their health.

Provision of cleaning supplies like soap would be very crucial especially for those workers who often get in contact with pesticides and chemicals. Unfortunately, most of

the flower farms surveyed have not been able to make this supply available for the workers.

Thirdly, of the four flower farms, the Jo flower farm appears to be lacking entirely all the facilities identified here, except transportation. Workers and supervisors informed the researcher that there is no toilet available on this farm and explained that workers are using plain fields as toilets. This will bring hazardous effect on workers' health.

Fourthly, with the exception of Jo flower farm as indicated earlier, all the three flower farms provide their workers with drinking water and toilet facilities. However, these flower farms obtain water from underground and as such might not be safe for drinking. Most of the toilets have also dry pit structures, which do not seem to be maintained regularly.

Most of the surveyed flower farms are found to be less suitable for the workers in terms of providing necessary facilities for their workers. For example, many of my informants complained about the lack of clean showers, washing facilities, housing facilities and free medical care services (Box 1). In one of the surveyed flower farms, the researcher was also able to observe the complete absence of clean drinking water in conditions where the temperature in the greenhouse was running really hot during the time of her visit. Workers have to buy soft drinks, which are expensive and may not be also always available on the farm as it is located far away from town.

Box 1

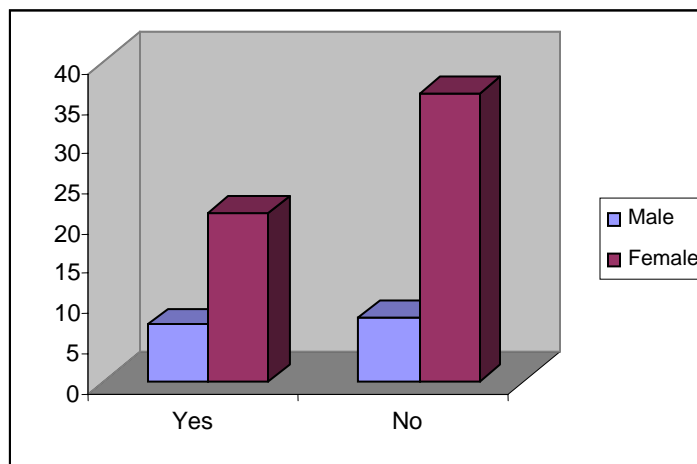
A 20 year-old informant from Mekia Flowers said "our farm lacks basic facilities that workers need on a day-to-day basis. For example, the absence of toilet on the farm is a serious problem – workers are forced to defecate in the open space. Also, workers do not have access to clean drinking water – we are forced to drink unprotected underground water. Because of this, some workers are exposed to typhus and typhoid, according to the informant. What is surprising is our employers do not seem to be willing to improve the situation by providing toilets and pure drinking water". (Taken from case 4)

The researcher strongly feels that the working and living conditions of the flower farm workers need to be improved before causing ill-health effects on workers. For example, packing house workers perform their tasks by standing for eight hours. According to some informants, this may cause kidney infection and some explained they sometimes experience swellings on their legs as a result of long hours of standing and working in the packing house. Some female informants expressed their concern that the temperature in the greenhouse sometimes reaches intolerable level – too hot to work in the greenhouse all day long. Besides, informants also indicated that many workers come to work without eating adequate food, as their wage is not enough to buy basic necessities.

4.4.6 Training and personal development

In the survey questionnaire respondents were asked if they have received training since they got employed in the flower farm. Only 38.9% said they got training based on their specific tasks such as managing the greenhouse, proper application of chemicals and fertilizers, maintenance of irrigation channels and equipment, and so on. The majority of those who received training are from Agri Flowers (Figure 5).

Figure 5: Distribution of respondents whether respondents have received training



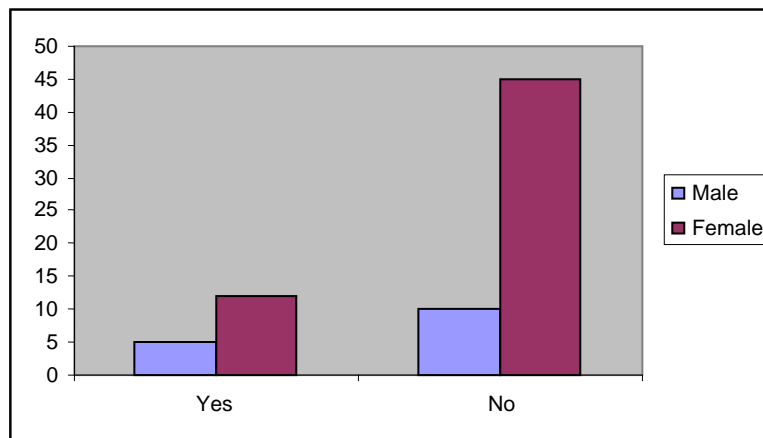
According to the ICC, flower companies should promote human and personal development of its employees with educational programs in the productive, social and cultural fields. This is beneficial for both the company (through increasing workers' productivity) and for the workers (through education, promotion, pay raise, personnel

development). As the floriculture industry is becoming increasingly competitive, its work force needs to be developed through training and education, both on-and-off-the-jobs.

It needs to be noted that none of the respondents from Joy Tech received any training related to their tasks. The four flower farms studied needed to support the personal development of their workers. Some informants explained that offering training for the workers is not a priority for employers and bosses are not interested in improving workers' working conditions, and personal development.

In connection with the above, respondents were asked if the flower farm they are working with helps to promote their personal and emotional development. The results are shown in Figure 6. It is indicated that only 23.6 % of the respondent said that their farms provide opportunities for personal and emotional development. The majority of the respondents did not believe that their farms are encouraging personal development of their employees.

Figure 6: Distribution of respondents by their assessment of whether the farm provides opportunities for personal development



4.4.7 Freedom of Association and collective bargaining

Another important aspect of the working conditions of flower farm workers is to see whether each of the four surveyed flower farms allow their workers to form unions, which can represent workers' interest and can be used as a forum for negotiation between employers and employees. Unfortunately, none of the respondents indicated that workers

are allowed to form unions. Even committees (which can address workers' needs by dealing with their day-to-day grievances, concerns and demands) are not allowed on the farm. The absence of workers' associations puts workers at a disadvantage in their efforts to bargain with employers. Almost all of the respondents indicated that the lack of workers' association made them vulnerable to mistreatment and sometimes abuses by employers over work conditions and pay (Box 2).

Box 2

Another interviewee described major problem facing all flower farm workers. The informant said "*workers cannot speak out about their problems or are not allowed to discuss their concerns (e.g. low wages, poor working conditions, not having their own association) with the management. Workers are not allowed to form associations that can represent them in their relationship with the management. Most of us have not signed formal contracts with our employers and even if when an agreement has been signed there is no guarantee from arbitrary dismissal*". (Taken from case 1)

Flower farm owners are not willing to allow workers form associations, as this will enable workers to become aware of their rights through their involvement in the association. However, Article113, sub title 1 of the 2004 Labor Law states, "*Workers and employers shall have the right to establish and form trade unions or employers associations, respectively and actively participate in them.*" In this regard, the researcher has learnt that there exists an Ethiopian Horticulture Producers' Association but there is no workers' association in the four farms surveyed.

According to some informants, one of the reasons why employers do not want workers to form association is that using their association workers will demand for improved working conditions and for improved pay. These are some of the key issues which employers usually try to avoid (in their dealings) with workers in order to maximize their profit by keeping workers wages at minimum.

In the absence of workers' associations, workers would be forced to depend on their immediate bosses/supervisors in communicating their grievances and problems they are

facing on a daily basis. Such channels of communication may not be effective in addressing workers' issues, as the supervisors are not likely pass workers' grievances onto the employers. Besides, employers may not appreciate supervisors who bring up workers' problems for discussion. Supervisors can decide on workers' fate by speaking favorably or unfavorably about his/her performance and by recommending for promotion or demotion. Most of the key informants indicated that workers would have been in a better position had they formed associations and used them for bargaining purposes with the management which often looks after employers' interests at the expense of workers' needs.

It should be noted that Article 31 of The Ethiopian Constitution states that *every person has the right to freedom of association for any cause or purpose*. It is not fair that flower farm workers are denied to exercise this fundamental right, which is enshrined in the country's constitution.

With regard to participation in decision-making in the flower farms, some informants indicated that the owners do not make workers participate in decision-making. The management does not want workers to be involved in things since there is a fear that if the workers participate in decision making they will demand more rights, and this will not be good for the smooth running of the company. Informants also indicated that the relation between the management and the workers is like a cat chasing a rat. This view was also supported by informal conversations undertaken with some flower farm workers (Picture 4).

Picture 4: Researcher having a conversation with a greenhouse worker



4.4.8 Gender Issues

In four of the surveyed farms, most of the respondents indicated that there is equal treatment between men and women workers in terms of recruitment, promotion and other work related issues. As shown in Table 14, 49.3% women and 23.2% men respondents indicated that there is equality of treatment while 30% women and 7% of men respondents indicated that there is no equality of treatment. In addition, some key informants noted that there are instances where men are favored at the time of employment such as recruiting men for relatively better paying jobs. For example, construction jobs that are often filled by men fetch better wages than packing or greenhouse work, which are often performed by women. The difference in terms of pay between a greenhouse worker and construction employee can be Birr 7 or 8 per day. This means construction workers may earn twice more than greenhouse workers.

Table 14: Distribution of respondents by their assessment of equality of treatment of men and women workers

Sex of Respondents	Equality of Treatment		Total
	Yes	No	
Male	10	5	15
Female	36	22	58
Total	46	27	73

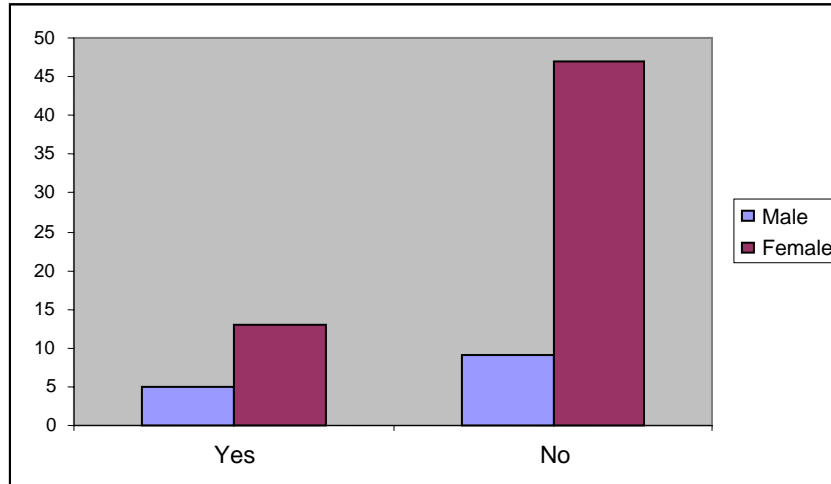
Respondents who replied there is **no** equality of treatment were also asked if women are discriminated against men and how this discrimination is actually expressed. About 19.2 % of the respondents said women are discriminated in terms of pay; 15.4 % in terms of promotion; 11.5 % in terms of getting leadership positions; and 53.8 % of the respondents observed multiple discrimination (that is in terms of pay, promotion and getting leadership positions) (Table 15). This means women flower workers compared to men flower workers are paid less, promoted less frequently and do not usually get leadership positions.

Table 15: Distribution of respondents by their views of how women's discrimination is manifested

Ways of discrimination	Dugda	Joy Tech	Jo Flowers	Agri flowers	Total
Pay	-	5	-	-	5
Promotion	2	2	-	-	4
Leadership Positions	-	-	1	2	3
All of the above	5	-	2	7	14
Total	7	7	3	9	26

Respondents were also asked if women's issues (such as maternity leave, providing necessary facilities such toilets and showers, offering free medical care during pregnancy, etc.) have received enough attention from employers. Some 24 % of the respondents said women are given enough attention by the management while the majority of the respondents (74.7%) said the management is not paying due attention to women's issues (Figure 7).

Figure 7: Distribution of respondents by whether women's issues have received necessary attention



Almost all the surveyed flower farms appear to have similar number of respondents who said that women’s issues are not given the necessary focus they should have deserved. This goes in line with the Marxist Feminists' perspective emphasizing patriarchy as being the dominant paradigm regulating labor relations where men's needs and intentions are reflected. By the same token, in all the four farms studied women's issues seem to receive less attention as men are in charge of the decision making.

Although women constitute a significant majority of the work force in the flower farm industry and women do most of the work, it is not right that they are not receiving enough attention from employers. It is evident that women are responsible for handling the greenhouse work (including carefully planting seeds and growing and harvesting flowers). This job is tiresome and needs patience. It takes about three months to grow a flower and harvest. It is clear that women shoulder the heavy workload. Work in the greenhouse, requiring long hours of standing and bending, is mostly done by women (Picture 5). Upon returning home from work, women are also responsible for domestic chores (such as cooking, cleaning, and caring for children), which add to their workload and make their lives difficult.

Picture 5: Women spend most of their time bending and taking care of flowers



In view of the above, the flower farm industry needs to pay attention to the special needs of women including the provision of facilities specially designed for women. These include provision of clean and women-friendly toilet facilities, showers and the like. It should be noted that the absence of toilets in some farms (e.g. Jo flower farm) make women suffer a lot in times of menstruation.

4.4.9 Health and Safety

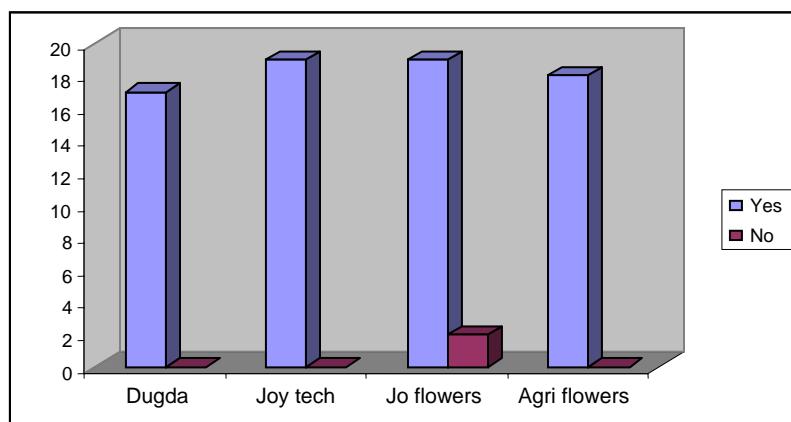
With regard to matters dealing with workers' health and safety issues, respondents indicated that they face problems that affect their health conditions. For example, the absence of toilet facilities (like the Jo flower farm) and their poor condition (in the other surveyed farms), absence of clean drinking water, showers, absence of maternity leave as well as absence of first aid and free medical care coupled with the presence of high temperature in the greenhouses create potentially hazardous effect on workers' health.

Picture 6: Women have to stand up and strictly take care of flowers



Some informants also highlighted workers sometimes experience health and safety problems due to long hours of standing in the greenhouse causing their feet to swell and also causing kidneys problems (Picture 6) and other health related problems including headaches, coughing, skin rushes, respiratory problems, blood vein problems, pneumonia, bronchitis, sinus, vomiting and others. However, the management does not seem to be concerned about worker's health, as they do not seem to be taking measures to improve some of the important facilities such as the provision of safe drinking water and toilets on the farm. Instead, the management is more interested in protecting the flowers from plant diseases rather keeping the workers healthy.

Figure 8: Distribution of respondents by their views on the management regularity follows workers' health conditions

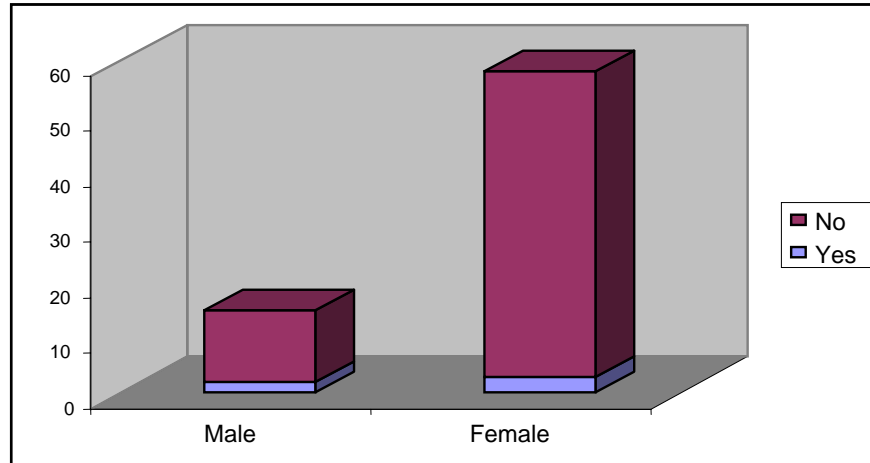


The respondents were asked if owners and the management regularly follow employees' health conditions. The majority of the respondents indicated that their respective farms do not regularly check workers' health conditions (Figure 8). Therefore it seems that owners' top priority is not workers' health but to increase their profit by producing healthy flowers.

Workers in the flower farms need to have some knowledge about health and safety issues so that they know the safety procedures and take the appropriate measures. However, in most of the farms surveyed workers do not seem to be aware of the importance of occupational health and safety matters (e.g. how to properly use cutting tools) and training is not provided about health and safety issues. Besides, none of the four flower farms have established health and safety committees, which would be responsible in collaboration with the management for ensuring that working conditions are healthy and safe.

Regarding, health and safety related training respondents were asked if they have received health training in their respective farms. Except the five respondents of Agri Flowers flower farm (2 males and three females), all the other respondents (93%) said they did not receive any health training (Figure 9). This implies that there is an urgent need to give workers' proper health trainings focusing on precautionary measures designed to reduce workers' vulnerability to accidents and other health hazards.

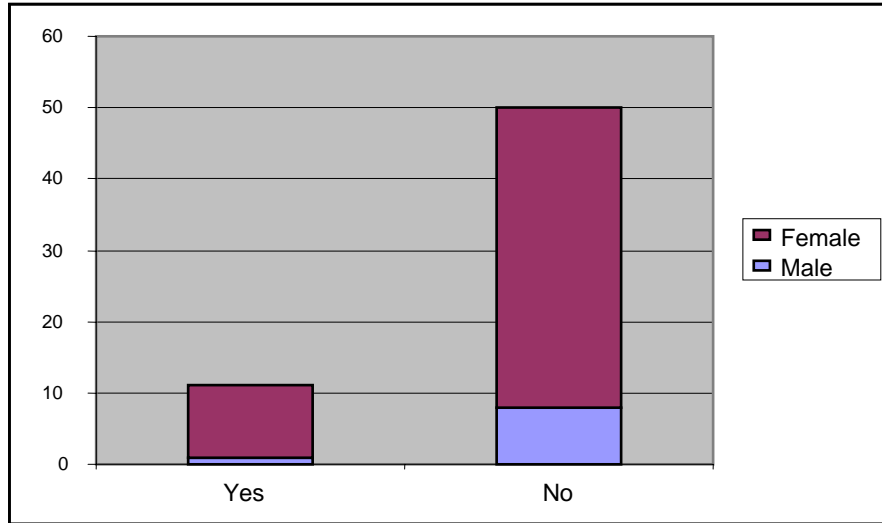
Figure 9: Distribution of respondents by whether they have received training in health and safety issues



Another important indication that most of the surveyed flower farms do not pay attention to workers' health condition is regarding the absence of maternity leave for women workers during and after pregnancy. In all the farms that have been surveyed, there is no farm that provides maternity leave for its temporary and daily laborer pregnant workers with full pay. About 74.7 % of the respondents indicated that their farms do not provide maternity leave. Except Joy Tech and Jo flowers that allow their pregnant workers who are permanent and signed contracts to have 2 to 3 weeks maternity leave, most of the female workers do not have access to maternity leave. This may be due to the fact that some of the owners of Joy Tech are foreigners (Israelites) who may be a bit flexible.

Article 35 (5a) of The Ethiopian Constitution states that women have the right to maternity leave with full pay. And the same article (5b) indicates that maternity leave may, in accordance with the provision of law, include prenatal leave with full pay. However, women in most of the flower farms surveyed are not exercising their constitutional rights.

Figure 10: Distribution of respondents by their assessment of whether women get the necessary support during pregnancy



With regard to whether the flower farms give the necessary support for pregnant mothers (for example, free medical care for pregnant women & their babies, allowing to take their salaries in advance so that they can use it to cover maternity related costs, assigning pregnant mothers to less difficult tasks), 80.6 % of the respondents said “no” and the rest said “yes” (Figure 10). As stated above, only respondents from Joy Tech indicated that their farm offers limited maternity leave for pregnant workers and it is also the only farm that gives its workers pregnancy support.

Article 88 of the 2004 Ethiopian Labor Law indicates that “An employer shall grant leave to a pregnant woman worker without deducting her wages, for medical examination connected with her pregnancy; however that she is obliged to present a medical certificate of her examination.” Sub title 3 of the same Article also points out that “A woman worker shall be granted a period of 30 consecutive days of leave with pay preceding the presumed date of her confinement and a period of 60 consecutive days after her confinement.” However, this provision does not seem to be properly enforced in the Ethiopian floriculture sector.

4.4.10 Pesticides and chemicals

Chemicals and pesticides are important elements of the floriculture industry. The flower business is heavily dependent on chemicals and pesticides. Chemicals such as fertilizers affect the growth and production of flowers. The ICC states that *spraying, handling and*

storing pesticides and chemicals should be done by specially trained people with suitable equipment. In order to get a sense of how the four farms surveyed deal with chemicals and pesticides, respondents were asked whether their respective farms follow proper safety procedures in the use and handling of chemicals and pesticides (Table 16). About 60.9% of the respondents indicated that they rarely follow safety instructions, 20.3% said that they never practice safety instructions while 17.2% said they sometimes adhere to safety instructions.

Table 16: Distribution of respondents by how often they follow safety instructions

	Sex of Respondents		Total
	Male	Female	
All the time	1	-	1
Sometimes	3	8	11
Rarely	8	31	39
Never put in practice	1	12	13
Total	13	51	64

Respondents were also asked if they are regularly informed by their supervisors about the possible health risks associated with working with chemicals and pesticides and the importance of taking necessary precautionary measures. The overwhelming majority of the respondents (93.9%) said that they have not been regularly informed about these issues. Results from key informant interview also support the view that workers have very limited knowledge about the proper use and application of chemicals.

Some key informants also noted that sometimes spraying is done while the workers (who normally do not wear protective clothes) are working in the greenhouse (Box 3). This is done to avoid work interruption and save time. In the absence of regular enforcement of proper safety measures, spraying chemicals and pesticides during working hours is likely to cause ill-effects on the workers. To this end, respondents were asked if they have experienced any side effect as a result of exposure to pesticides. Some 41.3% replied that they experienced side effects on themselves while 58.7% of the respondents said they did not experience any problem associated with pesticides.

Box 3

One male informant expressed his concern regarding the handling and use of chemicals and their effects on workers' health and safety. He said "*during spraying pesticides, all workers (except the spraying team) are expected to vacate their working stations and*

Some of the ill-health effects of pesticides as identified by informants include: headache, respiratory problems, skin rashes, and vomiting. There is also a belief that some chemicals may cause ill health on cattle such as cows losing their young calves. Recognizing the ill-health effects of chemicals and pesticides, some flower companies provide the spray team with a liter of milk per day and in some companies, workers are given money to be used for buying milk, which is believed to reduce the negatives effects of pesticides and chemicals on workers' health.

According to some informants, some supervisors and managers are reluctant to inform workers about the need to properly follow safety instructions in the application of pesticides and chemicals. An informant who has experience working in the flower farm industry revealed that sometimes owners remove the safety instructions attached to pesticide containers and tell spray workers that the pesticide causes no harm to their health.

Although the researcher has observed that spray workers are supplied with boots, gloves and masks, some informants said that there are not enough protective wears for all spray workers, or some of the materials might be old or worn out. Besides, some workers may not properly use the available equipment because of lack training or awareness. Another concern expressed by informants is that the protective clothes are not chemical-proof.

4.4.11 Environmental Issues

Environmental protection is an important issue that any investment should put into consideration. One of the environmental issues raised by some key informants was the concern that the intensive use of chemicals and pesticides (see 4.7) is likely to cause soil and water pollution (both surface and underground water) since chemical residuals enter the soil without adequate treatment. During spraying chemicals are also likely to cause air pollution (Box 4).

Box 4

Regarding environmental issues, one of the informants from Jo flowers said "*the flower farms are likely to pose a serious threat to the environment. Chemical tubes are washed off and residues are disposed off in the nearby area. Chemical containers are burned but are not decomposed safely. Some people use chemical containers to put foodstuffs. There is no way to ensure that the containers are completely free from chemical residues. These activities are likely to pose serious health risks to the surrounding communities unless measures are taken to ensure that chemicals are properly used and their containers are safely disposed off*". (Taken from case 5)

There is a fear that the burgeoning of the flower farms is rapidly encroaching upon neighboring farmland so much that many farmers might be tempted to surrender their plots to the apparently lucrative deal which is likely to come from investors. It has also the effect of changing farmers from farm producers to daily laborers on the flower farms with minimum wages. Converting productive soils into flower farms is likely to undermine the productive potential of farming communities and in the long run may cause them to lose their livelihoods.

Chapter Five

Summary and Recommendation

5.1 Summary

The floriculture industry is one of the newly emerging industries of Ethiopia. Since its modest beginning in the early 1990s, it has created employment opportunities for a large section of the population. Realizing its capacity to generate employment and foreign exchange, the government is also encouraging investors to invest in the sector. This thesis was intended to assess the working conditions of workers working on the flower farms based on a case study of four flower farms (namely, Joy Tech, Dugda, Jo Flowers, and Agri Flowers) in Oromiya region. Especially, the study focused on women flower farm workers who constitute the majority of the workforce in each of the four flower farms studied.

Both qualitative (e.g. key informant interviews and case studies) and quantitative (e.g. questionnaire method) data gathering instruments were used in the collection of qualitative and quantitative data. The survey data has been organized and analyzed using SPSS while the qualitative data has been analyzed and interpreted by focusing on thematic issues.

The socio-economic conditions of the flower farm workers indicate that most of them are single, young people (ages 16-25) who are active and energetic to perform physically demanding farm jobs. Most of the workers have either completed primary education or dropped out of secondary school and may be currently attending evening classes. Most of them have 12 months or less years of experience in the farm they are currently working and this may indicate the existence of high job turnover in the floriculture industry.

Looking at the working environment of workers, results of both qualitative interviews and survey indicate that the workers in the four flower farms studied are working in a poor and insecure working, job and wage conditions. Many workers are employed on casual and temporary basis and have not signed contracts with their respective employers. This means that they have limited means to exercise their rights, including lack of job security (as they are vulnerable to arbitrary dismissal from work) and absence of maternity leave for women workers.

On the surface, the length of working hours seems to be fair (i.e., 8 hours per day) but in reality, most of the workers may be required to work more than 8 hours if they have production targets to meet especially during the harvest season. Although flower farm workers are subjected to heavy workload, they are receiving one of the lowest wages not seen anywhere in the formal sector, especially in an export-oriented sector such as the floriculture industry. Most of the workers interviewed claimed that their wages are not enough to cover monthly food expenses for themselves and for their families. Because of this, they sometimes skip their lunch and lack energy to perform their duties. Yet, employers do not seem to be willing to listen to workers' concerns.

The gender-based division of labor that exists in the flower farms has made men and women workers fit for different type of jobs. As a result of this, women workers usually occupy low paying and exhausting jobs, which are likely to bring meager incomes. The fact that women are responsible for household tasks at home is also another burden, making the working conditions of women flower workers difficult. Because of their

sexuality they are also likely to be exposed to some of the ill effects of chemicals and pesticides as they lack influence and power to challenge some of the relentless demands imposed on them by supervisors, managers and employers many of whom are men.

Most of the four flower farms surveyed are deficient in the necessary facilities and this makes workers' working conditions harsher. Poor toilet facilities, lack of clean water, lack of shower, absence of first aid facilities and free or partially free medical care are some of the major things that workers are in need of. The lack of these basic facilities is likely to expose workers to the many health risks (e.g. water-borne diseases) associated with the poor and unsanitary conditions of the flower farms. Almost all the flower farms surveyed provide transportation services for their workers but pregnant women and old women are not given priority in getting seats.

The fact that many workers did not receive the appropriate training related to their jobs together with lack of management's support for personal and human development has been major constraints for workers to effectively perform their tasks. There is also the issue of lack of a clear career opportunity in the floriculture industry, making workers worry about their future. Besides, the absence of the right to freedom of association has been a major obstacle for workers to freely express their concerns and grievances. This has resulted in the prevalence of owners' interests over the workers since there are no procedures for addressing workers' concerns from time to time.

In the surveyed farms, most workers responded that there is equality of treatment between men and women on the job. But it is evident that women are assigned to relatively low paying jobs and as a result they are likely to face discriminations against promotions, and getting leadership positions. Moreover, most flower farm workers indicated that women's issues are not given the necessary attention. It was also possible to note that workers do not participate in decision-making processes in the flower farms.

The other issue explored in this thesis is related to workers' health and safety conditions. It is evident that the inadequacy or complete lack of facilities, presence of high temperature in the greenhouse, repeated exposure to chemicals and pesticides are likely to make workers' vulnerable to health risks. It would seem that the management is not willing to regularly check workers' health conditions, nor is it committed to improve workers' health and safety issues through training. Some of the workers have already experienced ill-health effects (e.g. kidney infection) as a result of their poor working conditions.

Problems related to pesticide and chemical use and application were also identified. Workers do not follow safety instructions all the time and also they are not regularly informed about health risks and the necessary precautionary measures they need to take as a result of coming into contact with chemicals and pesticides. Workers do not usually use protective wears, in addition to their uniforms being too old worn out. These situations increase workers' exposure to the negative-health effects of pesticides and chemicals. It is absolutely important that workers be informed about the possible negative effects of chemical risks so that they can take precautionary measures, and that workers need to be oriented to the importance of following instructions in the applications of pesticide. There is also a need to provide workers with a translated version of the instruction manuals (using language that workers can easily understand) related to the use and handling of pesticides.

It can be stated that the floriculture industry has created employment opportunity for many Ethiopians. However, there are problems related to employment conditions, fundamental rights at work, safety and health condition of workers and social protection. The increase in production and profit should not be at the cost of the workers. Therefore, workers' human right and working conditions need to be given due attention.

5.2 Recommendations

In order to improve the working and living conditions of flower farm workers and make the sector competitive, it is suggested that the following points need to be considered.

These include:

- Providing health and safety training to workers
- Modest raise in workers wages so that workers can be able to feed themselves and their families
- Allow workers to establish their own associations which can represent them in matters dealing with the management
- Introduce maternity leave and women-focused packages for pregnant workers
- Preparing enough protective wears, ensuring workers use them every time
- Establishing facilities on the farms such as toilets, clean drinking water and health care facilities
- Organizing awareness-raising programs for workers about their basic rights in the workplace and about principles of human rights
- Developing National Code of Conduct designed to regulate the activities of the flower farms in the country.

References:

- Acker, J., K. Barry, & J. Esseveld (1996) Objectivity and Truth: Problems in Doing Feminist Research. **In** H. Gottfreid (Ed.), *Feminism and Social Change*. Urbana: University of Illinois Press.
- Anderson, L.M. (2006) *Thinking about Women: Sociological Perspectives on Women and Gender*. 7th ed. USA: Pearson Education.
- Beechey, V. (1993) "Unequal Work". **In** S. Jackson, K. Atkinson; D. Beddoe et al. (Eds.) (1993) *Women's Studies. A Reader*. Britain: Cambridge University Press.
- Burrows, N. (1988) *Employment and Gender*. **In** S. McLean and N. Burrows (Eds.), *The Legal Relevance of Gender: Some Aspects of Sex-Based Discrimination*. Hound mills: Macmillan press.
- Berg, B. L., (1995) *Qualitative research methods for the social sciences*. 2nd ed. Boston: Indiana University of Pennsylvania.

- Bernard, R. (1994). *Research Methods in Anthropology: Qualitative and Quantitative Approaches*. Thousand Oaks, CA: Sage Publications.
- Chammartin, F. M. G. (2002) *Migrant Workers*. Labor Education 2002/04. No 129. International Labor Organization. Geneva.
- Coser, L. A. (1977) *Masters of Sociological Thought: Ideas in Historical and Social Context*. Long grove, Illinois: Waveland.
- Cresswell, J.W. (1998) *Qualitative Inquiry and Research Design: Choosing among Five Traditions*. Thousand Oaks, CA: Sage Publications.
- Dolan, C.; M. Opondo, & S. Smith (2002) *Gender, Rights and Participation in the Kenya Cut Flower Industry*. NRI Report No. 2768. SSR Project No. R8007 2002-4.
- Donovan, J. (2000) *Feminist Theory: The Intellectual Traditions*. 3rd ed. New York: Continuum.
- De Vault, M. L. (1996). *Talking Back to Sociology: Distinctive Contributions of Feminist Methodology*. *Annual Review of Sociology*.
- Fontana, A. & J. H. Frey (1994) *Interviewing: The Art of Science*. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of Qualitative Research*. Thousand Oaks, CA: Sage Publications.
- Flew, F.; B. Bagilholea; J. Carabinea; N. Fentona; C. Listera and S. Wildinson (1999). *Introduction: Local feminisms, Global Features*. *Women's Studies International Forum*, Vol.22, No.4 USA: Elsevier Science Ltd.
- Game, A. & R. Pringle (1984) *Gender at Work*. Forwarded by C. Cockburn. UK: Pluto Press.
- Hadjifotiou N. (1983) *Women and Harassment at work*. London: Pluto Press.
- Hartmann, H. (2000) "The Unhappy Marriage of Marxism and Feminism: Towards a More Progressive Union." In W. Kolmar and F. Bartkowski (2000), *Feminist Theory: A Reader*. Mountain View, CA: Mayfield Publishing Company.
- Hombergh, H. V. D. (1993) *Gender, Environment and Development: A Guide to Literature*. Institute for Development Research Amsterdam by International Books. Utrecht: The Netherlands
- Humm, M. (1992) *Modern Feminisms: Political Literary Culture*. New York: Columbia University Press.

- ILO (2006) Decent Work in the Floriculture Sector in Ethiopia. National Consultative Workshop on a Decent Work in the Floriculture Sector in Ethiopia. Addis Ababa Hilton, Harar Grill. 2006. Organized by ILO sub regional office for Eastern Africa, in collaboration with the Ministry of Labor and social Affairs (MOLSA).
- ILO (2006) Summary of the study report on decent work in floriculture Ethiopia. Presented on the National Consultative Workshop decent work in floriculture Addis Ababa. Oct. 2006. Based on the works of Masresha Yimer (ITCS).
- Jaggar, A. & P. M. Rothenberg (1993) Feminist Frameworks: Alternative Theoretical Accounts of the Relations between Women and Men. New York: McGraw-Hill, Inc.
- Joekes, S. P. (1987) Women in the World Economy, An In straw Study, Oxford University Press.
- Leacock, E. and S. Helen (1986) Women's Work: Development And the Division Of Labor by Gender, Bergin and Garvey Publishers
- Lewenhak, S. (1980) Women and Work. London: The Macmillan Press Limited.
- Marshal C. & G.B. Rossman (1995) Designing Qualitative Research. (2nd ed.) Thousand Oaks, CA: Sage.
- Mies, M. & V. Shiva (1993) Ecofeminism. London and New Jersey: Zed Books.
- Mena, N. and S. Proano (2005) Sexual Harassment in the Workplace: The Cut Flower Industry. Case study Northern Sierra of Ecuador.
- NOP (National Office of Population) (1999). Women in Ethiopia. Addis Ababa.
- Pennington, S. & B. Westover (1989) A Hidden Workforce: Home Workers in England, 1850-1985. In Jo Campling (Ed.) Women in Society. Hound mills: Macmillan Education Ltd.
- Remenyi D. (2002) Doing Research in Business and Management: An Introduction to Process and Methodology. Thousand Oaks, CA: Sage Publications.
- Reid, C. (2004) Advancing women' social justice agendas: A feminist action research framework. International Journal of Qualitative Methods.
- Reinharz, S. (1992) Feminist Methods in Social Research. New York: Oxford University Press.

- Rogers, K. A. and D. Chapell (2003) Preventing and responding to violence at work. ILO: Geneva.
- Sepulveda, O.P. (2004) Behind the Flowers. The Workers' Rights. Corporacion Cactus. Bogotá, Estigma publications.
- Smith, D. E. (1987) The Everyday World as Problematic: A Feminist Methodology. Boston: Northern University press.
- Sweetman, C. (Ed.) (1996) Women, Employment and Exclusion. Oxfam Focus on Gender. Uk and Ireland.
- Thomas, R. M. (2003) Blending Qualitative and Quantitative Research Methods in thesis and dissertations. California: A Sage publications company.
- (UWEA) Uganda Workers' Education Association (2006) "Promoting Women Workers' Rights: African Horticulture." Progress Research Report Presented to "Women Working World Wide Regional Workshop." 28th -31st March 2006. Kampala, Uganda.
- Yeshi Emabet Imagnu (1969) The role of Women's Voluntary Organizations in Encouraging Women to take an active part in Social and Economic Development. Hannah Rydh memorial seminar II. Female's participation in Society Organized by the International Alliance of Women with the Ethiopian Women's Welfare Association (29th Sept.-4th Oct 1969). Addis Ababa, Ethiopia.

Internet Sources

- EHP.org (2002) 'Would a Rose not Smell as Sweet?' Environmental Health Perspective, Vol. 110, No. 5. May, 2002. U.S. Department of Health. <http://www.ehponline.org/docs/2002/110-115/focus>.
- Interior Trade Promotion Agency (2006) Facts on Flower Export. Source Inland Trade Expansion Agency. <http://www.waltainfo.com/Facts/2006/Oct/flowerfact.htm>.
- Jones, C. (2004) Quantitative and Qualitative Research: Conflicting Paradigms or Perfect Partners? <http://www.shf.ac.uk/nlc2004/Proceedings/Symposium4/Jones.htm>
- Olson, H. (2005) Quantitative "versus" Qualitative Research: The Wrong Question. <http://www.ualberta.ca/dept/slis/cais/olson.htm>
- Wondimu Geda (2006) The Flower Affair: Flower from Ethiopia to Europe. [http://www.waltainformation.com/Analysis/2006/ Dec/flower/htm](http://www.waltainformation.com/Analysis/2006/Dec/flower/htm).

Periodicals

FDRE (2004) Federal Negarit Gazeta. Labor Proclamation No. 377/2003. 10th Year, No. 12. Addis Ababa. February 26, 2004.

International Code of Conduct (2004) Version 2. Guidelines for the Socially and environmentally responsible production of cut flowers, ferns, plants and foliage.

Appendix I: Instruments

Instrument I - Questionnaire

I am a student at the Addis Ababa University in the Institute of Gender Studies /MA Programme/. This questionnaire survey is intended to assess the working conditions of flower farm workers with an emphasis on women workers. Therefore, I kindly request you to fill the appropriate answers for the questions provided below. In addition, the researcher wants to assure you that your identity will not be revealed by any means.

1. Sex: 1. Female 2. Male
2. Age: _____
3. Marital Status:
1. Single 2. Married 3. Widowed 4. Divorced
4. Educational level:
1. Able to read and write 2. Primary (1-6) 3. Junior (7-8)
4. Secondary (9-12) 5. Post-secondary 6. Unable to read and write
5. Number of children: _____
6. Name of farm: _____
7. How long have you worked in the flower farm? _____
8. From where did you get the information of employment?
1. Media 2. Relative 3. From friends 4. Other, specify _____
9. What is your main duty on the flower farm? _____
10. Do you think working on the farm is harder for women than it is for men?
1 Yes 2 No
11. If yes, please explain why? _____
12. Are you employed as
1. Temporary worker 2. Permanent worker 3. Daily Laborer
13. Have you signed a contract with your employer?
1. Yes 2. No
14. If yes, has the company given you a copy of the signed contract?

1. Yes 2. No
15. Since you have been working on the farm, have you received training?
1. Yes 2. No
16. What is your monthly salary that you are getting from the farm?
_____.
17. Do you think the income that you are getting is adequate to sustain your family?
1. Yes 2. No
18. What additional payments other than your salary do you get by working on the farm?
1. Overtime 2. Bonus 3. Holiday 4. There is not additional payment
19. Do you have a provident/ pension fund?
1. Yes 2. No
20. Have you got salary increments since you have been employed?
1. Yes 2. No
21. If yes, what was the highest amount of increment you got at once?

22. Do you think women are underpaid compared to men?
1. Yes 2. No
23. Do you think your company has provided its employees with an opportunity for personal and human development?
1. Yes 2. No
24. Do you have a workers' association in your flower farm?
1 Yes 2 No
25. If yes, are you a member of that association?
1 Yes 2 No
26. If not member of the association, give reasons _____
27. Do you think the association is helpful in helping its members trying to solve problems with the management?
1. Yes 2. No
28. Do you think workers have the opportunity to discuss their problems with the management when problems arise?

1. Yes 2. No
29. When you have issues to be discussed with the management, how do you go about dealing with such issues?
1. Through the union 2. Individually 3. Through supervisors
4. Through other means, specify _____
30. Do you think women's issues have received enough attention from the management?
1. Yes 2. No
31. Do you think both women and men receive more or less equal treatment by the management?
1. Yes 2. No
32. If no, do you think women are discriminated in terms of the following (Multiple answers are possible)?
1. Pay 2. Promotion 3. Leadership positions 4. All of the above
33. At the time of recruitment, are workers tested for
1. HIV 2. Pregnancy 3. Other, specify _____
34. How many hours do you work per week? _____
35. Do you think the working environment on your farm is safe for your health?
1. Yes 2. No
36. Does the company undertake a regular check up and monitoring of workers' health and safety situations?
1. Yes 2. No
37. If yes, who does the regular check up?
1. Qualified health Officer 2. Unqualified health officer
38. Have you received proper training with regard to health and safety procedures?
1. Yes 2. No
39. How long is the duration of women's maternity leave?
1. Less than 12 weeks 2. 12-14 weeks 3. More than 14 weeks 4. No leave
40. Do women get the necessary support during pregnancy?
1. Yes 2. No

41. Which of the following facilities are available on your farm?

	<u>Yes</u>	<u>No</u>
Toilets	_____	_____
Drinking Water	_____	_____
Washing facilities	_____	_____
Showers	_____	_____
Housing provision	_____	_____
First aid facilities	_____	_____
Free medical care	_____	_____

42. Have you encountered any negative effect of pesticides on yourself?

1. Yes 2. No

43. How often do you follow safety instructions and proper re-entry intervals with regard to pesticide application?

1. All the time 2. Sometimes 3. Rarely 4. Never practiced

44. What do you think are side effects of the pesticides and chemicals on the workers?

1. Negatively fertility on women 2. Cause skin irritations
3. Cause deformities in unborn children 4. Causes headaches
5. Makes workers skinny 6. All of the above 7. Other, specify _____

45. Do you think workers are regularly informed about the risks and safety measures relating to the pesticides and chemicals?

1. Yes 2. No

Thank You

Instrument 2: Interview-guide questions for flower farm workers

1. Sex
2. Age
3. Marital Status
4. Educational Level
5. What was your Occupation before you work here?
6. Name of your flower farm
7. What is your responsibility in the flower farm?
8. What does your experience in the flower farm look like?
9. Do you have workers' association on your farm?
10. Are men and women equally treated with regard to pay, recruitment, promotion and other issues?
11. How much do you earn monthly? Do you think it is enough?
12. What are the problems you face while working in the flower farm?
13. Do you encounter problems with regard to your health and safety while working in the farm?
14. What do you think are the possible effects of pesticides and chemicals on the workers?
15. What do you think are the possible effects of flower farms with regard to the environment and its impact on the surrounding communities?

Instrument 3: Interview-guide questions for flower farm supervisors

1. Sex
2. Age
3. Marital Status
4. Educational Level
5. Name of flower farm
6. What is your responsibility on the flower farm?
7. For how many years have you served in the flower farm?
8. Do workers have the right to form workers' unions?
9. Is there equal treatment between men and women with regard to pay, promotion and other issues?
10. Do you think the wage that is paid to the workers is enough?
11. Do you think the work environment is safe for the workers' health?
12. Is there any effort undertaken by the company to improve workers' working conditions such as their health conditions and others?
13. Are pregnant women given the necessary maternity leave with pay?
14. What are the problems that you think workers encounter in the flower farms?
15. Do you make efforts to enable workers solve their problems by discussing with the management?
16. How do you see the side effects of pesticides on workers?
17. Are precautionary measures proper application instructions put in practice all the time?
18. How do you dispose chemical wastes?
19. How do you see the relation between the workers and the management?

