

Assessment of Workers' Benefit from Employment Injury in Batu Floriculture Industry

Solomon Dessalegn Dibaba*

School of Law, College of Law and Governance, Oromia State University

Article History: Received: June 22, 2020; Accepted: March 31, 2021; Published: June 4, 2021

Abstract: This research assessed the benefit from employment injury floriculture workers receive when they face injury based on international and domestic laws and policies made to provide benefit of employment injury. To address these issues and for strong evidence based claims, qualitative and quantitative research method such as questionnaires, in-depth interview and personal observation were used. The study employed simple random and purposive sampling technique to select respondents and informants for the questionnaires and in-depth interview, respectively. Quantitative data collected were analyzed by using simple descriptive statistical methods such as summation, averages, and percentages. And the qualitative data were analyzed and interpreted thematically against the relevant research issue. The findings of the study indicated that injured workers were not properly paid of these benefits provided by laws. There are challenges to hold/avoid benefit of employment injury which ranges from low bargaining power from the workers up to complexity of litigation process before court. There are also weaknesses from the government on implementing laws and policies made to provide benefit of employment injury. There is a problem of budget, motivation, authority and lack of coordination among the stakeholders. Based on the findings, there should be strong institutions including nongovernmental organizations (NGOs) that work together to enforce international, regional and domestic laws to safeguard benefit of employment injury. NGOs should aware workers on occupational safety and health, and further advocate for those who have incurred employment injury. Furthermore, research on benefit of employment injury is necessary to have due insight into the issue.

Keywords: Benefit; Employment injury; Floriculture workers; Laws

Licensed under a Creative Commons. Attribution-NonCommercial 4.0 International License.



1. Introduction

Floriculture is branch of Horticulture that is concerned with propagation of Ornamental plants, specifically focusing on flowering plants (Mohammed, 2004). Floriculture can be defined as a discipline of horticulture concerned with cultivation of flowering and ornamental plants for gardens and floristry comprising the floral industry. Globally, the horticulture industry has been growing very fast; it is developed in Kenya and picking up in Tanzania, Ethiopia and Uganda (National Association of Professional Environmentalist [NAPE] & Swedish Society for Nature Conservation [SSNC], 2012). The flourishing of the industry, in a country where unemployment is a big problem, capital is scarce and labor is abundant, coupled with relatively huge participation of foreign direct investors in the industry and the dramatic performance registered in foreign exchange earnings, has therefore, become significant contributor to the national economy as well as a key means of linking the poor to the global product markets. Young unemployed citizens, women in particular, have taken the advantage of new employment opportunity arising from the introduction and growth of the cut flower industry in Ethiopia. Even though the floriculture is becoming a pillar to the development of the national economy, there are a lot of controversies and critiques in relation to labour, social and health conditions of the workers and communities, environmental pollution and others (Tewodros, 2010). The floriculture industry in Ethiopia has, definitely, brought many advantages to the nation such as solving the problem of unemployment, increasing the country gross domestic product (GDP), providing some social infrastructures to the nearby community like schools, roads, medical services and the like (Gebreeysus and Iizuka, 2012). Although, the floriculture industry were taken as a solution for economic development and gained in the generation of employment during the last 30 years in developing countries, these advantages of the industry are at the expense of social and environmental disadvantage (Gudeta, 2011/2012). Floriculture industry utilizes a high amount of pesticides and chemicals which seriously affect the health of the workers. These pesticides and chemicals can cause cancer/carcinogenic, birth defect, reproductive complication, nervous system problem, etc. Workers can be exposed to these chemicals, herbicides, and pesticides through contact and/or inhalation while spraying, harvesting or packing (Tilahun, 2013).

The majority of workers in these farms are young women and the health effects of exposure to pesticides in women and men may be different in important ways. Women on average have lower body weight and a higher proportion of body fat than men. Women's breast tissue has been associated with significant accumulation of fat-associated pesticides. During breast feeding these pesticides may pass to an infant. In addition, effects of certain pesticides on human hormones may affect men and women differently and can have negative impacts on developing fetuses (Gudeta, 2011/2012). Jobs are often temporary, seasonal, casual and migrant, hence precarious. Long working hours and hazardous conditions are also common. Health and safety provisions are often poor, with workers not being provided with protective clothing, toilets, washing facilities and drinking water (Smith, Bhaskar, Fernandez, and Courey, 2004). Too much use, or misuse, of herbicides and pesticides can threaten human, animal and plant life. The extensive use of toxic pesticides, chemicals and fertilizers of Batu area floriculture industries has caused work related health problems including skin rashes, respiratory problems, eye problems, and miscarriages affecting almost all workers. Medical professionals in Sher flower producing company (one of the biggest floriculture industries in the world found in Batu) reported 5-10 cases of acute poisoning per day, and a similar study found an elevated rate of miscarriage, premature births, and congenital malformations among floriculture workers (Mohammed, 2004). The study conducted on floriculture farms in Ethiopia showed that 76.5% had fatigue and 73.4% had headache (Atkur, 2011). When workers sustain employment injury, there is a remedy to redress the damage. Remedy can be understood to refer to the range of measures that may be taken in response to an actual or threatened violation of human rights'. Remedy in its substantive sense, connotes the outcome of proceedings, and the relief afforded to the claimant which includes, but which is not limited to, declarations, compensation and reparations (Godfrey, 2006). Workers compensation is a legal remedy whereby an employee who is injured on the job is

automatically entitled to certain benefits. The benefit includes medical care for the injury, indemnity, and wage benefits or death benefits (Arts. 103-107, Labour proc. 1156/2019).

Based on the points discussed above, this research assesses the benefit of employment injury of floriculture workers which they receive when they face employment injury based on national and international human rights laws that regulate everyone's right to clean, health and safe environment including Ethiopia labor proclamation No. 1156/2019, and international labor organization convention No. 155.

2. Research Methods

2.1. Description of the Study Area

Ethiopian government investment policy is a key promoter to the development of the flower sector (Gezmu, 2013). Oromia, which is found in southern part of the country, is the floriculture hub of Ethiopia. Over 95% of the total flower production comes from Oromia regional state. The region has well developed infrastructure and logistical facilities in and surrounding the national capital, in addition to favorable climate, fertile soil and trainable and disciplined work force (Shay Shone Consultancy, 2015). The study area is Oromia region, East Shewa Zone, Adami Tullu Jiddo Kombolcha Woreda in and around Batu area. Batu town is found on the [Finfinne]- Hawassa road at 163 km distance from the capital.

Its temperature is between 22°C and 27°C, and its soil type is leptosol; which is suitable for shallow root plants. The major source of water is Lake Ziway fed by Meki and Katar rivers but there is also ground water potential (DBpedia Association, 2017). There are around five flower farms in the study area. These include Sher Ethiopia plc, Herburg Rose plc, AQ Rose plc, Ziway Rose plc, and Braam Rose plc.

Sher Ethiopia plc was established on June 1st 2005. It covers 700 hectares of land. At national level, Sher Ethiopia plc has built good image of the country, as it generates a big amount of hard currency from export (1 million Euros per month), it offers huge employment opportunities for more than 15,000 persons (65%-70% of whom are women), it also pays huge amount of money in the form of taxes and other expenses (more than 5 million per month). Sher Ethiopia plc is the largest flower farm of the world that produces different types of flowers and it covers 65% of the total exports. It is the most important supplier of flower for Europe which is direct sale- long term contract with European market. The other floriculture industries, i.e., Herburg Rose plc, AQ Rose plc, Ziway Rose plc, and Braam rose plc were established following the establishment of Sher Ethiopia plc, and they work with Sher Ethiopia plc by taking greenhouse through lease contract (Kemal, 2016).

2.2. Research Design and Approach

To assess and address the benefit floriculture workers received during employment injury, and make strong evidence-based claims, a mixed approach, combining qualitative and quantitative research methods; including questionnaires, in-depth interview and personal observation was used for this study. This research also used mono-disciplinary legal research because it essentially focuses on legal aspects that regulate benefit of employment injury for floriculture workers. The study analyzed national and international laws that regulate benefit from employment injury of floriculture workers. The study also employed non-doctrinal methodology because the researcher went to the study area to assess and address benefit of employment injury of floriculture workers using data collection methods including questionnaires, in-depth interview and personal observation. Data relevant to the study were collected from both primary and secondary sources. Primary data was mainly collected through questionnaires, in-depth face-to-face interviews with different stakeholder respondents, and personal observation (i.e. participatory and non-participatory). In the process of explicating the theories supporting impact of floriculture industry on safety and health of workers, reliance is made on exposition based on review of related literature. In the process of doing this study, national and international human rights documents, international labour organization convention and the Ethiopian

labour law were consulted. Probability sampling technique was used because each respondent is known, i.e. injured workers, and gave equal chance of being included in the study. From probability sampling, simple random sampling was used to selected respondents for the questionnaires. Accordingly, sixty-five (65) questionnaires were randomly distributed among those workers found in the study area and who have encountered employment injury in five flower farms in order to assess the benefit of employment injury they have been provided. Based on their position and experience in the production process in the farm, interviews with purposefully selected ten (10) seriously injured workers, the concerned company personnel, and experts from Ministry of Labor and Social Affairs (MoLSA), Ethiopian horticulture producers and exporters agency (EHPEA), Ethiopian horticulture development agency (EHDA), Oromia labour and social affairs agency, Batu labour and social affairs bureau were conducted to generate important information. This has helped the researcher to get broad and clear answers on the questions which need more clarification and help him to deeply explore and understand the experience of the participants. The researcher observed the condition of those workers who have encountered grave bodily injury because of the damage sustained while in work. The researcher chose personal observation which is both participatory and non-participatory because he has been living in flower growing area for about eight years, and worked with growers for two years, and this has helped him to get important information which is relevant to the study. Quantitative data were analyzed by using descriptive statistical methods such as summation, averages, and percentages. On the other hand, qualitative data were analyzed and interpreted thematically against the relevant research issue. The laws that regulate benefit of employment injury of floriculture workers and which have been in force were interpreted and discussed broadly.

Table 1. Total number of respondents from all farms

No.	Flower farm	Number of respondents
1	Sher Ethiopia plc	20
2	Herburg Rose plc	10
3	AQ Rose plc	10
4	Ziway Rose plc	15
5	Braam Rose plc	10
	Total	65

Source: Survey, 2018/19

3. Results and Discussion

3.1. The Emergency of Floriculture Industry in the World and Its General Trends

People all over the world realize that flowers enhance the quality of life and influence human feelings more than words or other gifts. Globalization, cultural exchange, and celebrations enhancing fraternity such as New Year, Valentine's Day, Memorial Day, Mothers' day, Fathers' day, Christmas, and Weddings have induced people globally to use flowers as a means of sharing their feelings. Above all, these celebrations have acquired one-to-one pairing with flowers in some cases, e.g. roses to Valentine's Day and carnations to mother's day (Gudeta, 2011/2012). Increased use of flowers and ornamental plants makes marketing of flowers a lucrative business (Belwal and Chala, 2008).

The present day floral industry is a dynamic, global, fast growing industry, which has achieved significant growth rates during the past few decades. Currently, the global trade volume of floral industry is estimated to be worth more than \$100bn per annum and the major consumer markets are Germany (22%), USA (15%), France (10%), UK (10%), Netherlands (9%), Japan (6%), Switzerland (5%) and Italy (5%) in the year of 2014. New production centers stretch from Africa to Asia and Australia. East African countries like Ethiopia, Kenya and Tanzania host important floriculture industries. The Netherlands remain the center of production for the European floral market, as well as a major international supplier to other continents. The flower auction at Aalsmeer is the largest flower

market in the world (Global Flower Trade, 2017). The Netherlands is the world's largest producer of cut flowers and foliage valued at \$3.6bn, followed by Germany and Italy (Hamrick, 2004). Colombia and Ecuador from South America and Israel from Middle East are the major producers of carnations and roses (Gudeta, 2011/2012).

Some countries are both producers as well as consumers (Belwal and Chala, 2008). In Israel, African and Central American countries, cut flowers have been produced mainly for export with no thought of a potential domestic market. On the other hand, in Asia, whereas cut flowers were initially produced for export, the market potential has rapidly changed to include opportunities for supplying to the local market as well. This unique development is on account of the rapid strengthening of economies in the region, high population densities, and the changing consumer's perception towards importance of flowers in their life style. If we take the case of Ethiopia, it is only recently that the mere concept of flowers as a gift emerged. Thus, the domestic market is not yet mature. Notwithstanding, Ethiopia has attracted several foreign investors in exporting cut flowers mainly to European markets in recently (Gudeta, 2011/2012).

3.2. Ethiopia Flower Industry: An Overview of Opportunities and Challenges

The floriculture industry in Ethiopia was started in the early dates of 1980s (Gudeta, 2011/2012). Others date it forward to around 1997, where the first private floriculture companies, Meskel flower and Ethio-flora, started activities in few hectares of land (Mulugeta, 2009; & Mulu and Tetsushi, 2011). But, the rapid development of this sector is originally due to the attempts by several private cut flower farms, which began operation in the early 1990s. The cut flower industry has emerged much more recently, but is now one of Ethiopia's main export sectors. Its export performance is booming from year to year. The endowment of Ethiopia with natural resources in different agro-ecological zones, which are suitable for the cultivation of horticulture product, is a paving factor for the rapid growth of flower industry in the country (Yukichi, Takashi, Aya, and Tomoya, 2010). In addition to this, high level of support by the government, favorable investment laws and incentives, proximity to the global market, efficiency of the transport system, and availability of abundant and cheap labor are other crucial factors for the rapid development and expansion of the industry (Mulugeta, 2009). The flower farms are owned by internationally well-established foreign companies, local investors and a mix of the two. Currently, the flower farms occupy 1426 hectares of land and there are around 84 (50 Foreign Direct Investment [FDI], 10 joint venture and 24 local) active flower farms which make Ethiopia the second largest flower producer and exporter next to Kenya. The destinations of the flower export from Ethiopia are Netherlands (80.3%), and the remaining goes to Germany, Saudi Arabia, Norway, Belgium, United Arab Emirates, Japan, USA, France and Italy (Ethiopia Horticulture Producer and Exporter Association [EHPEA], 2015). The cut flower trade is conceived to be an important means of diversifying the export regime, an additional source of export earnings in Ethiopia. The cut-flower industry in Ethiopia has emerged as one of the biggest sources of foreign exchange in recent years. The horticultural export industry has recorded increasing growth each year, both in value and volume (Ethiopia Horticulture Development Agency [EHDA], 2012). Due to this factor, the revenue secured from the industry has also increased from year to year. In 2014, flower export makes the biggest export share from the fruits and vegetables by generating more than 230m USD and employed more than 50,000 workers [EHPEA], 2015). Young unemployed citizens, women in particular, have been able to take advantage of new employment opportunities arising from the introduction and growth of the cut-flower industry in Ethiopia (Tewodros, 2010).

The flower industry has created 50 to 70 jobs per hectare and it has a big contribution to women empowerment since more than 70% of the workforces are women (Tilahun, 2011). Due to the fact that women within developing countries have some difficulties of having their own job it turns out to be an important source of income and one way of escaping from being dependent on shoulder of their husband or family (Gudeta, 2011/2012). Floriculture is growing at astonishing rate since the turn of millennium and contributing a lot of things to the development of the nation (job creation, foreign

earnings and other economic returns). In Ethiopia the sector is growing by 20% every year making the nation the second largest African exporter of roses (Mulugeta, 2013). But, there are a number of related critiques against the sector by different organs. There are a lot of controversies on the working condition of the workers. Many workers who are employed in the sector are working in poor working conditions. Low wages, employment insecurity, sexual harassment (on females), difficulty of exercising freedom of association and collective bargaining, lack of access to education and training on occupational safety and health, long working hours, inadequate provision of personal protective equipments (PPE) are among those repeatedly criticized regarding floriculture industry (Hanan, 2010; Riisgaard, 2009). The other main criticism and challenges of floriculture industry is its impact on the health of the workers. Because of the intensive utilization of chemicals, pesticides, fungicides and fertilizers, workers are exposed to some occupational injury. The most common pesticides used in flower farming are carbamates, organophosphates and herbicides. These pesticides are considered to be the most toxic group causing acute and chronic poisoning to farm workers who are occupationally exposed to them (Grace, 1997).

Occupational exposure of humans to agrichemicals, especially pesticides is common and results in different health effects, including cancer, skin allergy, lung damage, respiratory failure, male infertility, adverse reproductive and development effects, irregular menstrual flows, miscarriage, headache, fainting, nausea, swelling, rashes, and bodily injury such as loss of sight (Hailemichael, 2013; Grace, 1997).

3.3. An Overview of International and Domestic Laws Governing Workers' Occupational Safety and Health

The International labor organization (here after ILO) occupational safety and health convention, (1981) (No 155), and its accompanying recommendation (No 164), provide for the adoption of a national occupational safety and health policy, as well as describing the actions taken by the governments and within enterprises to promote occupational safety and health, and improve the working environment. The ILO convention is supplemented by the protocol of 2002 to the occupational safety and health convention (No 155) which calls for the establishment and periodic review of requirements and procedures for the recording and notification of occupational accidents and diseases, and for the publication of related annual statistics. ILO convention No 155 covers all branches by which workers are employed, including the public service (Article 3(a), ILO). It is of central importance because it introduces a national policy process in relation to occupational safety and health. Under its Article 4 (1) it urges each member states, the formulation and implementation, and periodically reviews national policy on occupational safety and health, and the working environment. The aim of the policy shall be to prevent accidents and injury to health arising out of, linked with or occurring in the course of the work, by minimizing, so far is reasonably practicable, the cause of hazards inherent in the working environment (Article 4 (2), ILO). Article 11 of ILO convention No. 155 sets out six functions, which the national policy shall cover progressively, to mention some of them:

- The establishment and application of procedures for the notification of occupational accident and disease by the employers;
- The holding of inquiries, where cases of occupational accidents and disease, or any other injuries to health arise in connection to work;
- The publication, annually, of information on occupational accidents, disease and other injuries to health.

Article 16-18 of ILO convention places obligation on the employers to ensure, so far as is reasonably practicable, that the working environment is safe. These obligations include ensuring safe and healthy working place; ensuring chemical, physical and biological substances, and agents under their control are without risk to health when the appropriate measures of protection are taken; providing adequate protective clothing and protective equipment to prevent risk of accidents or

adverse effects on health; and providing for measure to deal with emergencies and accidents, including adequate first-aid arrangements. Adequate arrangements should also be made for compensation of work related injuries and disease, as well as for rehabilitation and to facilitate a prompt return work (Alli, 2008). The labour proclamation 1156/2019 is the principal national legislation on labour issues (ILO, 2009). This proclamation has given special attention to the safety and health of women and young workers (Arts. 87-88, Labour proc. 1156/2019). It is prohibited to employ women on type of work that may be arduous or harmful to their health (Art. 87 (3)). Based on Art 171 (1) (d) of this proclamation, the ministry of labour and social affairs (hereafter MoLSA) has enacted a directive to enlist works that are arduous and dangerous to the health and the reproductive systems of the women workers (Directive, 2005). Under Article 5 of the directive, it has been provided that women should not be engaged in production, handling, packing or use (spraying) of pesticides or chemicals. In addition to these, a woman who works without sitting for a long time and who works in hot and cold areas shall have a special protection of safety and health (Art. 6 of the directive). Convention on the rights of the child Article 24 (1), in which Ethiopia is a party, lays an obligation on state parties to recognize the right of the child to the enjoyment of the highest attainable standard of health (CRC, 1989). In addition, Ethiopia has ratified two child right conventions issued by ILO (minimum age convention, 1973 No. 138, and worst forms of child labour convention, 1999, No. 182) (ILO, 2014/2015). Under article 36 (1) (e) of the Federal Democratic Republic of Ethiopia (FDRE) Constitution, children are entitled to be protected from social or economic exploitation and shall not be employed in or required to perform work that is likely to be hazardous or to interfere with their education or to be harmful to their health or physical, mental, spiritual, moral or social development. A child is any person who is under the age of 18 (ILO, 2014/15). The labour proclamation has recognized the working capacity of the young workers (Art. 89 (1), Labour Proc. 1156/2019) in activities which do not endanger their life or health (Article 89 (3)). MoLSA in pursuant to the duty given under article 89 (4) of the labour proclamation has issued directive on list of activities prohibited to young workers, in 2005 (Directive, 2005). Like women, young workers are not allowed to take part in works, in rooms or store which are too cold and in production, handling, packing or spraying of pesticides or chemicals (Article 5 of the directive). Among other obligations, an employer shall take the following measures to safeguard adequately the health and safety of the workers (Art. 92 Labor Proc. 1156/2019):

- Take appropriate steps to ensure that workers are properly instructed and notified concerning the hazards of their respective occupations; and assign safety officer; and establish an occupational health and safety committee (Art. 92 (2), Labor Proc.);
- Provide workers with protective equipment, clothing and other materials and instruct them of their use (Art. 92 (3), Labor Proc.);
- Register employment accidents and occupational diseases and report same to the labour inspection service (Art. 92 (4), Labor Proc.);
- Arrange, according to the nature of the work, at his own expense for the medical examination of the new employed workers and for those workers engaged in hazardous work, as may be necessary (Art. 92 (5), Labor Proc.);
- Ensure that the work place and premises of the undertaking do not pose threats to the health and safety of workers (Art. 92 (6), Labor Proc.);
- Take appropriate precautions to ensure that all the processes of work in the undertaking shall not be a source or cause of physical, chemical, biological, ergonomical and psychological hazards to the health and safety of the workers (Art. 92 (7), Labor Proc.).

In addition to taking main actions that have been listed above, the employer shall be liable for, all occupational injuries on workers and shall make compensation, except those that are caused intentionally by workers in case of non-obedience to safety instructions, non- observance of accident prevention regulation and injuries caused being intoxicated (Arts. 95-112, Labor Proc.). It classifies

occupational/employment injury into occupational accident¹ and occupational diseases.² When employment injury happens, then the employer will have;

- Special obligation: To provide the injured workers with first aid in time, to carry the injured worker by an appropriate means of transport to the nearest medical center, to notify the occurrence of the injury to the appropriate organ, to pay the funeral expenses where the worker dies as a result of an employment injury (Art. 104, Labor Proc.).
- Medical benefits: The employer shall cover general and specialized medical and surgical care, hospital and pharmaceutical care, any necessary prosthetic or orthopedic appliances (Art. 105, Labor Proc.).
- Cash benefits: Article 107-110 of labour proclamation No. 1156/2019 has also clearly put the cash benefit the worker ought to be provided, i.e. periodic payment during temporarily disablement³; disablement pension or gratuity or compensation where he sustains permanent disablement; and dependents' pension or gratuity or compensation to his dependent where he dies. Where the injury results in temporary disability, namely an injury that prevents the injured employee from rendering service for up to one year, the employee will be entitled to full wage for the first three months, not less than 75% of the monthly wage for the next three months and 50% of the monthly wage for the remaining six months (Article 108 (2) of labour proclamation)); where the injury sustained by the worker is permanent total disablement, a sum equal to five times of his annual wages (Article 109 (4) (a) of labour proclamation); where the injury brings about permanent and total disability or death of the employee their dependents shall be entitled to five years of the employee's wages to be covered by the employer (Article 110 (3) of the labour proclamation No. 1156/2019)).

3.4. Characteristics of the Respondents

The respondents used to work or were working in different farms of the study area had different work categories, positions, work experiences, educational background, age groups, marital status, and sex. In-depth interview with some physicians who renders medical service in the research area and direct personal observations have been used in order to triangulate the data obtained through questionnaires.

The main focus of this section is to assess the benefit of employment injury workers get in case of injury. This section is divided into two. The first part of this section describes the general background of the respondents, and the second section includes different issues including the type of employment injury the workers encountered, the availability of first aid of medication when those employment injuries happen, the type of benefit of employment injury the workers get from their employer, and if they didn't get such benefits, why they could not get benefits.

Out of the 65% sampled workers, the number of male and female respondents was nearly equal (51% and 49% male and female, respectively). The majority (88%) of the respondents were found between the ages of 18-35. Age wise, all the sampled workers were between 18 & 50 years of age. Regarding education, the respondents are categorized under three levels. Among the sampled injured workers, 62% of them attended the primary level, 20% of them have never gone to formal schooling, and the remaining 18% of them have completed the secondary level education. From the injured workers, 38% have been working as sprayers, chemical mixers, storekeepers and supervisors of sprayers; 33% of them were a green house worker which includes harvesting, irrigation workers and

¹ Occupational accident means any organic injury or functional disorder sustained by a worker as a result of any cause extraneous to the injured worker or any effort he makes during or in connection with the performance of his work (See Article 97 of labour proclamation No. 1156/2019).

² Occupation disease means any pathological condition whether caused by physical, chemical or biological agents which arise as consequence of the surroundings in which the worker is obliged to work during a certain period prior to the date when the disease become evident or the type of work performed by the worker (See Article 98 (1) (a) & (b) of labour proclamation No. 1156/2019).

³ Disablement means any employment injury as a consequence of which there is decrease or loss of capacity to work may be categorized into four type's i.e. temporary disablement, permanent partial disablement, permanent total disablement and death (Article 99 of labour proclamation No. 1156/2019).

seeders; 20% and 6% were packing (including grading and arranging) and cold room workers respectively. Concerning their salaries, 60% of the injured workers were paid between ETB 500-1000 per month. In all farms the researcher witnessed that the majority of injured workers were paid ETB 850 per month. The most surprising thing about the disparity of payment among those flower farm workers is that there are some staff who are paid up to ETB 54,000 per month. Also from the in-depth interview, it has been revealed that there are some employees paid up to ETB 25,000 per month at position of public relation officer. This means the farms are largely exploiting the labor force with a very low payment of salary. About 25% of the sampled injured workers; especially workers of Sher Ethiopia plc, were working for more than 8 hours. They are required to avail themselves for work at 6:00 am in the morning and finish their task around 3 o'clock in the afternoon, which is more than the legally required working hour per day (i.e. 8 hours). Such long working hours exposed safety and health of workers to danger.

From the injured workers, the females said that such long working hours prevented them from properly caring for their children.

Case one: The story of a woman who has a four month child

The story is about a 29 year old woman working in a greenhouse. She regularly avail herself for work at 6 am in the morning and go back home at 3:00 pm in the afternoon. She has a fourth month child and is unable to properly feed him because of engagement in duty for long hours. Because of such long working hours, the health of her child was exposed to danger. While she asked to render a six hours service per day for the purpose of looking after her child, the employer gave her a final warning of dismissal.

Table 2. Characteristics of respondents

No.	General information about respondents	Description	Total no. with %	Remark
1	No. of respondents	Male	33 (51%)	
		Female	32 (49%)	
2	Age	< 18	0 (0%)	
		18-35	57 (88%)	
		35-50	8 (12%)	
		> 50	0 (0%)	
3	Marital status	Single	22 (34%)	
		Married	37 (57%)	
		Divorced	2 (3%)	
		Widower/ed	4 (6%)	
4	Educational status of respondents	No formal schooling	14 (22%)	
		Primary level	41 (63%)	
		Secondary level	10 (15%)	
		Diploma	0%	
		Degree	0%	
5	Task (job title)	Sprayer	25 (38%)	Includes sprayers, mixers, controllers of chemicals
		Green house	21 (33%)	Includes harvesters, seeders, sowers and others
		Packing	13 (20%)	Includes packers, graders, arrangers, and others
		Cold room	4 (6%)	
		Others	2 (3%)	Includes maintenance, construction and installation workers
6	Work experience	< 1 year	12 (8%)	
		1-5 year	39 (60%)	
		> 5 year	14 (22%)	
7	How much do you earn/you were earning from your current employer per month?	ETB 500-1000	39 (60%)	
		ETB 1001-2000	22 (34%)	
		ETB > 2000	4 (6%)	
8	How many hours do you have to work/used to work per day?	< 8 hrs	23 (35%)	
		8 hrs	26 (40%)	
		> 8 hrs	16 (25%)	

Source: Survey, 2018/19

3.5. Types of Employment Injury and the Treatments Thereof

The floriculture sector is blamed for its negative impact on the worker's health. Because of the intensive utilizations of chemicals, pesticides, fungicides and fertilizers, workers are exposed to some occupational injuries. In the study (as indicated in Table 3), over 22% of respondents indicated that they have faced a respiratory problem due to their job. In the interview, they reported that they suffered from respiratory problems associated with their lung, throat and nose. They revealed that they face difficulty to breathe most of the time. They were unable to inhale and exhale when they sniff the chemical at the work place, and because of these problems they were frequently forced to be absent from work. The effect of the chemical and pesticide further worsened in making workers to become unconscious for some time. From the total respondents, 12% of them have such health

problems at work place. The majority of the respondents revealed that they encountered skin allergy/infection because of their daily contact with chemicals and due to failure of employer to provide regularly personal protective equipment.

The researcher's observation also confirmed that these workers have faced skin related health problems on their body parts like elbow, face, and neck areas. As it has been indicated, 11% of female respondents said that they have experienced miscarriage. About 14% of the respondents, majority of them from the spray unit, have lost either one or two of their eyes. The remaining 15% of respondents have encountered different types of work injuries like loss of fingers and broken limbs, and these workers were from the section of maintenance, construction and installation of green house. An interview conducted with some physicians who run their own clinic in the study area revealed that these floriculture workers sometimes visit their clinic for treatment. The majority of the workers, as indicated in the focus group discussion, did not have trust in the medical service provided by the farm. They said that the farm clinic/hospital, instead of undertaking proper medical investigation, took the cases very simple and prescribed anti pains and instructed them to go back to work. That is why workers with such problems were forced to visit private health centers. Physicians of private clinics said that flower farm workers, who usually came, were mostly affected with respiratory disease and skin allergy. They said that such type of health problem is more prevalent on flower workers than on the others in the surrounding community. They strongly believe that the disease and the working environment have a direct cause-effect relationship.

With respect to treatment of employment injuries, the workers were asked whether they got first aid, to which 42% of them responded positively. The researcher personally observed that all farms have mini clinics to treat employment injuries. Sher Ethiopia plc, for example, has its own hospital which renders a medical service to its workers and the surrounding community at large. Such type of activity can be exemplary to other farms which are found outside the study area. But, 18% of respondents indicated that they did not have any medical first aid when they encountered employment injury due to the employers' negligence. From the response of respondents, the type of employment injuries that immediately happened at work place are respiratory problems, fainting, loss of sight and other bodily injuries.

Table 3. Types of employment injury and treatments

No.	Questions for respondents	Types of injury and response of respondents	Total no. with %	Remarks
1	What type of employment injury you encountered?	Skin allergy Respiratory Fainting Miscarriage Loss of sight Others	17 (26%) 14 (22%) 8 (12%) 7 (11%) 9 (14%) 10 (15%)	Others mean those who lost fingers, bodily injuries like broken legs and hands.
2	If the injury happened at work place, have you been provided with first aid medical service?	Yes No Don't know No response	27 (42%) 12 (18%) 9 (14%) 17 (26%)	

Source: Survey, 2018/19

Case two: The story of a respondent who lost his eyes by chemicals

The story is about a 32 year old sprayer from Sher Ethiopia farm plc. He is married and has one daughter. The employment injury happened three years ago while he was mixing a chemical. He said

that while mixing a chemical, a tiny amount of chemical accidentally entered his eyes. Immediately, he started yelling for help to his colleagues who were working with him. He remembers that he could not see anything at that moment and he felt a serious burning sensation in his eye in a way he never experienced before. Then after, his colleagues took him to Sher Ethiopia hospital, and having first aid there, he was transferred to Betezata hospital and finally transferred to Menelik hospital. Unfortunately, the diagnosis he took could not bring back his eye sight. He lost both of his sight and now assisted by his younger brother. When he was asked why he failed to wear facemask, he said that he was provided with only respirator, boots and spray suits at the time of injury. He said that the employer dismissed him after covering his medical expenses. The employer tried to convince me of that the injury was not employment injury. Even, the employer did not want to see me around Batu in fear of his good name defamed. Right now, he is trying to reach Ethiopian Human Right Commission and Institution of the Ombudsman in search of legal assistance.

3.6. The Types of Benefits of Employment Injury Obtained

When workers faced any employment injury, they were entitled to the following benefits based on the degree of their disablement, i.e. medical benefits, cash benefits, both medical and cash benefits, or the funeral expenses, if the workers die (Arts. 104/5, Labor Proc.).

From the sample injured workers, 41 (63%) of them indicated that they did not have medical or cash benefits. But, 23 (35%) of the respondents said that they received either medical/cash or both medical and cash benefits. Only 2% of the respondents have got no awareness about the benefit. From the total number of respondents (i.e. 23) who replied that they received benefit of employment injury, 18 (78%) received only medical benefit, 2 (9%) of them received only cash benefits and 3 (13%) of them received both medical and cash benefits. The result clearly shows that the farms are willing to offer medical benefits which are rendered only by their clinics. The respondents said that employers pay cash benefits after law suit before courts of law and this happens rarely.

From the 65 respondents, 41 (63%) of them said that they have not got any benefit of employment injury. These respondents were asked whether they took their case before courts of law. About 21 (52%) of them responded that they failed to take their case before courts of law. They have raised a number of problems for their failure to sue before courts of law. First, they said that they have no trust on the judiciary because it is the farm that fully funded for the construction of courts building, and this is what the researcher proved personally from certificate of recognition granted by Adami Tullu Woreda Court to Sher Ethiopia plc. The researcher does not criticize such support by business firms which affects the interest of public at large. Though, it eroded peoples' trust over the judiciary. Secondly, the respondents said that the legal procedures to prove employment injury, degree of disablement and others are very cumbersome and complex. For example, when they are required to produce either personal or real medical evidence, the personal witnesses are their colleagues and they are not willing to testify because of fear of being fired from work immediately by farms. As a result of this, it is difficult to produce evidences before courts of law. From the total of 41 respondents, only 16 (39%) of them brought their cases before court, but the main problem is that the farm has competent attorney who wins the case against them. Majority of the files which the researcher personally discovered were decided in favor of the floriculture farms. Even, the injured workers required to refund the loss the farm incurred in the course of the proceeding. Thirdly, the respondents said that it was difficult to produce medical evidences because the hospitals were in distance from the farm. That means, because it was difficult to afford transportation costs to visit them repeatedly as the hospitals have complex bureaucracy to give medical evidence.

Table 4. Types of benefits of employment injury

No.	Questions for respondents	Types of benefits and response of respondents	Total no. with %	Remark
1	Have you got any benefit of employment injury?	Yes No Don't know No response	23 (35%) 41 (63%) 1 (2%) 0%	
2	If your response is "yes" for question no. 1, what type of benefit you got from the employer?	Only medical benefit Only cash benefit Both medical & cash benefit Other	18 (78%) 2 (9%) 3 (13%) 0%	
3	If your response is "no" for question no. 1, have you tried to sue the employer?	Yes No Don't know No response	16 (3%) 21 (52%) 4 (10%) 0%	

Source: Survey, 2018/19

Case three: The respondent who lost his three fingers

This is a 26 years old worker from Herburg flower plc. The injured said that while assisting driver of tractor used to plough land for seed flower. While checking the problem of a stacked tractor a sharp metal felon his three fingers and cut them. After receiving the first aid medical treatment, the injured was taken to Sher hospital. After having the medical aid the physician managed to stop the bleeding even if it was painful. After recovery from his pain with permanent partial disability, the injured was ordered by the employer to return to his previous position without compensation. The injured worker asked why he failed to institute law suit against the employer before court of law for compensation. The victim responded as he was ignorant of such law and institution that authorize compensation payment.

3.7. Response of Employers as to Benefits of Employment Injury

Some relevant questions used to assess the condition of benefit of employment injury were addressed to the employer.

The researcher asked the employers whether the employees experienced any employment injury. The employers responded that they experienced both minor and major injury. The employers said that the industry has a system of reporting and notifying any employment injury and the data of injury are collected, recorded, organized and utilized for different purposes. The employers said that they provide workers who sustained employment injury with compensation. The researcher asked the employers to produce the statistics of compensated injured workers to cross-check what they said and to learn the provision of benefit for those injured workers. Unfortunately, none of the employers could provide the statistics. Probably, this was either deliberate refusal or due to the absence of the documents/recording system. The employers were asked whether they have been sued by their employees to get compensated for injuries they incurred. Majority of the employers said that they were not sued before any court for compensation. Instead, the employers said that they have been before court mostly for termination of employment contract with their employees. That means, the employers said that they are providing medical assistance or compensation or both to their injured employees. But, the result of response from respondents, interview, focus group discussion and personal observation shows the employers' failure to discharge their legal obligations.

Generally, the employers indicated that they are much concerned about safety and health of their workers. In addition, they promised to give hand to the maximum of their resources in case there is employment injury. The employers added that they are accepting views, suggestions, and comments

of their employees as to how to promote and develop occupational safety and health care service for workers. They also promised to accept complaint of any workers with regard to the issue of benefit for employment injury.

4. Conclusion

Floriculture sector is one of the newly emerging industries in Ethiopia, but it is booming from time to time and it made Ethiopia to be ranked the second largest rose producer in Africa. The industry has a vital role in creating employment opportunities, earning foreign currency, expansion of infrastructure and others.

Despite these advantages, there are critics with respect to the effect of the industry on the working conditions of the workers. There is high chance of workers exposure to chemicals and pesticides. The workers not follow safety instructions because there were no instructions from their employers, and they were not regularly informed about health risks and the necessary precautionary measures they should take at time of handling or using chemicals or pesticides. The inadequacy and sometimes lack of personal protective equipment with their replacement irregularity were also other problems of the workers. The workers do not regularly use personal protective equipment, even if they are provided with the equipments, and sometimes failed to use it due to the presence of high temperature in the area and lack of knowledge as to the effect of its disuse on their safety and health. The absences of regular and proper medical checkups for the employees were their common problem. Absence of training on how to use/handle chemicals or pesticides, and proper utilization of personal protective equipment were other safety and health problems revealed by the study. The cumulative effects of all these exposed workers to different type of safety and health problems as addressed above.

With respect to benefit of employment injury, this study indicated that it was challenging for the injured workers to maintain their rights. Unequal bargaining power between the employers and the workers was the challenge for getting compensated. The employers have qualified lawyers who can win cases against the injured workers. In addition loss of confidence by the injured workers over the judiciary was another challenge for getting compensated.

The employers/farms are not concerned about health and safety of workers, and do not adhere themselves to the laws and code of practice made to safeguard the rights of their workers. Employers/farms seldom report occurrence of employment injury to concerned body and they do not work as required by law. On top of that, the government failed to fulfil its obligations to protect its citizens from violation of their safety and health rights by farms. Due to this, the workers' right to health and benefit of employment injury is in danger.

5. Recommendations

Any development or civilization should not be attained at the cost of the rights of the citizens. Even, the weakness of the floriculture sector may hamper the future growth of the sector if it is not quickly addressed. Because of the wide range of deficit, no single initiative may effectively and efficiently solve the problems workers experienced in the floriculture with respect to right to health and benefit of employment injury. Based on the findings of the study, the following actions should be taken in order to safeguard benefit of employment injury.

As a matter of urgency, the government shall intervene and investigate the working conditions of those flower workers, and shall enforce relevant international, regional and domestic laws to safeguard benefit of employment injury.

The provision of personal protective equipment (PPE) with the necessary quality and its regular replacement should be provided by the employers to the employees.

Proper training on how to use/handle pesticides/chemicals, and training on how to use the PPE shall be provided by the employers to the employees.

Regular medical checkup should be provided by the employers to the employees within provided period of time to maintain the wellbeing of workers.

The workers should be aware or made to know their fundamental rights in relation to working conditions that help them to exercise their right without expecting help from external bodies.

Nongovernmental organizations should take active role of creating awareness on occupational safety and health to the workers and further advocate for those who have incurred employment injury.

Furthermore, researches on benefit of employment injury of floriculture workers on flower farms found in other areas are recommended for having due insight into the issue.

6. References

- Alli, Benjamin. 2008. Fundamental principles of occupational safety and health, 2nd edition. International Labor Office, Geneva.
- Atkur, D. 2011. Assessment on occupational induced health problems in floriculture workers in west Shewa, Oromia, Ethiopia. Addis Ababa University.
- Belwal, R. and Chala, M. 2008. Catalyst and barriers to cut flower export: A case study of Ethiopian floriculture industry. *International Journal of Emerging Markets*, 3 (2): 217-220.
- Council of Ministers Regulation No. 207/2011. Code of practice of the floriculture sector, Federal Negarit Gazeta, 17th year, No. 74.
- DBpedia Association. 2016. Batu town. (<https://dbpedia.org/resource/Ziway>). (Accessed on November 20, 2017).
- Ethiopia Horticulture Development Agency (EHDA). 2012. Ethiopian horticulture sector bulletin, Issue 01. PP. 7-15.
- Ethiopia Horticulture Producer and Exporter Association (EHPEA). 2015. Code of practice for sustainable flower production, version 4.0. PP 3-15.
- Federal Democratic Republic of Ethiopia Constitution, Proclamation No. 1/1995, Federal Negarit Gazeta, 1st year, No. 1.
- Federal Democratic Republic of Ethiopia Labor Law, Proclamation No. 1156/2019, Federal Negarit Gazeta, 25th year, No. 89.
- Federal Democratic Republic of Ethiopia Pesticides Registration and Control, Proclamation No. 674/2010, Federal Negarit Gazeta, 16th year, No. 52.
- Federal Democratic Republic of Ethiopia Public Health, Proclamation No. 200/2002, Federal Negarit Gazeta, 6th year, No. 28.
- Gebreeysus and Iizuka. 2012. Discovery of flower industry in Ethiopia: Experimentation and coordination.
- Gezmu, A. B. 2013. The human impacts of flower farm development in the Ethiopia rift valley region. PhD Thesis, University College Cork.
- Global Flower Trade. 2016. Global trade volume of floral industry. (<http://africanbusinessmagazine.com>). (Accessed on February 1, 2017).
- Godfrey, M. Musila. 2006. The right to an effective remedy under the African charter on human and people's rights. *African Human Rights Law Journal*, 6 (2): 466-70.
- Grace, J. A. 1997. *Occupational pesticide exposure among Kenyan agriculture workers*, Utrecht Oct.
- Gudeta. T. 2011/12. *Socio economic and environmental impact of floriculture industry in Ethiopia*.
- Hailemichael, Daniel. 2013. *Evaluation and development of floriculture supply chain in Ethiopia, to attenuate environmental impact and logistics cost*. Addis Ababa University (AAU).
- Hamrick, D. 2004. Can Dutch roses survive. *Folra Culture International*, 6 (8): 6-7.
- Hanan, A. 2010. Developing strategies for change for women workers in African horticulture: The case of Ethiopia, NFFPFATU/ study report, Addis Ababa.
- International Covenant on Economic, Social and Cultural Rights (ICESCR) General Comment 14. 2000. The right to highest attainable standard of health (Article 12).
- International Labor Office (ILO). 1981. Building a preventive safety and health culture, a guide to the occupational safety and health convention No 155 (1981), its 2002 Protocol and the

- Promotional Framework for occupational safety and health convention No. 187 (2006), Geneva, 2008.
- International Labor Organization (ILO). 1981. Occupational safety and health convention No. 155/1981.
- _____. 2009. Technical Memorandum: Ethiopia labour inspection audit, labour administration and inspection programme, Geneva.
- _____. 2014/15. Decent country work programme, Ethiopia.
- Kemal, J. 2016. Sher Ethiopia plc. Investment and public benefit. PP. 3-15.
- Ministry of Health of the Federal Democratic Republic of Ethiopia. 2014. National occupational safety and health policy and strategy, Addis Ababa.
- Ministry of Labour and Social Affairs of the Federal Democratic Republic of Ethiopia. 2005. Directive on works that are arduous or dangerous to the health and to the reproductive systems of women workers, Federal Democratic Republic of Ethiopia, Addis Ababa.
- _____. 2005. Directive on list of activities prohibited to young workers. Addis Ababa.
- _____. 2005. Directive on works that are arduous or dangerous to the health and to the reproductive systems of women workers, Addis Ababa. (Since the directive is available in Amharic, the translation is made personally).
- _____. 2008. Occupational safety and health directive, Federal Democratic Republic of Ethiopia, Addis Ababa.
- Mohammed, Dagnachew. 2004. Assessment of occupational health risks, outcomes and associated factors among floriculture farm workers, East Shewa, Oromia Region. BSc thesis, Addis Ababa University Institutional Repository.
- Mulu, G. and Tetsushi, S. 2011. Global value chains and market formation process in emerging export activity: Evidence from Ethiopia flower industry. GRIPS discussion papers 11-13, National Graduate Institute for Policy Studies.
- Mulugeta, G. 2009. Ethiopia floriculture and its impact on the environment: Regulation, supervision and compliance. *Mizan Law Review*, 3 (2): 240-270.
- _____. 2013. Defiance of environmental governance: Environmental impact assessment in Ethiopia floriculture industry. *E3 Journal of Environmental Research and Management*, 4 (4): 219-229.
- National Association of Professional Environmentalists (NAPEA) in cooperation with financial support from the Swedish Society for Nature Conservation (SSNC). 2021. The impact of the flower industry on environment and people's livelihood in Uganda.
- Riisgaard, L. 2009. How market for standards shapes competition in market for goods: Sustainability standards in flower industry, DIIS working paper, Copenhagen.
- Shay Shone Consultancy. 2015. Hands-on investment guide, Oromia regional state Ethiopia. Horticulture floriculture and dairy (published and commissioned by Embassy of the Kingdom of the Netherlands, Addis Ababa).
- Smith, M., Bhaskar, V., Fernandez, J. and Courey, A. J. 2004. Drosophila Ulp, a nuclear pore-associated SUMO protease, prevents accumulation of cytoplasmic SUMO conjugates. *Journal of Biological Chemistry*, 279 (42): 43805-43814.
- Tewodros, W. N. 2010. Promoting workers' right in the African horticulture: Labor condition in the Ethiopian horticulture industry. Study report, Addis Ababa.
- Tilahun, Abayneh. 2013. Environmental impacts of floriculture industry in [Bishoftu] town: A need for strategic environmental assessment. Ethiopian Institute of Architecture, Building Construction and City Development (EiABC), Addis Ababa University, Faculty of Technology.
- Tilahun, Abiy. 2011. Toxication in bits flower industry threatens right to water in Ethiopia cut-flower production practices, the sectors socio-economic contribution and environmental standards.

- Ethiopian Institute of Architecture, Building Construction and City Development (EiABC), Addis Ababa University, Faculty of Technology.
- UN General Assembly Resolution. 1996. International Covenant on Civil and Political Rights, G.A. Res. 1996, 2200A (XXI), U.N. GAOR, 21st Sess., Supp. No. 16, at 49, U.N. Doc A/6316.
- UN General Assembly Resolution. 1996. International Covenant on Economic, Social and Cultural Rights, G.A. Res. 1996, 22001 (XXI), U.N. GAOR, 21st Sess., Supp. No. 16, U.N. Doc A/6316, 993 U.N.T.S. 3.
- United Nations (UN). 1989. Convention on the rights of the child, General Assembly, Res. 44/25, 44 U.N. GAOR, supp No. 49, U. N. Doc. A/44/736.
- Yukichi, M., Takashi, Y., Aya, S., and Tomoya, M. 2010. Local and personal networks in employment and the development of labor markets: Evidence from the cut flower industry in Ethiopia, National Graduate Institute for Policy Studies.

