



Cut Flower Production, Social and Environment Standards in Zambia

By
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A Research Study

**Cut Flower Production and Social and
Environmental Standards in Zambia**

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Foreword

Zambia has excellent potential for development in the agricultural sector, being well endowed with good soils (60 million hectares good arable land, of which only 15% is in use), ample surface and underground water, climatic conditions suited to a wide variety of crops including wheat, soya, bean, coffee, cotton, tobacco, sugar, paprika etc.

Floriculture is one of the fastest growing export industries in Zambia. The cut flower industry in Zambia has therefore become a significant contributor to the national economy as well as a key means of linking the poor to the global product markets. Young workers and women in particular have been able to capitalise on new labour market opportunities arising from the growth of the cut flower industry in Zambia. However, cut flower production has not been without its problems in Zambia. A growing concern, however, relates to the perceived poor labour conditions in cut flower production in Zambia. Partial assessments suggest, among others, that working conditions are often not good: many workers fear for their health because they are exposed daily to pesticides; written contracts hardly exist; trade unions are not always welcome at farms; the wages are not sufficient to meet daily needs of a worker and her family and female workers have often to cope with sexual harassment. If this is true, then it raises concern as to how clean the flowers produced are given that their production is done in environments that compromise the levels of internationally accepted social and environmental standards. On the global level, a response to this rather dark side of cut-flower production has been a growing emphasis being put on social and environmental aspects of production.

It is with this background in mind, that Friedrich Ebert Stiftung embarked on this project to carry out the study and get some concrete information concerning the cut flower industry and in turn for the Trade Unions to come up with action plans on how to respond to the challenges in the cut flower industry in Zambia. Friedrich Ebert Stiftung is very grateful to the author of the study, trade union Researcher Grayson Koyi, to have contributed to a deeper analysis of the cut flower sector in Zambia.

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Acronyms and Abbreviations

COLEAP	Comité de Liason Europe-Afrique-Caribe-Pacifique
CSO	Central Statistics Office
EBZ	Export Board of Zambia
ECZ	Environmental Council of Zambia
ETI	Ethical Training Initiative
ICC	International Code of Conduct for Flower Producers
ILO	International Labour Organisation
JIC	Joint Industrial Council
MPS	Milieu Project Sierteelt
NRI	Natural Resource Institute
NTE	Non-Traditional Export
NUPAW	National Union of Plantation and Agricultural Workers
NZTT	Natural Resource Development College/Zambia Export Growers Association Training Trust
SADC	Southern Africa Development Community
ZEGA	Zambia Export Growers Association
ZFEA	Zambia Farm Employers' Association
ZNFU	Zambia National Farmers Union

1.0 Introduction

1.1 Background Information

Floriculture is one of the fastest growing export industries in Zambia. The industry was dormant until the late 1980s at which time the Zambian Government began to liberalise the economy, giving capacity to private entrepreneurs and easing import and export restrictions. It was during the same period that the Government embarked on a serious diversification from reliance on copper and other minerals to what is popularly known as Non-Traditional Exports (NTEs), cut flowers included. Today, cut-flower trade is an important means of increasing export earnings and employment in Zambia. According to the Export Board of Zambia (EBZ), the industry has grown from exports of just US \$8 million in 1993/4 to about US\$ 32 million in 2005 (EBZ, 2006:). The industry directly employs well over 12,000 workers.

The Cut-flower industry in Zambia has therefore become a significant contributor to the national economy as well as a key means of linking the poor to the global product markets. Young workers and women in particular have been able to capitalise on new labour market opportunities arising from the growth of the cut-flower industry in Zambia. However, cut flower production has not been without its problems in Zambia. First, as in many other African countries, Zambia lacks a supportive home market. Second, after spectacular growth in the 1990s, there has been a setback in recent years with major disadvantages being the high airfreight tariffs because of small quantities exported at one time and the lack of well-trained manpower (Sikazwe, 2004).

A growing concern, however, relates to the perceived poor labour conditions in cut flower production in Zambia. Partial assessments suggest, among others, that working conditions are often not good: many workers fear for their health because they are daily exposed to pesticides; written contracts hardly exist; trade unions are not always welcome at farms; the wages are not sufficient to meet daily needs of a worker and her family and female workers have often to cope with sexual harassment. If this is true, then it raises concern as to how clean the flowers produced are given that their production is done in environments that compromise the levels of internationally accepted social and environmental standards. On the global level, a response to this rather dark side of cut-flower production has been a growing emphasis being put on social and environmental aspects of production. As Vainola writes, “consumers are becoming increasingly and socially conscious of unsafe production techniques. They want to buy products from responsible growers with respect for the environment and workforce” (2004:3).

In the face of this, supply chains in which flower producers operate are increasingly characterised by ‘codes of conduct’. Codes set out what is expected of the producer in terms of quality and safety of the product, the environmental impacts of production, and/or the social conditions under which cut flowers are produced (NRI, 2004:5). Within this context, one of the strategies that has been proposed in recent years to address such concerns and to promote increased respect for workers’ rights and health is certification linked to voluntary codes of conduct.

1.2 Objectives of Study

Understanding cut-flower production in Zambia, therefore, requires several layers of analysis.

Following along these lines, this study's objectives were as follows:

- i) To examine the importance of the cut flower sector in Zambia.
- ii) To examine the nature of employment and labour conditions in the cut-flower sector in Zambia.
- iii) To examine the consequences of cut-flower production on the social situation of women workers in Zambia.
- iv) To examine the environmental impact of cut-flower production in Zambia
- v) To examine the role, influence and acceptability of international codes of conduct (ICC) and flower certification programmes in Zambia, and
- vi) To identify what sort of actions or programmes might government, employers and trade unions undertake to ensure that cut-flower production and trade contributes to the national economy without compromising the levels of internationally accepted social and environmental standards.

1.3 Guiding Questions of Study

On this basis the following questions guided the study's analysis:

- i) How important is the cut-flower sector to the Zambian economy?
- ii) What are the specific features of employment and labour conditions in the cut-flower industry in Zambia?
- iii) What have been the consequences of cut-flower production on the social situation of women?
- iv) What has been the environmental impact of cut-flower production in Zambia?
- v) To what extent are international codes of conduct (ICC) and flower labelling programmes influencing the conditions under which cut flowers are produced in Zambia? How acceptable are they locally?
- vi) What sort of actions or programmes might government, employers and trade unions undertake for the way forward to ensure that cut-flower production and trade contributes to the national economy without compromising the levels of internationally accepted social and environmental standards?

By using this multidimensional approach, this report documents what we know and do not know about the impacts of cut-flower production on the national economy and on social and environmental standards. It is also hoped that the report can hopefully be used in subsequent labour training programmes to educate workers about their rights and issues directly related to their work in the production of cut flowers. In so doing, the study agrees with Dolan and Sorby (2004:4) that, "negative repercussions can be alleviated through effective worker training, as well as the enforcement of national and international labour protections and codes of conduct".

1.4 Methodology and Data Collection

The study used the inductive method of analysis. Inductive analysis begins with specific observations and builds towards general patterns (Moonilal, 1998:11).¹ The study was mostly qualitative, and both primary and secondary data was used. On this basis, data collection involved both a review of important documents that shed light on cut flower production in Zambia and interviews with selected workers, trade unionists and management. The review was both general and specific to

¹ Inductive method is a contrast to the hypothetical-deductive approach, which requires the specification of the main variables and the statement of specific research hypothesis before data collection (Moonilal, 1998:11).

the cut flower industry in Zambia. The sources of the secondary data included: related books, articles, journals, pieces of legislation, policy documents, published and unpublished papers and documents from the libraries and the Internet.

1.5 Scope and Limitation of Study

Admittedly, a comprehensive study into cut flower production and social and environmental standards is a mammoth task requiring time and resources beyond what is currently available. This study was restricted to analysing aspects of cut flower production that have a direct bearing on the social and economic well being of workers and the environment. The study was not without limitations, however. First, even though the study was on a national scale, it was to be done in a space of two months, introducing a practical difficulty of data collection. Second, at the time the study was being undertaken there was a poor relationship between Zambia Export Growers Association (ZEGA) and the National Union of Plantation and Agriculture Workers (NUPAW) whereby ZEGA viewed the information being collected during the research as aimed at discrediting it in the export markets.² This was because not too long ago some union officials who had travelled to Europe had accused ZEGA of failing to observe internationally accepted social and environmental standards in the production of cut flowers. This accusation, however, did not go down very well with ZEGA. Thus, this friction complicated data collection. Even with these limitations, however, the study offers some very useful insights into cut flower production that can inform critical debates on the subject as well as advise sustainable strategies for workers education and training in the future.

1.6 Organisation of Study

The remainder of this report is organised as follows: The next section provides economic information demonstrating the importance of the cut flower sector in Zambia. Section three focuses on the nature and features of employment in the cut flower sector in Zambia. In section four, a gendered discussion is undertaken, focusing on consequences of cut flower production on the social situation of women. Section five discusses the environmental impact of cut flower production. Section six discusses International codes of conduct and the Flower Label Programme and evaluates their use and application in the cut-flower industry in Zambia. The last section concludes the study and recommends some possible actions for the way forward.

2.0 The Zambian Economy and Cut-flower Production

2.1 Macroeconomic Data

Zambia is listed as one of the poorest countries in the world. With a population of 11 million and a per capita Gross Domestic Product (GDP) of about US\$ 421, Zambia is a country in political and economic transition. Its economic performance has been largely chequered, beginning with

² The existence of a poor relationship was apparent during interviews conducted separately with both union officials and representatives of management. A recent study by Nakaponda (2006) also confirms the existence of this friction. The actual reaction of European flower importers to the information supplied by the Union officials while in Europe, however, could not be verified with absolute certainty. Nonetheless, management sources claimed there was a 'blacklisting' of flower exporters belonging to ZEGA.

modestly high growth rates and fairly rapid general development between 1964 and around 1972, but sliding into low growth thereafter. The period between 1974 and 2000 was characterised by low growth, rising poverty and major economic reforms. Between 2001 and 2005, however, Zambia witnessed some relatively sustained positive growth rates. Table 1 summarises Zambia macroeconomic data for the period 1980 to 2005 while figure 1 captures Zambia economic growth performance using GDP growth rates and inflation for the period 1993 to 2006.

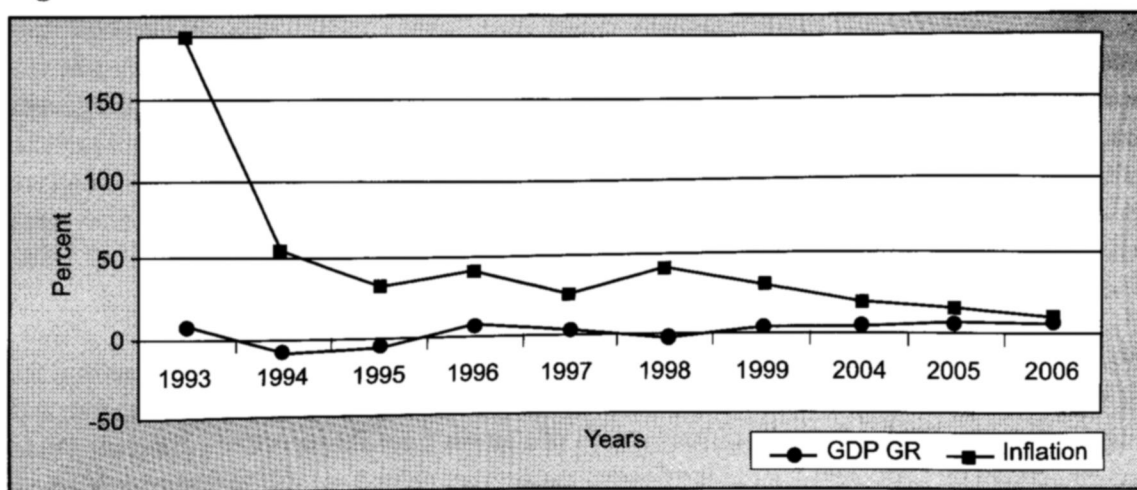
Table 1: Basic Economic Indicators, 1980 -2005

	1980	1981-1990	1991-2000	2001-2003	2005
GDP (mn'US\$)	3,350.05	3,544.3	3,736.8	4,439.5	**
GDP/Per Capita (US\$)	583.9	522.2	413.3	414.7	421.0
Inflation (%)	11.6	50.9	68.8	20.5	15.9
External Debt/GDP (%)	84.1	191.4	204.1	173.7	146.0
FSE/TLF (%)	23.4	25.0	12.9	8.8	8.1

FSE = Formal Sector Employment; TFL = Total Labour Force

Source: CSO 2005

Figure 1: Trends in GDP Growth and Inflation, 1993 - 2006



Source: author

A notable feature of Zambia's growth performance has been the changing nature of its source. While mining has predominantly been the prime mover of economic growth in Zambia, recent efforts at fostering diversification have seen Non-Traditional Exports (NTEs) assume increasing significance in the national economy. Table 2 depicts non-traditional export earning by sector between 2004 and 2005, cut flower included. This all points to the growing importance of cut flower production in enhancing export revenues for the national economy.

Table 2: Non-Traditional Exports by Sub-Sector (US \$ millions), 2004 and 2005

	2004	2005	% Change 2004/2005
Copper Wire	60.1	106.5	77.1
Whiter Spoon Sugar	33.4	67.7	102.7
Burley Tobacco	39.4	60.2	52.5
Cotton Lint	51.4	55.9	8.6
Electrical cables	32.7	48.5	48.3
Fresh Flowers	25.5	32.1	25.8
Cotton yarn	23.9	24.1	0.7
Fresh Fruit Vegetables	23.2	21.3	(8.2)
Gemstones	16.2	19.5	20.3
Gas oil/Petroleum oil	24.3	9.8	(59.7)
Other	126.8	92.2	(37.5)
Total	457.0	538.0	17.7

Source: Economic Report 2005(2006:28)

2.2 Type of Flowers, Cultivated Area and Annual Production

In terms of the type of flower varieties grown, Zambia's cut flower industry is dominated by the production of roses which account for 95 percent of the industry while the other 5 percent covers summer flowers such as atriplex, amaranthus, *ammi majus*, euphoria, hypericum, bupleurium and rudbeckia. The area currently under flower production in Zambia is 195 hectares with rose flowers taking up 145 hectares (Wijnands, 2005:58). In the 2001/2002 season almost 10,000 tonnes were exported and in the 2004 season, over 40,000 tonnes of fresh produce were exported (SADC Trade Brief, 2005:30).

The major markets for cut flowers include Europe with the European Union (EU) accounting for the biggest proportion. Within the European Union, Netherlands, Germany, United Kingdom and Italy stand out to be the major final destinations of Zambia's cut flowers (CSO, External Trade bulletin, 2004:11). Thus, almost all of the flowers and flower products are sold to European Markets with Dutch auctions taking up more than 98 percent of the roses, especially in the European Winter when local production ceases. Sixty varieties of roses are grown in Zambia, among them Arifa, Astra, Baronesse, Blue Curiosa, Calibra, Chelsea, Circus, Cream Prophtya, Dani, Dream Duo Unique, Enigma, Escada, Fashion and Femma (ZEGA, 2006; Sikazwe, 2004).

2.3 Employment

Estimates of employment in the cut flower sector vary.³ However, recent statistics suggest that direct employment in the sector is at over 12,000 (Wijnands, 2005:58; Sikazwe, 2004). Evidence suggests that women occupy between 50 and 65 percent of the employment in this industry. The rise in women's participation in the floriculture sector does, of course, raise important questions

³ Exact figures are difficult to obtain given the lack of official statistics, therefore the figures given here are estimates.

for gender and employment in the sector. The recognition that gender equality is a development objective in itself, as well as a means for furthering poverty reduction and economic growth, should therefore be acknowledged and, gender assessments made standard practice in the design and implementation of projects in cut flower production.

In terms of the nature of employment, estimates suggest that between 60 and 74 percent of the workers in the industry is either on temporal or seasonal employment contracts – as captured in table 3 below. It is the case, however, that much of the work being undertaken is of a permanent nature and not necessarily seasonal.

Table 3: Estimates of Employment in the Cut flower sector in Zambia

	Total Employment	% of Temporary or seasonal	% of female
Zambian Flowers	12,000	60-74	50-65

Source: Barrientos, Dolan and Tallontire (2001: 8); Wijnands (2005:58);

2.4 Value of Cut-flower Exports

Concerning the value of exports, the Central Statistics Office reports that floriculture is among the recent and potential sub-sectors of Zambia's economy whose receipts from exports have substantially increased over the years (CSO, External Trade Statistics Bulletin, 2004:11). In this respect, the Export Board of Zambia reports that the value of cut flower exports has been steadily increasing since the mid-1990s, rising from about US\$ 13.5 million in 1995 to about US\$ 42.6 million in 1999 before dipping to about US\$ 26 million in 2004 and rising to US\$ 32 million in 2005. Table 4 illustrates the trend in the performance of cut-flower exports between 1995 and 2005.

Table 4: Value of Cut flower Exports (US \$ millions), 1995 - 2005

Year	Value of Exports (US\$ millions)
1995	13.5
1996	18.3
1997	21.2
1998	32.8
1999	42.7
2000	33.9
2001	34.0
2004	26.8
2005	32.0

Source: EBZ, Annual Export Audit Report (2005).

From Table 4, it can also be seen that after spectacular growth in the 1990s, there has been a set-back in recent years. However, the value of cut flower exports still remain significant to the national economy, especially when seen in the light that only about ten years ago cut flower exports were valued at only US \$13 million but now stand at US\$32 million.

2.5 Flower Exporting Companies

At the time of the study, there were about 36 rose exporters in Zambia. The Export Board of Zambia's recent listing captures 33 of these as shown in table 5. From table 5, it can also be seen that most flower producers are located in Lusaka.

Table 5: Listed Flower Exporters in Zambia

Exporter	Exported Product	Location
1. Agriflora	Roses/summer flowers	Lusaka
2. All Saints Farm	Perennials	Lusaka
3. Ambrosia Export Limited	Roses	Lusaka
4. Beeline Enterprises	Perennials	Lusaka
5. Blessings Farm	Perennials	Lusaka
6. Chartonnel Estates	Summer flowers	Lusaka
7. Cheetah (Z) Limited	Flowers	Lusaka
8. Cherokee Roses	Roses	Lusaka
9. Circle Line	Perennials	Lusaka
10. Enviro-flor Ltd	Roses	Lusaka
11. Executive Gardens	Perennials	Lusaka
12. Ing'amba Farm	Perennials	Lusaka
13. Jakana Estates	Roses	Lusaka
14. Jojo Enterprises	Perennials	Lusaka
15. J.Y. Estates	Roses	Lusaka
16. Leona Limited	Roses	Lusaka
17. Lopi Lopi Farm	Roses	Lusaka
18. Masstock Africa Ltd	Marigold	Lusaka
19. Mayflower Farm	Summer flowers	Lusaka
20. Moyeni Farm	Orchids	Ndola
21. Nent Enterprises	Perennials	Lusaka
22. Noyi Bazi Exports	Roses	Lusaka
23. Pakawa Farm	Roses	Lusaka
24. Steelco Farm Ltd	Roses	Lusaka
25. Sunrose Ltd	Roses	Lusaka
26. Tata Farms	Roses	Lusaka
27. Ukoma Farms	Roses	Lusaka
28. Vistaview	Perennials	Lusaka
29. York Farm	Roses	Lusaka
30. Zamaflora	Perennials	Lusaka
31. ZEGA	Roses, Field flowers	Lusaka
32. Flamingo Farms	Cut flowers, foliage, fresh and dry artificial flowers	Luanshya
33. Rose Breeders (Z) Ltd	Roses	Lusaka

Source: Export Board of Zambia (2006).

2.6 Key Stakeholders in the Export Floriculture Industry in Zambia

The study finds that the level of stakeholder involvement in the cut flower industry in Zambia is minimal. Table 6 captures the identified stakeholders.

Table 6: Stakeholders in Export Floriculture Industry in Zambia

Sector	Stakeholders
NGOs	CLUSA, Women in Agriculture
Trade Unions	NUPAW
Academics	NZTT
Government	Ministry of Commerce, Trade and Industry Ministry of Labour, Ministry of Agriculture and Cooperatives
Industry Associations	ZEGA, ZNFU, ZFEA

Source: Barrientos, Dolan and Tallontire (2001:26)

The limited involvement of stakeholders in the industry raises concern. Evidently, few local NGOs have shown an interest in ethical trade or labour standards in the cut flower industry in Zambia, partly because of the small size of the industry. Two exceptions are Women in Agriculture and Cooperative League of the United States of America (CLUSA), but they are both more concerned with smallholders than waged labour (Barrientos, Dolan and Tallontire, 2001:27). The union, on the other hand, is limited in capacity to effectively articulate all workers interest. The weakness in capacity, for instance, was brought to the fore during the Millieu Project Sierteelt (MPS) pilot social audit when the union was not able to fully participate in the meetings to discuss the proposed Bureau for Social Accountability (Redfern, 1999 quoted in Barrientos, Dolan and Tallontire, 2001:27). Nonetheless, without full participation of trade unions and other stakeholders, the implementation of codes of conduct will always likely be partial and thus not beneficial to workers whom they are meant to benefit.

3.0 Employment and Labour Conditions in the Cut flower Industry in Zambia

As section two highlighted, a key feature of the cut flower industry is that it draws a large number of workers into labour-intensive employment. This section explores characteristics of this workforce and the nature of this employment.

3.1 Characteristics of the Workforce

3.1.1 Gender Composition

Many cut flower producers are characterised by growing levels of female employment. Fifty percent to 65 percent of employment in the Industry is female, concentrated in the segments of the production process that holds the most significance for the quality of the final product, such as picking and packing. As a report by the Natural Resource Institute (2004) found, “in roses

[production] female staff are employed primarily for post harvest activities and quality control” (2004:21). The report further observes that generally women in the horticulture industry in Zambia carry out a range of low skilled seasonal work, including weeding, harvesting, sorting and packing, while men tend to occupy more skilled positions (sprayers, drivers, supervisors etc.). Similarly, Dolan and Solby (2003:25) find that over 65 percent of workers in the pack houses and on farms in the Zambian horticulture industry are female (2003:25). Table 7 summarises the involvement of women and men in cut flower production.

Table 7: Women and Men’s Involvement in Cut Flower Production

Production Stage	Employees Involved
Construction of Greenhouses	Men
Land Preparation (fumigation of soils & bed making)	Men
Planting	Mostly Men, but also women
Weeding & Removing Suckers	Women
Spraying	Men only
Harvesting	Men/Women
Grading and Packaging	Women

Source: Nakaponda (2006:24)

Thus, traditional views on the respective roles of women and men permeate employment practices throughout the Zambian floriculture industry. The subordinate position of women within the workplace hierarchy is to some degree both the result of male perceptions and women’s acceptance of this traditional role. Women are selected for certain tasks on the basis of certain attributes: reliability, care, attention to detail etc, but also acceptance of working long hours under, sometimes, uncomfortable conditions without complaint. Men are allocated tasks where strength is required, often described as ‘heavy’ work in contrast to light work done by women. The intense concentration and skill level involved in the work that the women do tends not to be appreciated, even by women themselves, though some note that men are ‘too rough’ for tasks such as picking.

3.1.2 Social Background

Overall, the majority of people working in the cut flower industries in Zambia come from poor households, mainly poor urban households who lack notable asset holdings and have limited wage earning or farming opportunities available to them. The cut flower industry, therefore, offers the attraction of waged employment in large numbers. As a matter of fact, the incidence of poverty in the country is reported at 67 percent of the total population, suggesting that for the majority of the unemployed, being without a job almost means being poor and without much choice about the nature of employment sought. For women, many also enter the cut flower industry to avoid other unattractive alternatives – e.g. domestic work that is less well remunerated. Thus, the poverty afflicting many households and the absence of decent work opportunities underlies the prevalence of entry in the cut flower industry, with workers taking up such work to insure themselves against falling into deeper and severe poverty. In contrast to other countries, for instance, Mexico and Kenya, where most of the labour employed in cut flower farms are migrants from other parts of the

country, it seems the case that this phenomenon is not pronounced in cut flower production in Zambia.

3.1.3 Age Composition

Turning to the age composition, the age profile of flower workers in Zambia is largely young. Companies generally prefer to hire young workers, who are perceived to be more flexible and dexterous. Evidently, workers between the ages of 18 – 40 were involved in the production of flowers in Zambia. One recent study on the ‘Promotion of Women’s Workers Rights in African Horticulture’ found that the modal age of their respondents in the cut flower industry in Zambia was 25 years. It can also be noted that age composition varies according to a number of factors, including how long the company has been established. In general, longer established companies are characterised by a more balanced age distribution than more recent ones.

3.1.4 Marital Status

Evidence on marital status of workers varies substantially across the industry. However, much of the sector’s labour force consists of single women most of whom are household heads. A union source also revealed that most of these women have been widowed due to the HIV/AIDS pandemic. Thus, regardless of marital status, the majority of women engaged in this industry have children.

3.1.5 Education and Training

In the aggregate, the educational level of workers in cut flower production tends to be low, although there is significant variation across different work categories. Trade union sources revealed that over 60 percent of workers in the industry had at least primary education and were literate. But, management sources seemed to indicate that most employees were functionally illiterate even though they possessed at least primary school level of education. Nevertheless, in some cases, levels of educational attainment were relatively high, particularly given the low skill and wage levels of the industry.

Of concern, however, was that while education was widely recognised as a gateway to promotion and other employment possibilities, few individuals in this industry have returned to school. The limited opportunities for training that exist also depend on the employment status of the workers. Preference is given to permanent employees. Thus, even though there are a significant proportion of seasonal workers, companies are reluctant to invest in short term workers. This pattern suggests that there may be limited potential for workers (especially for women who are concentrated in ‘flexible’ work) to gain skills that can facilitate upward mobility or can be transferred to other employment opportunities.

3.2 Wages and Benefits

3.2.1 Wages⁴

Wage levels in the cut flower industry in Zambia are generally low. According to the Joint Industrial

⁴ At the time of the research: 4,060 Zambian Kwachas were equivalent to one (1) United States Dollar

Council (JIC) Collective Agreement (effective from July 2004) signed between the employers association, the Zambia Farm Employers' Association (ZFEA) and the Sector Union, National Union of Plantation and Agriculture Workers (NUPAW), casual workers earn K6,580 (about US\$ 1.6) per day while fulltime workers earn K7,435 (about US\$ 1.8) per day. However, wages vary according to the areas of work, as well as by employment status, with field workers, including casual workers receiving the lowest wages and skilled and other permanent workers (e.g. clerks and mechanics) the highest.

An earlier study reported similar low average earnings for the cut flower industry in Zambia (NRI, 2004). Accordingly, it was found that the average monthly wage for a worker in cut flower production was K145,380 (about US \$36). A further decomposition on the basis of gender revealed that the average for female workers was K137,554 (about US\$ 34) whilst the average for men was K150,669 (US\$ 37). Table 8 below gives further indications of average monthly wages found for various job categories.

Table 8: Average Monthly Basic Wage for Cut flower Workers

Job Position	Average Wage (Kwacha)
Field worker	120,994
Sprayer	136,000
Greenhouse worker	142,100
Packhouse worker	142,814
Irrigation workers	163,785
Others (Clerk, Mechanic etc)	176,666
Average	141,091

Source: NRI (2004:38)

Exchange rate: 1 US \$ =4,060 Zambian kwachas

Evidently, There are gender disparities in wage levels obtaining. To a great extent, this reflects the types of jobs for which women are employed, which typically are concentrated in the “lower skill” and lower wage end of the employment spectrum. As noted earlier, companies tend to label female tasks and skills (such as concentration, speed, precision)) as “feminine” qualities (for example, patience, delicacy, and dexterity), which do not warrant greater remuneration). These gender ideologies permit firms to employ large numbers of women at lower costs, and conceal the fact that tasks involved in production and processing can require considerable skill.

Besides, what is also evident is that the wage levels obtaining in the cut-flower sector are below what would constitute a living wage for the workers. According to the November 2006 CSO Basic Needs Basket (BNB), a family of six is expected to live on **K1,105,351**(about US\$ 270) per month to meet the minimum requirements for all their food and basic needs.⁵ A comparison between the monthly cost of the CSO Basic Needs Basket and the average basic monthly salary for the

⁵ See The CSO monthly (November 2006, Volume 38) www.zamstats.gov.zm. See also the monthly food basket compiled by the Jesuit Center for Theological Reflections (JCTR) at www.jctr.org.zm

worker in the cut flower sector suggests that he/she would be below the CSO defined Poverty line. Therefore, the wages obtaining in the flower industry in Zambia are not adequate to enable the workers lead decent lives or afford the cost of the officially defined food basket. Arguably, while low labour costs may be seen as a dimension of comparative trade advantage in some circles, it seems a stronger case can be made for workers in the cut flower industry to be paid wages that should enable them lead decent lives.

3.2.2 Benefits

One way, of course, to compensate for low wages is through the provision of benefits. Conventionally, the benefits derived from employment generally include direct wage benefits, such as pensions, social security, and health insurance, as well as fringe benefits such as transport, and day care facilities. In the case of Zambia, the study finds that benefits are given to permanent staff as stipulated by the collective agreement and as they are entitled to under the law. These include: paid annual leave, paid sick leave, paid maternity leave, funeral grants, house or housing, meal and transport allowances and protective clothing and health care. However, a report by the Natural Resource Institute observes that, “there exist disparities between what is written down as workers’ entitlements and what workers themselves actually report to be getting (2004:39). This was particularly the case with respect to paid leave, annual leave, sick leave, workmen’s compensation, bonus system and funeral grants, all of which workers didn’t think they received. Similarly, “Mother’s” day was mentioned as a benefit by only a handful of women, with others either unaware of this entitlement or fearful of losing their jobs if they requested it. At any rate, this demonstrate the general lack of understanding among workers about the terms and conditions of employment, which is exacerbated by not having written contracts and /or pay slips, or not having them explained to them.

Under Zambian law, only permanent employees are entitled to paid maternity leave. This is because to be eligible for maternity leave an employee must have been employed for at least one year continuously. Since seasonal and casual workers are on contracts of less than one year, they do not technically qualify for maternity leave, despite often being on rolling contracts and therefore working year round. Employers, therefore, exploit this lacuna in the existing law to employ women as ‘permanent casuals’ as a way of avoiding paid maternity leave. Importantly, it was found that non-permanent pregnant women who go on unpaid leave do not necessarily have their jobs held open for them, leaving them in a vulnerable economic position. Childcare facilities are also generally absent. On this note, female workers reported leaving older children to cater for younger ones, some even keeping older children out of school to do this since they could not afford to pay carers. A case can therefore be made for childcare facilities to be made available at the workplace.

3.1.1 Working Hours, Overtime and Weekly Free time.

Under the Zambian law, the normal working hours is 8 hours a day or 48 hours per week. However, working hours in cut flower production in Zambia range from 07:00 hrs to 18:00 hrs, 6 days a week (i.e. from Monday to Saturday). Thus, the typical daily working hours for workers in the cut flower sector in Zambia appear to be 10 hours. Union sources also reported that “sometimes workers go as late as 21:00 hours” particularly for workers in packing sheds during the peak season to ensure that all the harvest for the day is ready for delivery to Europe on the same day.

While in normal circumstances overtime can allow workers to garner higher incomes, which can add to the monthly wage, it seems the case that workers in the cut flower industry in Zambia are not usually compensated for overtime. According to a Natural Resource Institute 2004 Report, casual workers on one farm ranked 'long working hours without payment' as their most serious problem' (2004:37). Time off in lieu of extra hours worked was particularly unpopular because workers said that they struggled to get supervisors to give them the hour off or were too scared to request them.

Another issue is the obligatory nature of much of overtime. Workers claimed that working extra hours was not on voluntary basis. Rather, that it was obligatory, especially when there were exports to be made. Incidentally, there was also confusion among workers whether these long hours constituted overtime or "normal" working hours because instead of paying overtime, management often gave time-off in lieu of payment. However, indications suggested overtime was only paid on occasion.

More importantly, there appeared to be insufficient clarity around the issue of overtime, leaving workers confused and sometimes feeling aggrieved. In addition, overtime was said to be highly stressful for women heads of households, who faced substantial labour burdens at home. For instance, a woman with four children, the youngest of which was four, said "I am concerned when I knock off late in the night...because, then I don't know how my children have coped during the day" (NRI, 2004:37).

3.3 Impact on Peasant Farming

Early research, especially in Central America, documents a number of positive benefits associated with smallholder contract production linked to high value non-traditional agricultural export production (Van Braun, Hotchkis, and Immink, 1989). These results have also been supported by recent research from Kenya where contract smallholder production also has garnered higher incomes for peasant farmers. For Zambia, however, contract farming linked to flower production is not yet significant. Assessing the impact of cut flower production on peasant farming might therefore be a subject of future research. The existing Out-Grower scheme that comes close to contract farming in the horticultural industry is still restricted to the production of vegetables, mainly baby corn. For instance, two horticultural farms in Lusaka are involved in smallholder contract farming. However, impacts on small farmers are still mixed as quality problems are restricting farmers' returns and the future development potential of contract farming in the industry. As such it would appear too early to ascertain the real benefits associated with this practice in terms of cost or benefits on the well being of smallholder farming.

In terms of consequences of the cut flower industry on peasants' rights to land and water, the study finds that most farms are located within an urban radius of Lusaka where land administration is under the Nation-State and managed through the agency of the Local Government Authority. Evidence of peasants chased away from their land due to the establishment of a cut flower farm was therefore hard to find. A case coming close to this was an instance whereby a huge tract of land belonging to an individual in Lusaka East was repossessed by the state and sub-divided to smallholdings, including some cut flower producers. Similarly, while the trend in the price of land in Lusaka was on the rise, there was little evidence of a significant correlation between the rise in the price of land in the Lusaka region and the establishment of cut flower farms. Future research might therefore be needed to further confront this hypothesis in the context of Zambia.

In terms of pollution of water, an instance of pollution of natural water sources through a spillage from cut flower farms was said to have occurred at one of the farms in Lusaka East. However,

evidence elsewhere was scanty. In terms of the sources of water and their impacts on other users, the study found that almost all the water used on cut flower farms visited was obtained from boreholes on the site and not from surface sources. It could however, not be ascertained whether pumping of water from boreholes could not increase the risk of depletion, particularly during extended drought periods as had prevailed in recent years.

4.0 Consequences of Cut flower Production on Women Workers

4.1 Consequences on Social Situation of Women

Employment and Empowerment

The impact of wage employment on women's welfare has been the focus of considerable debate in the recent years. On the one hand, researchers have argued that, despite the growing numbers of women employed, this growth has been based on abusive conditions: low wages, poor working conditions, and occupational segregation (Dolan and Sorby, 2003:43). Recently, however, a more nuanced picture has emerged with several feminist economists suggesting a positive association between women's wage work and their status in the household. The key point to emerge from this gender equality is not simply a matter of equal numbers of men and women in employment but rather the degree to which work contributes to women's well being and empowerment.

In investigating the consequences of cut flower production on the social situation of women, therefore, it became instructive to focus on how gender and household relations influence employment outcomes for women and their families. In this context, the study broadly finds that the sole responsibility for unpaid household work was not reduced by women's incorporation into paid economic activity. For instance, married women interviewed stated that they still performed domestic tasks in addition to wage employment in flower production. Equally, the study finds some evidence of sexual harassment in cut flower production in Zambia

Reproductive Labour Burdens

Therefore, one broad consequence of waged employment for women was the endurance of 'a double day' in combining paid employment with domestic work. Similarly, the fact that women usually worked long hours especially during peak period often forced them to shift the domestic burden to other household members, including their own daughters. For instance, female workers reported leaving older children to cater for younger ones, some even keeping older children out of school to do this since they could not afford to pay carers.

There is therefore little doubt that women remain primary providers of unpaid household work despite taking on wage employment in flower production. This reality raises important policy concerns, particularly regarding the potential transmission of domestic burden to children and other vulnerable family members, as well as the impact on women's health and well being. Developing appropriate care is necessary for working mothers, as are reasonable wages and working hours.

As such, while women may be getting the advantage in terms of employment, their competitive strength, unfortunately, seem to lie in lower pay and poor working conditions, which erode the long-term welfare and empowerment process of themselves and their families. The gain in

employment should therefore be evaluated in the light of several factors, ranging from the social nature of gender relations and household organisation to employment aspects, such as job stability, wages, working conditions, and opportunities for advancement.

Sexual Harassment

Yet another consequence is that of sexual harassment. There is some evidence of sexual harassment in the cut flower industry in Zambia. In most cases, its prevalence is strongly influenced by gender norms. Women workers reluctantly talked about their subjection to sexual harassment but were clear in stating that they do not report it for fear of victimisation. In addition, some women said that their supervisors demand sexual favours (for example, in exchange for permanent employment) and that, if the women refused, they risked losing their jobs. Management on the other side, acknowledged that sexual harassment can be a problem, and stressed that it was not permitted and that it would be dealt with if reported. One problem, of course, is that women workers are often reluctant to talk about such problems, especially to line managers.

Broadly, therefore, it appears difficult for women in this industry to combat sexual harassment. First, most of them are unaware of their labour rights and thus are vulnerable to exploitation by employers and their immediate supervisors, most of whom are men. Second, the prevalence of flexible forms of work makes it difficult for women to organise against such abuse. Writing on Chile, Barrientos and others (1999) note that the informality of employment in such industries creates opportunities for bosses to take advantage of female employees, for example by asking for “dates” in return for jobs. The most desperate women – single mothers or women without experience – are the more likely to consent. Third, in Zambia, it would appear women often find it difficult to report sexual harassment perhaps due to social norms and the predominance of patriarchal systems that legitimise and reinforce culturally based discrimination.

In summary, the study acknowledges that the consequences of cut flower production on the social situation of women appear difficult to resolve in the context of Zambia. On one hand, employment in the cut flower industry can (and does) engender some tangible gains for women, who often obtain access to an independent income stream, increased autonomy, and new social networks. In contrast, women also experience costs by working in these industries. One set of costs arises from the often-poor working conditions and flexible and insecure employment, including sexual harassment. A second set has to do with the social and economic consequences of increasing women’s time burdens on the health and well being of themselves and their families. While the extent of these implications varies considerably across company contexts, they do signal cause for concern.

Nevertheless, it also is the case that jobs in the cut flower production in Zambia provides many women with the best chance they have for improving their lives in a context of limited to non-existent alternatives. The challenge may therefore lie in all stakeholders concerned (NGOs, Trade Unions, as well as national government and international bodies) to raise the employment standards and ensure that workers’ rights are not sacrificed in the face of competitive pressures. In particular, company codes of conduct hold promise for improving women’s working conditions but these need to be brought to the attention of workers and to be implemented. The trade union can play a critical role in ensuring workers are aware of these codes of conduct as well as play a role in auditing compliance to such standards.

4.2 Trade Union Organisation

In terms of trade union organisation, the National Union of Plantation and Agriculture Workers (NUPAW) is the principal union representing workers in the floriculture sector. At the time of the research, NUPAW officials stated that they had 6,000 members in the cut flower industry, with majority of them (approximately 60%) being women found in greenhouses and employed on seasonal basis. Further, it was said that unionisation of the industry was restricted to six companies, even though there were on-going efforts at recruitment in other farms. Union coverage is therefore still small. Given the nature of labour conditions associated with cut flower production in Zambia, it would appear that the union will need to build capacity for improved pursuit, articulation and protection of workers interests, including education and training programmes that should tackle various identified dimensions of atypical employment practices in the floriculture industry in Zambia. Articulation of issues around employment contracts, workers rights and entitlements, occupation health and safety and international labour standards applicable to flower production would be some possible issues for labour education.

4.3. Flexibility

In regard to flexibility, evidence points to the use of a dual employment strategy consisting of a “nucleus” of skilled, permanent workers and a periphery of “flexible” relatively unskilled workers. A management source explained that flexibility was largely a strategy to manage risk, adding that this stratagem stems partly from the seasonal nature of agriculture production, in which large numbers of workers are required only at certain points of the year. Indeed, there are instances of demand peaks (such as Valentine’s Day and Mother’s Day) and reduction in flower exports in the June – August period.

However, despite the persistence of seasonal rhythms, technological innovation in the cut flower sector has facilitated year round production in most of exporting companies; hence seasonality alone does not account for the persistence of flexibilisation. Rather, perhaps as Standing (1999) writes, competitive pressures under globalisation and trade liberalisation have obliged more companies to rationalise their internal operations. The outcome of these pressures has been the intensification of and restructuring of labour arrangements through greater use of “non-standard” and flexible forms of work.

Evidently, In the Zambian cut flower industry, these include various categories of informality – such as casual, temporary, seasonal – most of which fall outside labour market regulation. But this phenomenon must also be seen in the context of the existing legislative framework. The Zambian law currently recognises three categories of employment as follows:

- (i) *Permanent*: this category comprises workers who have been employed for an indefinite period and provided with a range of employment benefits as set out in legislation. These are sometimes described as permanent and pensionable and, other things being equal, these are expected to continue working for the enterprise until they reach the legal age of retirement at 55 years or opt for voluntary retirement. As such, those who have worked for at least five years are entitled to three months pay for each year worked upon retirement at fifty five years of age (or payment in accordance with an established private pensions scheme).

- (ii) *Fixed Term Contract employment*: These workers are given contracts of at least one year. In general, such contracts tend to vary between one to three years. On completion of the term, workers are due for a gratuity, as set out in the contract.
- (iii) *Casual Employment*: this refers to employment where workers are hired for discrete jobs, sometimes paid on a daily basis and should not be employed for a continuous period exceeding six months. Either party can terminate the service agreement within 24 hours notice, in theory allowing flexibility on both sides. There are no benefits attached to casual contracts, with the exception of National Social Pensions Scheme (NAPSA) contributions.

Arguably, the generous termination and other benefits for permanent workers under the Zambian law may create a burden for some employers such that they are unwilling to employ more workers on a permanent basis. Thus, the legal framework regarding permanency has particular significance in relation to the potential for more workers to gain secure employment in the cut flower industry. In practice, casual workers tend to be paid monthly or every two weeks for convenience rather than daily. In addition, it is legal for them to be rehired for an additional six months as long as there is a period of at least three days between contracts. In reality, this provision allows for long-term use of casual labour, which can serve as a way for employers to cut labour cost but offer few benefits to workers. Export companies in the cut flower industry would therefore seem to have taken advantage of this lacuna in the law to employ casual workers for a season or longer, leading to a higher proportion of their workforce on non-permanent employment arrangements.

4.4 Collective Bargaining

Where a company employs at least 100 workers, it is legally required to have employees represented by a union. The union for agricultural workers in Zambia is called the National Union for Plantations and Agricultural Workers and it usually has branches on specific farms, depending on the number of employees. The union negotiates conditions of service centrally. Thus, collective bargaining in the industry is at two levels: Joint Industrial Council and at Enterprise levels. At the Joint Industrial Council, the Zambia Farm Employers Association (ZFEA), which is the union of farm owners, negotiates the agriculture sector's collective bargaining agreement with the employee union, National Union of Plantation and Agriculture Workers (NUPAW). At enterprise level, NUPAW bargains with individual companies in the agriculture sector. The collective agreement, however, only covers permanent workers, but seasonal workers are covered by the minimum wages negotiated and are entitled to join the union. Collective bargaining in the industry, therefore, sets some benchmarks that other forms of wage fixing have to measure up to. Besides, all members of ZFEA are bound to apply this agreement, which is regularly renegotiated. In addition, many flower producers who are not members of ZFEA also implement the joint agreement on salaries and basic conditions even if the union is not present on the farm.

ZFEA and NUPAW meet to review the conditions of service once every three years. A neutral and independent person who knows labour laws arbitrates the negotiations between the two parties and both parties meet his fees. The last collective agreement between ZFEA and NUPAW was signed on 21st July 2004 and it will be reviewed in 2007. Overall, however, collective bargaining agreements cover only about one-half of the workers in the cut-flower sector, with the other half covered by individualised contracts that deny the employees their right to bargain collectively.

Such individualised contracts are based on fixed wages that employees have to ‘take as given.’ Often, this form of wage fixing affects casual and seasonal workers who are given contracts of between three and six months, even though in practice they are continuously re-engaged at the expiry of such periods, leading to the phenomenon of ‘permanent casuals’. Another form of wage fixing is through the Minimum Wages and Conditions of Employment Act that sets minimum wages to be paid to employees that are not covered by collective bargaining. Minimum wages prescribed by the Act have, however, tended to lag behind economic realities because of the lengthy legislative processes needed to effect their revisions. Collective bargaining, therefore, remains the most important form of wage determination in the cut flower sector, both through its direct influence on wages and conditions of service of permanent employees as well as through its indirect influence on wages of casual and seasonal employees who are often not covered by such collective agreements.

5.0 Use of Pesticides and Environmental Impact of Cut Flower Production

5.1 Use of Pesticides

The main health and safety concern in floriculture production is the use of pesticides. This is of particular concern in flower production, as spraying takes place in closed greenhouses. The international requirement is that every company should assess the risks of chemicals used and apply measures to prevent any damage to the health of their workers. Further, it is expected that companies should record and reduce pesticide and fertilizer use by adequate techniques and methods. No banned, highly toxic (WHO I) or carcinogenic pesticides and chemicals should be used. Further, safety instruction and re-entry intervals must be strictly observed and monitoring, spraying, handling and storing of pesticides and chemicals should be done by specially trained people with suitable equipment. Stores, apparatus and equipment must be clean, safe, handy and conforming to international standards.

The study therefore proceeded to investigate the extent to which such requirements were observed in cut flower production in Zambia. The findings revealed that such requirements were not usually observed. On two farms, for instance, workers claimed that spraying was sometimes undertaken when they were still working. They also complained of being given no protective clothing. This is clearly in contravention of the international requirement that ‘all spray operators must wear suitable and intact personal protective equipment and clothing’. At another farm in Lusaka, workers reported that despite them being in cultivation, harvesting and finishing sections, the company did not provide them with suitable protective clothing, noting that ‘our clothes are very light and we have no gloves, no goggles, no boots’.

Further, at one farm, workers complained of the lack of washing facilities at work to remove the chemicals from their skin. It was noted that this was a particular issue where women are breastfeeding. At the same farm, various greenhouse workers complained of vomiting, coughs, dizziness and sore chests from being in greenhouses while spraying was carried out, or from going back into greenhouses when the leaves were still wet with freshly sprayed chemicals. At another farm, workers, especially those in pack sheds complained of flu, body rash and headaches due to the cold temperatures. Working without gloves also exposed them to thorn injuries.

While management generally admitted to having problems abiding by World Health Organisation recommended re-entry times⁶ due to tight production schedules, they insisted that they took every precaution possible. One farm, for instance, claimed to be an active member of the Zambia Export Growers Association (ZEGA) Pesticides Committee and stated that it operated in accordance with both the ZEGA and Dutch 'Milieu Project Sierteelt' (MPS) environmental management and labelling programme. Evidently, all agrochemicals used were being stored in a locked area, and it was reported that access to this area was restricted to the farm manager. On this particular farm, removal of any agrochemicals from the storage area was recorded in a centrally maintained registry, which included information on date received, volume, expiration date, and when used. What was unclear, however, was whether agrochemicals were being stored separately from other items in a properly ventilated area. Besides, while this particular farm used mobile tanks equipped with hosepipes and nozzles to apply pesticides, the mixing of pesticides was done in an unpaved, open area before being transferred to the mobile tanks, a practice that could result in spills to the ground and thus contamination of soils and ground water.

5.2 Environmental Impact

With regard to the protection of the environment, the internationally accepted requirement is that companies should make every effort to protect the environment and residential areas, avoid pollution and implement sustainable use of natural resources (water, soil, air and etc.). One, among other requirements in this regard, is that a programme has to be elaborated on by the company for conserving the environment and the sustainable use of natural resources.

In the case of Zambia, flower producers are required to submit an Environmental Impact Assessment Report to the Environmental Council of Zambia (ECZ) before they are authorised to commence production. A check at the ECZ Documentation and Information Centre, however, revealed that such Environmental Impact Assessment Reports were not readily available to the public. An in-depth analysis of whether companies were in full compliance with the Environmental Council of Zambia standards regulations on waste management, water pollution control, pesticides and toxic substances, air pollution control and waste management regulations could, therefore, not be done.

Nonetheless, field visits to selected farms revealed that almost all farms used fertilizers and chemicals to maintain soil fertility and for plant protection and treatment. One farm visited, for instance, was using two chemicals (DDVP and benomyl) that appear on the international list of substances whose use is to be avoided if suitable alternatives are available. This can be at the expense of the environment. Besides, while the Environmental Council of Zambia has laws in place to control and regulate the use of toxic substances by plantations and to protect the workers who apply them, enforcement is often lax. For instance, the Environmental Council of Zambia exhibited capacity constraints in terms of ensuring that there was effective monitoring of flower producers to prevent ground water contamination that would result from the excessive application of agrochemicals, and health effects stemming from inadequate protection of workers who handle dangerous chemicals. However, one major Lusaka based flower producer with a peak season of about 4000 employees indicated they had an environment management system in place in line with the "Milieu Project Sierteelt"(MPS) though they had not yet obtained the label. Most other farms subscribe to the local code developed by the Zambia Export Growers Association.

4 According to the WHO, the following re-entry intervals must be strictly observed: for highly toxic pesticides (WHO I) and carcinogenic (EPA), 24 hours; toxic pesticides (WHO II), 12 hours; Less toxic pesticides (WHO III + IV), 6 hours.

6.0 The ICC and the Flower Label Programme in Zambia

6.1 The International Code of Conduct for Flower Production (ICC)

The social and environmental impacts of cut flower production can be considerable. They can include ground water contamination resulting from the excessive application of agrochemicals, and health effects stemming from inadequate protection of workers who handle dangerous chemicals. For this reason, trade unions, social justice and environmental organisations have joined forces and developed, in August 1998, the International Code of Conduct for the production of flowers (ICC). Minimal conditions for the sustainable production of cut flowers are defined in this code. The main objective is to promote more sustainable production of cut flowers worldwide.

The code consists in the following points:

1. Freedom of association and collective bargaining
2. Equality of treatment
3. Living wages
4. Working hours
5. Health and Safety
6. Pesticides and chemicals
7. Security of employment
8. Protection of the environment
9. Child labour is not used
10. No forced labour

The ICC provides a concise statement of minimum labour, human rights and environmental standards for the international flower sector. Flower growers can commit themselves voluntarily to this code. If a flower grower meets the conditions, the flowers can be labelled as sustainable flowers. The farm pledges to observe the core ILO labour standards, the universal human rights standards and basic environmental standards, which are the base for this code. The farm accepts that the implementation of the code is subject to independent verification.

It must further be noted that this code only establishes minimum standards and must not be used as a ceiling or to discourage collective bargaining or innovating environmental initiatives. Besides, the farm must comply with all national laws and legal requirements. When national law and these criteria address the same issue, that provision which is most stringent applies. This code is supposed to be translated into local languages and prominently displayed in the place of work.

The advantages of using ILO conventions in codes of conduct (as the ICC does) are that they have been internationally negotiated and agreed through a tripartite process involving governments, employers and trade unions. They also provide some basis for commonality across the plethora of codes that exist.

However, there are at least three important limitations to using the ICC in Zambia. Firstly, the ILO conventions on which the ICC is based require not only ratification by the government but domestication into national law to be enforceable and hence meaningful for employees. On this basis, while Zambia has signed the core labour standards, it has only recently altered its law to

implement the Freedom of Association. Secondly, the ICC is a voluntary mechanism with no direct means of enforcement. Thus, while ratification means that the violations of workers' rights may be challenged in the courts of law, their enforcement nonetheless relies on moral pressure on governments within the ILO (Ladbury and Gibbons, 2000:8,22). Besides, the conventions are based on the notion that employment is full time and permanent, and, their coverage of temporary employment is limited (Seyfang, 1999). Thirdly, there is a strong dependence on **employees being** represented in a collective bargaining agreement. However, as this study reveals, permanent employees are a small percentage of total employment in the floriculture industry and they tend to be men. To affect the employment conditions of more insecure workers and women in particular, these realities have to be taken into account.

6.2 The ZEGA Code of Conduct

A local response to these weaknesses in the ICC seems to present itself in form of the ZEGA code of Conduct. In Zambia, therefore, the main sectoral code applying nationally in the flower industry is the ZEGA code, which was drawn up within the Comité de Liason Europe-Afrique-Pacifique (COLEACP) framework. It also has roots in production and quality control management system, and was developed to help growers meet demands of their buyers. Its content is relatively comprehensive, especially in terms of formal employment conditions and entitlements. It is based on the collective bargaining agreement between the industry's union (NUPAW) and the Zambia Farm Employers Association (ZFEA) and covers minimum wages and the wage structure, hours of work, overtime, public holidays, leave, special leave, contracts, sick benefits, subsistence, housing and other allowances and discipline (Barrientos, Dolan and Tallontire, 2001:23). Measures to ensure regular employment and tackle permanent casuals are not directly addressed in the ZEGA code. However, it stresses the need for contracts of employment and refers to an 'information sheet' for casual employees covering job description, hours of work and remuneration and payment procedures written in both English and local languages.⁷ The development of contracting systems and better record keeping on employment of seasonal and temporary labour has been one of the first steps in properly implementing the ZEGA social welfare code (Barrientos, Dolan and Tallontire, 2001:23). Until fairly recently, formal contracts of employment even for permanent employees were the exception rather than the rule in the Zambian floriculture industry.

Further, abuse, including sexual abuse, is covered in the ZEGA code, having been added as a result of dialogue between the Zambian Code development team and the Ethical Trading Initiative (ETI) pilots in Zimbabwe (Barrientos, Dolan and Tallontire, 2001:23). This also led to the addition of a grievance procedure in the code. Whilst the code itself does not specify a system for confidential complaints about sexual harassment, the audit questionnaire asks employees if such a system exists. The reproductive rights of women outside maternity leave are not covered. However, the code stipulates that women should not be employed in the handling, mixing or application of pesticides because of the potential dangers to the foetus. Evidently, very few women are involved in spraying and use of pesticides. Interestingly, Barrientos, Dolan and Tallontire (2001:23) reports that one woman who was supervising a spray team at one farm in Lusaka before the implementation of the ZEGA code was very angry when she was moved to a different supervisory position and perceived it as a block on her further promotion-perhaps only going to show how much gendered

7 The ZEGA code and joint Agreement officially refer only to permanent workers, but seasonal workers are covered by the minimum wages negotiated and are entitled to join the union.

awareness raising needs to be done about the implicit dangers of pesticides to the health of women workers.

A concern noted from the trade union with respect to the ZEGA code was that they are not involved in the auditing process. Evidently, the auditing of the ZEGA code has been a form of first party audit in that the NZTT, on behalf of ZEGA, audits the member farms. Results of previous audits were not accessible at the time of the current research. It appears that the union may have a case for demanding involvement in the ZEGA audit process. As Barrientos *et al* (1999) contends, "Local stakeholder participation in the monitoring and verification of codes is also essential if their implementation is to genuinely address the conditions faced by workers." Indeed, trade unions have knowledge of prevailing conditions, local language skills, and can often gain the confidence of workers in ways that professional auditors or company representatives cannot. This is particularly important in the case of temporary and casual employees, who may fear losing access to future work if they are critical of employers. In addition, it may be useful, from a gender perspective, to include in the audit team local organisations that are able to reflect women's interests to ensure that the needs of female workers are included in the process of implementing codes, without which a large section of the labour force is essentially ignored.

6.3 The Flower Label Programme (FLP)

Based in Germany, the Flower Label Programme (FLP) was created in 1998. Founded by two major organisations representing the flower trade in Germany (BGI – German Flower Wholesaler and Import Organisation and FDF – Professional Association of German Florists) in cooperation with human rights organisations and trade unions, its initiative is to set human rights and environmental protection standards for flower farms all over the world to follow. The basis of the programme is the International Code of Conduct, ICC, which comprises ten main principles or standards – as presented in section 6.1 above.

In terms of farm monitoring, the procedure is that flower farms must first comply with the FLP standards and guidelines. When they feel they meet the requirements and are ready to be inspected, the farm will submit a pre-inspection report to FLP office in Germany. An on-site inspection will then be conducted by independent inspection organisations. Upon successful inspection, the farm is accepted as a member of the Flower Label Programme and receives the FLP certificate and the right to market their flowers under the FLP label. Every year, follow-up inspections are conducted, and human rights groups and trade unions carry out unannounced spot checks.

Available statistics indicate that over 60 farms worldwide have joined the Flower Label Programme, including farms in Colombia, Ecuador, Kenya, South Africa, Tanzania, Zimbabwe and Portugal. All visited farms in Zambia were not part of the FLP, however. One reason could be that most flower exporters in Zambia sell their flowers to the Netherlands where FLP certification may not offer any advantage. Another reason could be that the programme has not been vigorously promoted in Zambia as the case may have been in other countries. Thus, the FLP does not seem to have found wide usage among rose growers in Zambia. The study could also not find organisations actively promoting the programme in Zambia.

6.4 Acceptance of Social Labelling in the Social Movement in Zambia

Generally, there appears to be a high level of acceptance of social labelling among social movements in Zambia. The signs are better now than at any other time when the issue was first considered within the context of the incorporation of a social clause in a multilateral forum, such as the World Trade Organisation (WTO).⁸ There is now a growing and broadly based civil society agenda supporting labour standards in trade. For instance, the Jesuit Centre for Theological Reflections (JCTR) and the Catholic Commission for Justice Development and Peace (CCJDP) and the Civil Society Trade Network (CSTN) are actively advocating for fair trade practices, the respect for labour standards included. Social concerns in trade are no longer an issue confined to trade unions or intellectual circles in Zambia. Fuelled by the excesses of global free markets, international labour standards have now become a topic for consumer, environmental and human rights groups in Zambia. They are not seen as merely economic problems but rather as human rights issues that demands the attention and protection that internationally applicable labour standards, such as is promoted within the broad framework of social labelling, could rightly provide.

The trade unions on their part accept the commonality of the moral underpinnings of the human rights agenda and the moral underpinnings of a properly ordered global labour market and within this context accept the positive role that social labelling can bring about in terms of achieving labour's legitimate interests and concerns for respect of labour standards, globally. Thus, there is general acceptance that social labelling is rightly conceived as a more integrated approach to the world's economy and economic progress which must emphasize the human, social, and political capital required to sustain stable market economies but that such an approach should not replace the institution of collective bargaining. One basic point of the labour movement is that the primary huddle lies in employers' non-acceptance of the legitimacy of the labour rights agenda as part and parcel of the construction of an international normative architecture. It is asserted that once legitimacy of the principle of the labour rights agenda is accepted, properly understood and acknowledged, then sustainable development would ensue. Within this context, trade unions welcome the social labelling agenda. For instance, NUPAW officials acknowledged that, "the debate has shifted from the question of *either* codes of conduct *or* collective bargaining to *how best* to incorporate codes of conduct within the frameworks of collective bargaining." Another union source added that, "we understand that codes of conduct are coming from NGOs but where they are good and do not seek to replace collective bargaining they are welcome." Overall then, the social movements in Zambia accept social labelling as a necessary but not a sufficient means of achieving ethical trade. Sufficiency would require taking into account legitimate interests and concerns of labour and recognising the critical institutional role played by collective bargaining at all workplaces.

8 The main argument against social labelling is that in recent years most developing countries have adopted outward-oriented developing strategies where access to both consumer and capital markets of the developed countries is a fundamental element for success which would be threatened should this access be tied to respect for basic labour standards. Readers interested in a detailed discussion on this subject are referred to Castle, R. et al (1999) "Labour Clauses, the World Trade Organisation and Child Labour in India" in Edwards, P. and Tony Elger (eds.) *The Global Economy, National States and the Regulation of Labour*, 182 – 201, Mansel: London.

7.0 Summary, Conclusions and Way Forward

7.1 Summary of Findings

In summation, this study set out to examine cut flower production and social and environmental standards in Zambia. The first section introduced the study by outlining the objectives, research questions, methodology and the limitations of the study. On this basis, the study undertook several layers of analysis with the underlying motivation to understand what might concerned stakeholders do to ensure that cut-flower production and trade contributes to the national economy without compromising the levels of internationally accepted social and environmental standards.

The second section examined the importance of cut flower production in Zambia. This was done by providing economic information that demonstrates the importance of the cut flower sector in Zambia. In this respect, the study finds that cut flower production plays a significant role in generating foreign exchange earnings for the national economy, to the tune of about US \$32 million in 2005. The sector also contributes to employment creation by directly employing well over 12,000 workers. In a country where an average household comprises about six people, it can reasonably be inferred that the cut flower production supports the livelihood of about 72,000 Zambians. Cut flower production is therefore critical to the national economy for at least two reasons: First, in the context of the policy of economic diversification from reliance on copper export earnings to Non-Traditional Exports (NTEs). Second, the employment-intensive nature of cut flower production provides job opportunities for the growing mass of the unemployed, especially women and the youths.

The third section examined the nature of employment and labour conditions in cut flower production in Zambia with particular attention paid to the following characteristics: gender composition, social background, age profile, marital status and education and training. The section also examined the wage levels and conditions of employment, with special attention paid to working hours, overtime and weekly free time and annual leave. This section also assessed the impact of cut flower production on peasant farming. The major findings of the study with respect to the nature of employment and working conditions is that the character of the workforce is largely young, female and unmarried, drawn from poor social backgrounds and with low levels of education. The study finds that fifty to 65 percent of employment in the industry is female, concentrated in the segments of the production process that holds significance for the quality of the final products. The majority of these workers come from poor households, mainly urban households within the geographical province of Lusaka. However, they are mostly young between the ages of 18-40 years with the majority having only primary levels of educational attainment. In terms of marital status, they are mostly unmarried but household heads and single mothers. The study also finds that the wages in the cut flower industry in Zambia are on the low side, averaging US \$35 per month and falling both below the recently revised minimum wage of about US \$67 per month and the official Central Statistics Office (CSO) defined poverty datum line or living wage of about US \$270.⁹ On benefits, the study finds that these are given to permanent employees as stipulated by the collective agreement and as workers

⁹ The official exchange rate as at November 2006 is used to convert the Zambian Kwacha equivalent into US dollars. Thus, K4,060 : US \$1

are entitled to under the law. These include: paid leave, paid sick leave, paid maternity leave, funeral grants, house and transport allowances, protective clothing and health care. The problem, however, seemed to be with the inconsistency of their implementation. In terms of working hours, the typical daily working hour is ten hours, six days a week (i.e. Monday to Saturday). Overtime was common but only paid on occasion with management preferring to have workers take rest in lieu of overtime pay. In terms of impacts on peasant farming, the study found no clearly discernable links yet.

The fourth section examined the consequences of cut flower production on the social situation of women. The study finds that on one hand, employment in cut flower production can (and does) engender some tangible gains for women, who often obtain access to an independent income stream, increased autonomy, and new social networks. In contrast, women also experience costs by working in these industries. One set of costs arises from the often-poor working conditions and flexible and insecure employment and sexual harassment. A second set had to do with the social and economic consequences of increasing women's time burdens on the health and well being of themselves and their families.

The fourth section also discussed the collective bargaining mechanism in the cut-flower sector in Zambia. It was established that collective bargaining in the industry is at two levels: Joint Industrial Council and at Enterprise levels. At the Joint Industrial Council, the Zambia Farm Employers Association (ZFEA), which is the union of farm owners, negotiates the agriculture sector's collective bargaining agreement with the employee union, National Union of Plantation and Agriculture Workers (NUPAW). At enterprise level, NUPAW bargains with individual companies in the agriculture sector. The collective agreement, however, only covers permanent workers, but seasonal workers are covered by the minimum wages negotiated and are entitled to join the union. Collective bargaining in the industry, therefore, sets some benchmarks that other forms of wage fixing have to measure up to. Besides, all members of ZFEA are bound to apply this agreement, which is regularly renegotiated. In addition, many flower producers who are not members of ZFEA also implement the joint agreement on salaries and basic conditions even if the union is not present on the farm. Collective bargaining, therefore, remains the most important form of wage determination in the cut flower sector, both through its direct influence on wages and conditions of service of permanent employees as well as through its indirect influence on wages of casual and seasonal employees who are often not covered by such collective agreements.

The fifth section dealt with the question of pesticide use and environmental protection issues in cut flower production in Zambia. The study finds that while most companies took every precaution possible in handling the use of pesticides, they admitted to having problems abiding by the World Health Organisation's (WHO) re-entry times after spraying due to tight production schedules. The study also reveals that provision of protective clothing was not strictly adhered to on some farms as some workers complained of working without appropriate protective clothing. With regard to the protection of the environment, the study reveals that almost all farms use fertilizers to maintain soil fertility and chemicals for plant protection and treatment. However, it was also established that there were capacity constraints on the part of the Environmental Council of Zambia (ECZ) in terms of ensuring that there was effective monitoring of flower producers to prevent ground water contamination and soil degradation that would result from the excessive application of agrochemicals, and health effects stemming from inadequate protection of workers who handle dangerous chemicals. Such capacity constraints also prevented the effective monitoring of farms to ensure they did not use highly hazardous pesticides.

The sixth section addressed the question of codes of conduct and specifically tried to understand to what extent the International Code of Conduct for flower producers (ICC) and the Flower Label Programme (FLP) were influencing conditions under which cut flowers are produced in Zambia. The study finds no direct links except that there was a local version of codes of conduct that appears to have been modelled along internationally accepted social and environmental standards. This code of conduct has been developed by the Zambia Export Growers Association (ZEGA) and is called the ZEGA code of conduct. In many ways, the content of this code of conduct is relatively comprehensive, especially in terms of formal employment conditions and entitlements. It is thin, however, on addressing the situation of non-permanent employees, especially those on casual, seasonal and temporal employment basis who apparently are the majority in the cut flower industry in Zambia. Overall, the study establishes that social labelling was generally accepted within the broad social movement in Zambia even though trade unions maintained that social labelling should not replace (but rather reinforce) the collective bargaining at the workplace.

7.2 Main Conclusions of the Study

Against the background of these findings, this study arrives at the following two broad conclusions: First, the floriculture industry is important to the national economy of Zambia. However, the industry is still young and small and is struggling to compete in the global market. Besides, progress is hindered by lack of a supportive home market, high airfreight tariffs and the lack of well-trained manpower. Support at the policy level to boost flower production would therefore appear to be of utmost urgency. Second, cut flower growers in Zambia have concentrated on increasing production and meeting the demands of powerful global buyers in the supply chain rather than on improving social and environmental conditions in which flowers are produced. As such, conditions under which cut flowers are produced in Zambia often compromise levels of internationally accepted social and environmental standards. The role of local stakeholders such as trade unions therefore needs to be enhanced to ensure that flowers in Zambia are produced in conditions that do not compromise the levels of internationally accepted social and environmental standards. In this regard, labour-training programmes to educate workers about their rights and issues directly related to their work in the production of cut flowers should be of utmost necessity.

7.3 Way Forward

The study findings offer insights into ways forward for the Zambian cut flower industry. The research approach, combining primary and secondary data sources, has highlighted some issues that have hitherto been somewhat hidden, particularly labour issues. Through analysis of this data, the study has been able to tease out some of the key social and environmental issues facing the industry. Our recommendations have two inter-related dimensions: (a) specific actions that can improve the employment conditions of workers, and of women more specifically, and (b) improvements to code implementation to ensure cut flower production in Zambia can meet internationally accepted social and environmental standards.

7.3.1 Specific Actions

There are a number of specific actions that could be undertaken by stakeholders in the industry,

including companies, trade unions and government, to ensure that the employment rights of both men and women are respected.

a) Company policies

Workers displayed considerable ignorance of the terms and conditions of their employment and how their wages were calculated. The latter is particularly damaging to worker-management relations and morale as it can breed distrust. All workers should have written contracts with complete details of their employment conditions, and should be given a copy. The provision of pay slips for workers with clear information about days worked, wages earned and relevant deductions, is also essential for maintaining clarity.

b) Workers' education

Workers' ignorance of terms and conditions of employment as well as their labour rights could be remedied by an enhanced role of trade unions' education of workers regarding their rights at work, and also their responsibilities and the expectations of employers. The contention is that while employers would have responsibility for explaining contractual issues to workers in an understandable way, this should be complemented by more general workers' education and training by unions on rights.

c) Job Security and the Role of the Union

Long-term casuals should be transferred to permanent contracts, or fixed term contracts of at least one year. Seasonal contracts should be used to cope with fluctuations in production, providing pro-rata benefits and some guarantee of being rehired the following season.

Legislation relating to casual workers needs to be revised to close the loophole, which allows long-term use of casual labour with no protection or benefits. The Union should ensure that non-permanent workers are represented effectively and are given more protection through the Joint Industrial Council (JIC)

d) Support for female workers in relation to domestic responsibilities

Full-day childcare services (i.e. crèche and/or pre-school) should be provided so that older children who were caring for siblings can attend school and to reduce parental anxiety about their children when they have to work long hours. Women with young children should be permitted breastfeeding breaks. The Union, in dialogue with farm employers, should investigate ways of giving workers notice of when they have to work late. It is often the just-in-time ordering policies that lead to overtime being required at short notice, thereby creating problems for workers. In addition, pregnant women should be offered antenatal care, especially in the later months and they should be assigned light duties. Non-permanent women who go on unpaid maternity leave should be offered job security.

e) Elimination of Harassment

There is a need for clarity and enforcement of company policies on verbal and physical abuse and sexual harassment within the workplace.

f) Health and Safety

There are a number of health and safety measures that are recommended for immediate implementation. Spraying of chemicals with unprotected workers in the same greenhouse should be stopped immediately. The industry should jointly seek solutions to the difficulties of abiding by re-entry times, as some producers expressed difficulties with this while others said it was not a problem. The trade union is recommended to propose to management to set up joint Health and Safety committees to monitor conditions in an ongoing and proactive manner.

g) Representation and a 'voice' for workers

The Union needs to engage more effectively with all types of workers. All worker forums, be they farm-level trade union branches or workers' committees, should have female as well as male representatives. The union should consider establishing women's committees and/or committees for non-permanent workers, either additionally or as part of union representation, as a way of raising the 'voice' of marginalized workers as many workers feel that they have no avenue for complaint or fear that supervisors will quash their complaints. It is important that a complaints procedure that allows workers to bypass their supervisors is established. Complaints procedures should be made confidential; if confidentiality is not maintained complaints are likely to be anonymous and therefore difficult to follow up.

7.3.2 Effective Implementation of the ZEGA Code

The ZEGA code could contribute to sustaining improvements in labour practices if a number of changes are made to the way the code is implemented. These changes centre on the involvement of workers and uptake of a multi-stakeholder process approach. Standard auditing techniques tend to focus on the employer as the principal source of information. There were considerable discrepancies in our research between what management said about employment conditions and what workers reported. It was clear that most of the producers in our study were simply unaware of many of the problems that workers face. Worker testimony should be the primary focus of audits, not an optional add-on.

A concern noted from the trade union with respect to the ZEGA code was that they are not involved in the auditing process. Evidently, the auditing of the ZEGA code has been a form of first party audit in that the NZTT, on behalf of ZEGA, audits the member farms. It appears that the union may have a case for demanding involvement in the ZEGA audit process. Indeed, local stakeholder participation in the monitoring and verification of codes is also essential if their implementation is to genuinely address the conditions faced by workers. As a matter of fact, trade unions have knowledge of prevailing conditions, local language skills, and can often gain the confidence of workers in ways those professional auditors or company representatives cannot. This is particularly important in the case of temporary and casual employees, who may fear losing access to future work if they are critical of employers. In addition, it may be useful, from a gender perspective to include in the audit team local organisations that are able to reflect women's interests to ensure that the needs of female workers are included in the process of implementing codes, without which a large section of the labour force is essentially ignored.



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