



**International Labour Organization
International Programme on the Elimination of Child Labour (IPEC)**

**Investigating the Worst Forms of Child Labour No. 10
Tanzania
Child Labour in the Horticulture Sector in Arumeru District:
A Rapid Assessment**

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Preface

Unacceptable forms of exploitation of children at work exist and persist, but they are particularly difficult to research due to their hidden, sometimes illegal or even criminal nature. Slavery, debt bondage, trafficking, sexual exploitation, the use of children in the drug trade and in armed conflict, as well as hazardous work are all defined as Worst Forms of Child Labour. Promoting the Convention (No. 182) concerning the Prohibition and immediate action for the Elimination of the Worst Forms of Child Labour, 1999, is a high priority for the International Labour Organization (ILO). Recommendation (No. 190, Paragraph 5) accompanying the Convention states that “detailed information and statistical data on the nature and extent of child labour should be compiled and kept up to date to serve as a basis for determining priorities for national action for the abolition of child labour, in particular for the prohibition and elimination of its worst forms, as a matter of urgency.” Although there is a body of knowledge, data, and documentation on child labour, there are also still considerable gaps in understanding the variety of forms and conditions in which children work. This is especially true of the worst forms of child labour, which by their very nature are often hidden from public view and scrutiny.

Against this background the ILO, through IPEC/SIMPOC (International Programme on the Elimination of Child Labour/Statistical Information and Monitoring Programme on Child Labour) has carried out 38 rapid assessments of the worst forms of child labour in 19 countries and one border area. The investigations have been made using a new rapid assessment methodology on child labour, elaborated jointly by the ILO and UNICEF¹. The programme was funded by the United States Department of Labor.

The investigations on the worst forms of child labour have explored very sensitive areas including illegal, criminal or immoral activities. The forms of child labour and research locations were carefully chosen by IPEC staff in consultation with IPEC partners. The rapid assessment investigations focused on the following categories of worst forms of child labour: children in bondage; child domestic workers; child soldiers; child trafficking; drug trafficking; hazardous work in commercial agriculture, fishing, garbage dumps, mining and the urban environment; sexual exploitation; and working street children.

To the partners and IPEC colleagues who contributed, through their individual and collective efforts, to the realisation of this report I should like to express our gratitude. The responsibility for opinions expressed in this publication rests solely with the authors and does not imply endorsement by the ILO.

I am sure that the wealth of information contained in this series of reports on the situation of children engaged in the worst forms of child labour around the world will contribute to a deeper understanding and allow us to more clearly focus on the challenges that lie ahead. Most importantly, we hope that the studies will guide policy makers, community leaders, and practitioners to tackle the problem on the ground.



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¹ Investigating Child Labour: Guidelines for Rapid Assessment - A Field Manual, January 2000, a draft to be finalized further to field tests, <http://www.ilo.org/public/english/standards/ipec/simpoc/guides/index.htm>

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-J. Mwinulla

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EXECUTIVE SUMMARY

Research done by: NSWTI

There is no child labour on the flower plantations in Arumeru district.

It was assumed that since child labour was practiced on the coffee farms in Arumeru District, there was a high likelihood of child labour practices on the cut flower farms. This assumption was based on the premise that cut flower farms are located near the coffee plantations and therefore factors which cause child labour on the coffee plantations would also cause child labour on the cut flower farms.

But the research team was not able to identify a single working child during the field visits carried out during this rapid assessment study. Instead of being a failure, however, this investigation gives us the possibility to look at the reasons, causes and activities that can make a difference in the fight against the worst forms of child labour. The results do not mean that there is no child labour in the district. On the contrary, children who are not allowed to work in the protected and regulated flower industry are engaged in a great number of other activities in the informal sector.

Floriculture is the growing of cut flowers, potted plants, and associated greenery, and their subsequent arrangements. It is a newly established sector in Tanzania and very little is known about it in as far as child labour is concerned. Cut flower production is a major part of horticulture farming in which the cut flowers are produced mainly for export purposes. The cut flower industry, since its initiation in 1987, has been growing in terms of area under cultivation, production and export earnings. The export earnings have increased from US\$ 2219 million in 1997 to US\$ 40,446.6 million in 1998. The industry is currently serving as another source of modern employment to the population where the cut flower farms are established (i.e. Kilimanjaro and Arusha). The workforce in the cut flower industry has also been increasing over the years from 1114 employees (625 female and 489 males) in 1994 to 2346 employees (1347 female and 999 males) in 1998. The cut flower industry in Kilimanjaro and Arusha has attracted people to migrate to these places from other regions such as Singida in search of employment.

Most of the cut flowers are grown in the northern part of Tanzania, especially in Arumeru District where a large part of the cut flower farms are located. Eight out of the eleven cut flower farms of the Arusha region are located in Arumeru district. The cut flower industry in Tanzania is dominated by foreigners (mostly from the Netherlands) who own most of the cut flower farms in Arusha and Kilimanjaro regions. Cut flower production is a commercial agriculture crop, mostly grown in areas which used to be under coffee production or adjacent to coffee plantations. Within this context the horticulture sector, being a new and fast growing commercial sector, was an area thought to have a high incidence of child labour.

In our attempt to test this assumption, research was conducted in Arumeru District on the cut flower farms at the two key locations of Usa River and Nduruma areas. At Usa River key location, two out of the three cut flower farms were studied (i.e. Kombe Roses Ltd and Hortanzia Ltd). At the Nduruma key location, three out of the five cut flower farms were studied - Tanzania Flowers Ltd, La Fleur D' Afrique Ltd and Kiliflora Ltd. The Tanzania Plantations and Agricultural Workers Union (TPAWU) officials were very helpful to the research team in terms of the selection of the study area locations and guidance surrounding the cut flower farms.

The main study objectives were five-fold as follows:

- To find out the causes and consequences of child labour on horticulture farms;
- To assess working conditions on horticulture farms in particular, assessing the type of activities and tasks children are involved in, working environment and work schedules;
- To examine characteristics of child labour on horticulture farms i.e. age, sex, number, ratio between boys and girls in each activity, life style and historical experiences;
- To propose tentative intervention measures to eliminate worst forms of child labour as a matter of urgency; and
- To test and evaluate the ILO/UNICEF Rapid Assessment methodology.

The rapid assessment methodology was used as a means of accessing information about the working children in a short period of time. Various data collection methods were used in varying proportions in order to collect a variety of the requisite quantitative and qualitative information. The data collection methods applied included key informant interviews and discussions, observation, individual child interviews and conversation, mapping, questionnaires and focus group discussions. The most prominent of these methods were the interviews and

conversation, observation, and focus group discussions. Interviews and discussions with individual children and adults offered an opportunity to build a rapport which increased confidence of the interviewees and thus helped to facilitate free conversation. Observation was also a very useful method which enabled the researchers to view activities being undertaken, the working tools and protective gear used, and the conditions under which work was performed. Focus group discussions were also an instrumental method which offered the researchers a good opportunity to access useful information from different people, which could not have been achieved through individual interview and discussion.

A combination of these methods was ideal because each method was designed to gain different types of information in a complementary manner. The study, however, did suffer from certain limitations, namely limited time for data collection in relation to the volume of work; lack of time to pre-test the research instruments and make sure all questions were useful and relevant; the problem of entry into some of the cut flower farms due to bureaucratic procedures; and the lack of literature and published studies on the floriculture industry in Tanzania. All these limitations were mitigated in one way or another to reduce their effect on the study. The researchers had to work for long hours and during weekend days in order to cope with the limited time. In the course of conducting interviews, some irrelevant questions in the research instruments were adjusted in order to suit the requirements of collecting the requisite information. Patience and diplomacy had to be applied in order to secure entry into some of the cut flower farms as the researchers were subjected to long bureaucratic procedures. The researchers also had to strive hard to look for whatever literature was available on horticulture, as there is a very limited amount, to enable them to get the background information and gain insight into this sector. For this reason this report relied mostly on primary data.

After conducting a field survey, this study led to the conclusion that the child labour problem which was assumed to exist in the horticulture sector was in fact non-existent. All the different methods used to collect data on child labour did not result in evidence of the existence of child labour on the cut flower farms in Arumeru District.

Although child labour proved to be non-existent on the cut flower farms, it exists in other sectors such as the informal sector, mining and the commercial agriculture sector. In these sectors, children performed different activities that made them vulnerable to health risks and hazards. On coffee plantations, for example, children worked for wage payment at their own will or they accompanied their parents in order to boost their daily income. In performing various activities on mixed farms and coffee plantations children were exposed to adverse weather conditions such as scorching heat, rain, cold temperatures, snake and insect bites and continuous standing for a long time.

Children were also employed in garages to perform a variety of activities such as panel beating, welding, lifting, carrying and moving heavy objects. In so doing children were exposed to health risks and accidents.

Besides being employed in the formal sector children are also employed in the informal sector where they perform activities such as domestic work; cutting of grass and fetching water for cattle; doing petty business and conducting the push cart operations. In the course of conducting such activities children are exposed to health risks, accidents, abuse and exploitation through the payment of low wages.

The study found that the poverty of the majority of the people in Arumeru district and the school learning environment tend to contribute to the existence of child labour in different sectors of the economy in the district. The population pressure on land, the adverse weather conditions (drought) and the falling prices of coffee, affected the income of the people contributing to the low per capita income. The per capita income was estimated to be Tshs. 75,000 per annum¹. The scarcity of land has resulted in some people becoming landless while others have small holdings which are not economically viable for subsistence agriculture. Although 98.8% of the arable land in Arumeru district is under crop production, adverse weather conditions have affected the food crop production, and production has been short of the targeted quantity since 1995.

The learning environments in primary schools in Arumeru district were not equipped or friendly enough to attract and retain children in schools. The primary schools lacked the necessary infrastructure such as classrooms, desks, libraries, latrines, teachers, houses and playgrounds. The lack of qualified teachers also affected the academic performance in schools. The relatively few number of primary schools to the number of school-age children caused both low-enrolment of some school-age children and the late enrolment of children

¹ Tshs. 887 = USD \$1 (September 2001)

between ages 9-13. The failure to absorb all the school-age children may have also contributed to child labour to a certain extent.

Whereas the cut flower industry in Arumeru District has succeeded in combating child labour, other formal and informal sectors within the same vicinity have not been successful. Why is this? This success story has been enabled by a number of factors that have operated and continue to operate in both supplementary and complimentary manners. These factors have been operating simultaneously and have had different impacts in preventing child labour in the cut flower industry. These factors are as follows:

- Operation and application of various approaches (multidisciplinary) to the restriction of child labour on the cut flower farms;
- Existence of the international regulatory machinery of the International Flowers Coordination of Germany through its International Code of Conduct and the Milieu Project Sierteelt (MPS) of the Netherlands through its Social Chapter which had a great influence in restricting child labour;
- Existence of the regulatory and the national labour laws enforcement institutions which have been playing a remarkable role in restricting child labour in the cut flower industry. The labour union (TPAWU) has been conducting awareness raising seminars on child labour to its branch leaders of the union field branches established on the cut flower farms in Arumeru District. The labour inspectorate section of the Arusha regional labour office through labour inspection activities has also been actively engaged in ensuring that employers on the cut flower farms do not employ for wage children below the age of 18 years;
- Operation of internal and external forces which have enabled the cut flower industry in Arumeru to be child labour free. Some of these forces include:
 - The nature and type of activities performed on the cut flower farms together with the delicate and complex process of cut flowers production offers minimal opportunities for the employment of children under the age of 18 years;
 - The negative attitude of the people residing around the cut flower farms has also restricted child labour in the cut flower industry. The adverse effects of the toxic agro chemicals and pesticides on the health of people employed on the cut flower farms raised their awareness and concern about the hazards of working there. Because of this, parents have become hesitant to allow their children to go and seek employment on the cut flower farms;
 - The influence of Simanjiro District at close proximity which is very well known for the mining of Tanzanite and other precious gemstones at Mererani sites. It is an outlet for most of the male children under 18 years moving from Arumeru District to Mererani as they can be employed in this speculative business.
- The unique nature of the horticulture sector and especially the cut flower industry is another contributing factor which has made it easier for the cut flower industry in Arumeru District to be child labour free. This sector in Arumeru District was considered unique due to the following:
 - The existence and operation of the international regulatory machinery of the International Flowers Coordination of Germany and the MPS of the Netherlands;
 - The type and nature of activities and the production process of the cut flowers;
 - The concentrated nature and accessibility of the cut flower farms facilitating the smoothness and regularity of labour inspection work and the labour union activities;
 - The nature of cut flower production which has rendered the cut flower farms to a high level of community awareness and concern about the imminent hazards to people employed on them.

The cut flower industry success story could be an example to be emulated and applied in other sectors in order to combat child labour. The success story of the cut flower industry, however, cannot be applied wholesale to other sectors both within the region and the country as a whole. This is due to the fact that some factors operating in the cut flower industry are missing in other sectors. The cut flower industry does have some comparative advantages over other sectors.

As long as the factors that cause child labour persist in society, the law enforcement, sensitization and other intervening measures that do not directly deal with the root causes yield few results in combating child labour. A restriction of child labour in one sector (like in horticulture) will tend to cause children to move into other sectors in the same area in which restrictive measures are relatively relaxed. However bad child labour is, as long as parents continue to be incapable of meeting the needs of their families adequately, parents and other stake holders will remain silent and helpless spectators of this economic and social evil. Any intervention measure has to deal with the root cause of the problem. This will need a participatory approach with the communities in planning, implementation, constant monitoring and periodic evaluation of the intervention programmes.

Solutions for combating child labour adopted on the cut flower farms in Arumeru district should be adopted in other sectors too. This good practice should be effectively emulated, but with adjustments to the local situation and the concerned sector.

1. BACKGROUND INFORMATION

1.1 Horticulture – An overview

Horticulture is the branch of agriculture dealing with garden crops, generally fruits, vegetables and ornamentals. The field of horticulture is traditionally divided into food crops (pomology and dericulture) and ornamentals (floriculture and landscape horticulture). Floriculture is the growing of cut flowers, potted plants, and associated greenery, and their subsequent arrangement. Floriculture has long been an important part of horticulture, especially in Europe and Japan and accounts for about half of the non-food horticultural industries in the United States of America. Because cut flowers and potted plants are largely produced in plant growing structures in temperate climates, floriculture is largely thought of as a greenhouse industry, although it includes considerable outdoor floriculture of many flowers.

Floriculture is a competitive and highly technical business requiring knowledge, skill and large amounts of capital. Greenhouse floriculture is, in many respects, the most sophisticated part of plant agriculture.

The industry is usually very specialized with respect to its crop; the grower must provide precise environmental control and be vigilant in the constant struggle against pests and diseases. Exact scheduling is imperative since most floral crops are seasonal in demand. Because the product is perishable, transportation to market must function smoothly to avoid losses. For the purpose of this study horticulture implies floriculture and specifically the growing of cut flowers.

1.2 Horticulture Sector in Tanzania

Tanzania, like many other developing countries, is attempting to diversify its export base with a view of gaining new sources of income and foreign exchange, and thus reducing its exposure to the price volatility that is typical of international markets. A handful of non-traditional products such as oilseeds and oil, spices, fruits, vegetables and cocoa beans, which are almost invariably traded unprocessed, contribute considerably to total exports. Tanzania is strategically located between 1° and 12° south of the equator, thus commanding an enviable tropical climate to accommodate the production of a wide range of fruits, vegetables, spices and flowers (both tropical and temperate varieties). Some of the crops can be produced throughout the year and most of them are highly seasonal, consumed at the farm level with potential for local and export markets. The potential areas for horticulture are widespread in the country however only five percent of these areas are exploited (Mbwele and Nzalawahe 1999).

The horticultural industry has developed mainly in the highlands of Tanzania where a conducive climate exists. The industry has particularly flourished in areas which have relatively easy access to the market. The highland areas include the Southern Highlands covering Mbeya and Iringa regions, and the Northern Highlands covering Arusha, Kilimanjaro and Tanga regions. The central plateau, coastal zone and lake zone also have potential for the horticultural industry. The central plateau includes Dodoma and Singida regions; the coastal zone includes the eastern part of Tanga, Dar es Salaam, Coast Regions and Uluguru Mountains in Morogoro Region; and the lake zone includes Mwanza and Kagera regions. However, the country does not have many actual horticultural products to be presented to the international market (Mutabuzi, 1999).

1.2.1 Cut Flower Industry in Tanzania

The cut flower industry, started in 1987, is of recent origin in Tanzania. The Tanzania Flowers Limited (TFL) was the first company to undertake this form of agriculture. It started with the cultivation of cut flowers/foilage such as carnations, euphorbia and *Ami majus*. All production activities were performed in open fields instead of indoors under greenhouse conditions. The indoor system of production involves large capital investment but ensures the quality of the end product.

In 1992, Tanzania Flowers Limited started intensive commercial production of roses. It changed the production process from open field to an indoor system. The indoor system involves the construction of greenhouses, in order to control the environment that favours cut-flower production. TFL started with 6,000 square metres of greenhouses, an area that increased to 36,000 square meters by 1998 (ESRF, 1999).

Ever since 1994, there has been an increase in the number of flower companies joining the flower industry and also an increase in the area under flower cultivation. This is shown in Table 1 below:

Table 1: Area Under Flower Production (ha)

Name	Type of Flowers	1994	1995	1996	1997	1998
Horticulture farms and Export	Roses	-	1	3	6	6
Hortanzia	Roses	2.6	2.6	1.3	0.5	-
	Lisianthus	1.4	2.3	3.5	4	5
Tanzania Flowers	Roses	5	5	5	8.8	7.1
Kombe Roses	Roses	-	-	3	3	5
La Fleur D'Afrique	Roses	-	-	-	3	8.5
Arusha Cuttings	Chrysanthemum	-	-	-	-	2.8
Multiflower	Chrysanthemum	-	-	-	1.2	1.2
Kiliflora	Roses	10	10	14	14	18
Others	Roses	9.4	10.3	14.7	20	26.4
Total		28.4	31.2	44.5	60.5	87.8

Source of Data: ESRF Field Survey 1999

Analysis of the data in Table 1 above shows that there has been an increase in the area under production since 1994. The land under flower production increased by 43 percent in the 1995/96 production year, during which time most of the flower farming areas were established. During the 1994/95 period, the growth rate of land under cultivation increased by only 10 percent when only a few farms were producing cut flowers. During the 1996/97 and 1997/98 production years the land under production grew. This is because flowers are a perennial crop, thus an increase in the size of farms or the establishment of new farming means an increase in the size of land. During this period, fewer greenhouses were constructed, as producers were concentrating on the crops that were in the greenhouses (ESRF.1999).

The net return obtained from rose production per hectares is estimated to be Tshs 202,048,077 per year. The production of flowers has been on the increase each year as shown in the table below.

Table 2: Annual Production of Cut Flowers in Tanzania (stems)

Type of flower	1994	1995	1996	1997	1998
Roses	97,500,027	104,361,137	148,055,568	199,694,494	256,388,952
Lisianthus	719,472	1,084,260	1,967,469	2,001,291	2,409,444
Crysanthemums	-	-	-	19,400,000	63,000,000
Total	98,219,499	105,445,397	150,023,037	221,095,785	321,798,396

Source of Data: ESRF Field Survey, 1999

The data in the table indicates that there has been a tremendous increase in the quantity of flowers produced in Tanzania and that there are different types of flowers produced. Roses are, however, the most abundant, accounting for about 80% of the total cut flowers produced in 1998. The growth in output for 1994/95 was seven percent only, while that of 1995/96 rose up to 42% and dropped slightly to 41% in the 1997/98 production year (ESRF: 1999).

Cut flowers are produced under very strict quality control in all their production phases. Due to the extreme sensitivity of the crop quality, cut flower production requires expert knowledge, professional management and constant vigilance during all phases of growing, packing and shipping. Taking into account the perishable nature of the cut flowers and the fact that the flowers themselves are the finished product and must be harvested, handled and transported with extreme care, timing is crucial.

Cut flowers sold in international markets often retain the identity of the individual grower, so growers who can successfully differentiate their products and satisfy their customers have the potential to attain profit levels that far exceed those of alternative agricultural products. To accomplish this, all companies take stringent measures that include:

- hiring a quality controller who, among other duties, collects feedback on flower quality from buyers;
- using high quality seedlings;
- conducting phytosanitary inspection to ensure pre- and post- harvest quality control;
- sorting damaged and diseased flowers;

- inviting an inspection by Tanzania Pest Research Institute (TPRI) from time to time; and
- rigorous grading (ESRF: 1999).

Cut flower owners employ adults (18 years and above). This has been the practice ever since 1994 when the cut flower industry in Tanzania took off. The distribution of employment by age (in years) and gender is provided in the table below.

Table 3: Employment by Age (in years) and Gender 1994 - 1998

Age/ Gender	1994		1995		1996		1997		1998		Average in %		Total % (F + M)
	F	M	F	M	F	M	F	M	F	M	F	M	
18 - 35	487	326	607	350	594	351	116	708	117	66	82.2	64.8	75%
36 - 55	91	106	92	120	104	113	245	337	134	230	13.6	24.5	18%
Over 55	47	57	34	45	35	55	58	137	34	105	4.2	10.8	7%
Total	625	489	733	515	733	519	1465	1182	1347	999	100	100	100%

Source of Data: ESRF Field Survey 1999

The above table shows that in terms of age, 75% of all employees are between 18–35 years of age while the rest are over 35. This implies that the cut flower industry has ample employment opportunities for people below 35 years of age. This is due to the fact that flower production is an extremely time and energy consuming activity, thus the people involved must be strong and active (ESRF: 1999).

1.3 Cut Flower Industry in Arumeru District

In Arusha Region horticultural farming is practiced in Arumeru and Arusha Districts. Arumeru District now has a total number of eight flower farms covering an area of 9,000 acres. Flower farms in Arumeru are concentrated in two major locations, at Usa River and Nduruma. Three farms are located at Usa River - Kombe Roses Ltd, Hortanzia Ltd and Kiliflora (Loliondo) Ltd, while five farms are located at Nduruma - Kiliflora (Nduruma) Ltd, La Fleur D’Afrique Ltd, Tanzania Flowers Ltd, Dekker Bruins Ltd and Hot Roses Ltd. Arusha District has three farms located at Them Industrial Area – Continental Flowers Ltd, Multiflowers Ltd and Arusha Cuttings Ltd.

Arumeru District is the pioneer of cut flower production in Tanzania as the first flower farm was established in this district in 1987. This farm was Tanzania Flowers Limited and it started with 6,000 square meters of greenhouses, an area that had increased to 36,000 square meters by 1998. Since then, TFL’s performance has been excellent in terms of productivity as well as profitability. As a result of the high profitability realised from quality cut flowers, many investors (both foreign and local) have joined the industry since 1992 as is shown in the table below:-

Table 4: Cut Flower Development Process in Arumeru since 1992

Name of Horticulture Farm	Type of Flowers	Year of Initiation	Area under Production	Name of Owner
1. Tanzania Flowers Ltd	Roses	1992	8.75 Hactares	Hans Bruins
2. Kiliflora Ltd	Roses	1992	18 Hactares	Jerome Bruins
3. Hortanzia Ltd	Lisianthus	1994	4.75 Hactares	H. Combos
4. Kombe Roses Ltd.	Roses	1995	5.5 Hactares	R. Kombe
5. La Fleur D’Afrique Ltd.	Roses	1997	9 Hactares	F. Mrema

Source: Field Survey 2000

Cut flower farms in Arusha District - Continental Flowers Ltd, Multiflower Ltd and Arusha Cuttings were established as recently as 1997. The industry has a very big potential for expansion as it has a ready market abroad, especially in Europe.

The production of flowers in Arumeru is undertaken by foreigners, especially from the Netherlands. Foreigners own most of the cut flower companies in the northern zone. In Arumeru District Hortanzia Ltd, Tanzania Flowers Ltd and Kiliflora

Ltd are fully owned by foreigners. La Fleur D’Afrique is jointly owned while Kombe Rose Ltd is owned wholly by an indigenous Tanzanian.

Most of the land used in cut flower production by foreign investors has either been purchased or leased by them. Such land was used for coffee and food crop production such as maize and wheat before making the switch to floriculture. Though the production of cut flowers is both capital and labour intensive, it is an economically viable business. The yield per square meter is high (200 stems per square meter) and the price per stem is high depending on the season. Very high prices appear during Valentine’s Day in February, Christmas and Mother’s Day.

Arumeru District is the leading district in the country in as far as cut flower production is concerned. Arumeru District has a number of coffee plantations and estates in which children along with adults are employed to perform various activities, especially harvesting. Most of the cut flower farms have been established on farms that used to be under coffee production. There was every possibility of children being employed on these farms. Since child labour in the horticulture sector seemed to be an unexplored area, the purpose of this study was to investigate the potential of children working in the horticulture sector in Arumeru District as a worst form of child labour.

1.4 History and Past Research on Child Labour in the Horticulture Sector

The horticulture sector and especially floriculture is a relatively new sector in Tanzania as compared to other commercial agricultural farming such as coffee, tea and tobacco. Its history dates back to 1987, when the first company undertook horticulture activities. This sector has been somewhat unknown to many people.

Very little research has been undertaken in this sector, and the research that has been undertaken has been related to economic issues. One such study is the Community and Economic Impact of Export Diversification: The Cut Flower Industry in Tanzania, conducted by the Economic and Social Research Foundation in 1999. Virtually no research on child labour in the industry has ever been undertaken.

1.5 Efforts Made in the Past to Combat child Labour

Arumeru district has a number of coffee plantations, cut flower farms and mixed farms in which children are likely to be employed, especially during the peak seasons of the respective sector. Besides the commercial agricultural crops, there are also some sectors in which children work for payment such as the informal sector. There have been efforts in the past as well as on-going efforts, which have been undertaken to combat child labour. In some sectors these efforts have been effective in eliminating child labour and in some sectors these efforts have yet to yield the desired results.

The following factors, approaches and measures have been successful in combating child labour on the cut flower farms in Arumeru district.

1.5.1 International Regulatory Machinery Efforts

(i) Regulation by the International Code of Conduct (ICC)

The International Code of Conduct is a document issued by the International Flowers Coordination of Germany. The International Flowers Coordination promotes socially and environmentally responsible flower cultivation both in the northern and southern countries by setting universal standards. The code aims to guarantee that flowers are produced under socially and environmentally sustainable conditions. The code provides a concise statement of minimum labour, human rights and environmental standards for the international cut flower industry. Companies are under obligation to pledge to require their suppliers, contractors and sub-contractors to observe these standards. Under Article 1:9 of this document it is categorically provided that:

“There shall be no use of child labour. No worker under the age of 15 years or under the compulsory school-leaving age, which ever is higher, shall be engaged.”

Additionally, children under 18 shall not work at night or in hazardous conditions, and adequate transitional economic assistance and appropriate educational opportunities shall be provided to any replaced child worker (ILO Convention 138). The compliance with this code of conduct by the cut flower companies has helped to combat child labour.

(ii) The Millieu Project Sierteelt (MPS) Social Chapter

The Millieu Project Sierteelt (MPS) is a non-governmental organization from the Netherlands. It deals with the conditions under which flowers are produced. It conducts a periodic inspection of the flower producing companies to ensure compliance. Flower producing companies are categorized into different grades according to their degree of compliance. The market status of the flowers of such companies will depend on the inspection grade of the concerned company.

Cut flower producing companies with higher compliance grades command high prices for their flowers. Under the MPS Social Chapter (4th version) Article 1:4 on minimum age it is provided that:

“1:4:1 No farm shall employ children under the age of completion of compulsory schooling or under the age of 15, whichever is higher.

1:4:2 A child worker who is replaced shall receive adequate economic assistance during the transitional phase and shall be provided with appropriate education opportunities.

1:4:2 3 For work which is likely to jeopardise health no person under 18 shall be employed.”

Tanzania Flowers Ltd was the first flower producing company to adopt the MPS Social Chapter in 1996 followed by Kiliflora Ltd and La Fleur D’Afrique Ltd. Other farms have not yet adopted the MPS Social Chapter. The complying cut flower producing member companies are awarded the flower production label and flag to be hoisted at the company premises.

1.5.2 Institutional Regulatory and Enforcement Machinery Efforts

(i) Activities by the Tanzania Plantations and Agriculture Workers Union

In 1997 the Tanzania Plantations and Agricultural Workers Union (TPAWU) initiated awareness-raising seminars on child labour. Seminars were conducted involving TPAWU branch leaders for all farms (coffee, flowers and mixed farms). After these seminars the branch leaders were assigned the duty of closely monitoring the child labour issues in their respective places of work and reporting on them to the Area TPAWU Secretary. This measure has had a positive impact on the prevention of child labour on the cut flower farms.

(ii) Labour Inspection Activities

The Arusha Regional Labour Office has been active in conducting labour inspections on the cut flower farms. This has been facilitated by the fact that all the cut flower farms are located within the easy reach of labour inspectors. They are easily accessible and are almost all clustered in three different locations of Usa River (Kombe Roses Ltd, Kiliflora Ltd (Loliondo) and Hortanzia Ltd); Nduruma (La Fleur D’Afrique Ltd, Kiliflora Ltd (Nduruma), Dekker Bruins Ltd, Hot Roses Ltd and Tanzania Flowers), and Themi Industrial Area (Continental Flowers Ltd, Multiflower Ltd, and Arusha Cuttings Ltd). Such periodic labour inspection has been instrumental in labour law enforcement, especially regarding the employment of children.

(iii) Voluntary Agreement

Voluntary agreement is another factor that has facilitated, and continues to facilitate, the combating of child labour on cut flower farms. A voluntary agreement is a written bilateral agreement reached and signed between the management and the trade union (acting on behalf of the workers) on certain specific terms and conditions of work/employment and may or may not have a binding effect on the parties thereto. A voluntary agreement was entered into (signed) on 1st September, 2000 between the Kiliflora Limited, Kilimanjaro Flowers Limited and the union- TPAWU. It is provided under article 3:4 of the said voluntary agreement that:

“It is hereby agreed that the employer shall not practice or allow child labour”.

This is the first voluntary agreement to be finalized and signed between TRAWU and the cut flower producing companies in Tanzania. Arrangements are under way to enter into voluntary agreements with other cut flower producing companies. Such voluntary agreements are instrumental in combating child labour.

1.5.3 Local initiatives

(i) Child Labour Grassroot Training Programme

The Tanzania Federation of Trade Unions (TFTU) / National Organization of Trade Unions (NOTU) / Central Organization of Trade Unions - Kenya (COTU) (K) / Solidarity Centre Child Labour Grassroot Training Programme is a special programme conducted by the Solidarity Centre of the American Federation of Labour (AFL) – Congress of Industrial Organization (CIO) of the United States, operating from Nairobi. This is an effort by the East African Trade Union Council (EATUC) to reduce child labour at the grassroots level. Seminars in Tanzania started by conducting the Training of Trainers in June 2000 in order to get resource persons to conduct grassroots seminars.

In July 2000 grassroots seminars started. These seminars involved trade union TPAWU field branch leaders on the farms; workers, employers; the Tanzania Association of Agricultural Employers (TAAE) officials; Village and Ward Executive

Officers, Teachers; Social Welfare Officers; Cooperative Union leaders and Labour Inspectors. Topics covered in these seminars were as follows:

- Labour laws in relation to employment of children;
- Definition of child labour and child work;
- Strategies of returning children back to school;
- Micro-finance – increasing family income;
- Strategic planning processes;
- Management of income generating activities;
- **Elimination of worst forms of child labour – ILO Convention No. 182 and accompanying Recommendation 190, and the ILO Minimum Age Convention 138.**
- Networking with collaborating organizations such as ILO/IPEC, UNICEF, ICFTU – AFRO, KNUT, National Steering Committee – Ministry of Labour and ANPPCAN.

After these seminars three child labour monitoring committees were formed covering the following areas:

- Cut flower farms;
- Coffee farms; and
- Mixed farms.

Members of these committees include representatives (one member) from the following groups/organizations:

- Workers;
- Tanzania Association of Agricultural Employers (TAAE);
- Teachers;
- Social Welfare; and
- Labour.

A Labour Inspector serves as a member on each of these three committees. These committees are newly formed, and are yet to be given terms of reference in order to start functioning. TPAWU area and zonal officers are going to monitor the functioning of these committees. This is another positive move towards the elimination of child labour on farms and plantations.

(ii) Regional Child Labour Monitoring Committee

The ILO, in collaboration with the Ministry of Labour and Youth Development conducted a seminar on child labour in Arusha on 27th and 28th July, 2000. This seminar covered a wide range of participants from different sections. After this seminar a committee of two officials from the Department of Community Development, Arusha Region was formed to deal with the monitoring of child labour in Arumeru, Simanjiro, Monduli, Arusha, Babati and Karatu Districts. This committee was assigned the following tasks:

- to ensure that children under the age of 15 will not be employed in coffee, cut flower and sisal farms and plantations, or in mines and domestic homes;
- to ensure that children of school going age are enrolled in schools;
- to ensure that drop-out students are brought back to school so that they may complete primary school education;
- to find out whether girls are used in child prostitution;
- to ensure that immigrant working children are repatriated to their places of domicile (origin).

This committee started its work on 14 December 2000, but its major constraints are the small size of the committee relative to the workload, lack of funds and transport facilities and the size of the area to be covered, i.e. six districts.

2. RESEARCH METHODS AND PROCEDURES

2.1 Objectives of the study

The specific objectives of the study comprised the following:

- To find out the causes of child labour on horticulture farms;
- To assess working conditions of children on the horticulture farms and in particular assessing the types of activities and tasks performed by children, their working environment and work schedules;
- To examine the characteristics of child labour on the horticulture farms i.e. age, sex, number, ratio between boys and girls in each activity, their life style and their historical experiences;
- To propose tentative intervention measures to eliminate the worst forms of child labour as a matter of urgency;
- To test and evaluate the ILO/UNICEF Rapid Assessment methodology.

2.2 Sampling

Sampling was necessary in order to be able to identify the local key locations where the research was to be conducted. In order to get a sample for the research the Area and Zonal TPAWU officials were contacted to provide a list of cut flower farms in Arumeru District and their locations. It was found that all eight of the cut flower farms were located in two different locations of Usa River and Nduruma.

Thus Usa River and Nduruma areas were the two key locations of the study where the flower farms were located and distributed as follows:

<ul style="list-style-type: none"> • Key location A – Usa River Area (i) Kombe Roses Ltd, (ii) Kiliflora Ltd – Loliondo Farm, (iii) Hortanzia Ltd. 	<ul style="list-style-type: none"> • Key location B – Nduruma Area (i) La Fleur D’Afrique Ltd (ii) Dekker Bruins Ltd (iii) Kiliflora Ltd – Nduruma Farm (iv) Hot Roses Ltd (v) Tanzania Flowers Ltd
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As it was not possible to conduct the research on all eight flower farms in the two key locations due to limited time, a purposive sampling was made. Two farms out of the three farms in the Usa River key location, namely Kombe Roses Ltd and Hortanzia Ltd, were sampled. Three farms out of the five farms in the Nduruma Key location were sampled as well, namely La Fleur D’Afrique Ltd, Tanzania Flowers Ltd and Kiliflora - Nduruma Farm.

2.2.1. Respondents

A total of 80 respondents were contacted in the two key locations. Some respondents were randomly selected such as children and parents. Some respondents were purposively contacted by virtue of the official positions they held such as owners of flower farms, supervisors, labour officers, heads of schools and village/wards leaders. Besides individual respondents contacted, four focus group discussions were conducted involving 24 people. The distribution of respondents by gender is shown in the table below.

Table 5: Distribution of Respondents by Gender

Type of Respondent	Gender		Total	Percentage
	Male	Female		
Chapter 2 Children	24	13	37	45%
Farms Owners	6	-	6	8%
Supervisors	6	4	10	13%
Parents/Guardians	4	9	13	16%
Labour Officers	2	-	2	3%
Heads of Schools	2	2	4	5%
Village/Ward leaders	5	-	5	6%
Trade Union Leaders	2	-	2	3%
Employers Leaders	1	-	1	1%
TOTAL	52	28	80	100%

Source: Field Survey 2000

The child respondents comprised the majority of all respondents (45%). This was necessary in order to obtain the most information from the children who were the main target of the study, and also to know their opinions, attitudes and feelings on child labour from their own points of view. As there were no working children in either of the key locations all the child respondents were non-working. Each group of respondents was able to provide useful information.

2.3 Methods of Data Collection

Various methods of data collection were used to collect the required information. These included dialogue and conversation, interviews, observation, mapping, questionnaires, and focus group discussions. In the following sub-section, the usefulness of the different methods applied is described.

2.3.1 Key Informant Interviews

In-depth discussions with key informants were conducted in a structured manner. Key informants were selected based on their knowledge about children's economic activities. Discussions and consultations were made with the following individuals and organizations familiar with the details of the child labour circumstances in the area:

- Officials of the TPAWU;
- The Acting Executive Secretary of the Tanganyika Association of Agriculture Employers (TAAE);
- Arusha Regional Labour Officer;
- Labour Inspector – the coordinator of the three child labour monitoring committees of Flower Farms, Coffee Farms and Mixed Farms;
- Labour Officer in the Arusha Regional Secretariat;
- TPAWU Area Secretary;
- Village Executive Officers of the two key locations;
- Ward Youth Secretary of Usa River Ward;
- Primary School Heads; and
- Owners of flower farms.

These key informants were able to provide valuable information because of their expertise and knowledge of the study area and the subject matter. Their familiarity with the local situation provided a useful entry point.

2.3.2 Observation

Observation was another very useful tool for collecting data which was adopted. Through this method, the researchers were able to prove and disprove the existence of working children in the key locations. They were able to go through the different sections of the cut flower farms such as greenhouses, grading sections, cold rooms, machine rooms and other important places which were thought to harbour child labour. The researchers were able to observe how different activities were conducted on the cut flower farms, the tools and protective gear used, and the conditions under which work was being done. They were able to assess the probable risks and hazards to which children would have been exposed if they were to be working in such an environment.

2.3.3 Individual Child Interview

Interviews and conversation with children in the key locations was another method employed to gather the needed information. As the working children did not exist in the two locations, interviews with non-working children at various places such as their places of residence, business centres (market) and other prominent locations were undertaken. At one key location the interviewing of children was facilitated by the Ward Community Development Officer with whom meetings were arranged.

At Nduruma key location, children were interviewed spontaneously at their different social gatherings during their normal daily routine activities. This method yielded very significant information for this research. The age group distribution of the non-working children is shown in the table below:

Table: 6 Non-Working Children Respondents Distribution by Age-Group and Gender

Age Group	Gender		Total	
	M	F	Number	Percentage
6 <=	0	0	0	-
7 - 9	2	2	4	11%
10 - 13	14	10	24	65%
14 - 17	8	1	9	24%
18+	0	0	0	-
Total	24	13	37	100%

Source: Field Survey, 2000

The majority of the non-working children respondents were between 10 – 13 years (school age, specifically class III – VI). No respondents were in the age groups of under 6 years or above 18 years.

2.3.4 Group Interviews

Discussions with small groups of adults were also conducted. Of the four focus group discussions that took place at the two key locations, two were formally structured and two were spontaneous. These four groups were composed of six members each. Two of the focus group discussions were composed of men and women. One group was composed of men only and another group was composed of women only. These focus group discussions yielded useful information on child labour.

2.3.5 Mapping

The approximate drawings (maps) of the key locations were prepared. A map was drawn for key location A - Usa River in which the three flower farms were included, namely Kombe Roses Ltd, Kiliflora (Loliondo) Ltd and Hortanzia Ltd. Another map was drawn for key location B – Nduruma in which the five flower farm were covered, namely La Fleur D’Afrique Ltd, Kiliflora (Nduruma) Ltd, Tanzania Flowers Ltd, Hot Roses and Dekker Bruins Ltd. Mapping was a very resourceful method of providing information on the physical features of the study area and how the existing resources could be tapped to combat the worst forms of child labour.

2.3.6 Questionnaire

The questionnaire method was also used to collect the requisite information and cross check the information obtained through interviews. Both open and close-ended questions were used in the questionnaire and were administered to the targeted respondents such as heads of schools and children.

2.4 Research Limitations

This research was limited in one way or another by the theoretical and practical factors listed below.

2.4.1 Time

The allocated time for field work (data collection) was not long enough, bearing in mind the nature and volume of work. This problem was solved by working long hours each day, including Saturdays and Sundays.

2.4.2 The research instruments

The research instruments, questionnaires and interview schedules were not pre-tested, thus in some cases some of the questions were rendered useless. This problem was solved by substituting the invalid questions by valid ones so that the required information could be obtained.

2.4.3 Entry Problem

In some of the flower farms access/entry was very difficult due to the long bureaucratic official procedures involved, which resulted in a loss of the already limited time available. This problem was solved to some extent by being patient and diplomatic. This problem was encountered at Tanzania Flowers Ltd and Kiliflora Ltd (Liliondo Farm).

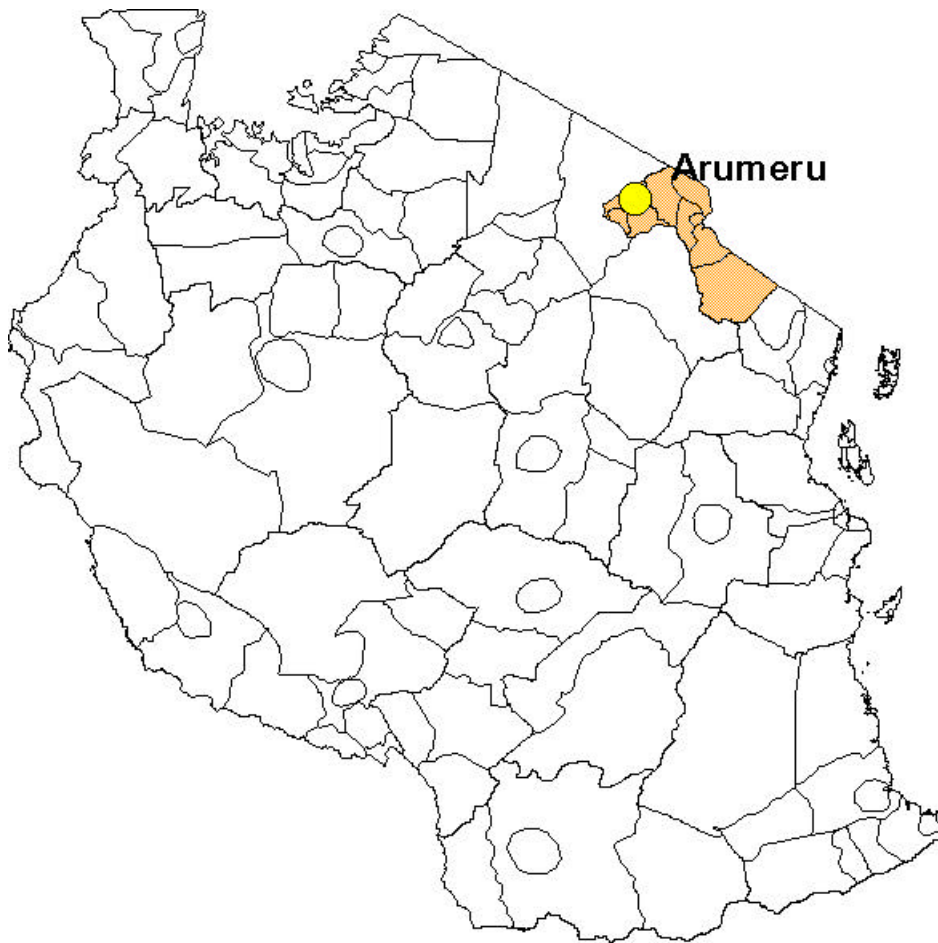
2.4.4 Research subject matter

The subject matter of the research “investigating the worst forms of child labour” was, in itself, frightening to some flower farm owners. In the case of one of the farms (Continental Flowers) an introductory letter from the Regional Secretariat was sent in advance requesting permission for the researcher to conduct research there. The letter mentioned that the intended research to be conducted was on the worst forms of child labour. In reply to this letter the following day the farm authority responded that the organization does not employ children below the age of 18, therefore the researcher would have nothing to investigate. It was thus not possible to conduct the research. This problem encountered served as a lesson for the future and by using different approaches with other flower farms the researchers were not denied entry again.

2.4.5 Lack of Literature

Lack of enough literature on child labour on horticulture farms denied the researchers of prior knowledge in the sector, and thus they had to write this report based mostly on the primary data from the field with little reference to secondary data. As mentioned previously, virtually no research on child labour has ever been conducted on the horticulture sector in Tanzania.

3. DESCRIPTION OF THE STUDY AREAS



Arumeru District is one among the ten districts of Arusha Region in northern Tanzania. Arumeru District borders Hai district of Kilimanjaro Region in the east, Monduli District in the west, and Simanjiro and Kiteto District in the south. Geographically Arumeru District lies between altitudes 870–1800 meters above sea level. It has an average rainfall of 500–1000mm per year and an average temperature of 22-28°C.

3.1 Demographic Information

3.1.1 Population

The district is estimated to have a population of 450,000 people (1999) with a population density of 172 people per square kilometre and an annual population growth rate of 3.1%. Arumeru District has the highest population of all districts in Arusha region. This is outlined in the table below.

**Table 7: Population Distribution by District and Projection
Arusha Region 1967 – 2000**

District	Population Census Results, and Growth Rates						Projections			
	1967	Grow th Rate % 1967/ 1978	1978	Grow th Rate % 1978/ 1988	1988	Growth Rate % 1988/ 2000	1995	1996	1998	2000
Arusha	46.3 62	5.87	85.55 3	4.5	134,708	4.1	179.12 7	186.78 5	202.74 7	220.07 3
Arumeru	167. 854	3.23	238.0 20	3.06	321.835	3	396.93 6	409.21 2	434.51 7	461.38 6
Babati					208.385	3.3	261.09 7	270.00 7	288.42 9	308.10 9
Hanang	125. 838	5.6	229.0 63	3.43	113.191	3.3	142.64 5	147.51 3	157.57 7	168.32 8
Kiteto	35.0 38	4.98	61.02 4	7.63	127.360	7.2	210.24 6	226.55 8	261.64 8	302.17 4
Mbulu	163, 528	1.55	193.7 67	3.28	268.129	3.1	332.37 5	343.00 8	364.94 8	388.29 1
Monduli	71.8 54	4.68	118.7 96	4.13	109.292	3.6	140.15 4	145.38 8	156.24 1	167.90 6
Ngoron- goro					68.775	3.4	87.625	90.709	97.092	103.92 4
Total	610. 474	3.86	926.2 23	3.82	1.351.6 75	3.88	1.750. 205	1.819. 180	1,963. 200	2.120. 189

Source: Regional Commissioner's Office Arusha, 1997
: 1998 Population Census
: Health Statistics Abstract, 1997

Arumeru District is made up of an area of 2,966 square kilometers. Administratively, Arumeru District has six divisions, 37 wards, 147 villages and 557 localities. The main economic activities of the people in Arumeru District include farming, cattle keeping and business operations. The per capita income of the people was Tsh. 150,000 per year in 1995, but because of the adverse weather conditions due to El Nino the per capita income fell to Tshs 75,000 (equivalent to U.S.\$ 113) during the 1997/98 year. The situation has not yet improved due to drought and the falling price of coffee.

Arumeru District has a population density of 172 (2000 District Statistics) people per square kilometer. According to the 1988 population census, Arumeru District had a population density of approximately 111 people per square kilometer. Arumeru District takes the lead in the region in both population number and density. The population number and densities are causes of social crisis in the district. The population density distribution by district is shown in Table 8.

Table 8: Population Density and Distribution by District Arusha Region, 1988 – 2000

District	Land Area Sq.k m.	Census 1988 pop.	Pop. Density 1988	Pop. Projection 1995	Projected Pop. Density 1995	Pop. Projection 1988	Projected Pop. Density 1998	Pop-Projection 2000	Projected Pop. Density 2000
Arusha	82.5	134.708	1.632.80	179.127	2.184.50	202.747	2.472.50	220.073	2.683.80
Arumeru	2.896	321.835	111.1	396.963	137.1	434.517	434.517	150	159.3
Babati	4.969	208.835	41.9	261.097	52.5	288.429	288.429	58.1	62
Hanang	4.436	113.191	25.5	142.645	32.2	157.577	157.577	35.5	37.9
Kiteto	35.156	127.360	3.6	210.246	6	261.648	261.648	7.4	8.6
Mbulu	7.652	268.129	35	332.375	43.4	364.948	364.948	47.7	50.7
Monduli	14.201	109.292	7.7	140.154	9.9	156.241	156.241	11	11.8
Ngorongoro	14.036	68.775	4.9	87.625	6.2	97.092	97.092	6.9	7.4
Total	83.428.50	1.351.675	16.2	1.750.205	21	1.963.200	1.963.200	23.5	25.5

Source: Compiled from 1988 Population Census

Such a high population density is due to the fact that a large part of the arable land is under plantation cultivation, thus creating a scarcity of land for human habitation. The population pressure on the land has resulted in:

- creating a group of landless people and some people owning small and uneconomical holdings insufficient for subsistence agriculture;
- cultivation of hilly areas and water sources thus degrading of the environment;
- encroachment of school, hospital and other institutions' areas thus causing conflicts with the concerned authorities;
- encroachment of the forest reserves and thus people coming into conflict with the Government authorities.

3.1.2. Migration

One of the reasons for a high population in Arumeru District is the migration of people from other regions into the district. This is a regional phenomenon. According to the 1988 population census, Arusha region showed a very high net inward movement of people of 141,724, second to that of Dar es Salaam region of 500,621 net migration. Such a movement flow indicates the movement of people's search for new farming areas or employment. The migration distribution of population by region is shown in Table 9.

Table: 9 Migration by Region, Tanzania Mainland 1988 – Census

Region	Immigration	Emigration	Net Migration	Gross Migration
Arusha	218,427	76,703	141,724	295,130
Dodoma	89,900	190,985	-101,085	280,885
Kilimanjaro	93,040	217,423	-124,383	310,463
Tanga	98,747	150,915	-52,168	249,662
Morogoro	172,393	141,959	30,437	314,349
Coast	103,804	207,716	-103,912	311,520
DSM	651,246	150,625	500,621	801,871
Lindi	95,200	145,031	-49,831	240,231
Mtwara	46,299	144,988	-98,689	191,287
Ruvuma	66,442	81,661	-15,210	148,103
Iringa	49,282	169,480	-120,198	218,762
Mbeya	160,377	113,378	46,999	278,755
Singida	86,651	130,531	-63,880	237,182
Tabora	241,729	175,359	66,370	417,088
Rukwa	87,599	49,924	49,294	136,893
Kigoma	26,795	129,718	129,718	156,513
Shinyanga	288,210	281,447	281,447	569,657
Kagera	103,713	109,693	109,693	213,406
Mwanza	270,142	303,646	303,646	573,788
Mara	75,987	115,414	115,414	191,852
Total	3,025,983	3,106,414	3,106,414	6,132,397

Source: 1988 Population Census National profile, Analytical Report.

The population of the key location under study is sparsely distributed on the coffee plantations and densely distributed in the peripheral areas of the coffee plantations and estates. It was found that, most of the people in the two key locations did not originate in the area. They have immigrated to the key location from other regions of Tanzania to come and look for work on plantations (for example, coffee and cut flower farms). The following table shows the distribution of 37 children and 13 parent/guardian respondents by tribe, revealing their ethnic origins.

Table: 10 Distribution of Children and Parents/Guardians Respondents by Ethnicity

Tribe	Children	Parents	Total	Percentage
Masai	1	1	2	4%
Meru	6	3	9	18%
Nyiramba	4	4	8	16%
Arusha	9	1	10	20%
Pare	1	1	2	4%
Nyaturu	1	1	2	2%
Hehe	-	1	1	2%
Rangi	-	1	1	2%
Sukuma	1	-	1	2%
Sandawe	1	-	1	2%
Makua	1	-	1	2%
Zigua	1	-	1	2%
Chaga	10	-	10	20%
Sambaa	1	-	1	2%
Total	37	13	50	100%

Source: Field Survey 2000

From the above table, it is shown that a larger part of the people in the two key locations originated from Singida region (20%: 16% for Nyiramba and 4% for Nyaturu). Some come from the neighbouring region of Kilimanjaro (20%). The indigenous people of the area - Meru and Arusha - constitute 38% of the total respondents interviewed randomly at the two key locations.

3.2. Social – Economic Activities

The people in Arumeru earn their livings through three major economic activities: agriculture, animal husbandry and commercial activities. Mining activities are undertaken on a small scale.

3.2.1 Agriculture

Agriculture is the mainstay of the regional economy. It contributes to more than 40% of the regional Gross Domestic Product (GDP), and also accounts for more than 75% of export earnings. Moreover, both agriculture and livestock sectors employ more than 85% of the rural population. There is still vast agriculture potential that remains unexploited. About 24,729 sq km, which is about 29.6% of the entire land, is arable land.

The land currently under cultivation is only 520.385 sq km, or 520,100 ha, about 21% of the arable land. This vast untapped and rain-fed potential coupled with the unexploited region's potential for irrigation, shows that current production - already great - could easily be tripled.

Agriculture is divided into five main groups – the indigenous small peasants, traditional cattle keeping, modern dairy keeping, commercial agriculture (plantation), and big farms for special crops. Food and cash crop production in Arumeru for the past five years has been as shown in the table below:

**Table: 11 Commercial Food Crops Production for 1995/96
1999/2000**

Year	Crops	Target (Tons)	Performance (Tons)	Deficit (Tons)
1995/96	Food Crop	159,745	32,600	127,346
	Commercial Crops	73,920	33,720	40,620
1996/97	Food crops	92,589	56,295	36,694
	Commercial Crops	30,375	22,990	7,385
1997/98	Food Crops	106,375	67,553	38,907
	Commercial crops	31,775	24,000	7,775
1998/99	Food Crops	163,680	70,226	93,454
	Commercial Crops	25,670	22,150	3,520
1999/2000	Food Crops	117,635	41,335	76,300
	Commercial Crops	27,115	22,732	4,383

Source: Arumeru District, 2000

It is evident that the performance of both food and commercial crops has not been satisfactory for all five years from 1995-2000. The reason behind this has been the drought during the year 1996/1997, the adverse El Nino weather conditions for the year 1997/98, and the effects of pests for the 1998/99 crop season. The unsatisfactory food and commercial crop production, along with the falling prices of coffee, have contributed to the poverty of the people.

Arumeru district has a land area of 2,896.0 square kilometres. Out of this area 56,080 ha is arable land (19%). Of the arable land 55,400 ha (98.8%) is under crop production. This implies that less than one-fifth of the land area is suitable for agriculture. The distribution of arable land and land under crop production by District in Arusha region (1996) is shown in the table below.

Table: 12 Distribution of Arable Land and Land Under Crop Production by District Arusha Region, 1996.

District	Land Area (Sq km)	Arable Land (Ha)	Area under crop Production (Ha)	% Arable under crop production
Arumeru	2,896.0	56,080	55,400	98.8
Arusha	82.5	6,620	6,310	95.3
Babati	4,969.0	180,000	111,840	62.1
Hanang	4,300.0	274,880	78,000	28.4
Karatu	3,300.0	96,000	N.A	-
Mbulu	4,352.0	192,800	97,650	50.0
Monduli	14,210.0	247,680	90,680	36.6
Ngorongoro	16,305.0	50,000	10,250	20.5
Kiteto	18,850	380,000	40,000	10.5
Simanjiro		420,000	300,000	7.1
Not stated	-	568,880	-	-
Total Region.	83,428.5	2,472,940	520,130	21.0

Source: Regional Agriculture Office, Arusha 1997

From the table above, it is clear that, a greater portion of the arable land in Arumeru district is under crop production (98.8%). This is the reason why some people are landless and some have small holdings which are not economically viable. Migration of the people to Arumeru district makes the land situation even worse.

Most of the people in the study area were landless because they were immigrants from other regions and they did not own land. They were mostly engaged in petty business and employment on cut-flower farms and coffee plantations. Their average daily income is estimated to be between Tshs 200 – 1000 per day¹.

3.2.2 Animal Husbandry

Arumeru District had a total number of 860,039 cattle in 2000. The number of cattle for the past five years is indicated in the table below:

Table 13: Number of Cattle in Arumeru District 1995 – 2000

Year	Number of Cattle	Percentage
1995	770,140	-
1996	729,196	(5.6)% Decrease
1997	744,624	5.4% Increase
1998	753,990	5.6% Increase
1999	618,313	4.7% Increase
2000	860,039	5.3% Increase

Source: Arumeru District, 2000

The district experienced a drought in 1996 during which some of the cattle died. After that year, the district experienced an increase in cattle. Cattle keeping in Arumeru is practiced mainly by small cattle keepers due to the lack of available grazing area.

3.2.3 Commercial Activities

Due to high population pressure on the land most people in Arumeru District are engaged in commercial activities. In 1999/2000 the following commercial activities were recorded:

- Commercial shops - 812
- Meat butcheries - 72
- Local brews stores - 189
- Groceries - 229

¹ Tshs. 887 = USD \$1 (September 2001)

Income from the above commercial activities increased from 92% in 1995 to 150% in 1997. In 1998 income dropped to 80% due to the conflict related to the development levy administration that affected the district starting in February 1998. The following are statistics showing income generated from formal commercial activities.

Table 14: Income Generated District From Formal Commercial Activities in Arumeru 1995/96 – 1999/2000

Year	Targeted Income	Actual collected Income	Percentage
1995/96	45,238,200	37,850,179	84%
1996/97	52,600,000	77,134,571	146%
1997/98	68,780,000	55,580,200	69%
1998/99	69,780,000	61,210,199	87%
1999/2000	81,105,000	78,172,909.5	96%
Total	317,503,700	309,948,058.5	120.5%

Source: Arumeru District, 2000

It is clear from the above table that income from commercial activities has been on the rise. Besides formal commercial activities, some people are engaged in informal commercial activities, which help them to earn a living. As these activities are not formal it was very difficult to ascertain their business performance.

3.3 Education

Arumeru district has a total of 153 primary schools owned by the government and five primary schools owned by private individuals. Other educational related statistics in the district are shown in the table below:

Table: 15 Educational Related Statistic of Arumeru District 2000

Type	Number	Average/Ratio
Pupils	76,039	482 Pupils Per School
Streams	1,950	39 Pupils Per Stream
Classrooms	990	6 Classroom Per School
Teachers	1905	Teacher Pupil Ratio 1:40
Teachers Houses	405	3 Houses Per School
Latrines (Holes)	1520	10 Holes Per Schools
Desks (Deficit)	700	5 Desks Per School

Source: Arumeru District 2000

According to the above statistics the educational situation is not alarming except in regards to teachers' houses. In 1995 there were three government owned secondary schools. The number increased to 29 Secondary Schools in the year 2000. This increase in secondary schools has resulted in an increase of the number of entrants (those students beginning the first year of study in Secondary School) from 240 pupils to 1000 pupils – this is a 458% increase within five years. There are also 11 private secondary schools which make a total of 40 secondary schools in the district.

3.4 Poverty

Poverty of the people was reflected by the low per capita income which was Tshs 75,000 per annum. Poverty of the people affected the ability of parents to meet the school expenses of their children in primary schools. For one of the primary schools in Usa River key location the school fees and contributions statistics for the period of January to September 2000 are shown in the table below:

Table: 16 The School Fees and Contributions Payment by Pupils for Leganga Primary School for Jan – Sept. 2000

Class	No. of Pupils	No. of Payment Completion	No of Partial Payment	Non Payment	Percentage of Non Payment
II	253	65	9	180	71%
III	134	26	16	92	69%
IV	182	48	45	89	49%
V	165	30	29	106	64%
VI	165	27	19	119	72%
VII	124	36	48	40	32%

Source: Leganga Primary School, Usa River, 2000

The table illustrates that the partial payment and the non-payment of education costs for almost the whole academic year demonstrated the inability of the parents to meet the schooling expenses of their children. It is obvious that the level of poverty of the people in the area is the major reason behind this situation. It is to be noted here that class one pupils pay school fees and contributions in full as a condition for enrollment.

The scarcity of land in Arumeru district has been one of the grievances of the people. The majority of the people in Arumeru District own small holdings (farms) that are not economically viable for subsistence agriculture. The need for land by the people has necessitated the district authority to request that the Ministry of Lands gives the settlers undeveloped farms and distributes them in the following proportions:

- People (citizens) to get 90%;
- Institutions to get 5%; and
- District employees to get 5%.

The farms requested for distribution are shown in Table 17.

Table: 17 Farms Requested from the Ministry of Lands for Distribution in Arumeru District, 1997

S/No	Farm	Total Acres	Acres Requested
1.	Arusha Duluti Ltd	-	50
2.	Madiira Coffee Estate	320	200
3.	Karangai Sugar Plantation	6,477	3000
4.	Lucy Estate	8,696	6000
5.	Imani Estate	1,556	1,556
6.	Salama Estate	1,482	1,482
7.	Umoja Sisal Estate No. 281,4879, 8108 and 2879	699.97	699.97
8.	Tanzania Maua	359	359
9.	Farm No. 78 and 79	286	286
10.	Kwaugoro (Fly Catchers) Safari Ltd)	100.6	100.6
11.	Farm No. 3 Oljoro	1,342	1,342
	Total Area Requested		15,075.57

Source: Arumeru District, 2000

The 11 farms shown in the table have continued to be processed for compensation to owners before they are distributed. From the table it is evident that, if the requested land is to be secured and distributed to the targeted group as desired this will ease the population pressure on land and improve people's income.

The children under 18 years of age covered by this research were school-age children, especially primary school children. The working children were either those who have never been enrolled in school for one reason or the other; those who have dropped out of school or those who were schooling and engaged in child labour on a part time basis. A random sampling of 37 non-working children in the two local key locations revealed the following educational status distribution.

Table 18: Educational Status of children Respondents by Gender and Age Group

Education Status	6< =		7 - 9		10-13		14 - 17		18+		Total Number	Total Percentage
	M	F	M	F	M	F	M	F	M	F		
Never Attended	0	0			1	1	1	0	0	0	3	8%
Attending	0	0	2	2	13	9	2	1	0	0	29	78%
Drop out	0	0					2	0	0	0	2	6%
Completed Std VIII	0	0					3	0	0	0	3	8%
Total	0	0	2	2	14	10	8	1	0	0	37	100%

Source: Field Survey, 2000

It is evident that in the study area there were children who, for one reason or another, have never been enrolled, who have dropped out, or who have completed their primary school education. All three groups of children were vulnerable to becoming victims of child labour. For example, one of the non-working children (16 years) who completed Std VII (Seventh year of study in primary school) in 2000 at Shangarao Primary School, works for payment by fetching and selling water for Tshs. 50/- per bucket of 20 litres and selling firewood for Tshs. 200/= per bundle. Another child (16 years) who dropped out of school while in Std III reported that he is engaged in casual labour jobs. Another child, 12 years old and in Std VI, said that he works on people's farms and is paid Tshs. 500/= (less than 1 US\$) per day during vacations in order to meet school expenses to buy clothes and to buy fish for the family.

Thus there was a direct and an indirect relationship between child labour and school attendance. Child labour may influence children not to enrol, to drop out or to engage in child labour on a part time basis. The school learning environment may have a positive influence or negative influence in as far as child labour is concerned. Because of the relationship that exists between schooling and child labour it was necessary to make an educational analysis of some of the primary schools in the key locations to see how the learning environment of schools contributes to child labour in Arumeru District.

During the research a total of four primary schools were covered; two in each key location, as follows:

- Key Location A- Usa River
 - Imbaseni Primary School
 - Leganga Primary school
- Key Location B – Nduruma
 - Shangarao Primary School
 - Mlangalini Primary School.

Various statistical data and information collected from the four primary schools at the two key locations are shown in the following table. One of the limitations concerning the data collection in the four schools is that important data such as enrollment rates, attendance rates, drop outs, graduation rates, secondary school entrants etc. were not available.

Table: 19 School Related Information and Data in the Local Key locations of Usa River and Nduruma

(a) Pupils	Key Location A – Usa River				Key Location B: Nduruma			
	Leganga P/s		Imbaseni P/s		Shangarao P/s		Mlangarini P/s	
	No.	%	No.	%	No.	%	No.	%
• Male	582	43%	255	50%	373	48%	281	54%
• Female	738	57%	254	50%	400	52%	240	46%
• Total	1350	100%	509	100%	773	100%	521	100%

(b) Teachers • Male • Female • Total	Avail-able	Deficit	Avail-able	Deficit	Avail-able	Deficit	Avail-able	Deficit
	1	1-3A	5	2-3A	2	2-3A	5	2
	34	-	14	+2- 3C	15	-	9	-
	35	1	19	-	17	2	14	2
(C) Teacher Pupil Ratio 1:38		1:27		1:45		1:37		

(d) School Infrastructure • Classrooms • Desks • Teachers' Houses • Latrine (Holes) • Playgrounds • Libraries	Available	Deficit	Available	Deficit	Available	Deficit	Available	Deficit
	14	13	7	7	13	-	7	7
	400	46	222	30	253	-	180	-
	3	32	1	9	2	8	3	1
	21	27	16	4	31	16	9	12
	-	2	-	1	1	1	-	1
	Book store	1	-	1	-	1	-	1

	Key Location A – Usa River	Key Location B: Nduruma	Key Location A – Usa River	Key Location B: Nduruma
(e) Distance from key location	4 KM	1KM	½ KM	4 KM
(f) Services provided at school e.g. meals	Nil	Nil	Nil	Nil

Source: Field Survey 2000

The analysis of data presented in the table shows that there is an overcrowding of pupils in the few available classrooms, and there is a deficit of classrooms at each school. Such a deficit does not provide a conducive learning environment to the pupils. There is a deficit of desks in schools of key location A – Usa River (Imbaseni and Leganga primary schools). It was also found that there were not enough primary schools relative to the number of school-age children who were required to be enrolled in schools. Thus not all children of school-age were enrolled. Each year there was a backlog of children who missed enrolment and this has resulted in the enrolment of over-aged children in class one (9-13 years). The over-age children were given priority in enrolment before other children. It was also found that there was a high drop out rate among the late enrolment children. They were either discouraged or influenced by working children to drop out of school and engage in child labour (especially in mining at Mererani - Mbuguni). It was also noted that there was a big shortage of teachers' houses – this was a common phenomenon for all the schools in the study area. This factor may affect the attendance and the good performance of the teachers in schools and consequently may have an effect on the academic performance of the pupils. Most of the schools had no playgrounds as the schools did not own enough area to accommodate playgrounds. This situation denied the pupils of an opportunity for recreation while in school. None of the schools in the study area provided meals to pupils. The meal problem was being addressed when the study was in progress, however, with most of the schools making arrangements to provide meals through self-help schemes and through donors such as World Vision.

4. ACTIVITIES PERFORMED ON THE CUT FLOWER FARMS

4.1 Activities

Cut flower production involves a number of activities. The type and nature of activities coupled with the cut flower production requirements does offer very minimal opportunities for the employment of children under the age of 18 years. The text below explains the details of each activity.

- **Fertilizing** – this involves the mixing and application of chemical fertilizers. This process is undertaken by agricultural experts in the chemical room where fertilizers are fed and directed into the flower farms through pipes and drips.
- **Suckering** – this activity involves the pruning of undesirable flower shoots and is required to be conducted carefully. This activity is mostly performed by women.
- **Spraying** – spraying was one of the activities on the cut flower farms. Spraying is done by male employees and it is an energy consuming activity. It is done carefully by strictly observing the spraying instructions in order to avoid the adverse effects of toxic pesticide and fungicide chemicals.
- **Harvesting** – the harvested flowers are the final product of the cut flower industry. Since this results in the end product the harvesting activity is normally required to be undertaken with great care in order to avoid losses which may result from negligence and irresponsibility of the harvesters. This delicate activity was performed mostly by women.
- **Grading** - the grading activity involves the sorting of flowers into different grades according to colour and quality. This was another delicate activity which calls for care and attention on the part of the workers. This activity was done mostly by women.
- **Storage** – after sorting, the flowers were stored in the cold room ready for transportation. The storage activity was done mostly by men.
- **Transportation** – the flower products are transported to international markets abroad through Kilimanjaro and Jomo Kenyatta International Airports. They are required to be transported to the airports in special refrigerated trucks.

The above main activities on the cut flower farms by their nature and requirements did not give room for the employment of children. Other activities not mentioned above that are directly or indirectly related with the above main activities are:

- **Supplying** – this activity involved the transportation of flowers from the farms to the grading section.
- **General cleaning** – the greenhouses need to be cleaned regularly in order to minimise the chances of diseases to the flowers. This activity must be done carefully in order to avoid the breakage of flowers and flower shoots as one cleans between the ridges. Cleaning of buckets or other tools and equipment on flower farms is also conducted.
- **Construction** - construction activities and repairing of greenhouses are tasks embarked upon as necessary.
- **Supporting services** – supporting services such as cooking, serving of food and first aid services etc were also conducted.

4.2 Working Conditions

Since there were no children working on the flower farms, working condition variables such as hours of work, tools, risks, payments, use of salary etc were not assessed. The working conditions of adult workers on the cut flower farms however, were observed.

The working conditions on the cut flower farms are not very conducive to the employees' health due to the use of toxic agro chemicals, especially in cases where employees were not provided with protective gear. If children were to be employed on cut flower farms, the effects of the toxic agro chemicals and pesticides on these farms could have detrimental effects on their young bodies. This illustrates one of the reasons that the International Flowers Coordination and the Milleu Project Sierteell (MPS) have issued codes of conduct under which child labour in the cut flower companies is prohibited.

Use of pesticides, chemical fertilizers, and chemicals has been addressed in the guidelines for the socially and environmentally responsible production of cut flowers by the International Flower Coordination. Some of the important provisions concerning the use of pesticides and chemicals are that:

- (a) Post-harvest treatment of the flowers is only permitted with non-toxic chemicals. Silver thiosulfate is not allowed to be used.
- (b) All spray operators must be thoroughly trained by a recognised institution or by specialists on the safe application and the risks of pesticides and chemicals.
- (c) Spray operators are not allowed to spray for more than four hours per day. Due to the high risks and exposure to toxic products a job rotation scheme has to be implemented. It is recommended that for every one week of spraying, there are two weeks of non-spraying.
- (d) Pesticide application in the greenhouses is strictly forbidden as long as unprotected workers are inside. Warning signals are required at each entrance to the areas, indicating the time and date when entry is safe.
- (e) After spraying pesticides the following re-entry intervals must be strictly observed:
 - Highly toxic pesticides (WHO TOXIC I) and carcinogens;
(EPA + B): 24 Hours;
 - Toxic pesticides (WHO Toxic II): 12 Hours; and
 - Less Toxic pesticides (WHO Toxic III X IV): six hours.
- (f) In all cases the foliage has to be completely dry before harvesting.
- (g) Recording and documentation of all fertilizer and chemical application must be carried out giving the date and time, crop quantity and dosage rate.
- (h) Chemical fertilizers should be applied only selectively on the basis of careful observation of the crop together with soil and (periodic) leaf analysis. The input should be optimally adapted to the needs of the plants.
- (i) Losses and drainage of the fertilizers through leaching into the soil should be kept at a minimum. Nitrogen and water supply should only cover the flowers' growth needs.
- (j) Wherever possible, low toxic and biodegradable chemicals must be used. Formaldehyde as a disinfectant is not allowed.
- (k) Organic fertilizer and composted organic wastes should be used for the improvement and care of the soil on the plantation in order to reduce chemical fertilizer input.

If children were exposed to work under such conditions their situation would be worse than the adults due to their young age, however, even adults under these conditions need to be treated with care because they are also subjected to hazards emanating from chemicals.

5. FACTORS CONTRIBUTING TO THE ABSENCE OF CHILD LABOUR IN HORTICULTURE IN ARUMERU DISTRICT

The research was based on our earlier assumption that, given the number of children found in Arusha Municipal town working in the informal sector, there was a high probability that some of these children would be used on horticulture farms. Our research was thus geared towards testing the existence of incidences and nature of child labour on the horticulture farms. The findings have proved that our hypothesis is null. In this chapter we try to analyze the factors contributing to the child labour success story in Arumeru District.

5.1 The vision of the key informants

5.1.1 Farm Owners

Various categories of respondents were interviewed and each category had a different but related explanation to give. First, the farm owners of five farms (Kombe Roses Ltd, Hortanzia Ltd, La Fleur D' Afrique Ltd, Tanzania Flowers Ltd and Kiliflora Ltd) were visited and interviewed concerning the existence of child labour on their farms. All the farm owners (100%) responded that:

- child labour was prohibited under the national (Tanzania) labour laws,
- child labour was prohibited under the international code of conduct and the MPS Social Chapter,
- children could not be serious with work because they are fond of playing,
- children under the age of 18 years were not the group which was really in need of work,
- child labour was prohibited by the Tanzania Agriculture and Plantations Workers Union (TPAWU), and
- the employment of children was a violation of their rights.

Because of the above reasons employers could not find any room for employing the children.

5.1.2 Parents/Guardians

The second category was the parents and guardians. This category was important because they are the custodians of the children. When these respondents were asked to explain why there were no children employed on the plantations they had the following reasons to give:

- cut flower farm owners do not want to employ children because of effects on them from chemicals used on the farms,
- children could not be employed on cut flower farms because they would not be able to perform heavy duties, and
- the government at all levels forces children to go to school.

5.1.3 Supervisors

Supervisors were also interviewed. This was an important category of respondents because supervisors were the ones who oversee the workers who are engaged in different cut flower farm activities. They were also the ones who knew the conditions under which work was being done. When these respondents were asked why there were no children employed on the cut flower farms, all ten (100%) had the following to say:

- children were not employed on cut flower farms because they were easily employed in other places (sectors),
- cut flower farm owners placed a great emphasis on age when they employ people,
- cut flower farm owners were prohibited by the labour department to employ children,
- children were seen as not being capable of effectively receiving and following work instructions on the farm,
- parents were not allowed to come with their children to the cut flower farms as they can to the coffee plantations,
- children could be overworked and mishandled by farm owners, and
- children could be underpaid considering most of the adults here were being paid Tshs 25,000 per month.

5.1.4 Village/Ward Leaders

Village and ward leaders were also important key informants to provide information on child labour. These leaders were village and ward leaders of Usa River, Majani ya Chai, Mlangarini and Chekereni areas of the two key study locations. Such leaders were familiar with the areas and the activities done by the people, as well as with their way of life. When these leaders were contacted and interviewed they had the following reasons to give for the absence of children in the cut flower industry:

- children were not employed in cut flower farms because they were schooling, and
- employment of children was prohibited through government regulations and orders.

5.1.5 Non – Working Children

A total number of 36 children (97%) out of the 37 children interviewed provided the following reasons:

- farm owners do not want to employ children because of their age (too young), and
- farm owners employ adults only because they have energy.

5.1.6 School Heads

The heads of schools were the custodians of school children while at school and they were concerned with the children's attendance, punctuality, welfare, discipline and academic performances. They were best placed to provide useful information on topics such as enrolment, attendance, truancy, drop out rates etc. The four primary schools visited were Imbaseni and Leganga of Usa River Key location, and Mlangarini and Shangarao of Nudurma key location. When the four school heads were interviewed they gave the following reasons:

- cut flower farm owners had their own system of employing adults and not school children, and
- parents have negative attitudes towards working on the cut flower farms due to the effects of toxic chemicals and thus they did not allow their children to seek employment on cut flower farms.

5.2. Multi Disciplinary Approach

The success story of this industry has come about due to a number of factors which have operated and continue to operate in both supplementary and complementary manners. These factors have been operating simultaneously and have had different impacts on restricting and combating child labour in the cut flower industry. These factors are mentioned below.

5.2.1 International Regulatory Machinery

The international regulatory machinery of the International Flower Coordination of Germany, through its International Code of Conduct, and the Milleu Project Sierteelt (MPS) of the Netherlands' Social Chapter, have had a great influence in combating child labour. These two documents contain suitable provisions which ensure that cut flowers are grown under socially and environmentally sustainable conditions. They categorically state and prohibit the use of child labour: **“employment of children under the age of completion of compulsory schooling or under the age of 15, whichever is higher.”**

Under these documents and in particular the MPS Social Chapter, the non-employment of children or the absence of children in cut flower production is a condition attached and related to the acceptability and marketability of the cut flowers. This means that compliance to these international regulations is not something debatable if the cut flower farm owners want to remain in the cut flower industry and market. Thus, this is a built-in self-regulatory mechanism against child labour in the cut flower industry.

5.2.2 Institutional Regulatory and Enforcement Machinery

This is an approach in which regulatory and enforcement institutions have played and will continue to play a remarkable role in combating child labour in the cut flower industry.

TPAWU is a trade union for the workers employed in plantations and agricultural activities. It has been conducting awareness raising seminars on child labour to its branch leaders. TPAWU union branches have been established on all the cut flower farms in Arumeru district. The union branch leaders, among other trade union duties, are charged with the responsibility of monitoring the child labour activities in their respective work place and reporting to the TPAWU area and zone office for necessary actions.

Besides establishment of trade union branches on the cut flower farms, TPAWU, on behalf of the workers, has been able to enter and sign voluntary agreements with employers on cut flower farms. Among other things, suitable clauses are included in the voluntary agreements in which **“employers are prohibited from practicing child labour.”**

Since voluntary agreements are bilateral, the parties involved are bound by such agreements. The employers are under obligation to observe and implement the agreement as desired, otherwise they are violating it by not complying. Voluntary agreements have thus helped, and will continue to help, combat child labour on the cut flower farms.

The Labour Department is a government institution that is charged with the enforcement of labour laws in Tanzania. In the course of discharging their duties, labour inspectors conduct labour inspections in industrial establishments that are liable for inspection. Among other inspection activities in the industrial establishments, labour inspectors in Arusha region have been actively engaged in ensuring that employers on the cut flower farms do not employ children below the age of 15 years for wage labour in Arumeru district. Because of the special role played by the labour inspectors from the Arusha

regional labour office, the office has been given the opportunity of having a member on each of the three established child labour monitoring committees on the cut flower farms, coffee farms and mixed farms.

5.2.3 Awareness Raising Approach

There have also been local initiatives geared towards sensitizing the community at grassroots levels on the child labour front. Trade Unions in East Africa have been working together in a collaborative manner to conduct training seminars to the TPAWU field branch leaders on the cut flower farms, workers, employers, village and ward executive officers, teachers, social welfare officers, cooperative union leaders and labour inspectors. The aim of these training seminars was to reduce child labour at the grassroots levels. The above mentioned group of trainees, after having undergone a Training of Trainers (TOT), were to act as change agents in their respective areas under their respective capacities.

Table 20

Comparison with other sectors	
Other sectors	Flower
<ul style="list-style-type: none"> •Labour-intensive •Requires casual labour (seasonal) •Local consumption 	<ul style="list-style-type: none"> •Capital intensive -time staff •Specific knowledge and skills required •Export oriented (international regulations)

5.3 Internal and External Forces

The operation of internal and external forces has enabled the cut flower industry in Arumeru to be child labour free when other industries and occupations in the same communities are not.

The nature of work in the cut flower farms has acted as a repelling force working against the employment of children. As stated earlier, floriculture is a competitive and highly technical business requiring knowledge, skills and large amounts of capital. Greenhouse floriculture is in many respects the most sophisticated part of plant agriculture. Bearing this fact in mind the cut flower business operators are very mindful of how the cut flower production process activities are to be conducted. Cut flowers are produced under very strict quality control during all the production phases. Due to the extreme sensitivity of the crop quality, the perishable nature of the cut flowers, and the fact that the flowers themselves are the finished product, production requires expert knowledge, professional management and constant vigilance during all phases of growing, packing and shipping.

Cut flowers sold in international markets often retain the identity of the individual grower, so growers who can successfully differentiate their customers have the potential to attain profit levels that far exceed those for alternative agricultural products. This delicate and complex exercise does not give much room for the employment of children under 18 years of age. Owners of cut flower farms are not ready to compromise their flower quality. The different activities done on the cut flower farms such as fertilizing, suckering, harvesting, supplying, grading, spraying and transportation to market centres require a high degree of concentration and as such they offer very minimal chance for the employment of children under the age of 18 years.

- Besides internal forces working against child labour in the cut flower industry in Arumeru district, there have been external forces acting as repellants to child labour. One of the external forces working against child labour is the people's attitude towards the establishment and operationalization of the flower production in their areas. The attitude of the community people around the cut flower farms is negative, and some of the people around have ill feelings towards the farm owners. This was found out during the focused group discussion comprised of adults in the two key locations.

The cut flower farms are located within the local people's areas of residence. The people reside around these flower farms, some within a close range of ½ a kilometer of almost all the cut flower farms. The physical effects and environmental pollution from the cut flower farm have made these people aware of what is going on on the farms. The adverse effects on the health of the workers employed in the cut flower farms and especially of the female employees, have tended to restrict the parents in allowing their children to take employment on the cut flower farms. Because of the adverse effects caused by the agro chemicals and pesticides there has been a high rate of labour turn over, making employment on the cut flower farms transitional and unstable. The following adverse effects have been alleged to affect the stability of employment and especially of casual women employees:

- loss of weight - occurring some few months preceding their employment,
- premature delivery of babies,

- abortions,
- menstrual disorders,
- sterility,
- skin diseases,
- toxic effects when pricked by thorns of the cut flower plants,
- stomach disorders,
- chest problem, and
- bearing children with disabilities.

The above allegations need to be medically proven in order to establish their validity. A stigma has developed among some of the female children that, if one is employed on the cut flower farms she will become barren and will not be able to bear children. This has become a deterring factor towards child labour in floriculture.

Employees and former employees of the cut flower farms facilitate the spread of information on the adverse effects of agro chemicals and pesticides to the community people. Through this a high level of awareness and concern about the hazards to which children would have been exposed to if they were to work on the cut flower farms has been created. A respondent reported that, as employees come out of work from the cut flower farms and pass through the village on their way back home, people who happen to meet them or come close to them can detect the smell of agro chemicals and pesticides. Again, there are complaints among people who reside near the cut flower farms. They complain of air pollution from the sprayed pesticides, especially during windy days when wind spreads pesticides towards people's homes. These people experience inconveniences and discomforts during such days. A combination of the adverse effects on the health of workers and the air pollution contributes to raising the community awareness and concern about the hazards for children if they work on these farms. Under these conditions parents are very reluctant to allow their children to seek employment on the cut flower farms.

Finally, Arumeru district borders Simanjiro and Kiteto District in the south. The fact that the neighboring Simanjiro District is very well known for the mining of Tanzanite and other precious gemstones at Mererani sites, has made it an outlet for most of the male children under 18 years moving from Arumeru District to Mererani ("*Mbuguni*" as it is known by the local people) to be employed in this speculative business. This has eased the pressure of seeking employment on the cut flower farms by boys. Additionally, boys consider working on the cut flower farms to be women's work.

5.4 Unique nature of the sector

The unique nature of the horticulture sector is another contributing factor which has enabled the cut flower industry in Arumeru to be child labour free, when other industries and occupations in the same communities are not. The cut flower industry is unique compared to sectors that harbour child labour due to the following:

- The cut flower industry is regulated by international institutions such as the International Flower Co-ordination of Germany and the Milleu Project Sierteelt (MPS) of Netherlands. Such international regulatory machinery has been instrumental in combating child labour in the cut flower industry, and is missing in other sectors.
- Flower production is conducted under very strict quality control measures in order to maintain acceptable international market standards and requirements. Floriculture is a competitive and highly technical business requiring knowledge and skill. The whole cut flower production process is undertaken with utmost care by its operators. This delicate and complex exercise does not give much room for the employment of children under the age of 18 years. Owners are not ready to compromise their flower quality in any way. The different activities undertaken on cut flower farms such as fertilizing, suckering, harvesting, supplying, grading, spraying and transportation require a high degree of concentration and as such they offer very minimal opportunities for the employment of children under the age of 18 years.
- The nature of cut flower production has rendered it vulnerable to a high level of community awareness and community concern about its imminent hazards to children.

The above factors have contributed to the unique circumstances of the cut flower industry in Arumeru, and the prohibition of child labour practices within it.

5.4.1 Concentration and Accessibility

Concentration of and accessibility to the cut flower industry in Arusha Region in general, and Arumeru District in particular, have enabled the industry to be child labour free. The cut flower farms in Arusha Region are concentrated in three locations:

- Usa River location in Arumeru district where Kombe Roses Ltd, Hortanzia Ltd and Kiliflora Ltd (Loliondo Farm) farms are located;

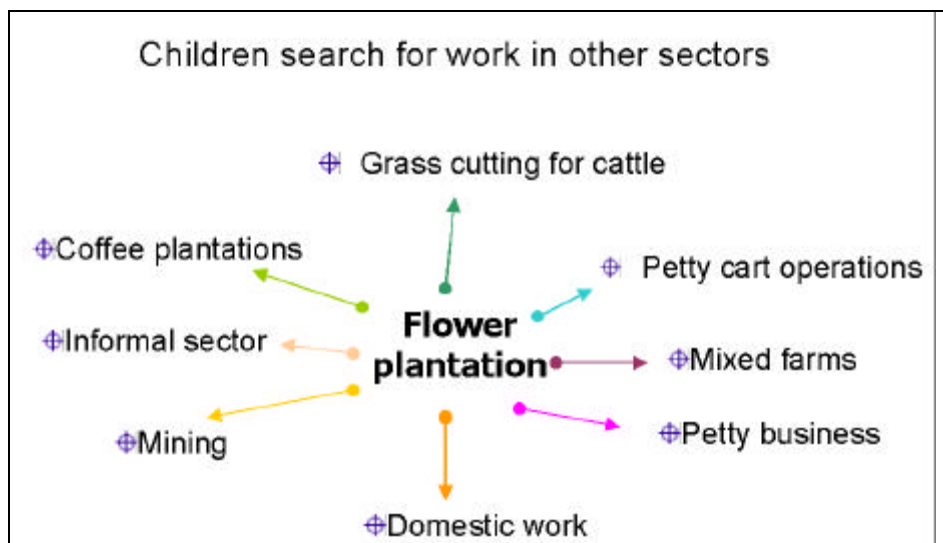
- Nduruma location in Arumeru district where Kiliflora Ltd (Nduruma Farm), La Fleur D'Afrique Ltd, Tanzania Flowers Ltd Dekker Bruins Ltd, and Hot Roses Ltd farms are located; and
- Themí Industrial Area where Continental Flowers Ltd, Multiflowers Ltd and Arusha Cuttings Ltd farms are located.

The cut flower farms in the three locations are concentrated within a radius of about two kilometers. These farms are also very accessible. In Arumeru district the two locations of cut flower farms are about 20 kilometers from Arusha municipal and they are easily reached by road.

The concentration of and accessibility to the cut flower farms in Arumeru have facilitated the smooth regularity of labour inspection activities and the trade union operations. This is another unique feature that distinguished it from other sectors, for example, in the coffee, tea and tobacco sectors, the plantations are scattered across a wide area. In some cases, plantations are located in remote areas where they can be inaccessible and thus render labour inspection difficult and irregular.

6. CHILD LABOUR SHIFTING INTO OTHER SECTORS

Table 21



6.1 Formal Sectors

The strict legal and other control measures applied to the cut flower farms barred the employment of children. Children who cannot work on these farms thus look for other avenues in which they can be employed. The above sectors, as shown in Table 21, have absorbed children who may otherwise have been employed on the cut flower farms.

- **Coffee Plantations** - Arumeru District has a number of coffee plantations. These are widespread, located in different areas of Arumeru District. Children are employed on coffee plantations at their own will or they accompany their parents in order to boost the daily income of the employed parents. On plantations children are engaged mainly in the harvesting activities. The nature of work on coffee plantations exposes children to the scorching sun, rainfall, snake and insect bites, and constant standing for long periods of time. These children are exploited by their employers through the payment of low wages.

- **Garage Operators** – garage owners frequently employ children to perform a variety of activities in the garages and to work alongside with adult employees. The garages in Arumeru District are located in the urban and other trading centers. Activities such as panel beating, welding, and the lifting, carrying and moving of heavy objects expose children to health risks and accidents. Children are engaged in garage activities regardless of the nature of the work and their age. Some health risks and accidents to which working children are exposed in the garages include negative effects on the eyes from the welding activities, cuts and burns, falling down due to wet and oily slippery floors and inhaling polluted air. Children are also subjected to working for long hours and low payment.

- **Mixed Farms** – in mixed farming children are employed on big maize, beans and other farms to perform various farm operations. These farms are located in the rural areas of Arumeru District. Some of the farm operations in which children are employed include weeding and harvesting. Since farm operations are seasonal, most children are employed during the peak seasons.

Working children on these farms are exposed to scorching heat, rain, cold, and standing for long periods at a time which affects their health. Working children on farms are also exposed to snake and insect bites. Big production and work performance target requirements subject children to strenuous work and exploitation.

6.2 Informal Sector

The informal sector is the largest employer of children in different activities. Activities in which children are employed/engaged in Arumeru District are as follows:

- **Domestic Work**

Female children are employed as domestic servants. They perform various domestic tasks in private individual homes (homes of others). Domestic servants are exposed to abuse, harassment, health hazards, accidents, sexual exploitation, isolation, carrying heavy loads, cuts and burns and sometimes beatings.

- **Cuttings of Grass for Cattle**

Most of the cattle keepers in Arumeru District practice zero grazing. Some such cattle keepers employ male children as grass cutters for their cattle and to perform other services related to cattle keeping. The children employed as grass cutters are exposed to various health risks such as working under scorching sun, rainfall, exposure to cold weather, and risks from snake and insects bites. They are also subjected to carrying heavy grass loads, and some travel long distances looking for grass and/or fetching water for the cattle. In most cases they are not provided with protective gear such as gum boots and gloves.

- **Petty Business**

Some children are employed in petty businesses and some children are engaged by their parents in such business as part of the family survival strategies. These businesses include the selling of sweets, nuts, ice-creams, plastic bags and other hawking affairs. In the course of conducting such business, children are exposed to hot sun, rain, cold weather and road accidents. In most cases, due to low profit margins and low payments, children eat very little food during the day, if any. Some children fail to enroll in school and some drop out of school in order to be engaged in such business due to the economic push and pull factors (poverty in the family and the urge to make quick money).

- **Push Cart Operations**

Some male children are employed by push cart owners. Push cart owners employ children to carry luggage by using push carts for a certain determined amount of money at the end of the day. Sometimes the amount of money expected by the push cart owners is so big that a child must overwork himself in an attempt to meet the targeted amount, and still remain with a balance as his pay. This practice has been noted at Tengeru, Usa River and other market and business centres.

The socio-cultural and socio-economic factors of Arumeru District have contributed to the existence of child labour in both formal and informal sectors where the children are employed and work under very trying conditions. The children and their parents are both victims of circumstance. The socio-cultural and socio-economic factors include both push and pull factors related to child labour to such an extent that child labour has become a dominant and persistent phenomenon on coffee plantations.

The poverty of the majority of the people in Arumeru District and the school learning environment have tended to contribute to the existence of child labour in some formal and informal sectors in the district. The population pressure on land, the adverse weather conditions (drought), and the falling prices of coffee, have affected the income of the people contributing to the low per capita income. The learning environment in schools does not attract or retain children in schools. Primary schools lacks infrastructure such as classrooms, desks, libraries, latrines, teachers' houses and playgrounds. The deficit of qualified teachers (grade 3A) also affects academic performance in schools.

7. POSSIBILITY OF DUPLICATION AND CONCLUSIONS

7.1 Unique Features

It is recommended that the positive experience of the cut flower industry in relation to child labour should be effectively emulated, with adjustments made to the specific sector environments. The success story of the cut flower industry cannot, however, be applied wholesale to other industries and occupations both within the region and the country as a whole. This is due to the fact that the cut flower industry combines unique features which have enabled it to be child labour free. A summary of these factors follows.

- The production of the cut flowers is regulated by international regulatory machinery of Germany and Netherlands.
- Cut flowers are grown under very strict quality control in order to maintain the international market standards and retain the identity of the individual grower. The highly technical, complex and delicate production process does not offer employment opportunities for children.
- The concentrated nature of cut flower farms in certain locations and their easy accessibility has facilitated the smooth conduct and regularity of labour inspection work and facilitated trade union activities.
- There is a high level of community awareness and concern about the hazards of working on these farms, especially for children. The adverse effects of agro chemicals and pesticides on the health of adult employees together with the air pollution to the people residing near and around the cut flower farms is an open secret to most people. This has acted as a repelling factor for both children and parents.

7.2 Community awareness

Community awareness of and concern about the hazards for children working in any sector is very important in as far as combating child labour is concerned. When the parents become aware of the hazards for children working in a sector they will raise concern as they have done in the case in the cut flower industry. Parents are instrumental in prohibiting their children from seeking employment in such hazardous work. Children also will refrain from seeking employment or getting involved in jobs unless there are attractive incentives connected with hazardous work.

This awareness on cut flower farms does not carry over to work on coffee plantations, at garages, on mixed farms and in other informal activities to the same extent. Attitudes are not as consistent as in the cut flower farms for a number of reasons:

- Adverse effects to the health of employed children and adults in such activities are not as clear and obvious as they are on the cut flower farms; and
- Adverse effects to the health of employed children and adults in such activities are not as certain as on cut flower farms.

The consistent community awareness and concern about the hazards for children working on the cut flower farms have, to some extent, contributed to the fight against child labour in the cut flower industry. It is important to mobilize the community in similar ways in regards to other hazardous jobs. Communities can be mobilized against these hazardous jobs by first mobilizing the community leaders who in turn may mobilize their members. The change agents in the community are ward and village leaders, primary school teachers, NGO and CBO leaders at ward and village levels and, where possible, children (school leavers). Community mobilization may be instituted by such means as seminars, non-projected visual aids, projected visual aids, audio visual aids and audio aids.

7.3 Enforcement of National Labour Laws

The enforcement of the national labour laws is another factor that has contributed and enabled the cut flower industry in Arumeru to be child labour free, while other industries in the same communities are not. The enforcement of the national labour laws in the cut flower industry has been relatively more effective than in other sectors. This is due to the following factors.

- The international cut flower production regulatory machinery has helped to create an enabling environment for effective labour law enforcement. National labour law enforcement in the sector has been supplemental to the international regulatory machinery.

- Concentration and accessibility of the cut flower farms has facilitated the smooth conduct and regularity of labour inspection and the consequent enforcement of labour law enforcement on the cut flower farms.
- The nature of work on the cut flower farms which does not offer employment opportunities to children has also helped to concretise national labour law enforcement.
- Employers are not victims of circumstance in cases of peak seasons like on coffee plantations when the demand for labour becomes inevitable to the extent of necessitating employment of children. Though there are peak seasons on the cut flower farms coinciding with Valentine's Day in February, Christmas and Mothers Day, the demand for labour in the cut flower farms during those seasons is not as high as in the other sectors, and does not necessitate the employment of children. Employment of labour in the cut flower industry is very discriminatory and selective in the sense that women are preferred most and age is an important factor to consider. Enforcement of national labour laws in such situations is relatively easy.

Labour law enforcement can be expanded through various measures such as:

- Increasing the number of labour inspectors, because currently the number of labour inspectors in Tanzania is low in relation to the work load. The number of industrial establishments that are liable for inspection is large. The labour department network for specific regions does not extend to cover all districts. For example, Arumeru district makes use of the only labour inspector at the Arusha regional labour office.
- Increasing the transport facilities for labour inspectors. Currently labour inspectors lack reliable transport which limits their mobility and adversely affects the national labour laws enforcement through labour inspection work.
- Increasing funds to the labour inspectors in order to facilitate mobility and make labour inspection smooth, easy, regular, and effective.

Even with these limitations, national labour law enforcement has been relatively effective on the cut flower farms.

7.4 Roles Played by Labour Unions

Labour unions have played a very special role in combating child labour in the cut flower industry in Arumeru district. The TPAWU in Arusha region has been instrumental in combating child labour through playing the following roles.

- Collaborating with other labour unions in East Africa, such as the East Africa African Trade Union Council (EATUC) and the Solidarity Center of the AFL-CIO of the United States, to conduct child labour special training programmes with the aim of reducing child labour at the grassroots level.
- Signing legally binding voluntary agreements with the cut flower farms owners under which employers are not allowed to practice child labour.
- Initiating and conducting awareness raising seminars on child labour, involving TPAWU branch leaders. After these seminars the branch leaders were assigned the duty of closely monitoring the child labour issues in their respective places of work and reporting to the TPAWU Area Office Secretary for necessary action.

The labour union role and activities have been so effective in the cut flower industry in Arumeru district due to the following reasons:

- Good working relationships exists between the cut flower farm owners and the labour union TPAWU leaders. This was evident to the researchers as they were able to witness this kind of good working relationship during a field visit with one TPAWU leader as their guide to the cut flower farms.
- The establishment of labour union branches on every cut flower farm in Arumeru district. Through these branches the monitoring of child labour activities is easily facilitated.
- The collaboration and networking with other related international labour organizations has facilitated funding for training seminars.
- The proximity and accessibility of the cut flower farms has also contributed to facilitating the labour union activities successfully.
- The operations of NGOs in combating child labour in Arumeru district was not noted.

7.5 Possibility of application of Labour Unions success story elsewhere

The success of the labour union in the cut flower industry in Arumeru may be difficult to apply due to the following reasons:

- The cut flower farms of Arumeru have their own characteristics which facilitated the success story, such as the concentration and accessibility of the cut flower farms. In other sectors, these conditions may not exist. Activities in some sectors such as in the garages, coffee plantations, mixed farms and informal sector activities are sporadically dispersed over a wide area and in different places. In such cases, the concentration of efforts of the limited number of labour union personnel will be very difficult. Too many efforts for too few achievements will be experienced.
- The labour unions lack enough personnel and other resources to effectively conduct their activities and attain the required success.

Chances of application of the success story of the labour union in Arumeru to others sectors cannot be ruled out completely, but such success will require additional human and financial resources and time.

7.6 The Role of International (Dutch and German) Regulations

The role of the international (Dutch and German) regulations in combating child labour has been influential. The International code of conduct of the International Flowers Coordination of German and the MPS Social Chapter of the Milleu Project Sierteelt (MPS) have helped to create an enabling environment for the efforts of other institutions/organization to succeed. Under these codes of conduct child labour practice is prohibited. Not only that, but they provide prior conditions to production and marketing of the cut flower farm products (cut flowers). The marketability of the cut flowers in the international market will depend on the degree of compliance of these codes of conduct. Because these codes of conduct directly affect the whole business operation of the industry, compliance by the cut flower farm owners is not debatable. This is why this machinery has been very effective in combating child labour in the cut flower industry.

These international regulations are well known by the cut flower farm owners, but are less known by the employees. Through their application they have been able to contribute a great deal to the prevention of child labour. In this respect they have been successful in supplementing the efforts of the Tanzania government against child labour and environmental degradation. These international regulations have been, and still are, necessary.

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Annex 1

CHILD LABOUR IN COMMERCIAL AGRICULTURE (HORTICULTURE) IN TANZANIA

Areas covered by the rapid assessment	Arumeru district (Arusha region). Other flowers-growing regions include Kilimanjaro region.
Educational facilities	Arumeru district has a total of 158 primary schools and 40 secondary schools.

Child labour is non-existent in the cut-flower industry due to a combination of factors:

International Regulatory Machinery	<ul style="list-style-type: none"> International Flowers Coordination (Germany) has issued an International Code of Conduct, which requires that suppliers comply with minimum labour human rights standards and provides that “there shall be no use of child labour. No worker under the age of 15 years or under the compulsory school-leaving age, whichever is higher, shall be engaged” (article 1:9). Millieu Project Sierteelt (Netherlands), a NGO which deals with the conditions under which flowers are produced, conducts periodic inspection to flower producing companies. It provides that “no farm shall employ children under the age of completion of compulsory schooling or under the age of 15, whichever is higher” and “for work which is likely to jeopardise health, no person under 18 shall be employed” (article 1:4).
National and Institutional Regulatory and Enforcement Machinery	<ul style="list-style-type: none"> A voluntary bilateral agreement has been signed between the Tanzania Plantation and Agriculture Workers Union (TPAWU) and the management of several companies on conditions for employment, that states “it is hereby agreed that the employer shall not practice or allow child labour” “ (article 3:4). TPAWU Activities. Awareness raising seminars on child labour for plantation branch leaders (for coffee, flowers and mixed farms), who are assigned the duty of monitoring child labour issues in their respective place of work Arusha Regional Labour Office. Labour Inspectors have carried out periodic labour inspections to cut-flower farms.
Local Initiatives	<ul style="list-style-type: none"> Child Labour Grassroots Training Programme, conducted by Solidarity Centre of the AFL-CIO (USA), have trained trainers to conduct grassroots seminars concerning labour laws, child labour concepts, income generating activities and strategies for withdrawal and rehabilitation and have established Child Labour Monitoring Committees. Community Development Workers have formed a child labour monitoring committee to deal with monitoring child labour in Arusha region.
Attitudes of local population	<ul style="list-style-type: none"> Parents do not encourage their children to seek employment on flower farms because of the adverse effects of toxic chemicals. Work in flower plantations is considered women’s work, so boys do not attempt to seek employment on flower farms Due to the proximity of the Mererani mines in the neighbouring Simanjiro district, children see more profit in mining than in flower production. A stigma has developed that girls working in cut-flower farms will become barren.
Nature of the work	Flower production is a competitive and highly technical requiring expert knowledge, extreme care and constant vigilance, and is conducted under very strict quality control measures. This delicate and complex exercise (which requires precise environment control and exact scheduling) does not give much room for the employment of children under the age of 18 years.

A restriction of child labour in one sector e.g. horticulture will tend to cause children to search for work in other sectors or to emigrate in search of work, in which there are less restrictive regulatory measures, such as:

- Agriculture: coffee plantations, mixed farms, grass cutting for cattle
- Informal sector: garage activities, domestic work, petty business, petty cart operations

Causes/Contributing Factors to Child Labour in Arumeru district

- Poverty: the result of social, environmental and economic factors
 - Social Factors: emigration of people from other regions in search of employment in the plantations.
 - Economic Factors: a significant portion of land is under commercial agriculture (coffee, sisal, cut-flower, sugar, mixed crops).
 - Environmental Factors: a large part of the northern zone of Arumeru is mountainous and under forest reserve.
 - Low family income: has affected parent's ability to send pay for school fees and other contributions.

Solutions for combating child labour adopted in the cut flower farms in Arumeru district should be emulated, but with adjustments to accommodate the local situation and respective child labour sector.

Annex II

**NATIONAL SOCIAL WELFARE TRAINING INSTITUTE
THE WORST FORMS OF CHILD LABOUR
IN COFFEE AND HORTICULTURE SECTORS
(KARATU AND ARUMERU – ARUSHA)
DECEMBER, 2000**

Interview Schedule for both Non and Working children

Religion_____ District_____ Locality_____
Date_____

A: PERSONAL INFORMATION

1. Age_____
2. Sex _____
3. Tribe_____
4. Religion_____
5. Place of birth_____
6. Is it rural area?
or urban area_____?
7. For how long have you been in this locality?_____
8. Whom do you live with?_____
9. How many are you in the family?_____
10. Why did you decide to come here?_____
- (a)_____
- (b)_____
- (c)_____

PART B EDUCATIONAL ANALYSIS

- 1.1 Are you schooling? YES_____ NO_____
- 1.2 If Yes, what is your school name?_____
- 1.3 How far is your school from home in terms of kilometres and time
(hrs/minutes)?_____
- 1.4 In which class are you?_____
- 1.4.1 If NO, why?(a)_____
- (b)_____
- (c)_____
- 1.4.2 Do your parents afford to pay school expenses? YES_____ NO_____
- If NO, where do you get the funds?_____
- _____
- 1.5 If NO, what are the reasons?
- (a)_____
- (b)_____
- (c)_____
- 1.6 Would you like to go to school? (for those who have never been to school)
- YES_____ NO_____
- 1.7 If YES, why?
- (a)_____
- (b)_____
- (c)_____

- 1.8 If NO, why?
 (a) _____
 (b) _____
 (c) _____
- 1.9 Would you like to go back to school? (for the drop outs)
 YES _____ NO _____
- 1.10 if YES, why
 (a) _____
 (b) _____
 (c) _____

- 1.11 if NO, why?
 (a) _____
 (b) _____

PART C: FAMILY BACKGROUND

- 1.1 Are your parents all alive? YES _____ NO _____
- 1.2 If NO, who is not alive? _____ What is the cause of death
 _____ When _____
- 1.3 All all are alive, where do they come from (origin)? _____
- 1.4 What does your father do? _____
- 1.5 What does your mother do? _____
- 1.6 If all passed away, with whom do you live? _____
- 1.7 What does your guardian do? _____
- 1.8 How many girls _____ and boys _____
- 1.9 How old are they? _____
- 1.10 Where are they? _____
- 1.11 What do they do? _____
- 1.12 What are the main sources of your parents' daily income?
 (a) _____
 (b) _____
 (c) _____
2. What type of assets do your parents have?
 (a) _____ (b) _____ (c) _____
 (d) _____ (e) _____ (f) _____
 (g) _____
- 3.1 How many houses do your parents have? _____
- 3.2 How are they built? _____

3. What is the level of education of your parents/Guardians?
 (a) Father _____
 (b) Mother _____
 (c) Grandmother _____
 (d) Grandfather _____
 (e) Uncle _____

PART D: GENERAL LIVING CONDITIONS

1. How many meals do you take per day? _____
2. What do you take in every meal _____

3. What is the type of food?
(a) _____ (b) _____ (c) _____
4. How many times do you take bath per day? _____
 - a. Do you have toilets at home? YES _____ NO _____
5. If No, why?
 - (a) _____
 - (b) _____
 - (c) _____

PART E: HEALTH ISSUES

1. Are there any health problems in this area? YES _____ NO _____
2. If, YES, what are the problems (identify)
 - (a) _____
 - (b) _____
 - (c) _____
3. What are the common diseases for children in this village?
 - (a) _____
 - (b) _____
 - (c) _____
4. How are they treated?
 - (a) _____
 - (b) _____
 - (c) _____

PART F: SOCIAL SUPPORT NETWORK

1. How do you solve your financial problems (identify different ways)
 - (a) _____
 - (b) _____
 - (c) _____
2. Do you get help when fallen sick? YES _____ NO _____
3. If YES, who helps you? _____
4. Who helps when depressed? _____

5. Who helps you when beaten by another child? _____
6. Who helps you when in need of food? _____
7. Who helps you when in need of play? _____
8. Whom do you share pleasant information with? _____

PART G: WORKING CHILDREN

(i) Worst Forms of Child Labour

1. How did you get into the job? (who influenced you?)
 - (a) _____
 - (b) _____
 - (c) _____
 - (d) _____
2. What were you doing prior to this job?
 - (a) _____
 - (b) _____
 - (c) _____
 - (d) _____
3. What are the reasons that make you work?
 - (a) _____
 - (b) _____
 - (c) _____
 - (d) _____
4. Do you enjoy working in tobacco shambas? YES _____ NO _____
5. If YES, why
 - (a) _____
 - (b) _____
 - (c) _____
6. If NO, why?
 - (a) _____
 - (b) _____
 - (c) _____
7. Do you have other sources of earnings apart from working in the tobacco shambas?
YES _____ NO _____
8. If YES, identify the sources
 - (a) _____
 - (b) _____
 - (c) _____
 - (d) _____

(ii) Earnings

1. What is the payment per?
 - (a) Day _____
 - (b) Week _____
 - (c) Month _____
2. How are you paid (identify forms of payment)
 - (a) _____
 - (b) _____
 - (c) _____
3. To whom are the payments made (who is given your payments)
 - (a) _____
 - (b) _____
 - (c) _____

4. When do you have good earnings?
 - (a) _____
 - (b) _____
 - (c) _____
5. Why good earnings during this time?
 - (a) _____
 - (b) _____
 - (c) _____
6. How are the earnings used?

Day:

 - (a) _____
 - (b) _____
 - (c) _____

Weekly:

 - (a) _____
 - (b) _____
 - (c) _____

Monthly:

 - (a) _____
 - (b) _____
 - (c) _____
- 7.1 How much is given to parents? _____
- 7.2 How many times? _____
8. What items are bought for personal use?
 - (a) _____
 - (b) _____
 - (c) _____
9. What problems so you encounter?
 - (a) _____
 - (b) _____
 - (c) _____
10. What is the source of problems?
 - (a) _____
 - (b) _____
 - (c) _____
11. What are the consequences of the problems?
 - (a) _____
 - (b) _____
 - (c) _____
12. What have you achieved since you joined labour activities?
 - (a) _____
 - (b) _____
 - (c) _____

(iii) Relationship with Employer

1. What kind of contracts do you have with your employer?
 - (a) _____
 - (b) _____
 - (c) _____
 - (d) _____
2. Are there fringe benefits out of these contracts? YES _____ NO _____
3. Does the employer provide you with any services?
4. If YES, List down the services you get
 - (a) _____
 - (b) _____
 - (c) _____
 - (d) _____
5. If NO, why?
 - (a) _____
 - (b) _____
 - (c) _____
 - (d) _____

(iv) Working Environment

1. What are the types of tools used in daily activities?
 - (a) _____
 - (b) _____
 - (c) _____
 - (d) _____
2. How is the natural surrounding?
 - (a) _____
 - (b) _____
 - (c) _____
 - (d) _____
3. How are the working conditions?
 - (a) _____
 - (b) _____
 - (c) _____
 - (d) _____
4. How many hours do you work per day? _____
5. At what time do you start working? _____
6. Do you have break time? YES _____ NO _____
7. If YES, how many minutes? _____
8. At what time do you stop working? _____

**INTERVIEW SCHEDULE FOR THE SUPERVISORS & WORKERS IN THE
COFFEE AND HORTICULTURE SECTORS**

A. PERSONAL INFORMATION

1. Farm No. _____ 2. Sex _____ 3. Age _____

B. DAILY ROUTINE

1. At what time d you start your work? _____
2. At what time do you stop working? _____
3. How many workers do you have (work under your supervision) _____
4. How many children (under 18 years)? _____
5. What are your daily activities in this farm?
 - (a) _____
 - (b) _____
 - (c) _____
 - (d) _____
6. What kind of activities are performed by children?
 - (a) _____
 - (b) _____
 - (c) _____
 - (d) _____
7. What are the indicators of the worst forms of child labour?
 - (a) _____
 - (b) _____
 - (c) _____
 - (d) _____
8. What can you say about the working environment?

C: EARNINGS

1. What are the forms of payment given to children?
 - (a) _____
 - (b) _____
 - (c) _____
2. How much is given to children as payment? _____
3. How do you determine the payments? _____

D: CAUSES OD CHILD LABOUR

1. In your opinion, why do children work?
 - (a) _____
 - (b) _____
 - (c) _____
 - (d) _____

2. What kind of children do you employ? _____

3. How do you recruit children?
 (a) _____
 (b) _____
 (c) _____
 (d) _____
4. How many seasons of tobacco activities so you have in a year?
 (a) _____ (b) _____
 (c) _____ (d) _____
5. What are the main activities for children in each season?
 (a) _____
 (b) _____
 (c) _____
 (d) _____
6. Where do children who work here come from?
 (a) _____
 (b) _____
 (c) _____
 (d) _____
7. What are the problems (hazards) facing the workers and working children?
 (a) Workers:
 (i) _____ (ii) _____
 (ii) _____ (iv) _____
 (b) Children:
 (i) _____ (ii) _____
 (ii) _____ (iv) _____

F: INTERVENTIONS

1. How can we help children under 18, not to work in this dangerous environment?
 (a) _____
 (b) _____
 (c) _____
 (d) _____
2. How can this be done?
 (a) _____
 (b) _____
 (c) _____
 (d) _____
3. What should the government do, to assist the children who work?
 (a) _____
 (b) _____
 (c) _____
 (d) _____

**INTERVIEW SCHEDULE TO THE OWNERS OF
COFFEE AND HORTICULTURE SECTORS
(KARATU AND ARUMERU – ARUSHA)**

A. HISTORICAL BACKGROUND

1. Location _____
2. What is the size of the plantation or farm in hectares? _____
3. When did the coffee and horticulture growing start in this location?

4. What were the factors or reasons behind the establishment of coffee and horticulture farms?
 - (a) _____
 - (b) _____
 - (c) _____
 - (d) _____
5. Who did start the coffee and horticulture farms? _____
6. What are the forms of coffee and horticulture growing in this area?
 - (a) _____
 - (b) _____
 - (c) _____
 - (d) _____
7. What is the production capacity in tons per year? _____
8. In the recent past five or ten years indicate the production of coffee and Horticulture (in tons per year) _____

B: COFFEE AND HORTICULTURE FARMING

1. What are the characteristic features of coffee and horticulture growing in this area?
 - (a) _____
 - (b) _____
 - (c) _____
 - (d) _____
2. How many workers do you have in all coffee and horticulture farms?
 - (a) Men _____
 - (b) Women _____
 - (c) Boys _____
 - (d) Girls _____
3. What are the major activities done by children in the farm?
 - (a) _____
 - (b) _____
 - (c) _____
 - (d) _____
4. What are the indicators of the worst forms of child labour?
 - (a) _____
 - (b) _____
 - (c) _____
 - (d) _____

5. Do you have any migrant labourers? YES _____ NO _____
6. If YES, where do they come from?
 - (a) _____
 - (b) _____
7. What is the mode of payment for working children?
 - (a) Hourly _____
 - (b) Daily _____
 - (c) Weekly _____
 - (d) Monthly _____
8. What are the forms of payment?
 - (a) _____
 - (b) _____
 - (c) _____
 - (d) _____
9. How many times (seasons) do you employ children in a year?
 - (a) _____
 - (b) _____
10. What do children do in each of the seasons?
 - (a) _____
 - (b) _____
 - (c) _____
 - (d) _____
11. Do you have formal contracts with the working children?
 - (a) YES _____ (b) NO _____
12. Can you mention the types of contract?
 - (a) _____
 - (b) _____
 - (c) _____
13. If NO, why?
 - (a) _____
 - (b) _____
 - (c) _____
 - (d) _____
14. If YES, what is the contract?
 - (a) _____
 - (b) _____
 - (c) _____
 - (d) _____
15. Of which age, children are employed? _____
16. What can you say about the working environment, in which children are exposed?
 - (a) _____
 - (b) _____
 - (c) _____
17. In your opinion, why do children under 18 years of age, come to ask for employment in your coffee and horticulture farms?
 - (a) _____
 - (b) _____

(c) _____

(d) _____

18. What should be done to help children especially those under 18 years, not to work in the coffee and horticulture farms?

(a) _____

(b) _____

(c) _____

(d) _____

**QUESTIONNAIRE TO HEADS & TEACHERS OF
PRIMARY SCHOOLS IN THE KEY LOCATION**

1. School _____
2. Sex _____
3. What is the state of the primary school infrastructure?

Equipment	Required	Available
Classrooms		
Desks		
Teachers		
Staff houses		
Latrines		
Chairs		
Libraries		
Playgrounds		

What is the number of school age children who have not been enrolled? _____

4. How many pupils does your school have?
 (a) Boys _____ (b) Girls _____
 (b) _____
5. What is the capacity of the school? _____
6. On average, how many pupils does each class have? _____
7. What is the required number per class? _____
8. Do you experience dropout rates in your school?
 YES _____ NO _____
9. If YES, why?
 (a) _____
 (b) _____
 (c) _____

10. What is the number of teachers and their qualifications?

Grade	Male	Required	Available	Female	Required	Available
A						
B						
C						
Total						

11. What is the teacher-pupil ratio? _____
12. Does the school provide pupils with services besides the academic ones? List down.

- (a) _____
 (b) _____
 (c) _____
 (d) _____

13. How far is the school from the tobacco growing sites?

14. How much do pupils pay per year?

15. What is the trend in enrolment rate in your school?

1991		1992		1993		1994		1995		1996		1997		1998		1999		2000	
F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M

16. What is the drop out rate in your school?

1991		1992		1993		1994		1995		1996		1997		1998		1999		2000	
F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M

17. What is the graduate rate?

1991		1992		1993		1994		1995		1996		1997		1998		1999		2000	
F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M

18. How many pupils have been selected to join form one in the last ten years?

1991		1992		1993		1994		1995		1996		1997		1998		1999		2000	
F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M

19. What are the expectations of parents after primary education?

- (a) _____
 (b) _____

20. What do Standard VII leavers do in the village?

- (a) _____
 (b) _____

21. How many times have the school pupils involved in tobacco farms?

- (a) _____
 (b) _____

22. What are the indicators of worst forms of child labour on tobacco plantations?

- (a) _____
 (b) _____
 (c) _____

23. It is quite obvious that there are children who work on tobacco farms in your area. In your opinion what are the reasons that make children under 18 years work on these farms?

- (a) _____

- (b) _____
 - (c) _____
 - (d) _____
24. What school expenses and contributions are supposed to be paid by your parents?
- (a) _____
 - (b) _____
 - (c) _____
25. To what extent has this been implemented by the parents? _____
26. Do all parents/guardians afford to pay a contribution?
 YES _____ NO _____
27. If NO, why?
- (a) _____
 - (b) _____
 - (c) _____
28. What measures are taken for the parents who fail to pay?
- (a) _____
 - (b) _____
 - (c) _____

INTERVENTIONS

1. What should be done at the village level to alleviate the problem of child labour?
- (a) _____
 - (b) _____
 - (c) _____
2. Which organizations can effectively assist to alleviate the problem of child labour in this village/ward?
- (a) _____
 - (b) _____
 - (c) _____
 - (d) _____
3. What should be the base for the programmes and interventions of child labour by NGOs and government?
- (a) _____
 - (b) _____
 - (c) _____
 - (d) _____

INTERVIEW SCHEDULE FOR VILLAGE/WARD LEADERS

LOCATION _____ DATE _____ 12.2000

DISTRICT _____

1. Sex _____
2. Age _____
3. How many tobacco farms are there in the village/ward? _____
4. Who is the owner?
5. How many primary schools do you have in this village/ward?
6. Do all children go to school? YES _____ NO _____
7. If NO, why not?
 - (a) _____
 - (b) _____
 - (c) _____
8. Do people in the tobacco growing areas have hospitals/dispensaries?
YES _____ NO _____
9. If YES, where?
10. If NO, why?
 - (a) _____
 - (b) _____
 - (c) _____
11. What are the common diseases in the tobacco growing areas?
 - (i) _____
 - (ii) _____
 - (iii) _____
12. Why are they common?
 - (a) _____
 - (b) _____
 - (c) _____
13. Which months of the year have high and low rates of diseases?
 - (a) high _____
 - (b) low _____
14. Why?
 - (a) _____

(b) _____

15. Are there mosques and churches in the tobacco growing areas?

YES _____ NO _____

16. If YES, how many are there?

(a) churches _____

(b) mosques _____

17. Are there any police stations? YES _____ NO _____

18. What are the common crimes in this village?

(a) _____

(b) _____

(c) _____

19. Who mainly commit these crimes?

(a) _____

(b) _____

(c) _____

20. What is the number of people in this village?

Men _____

Women _____

Children _____

Girls _____

Boys _____

Dependants _____

21. Apart from working on tobacco farms what other socio-economic activities are performed in the village?

(a) _____

(b) _____

(c) _____

(d) _____

(e) _____

22. Why do the children work on tobacco farms?

(a) _____

(b) _____

(c) _____

23. What are the indicators of the worst forms of child labour in this area?

(a) _____

(b) _____

(c) _____

24. Since working on tobacco farms for children is very dangerous, what should be done to alleviate child labour in this village?

(a) Village level

(i) _____

(ii) _____

(iii) _____

(iv) _____

(b) District level

(i) _____

(ii) _____

(iii) _____

(iv) _____

(c) The government

(i) _____

(ii) _____

(iii) _____

(iv) _____

25. What are the problems faced by children who work on the tobacco plantations?

(a) _____

(b) _____

(c) _____

**INTERVIEWS FOR PARENTS/GUARDIANS OF NON AND
WORKING CHILDREN IN COFFEE AND HORTICULTURE
SECTORS
(KARATU AND ARUMERU-ARUSHA)**

1. Age_____
2. Sex_____
3. Tribe_____
4. Level of Education_____
5. Do you have a disability? YES_____ NO_____
6. If YES, what type of physical disability?_____
7. Married_____
8. Single_____
9. Widowed_____
10. Divorced/separated_____
11. Occupation_____
12. How many children do you have by gender: boys_____ girls_____
13. How many dependants do you have?_____ how many are orphans?_____
14. What do your children do?_____
15. Do you have any children who are working on coffee and horticulture farms?
YES_____ NO_____
16. If YES, how many by gender/age?_____
17. If NO, what are the reasons?
 - (a)_____
 - (b)_____
 - (c)_____
18. If YES, why?
 - (a)_____
 - (b)_____
 - (c)_____
19. I) Why do people get their children employed on coffee and horticulture farms?
 - (a)_____
 - (b)_____

(c) _____

(d) _____

II) What are the indicators of the worst forms of child labour?

(a) _____

(b) _____

(c) _____

(d) _____

20. What is your place of domicile? _____

21. When/why did you come here?

(a) _____

(b) _____

(c) _____

(d) _____

22. Do your children go to school? YES _____ NO _____

23. If NO, why)

(a) _____

(b) _____

(c) _____

(d) _____

24. What is the socio-economic status of the families with working children?

(a) _____

(b) _____

25. Do all children in this village or ward work on coffee and horticulture farms?

YES _____ NO _____

26. If YES, why?

(a) _____

(b) _____

(c) _____

27. If NO, why?

(a) _____

(b) _____

(c) _____

28. What is your income per year? _____

29. What are the problems working children encounter?

(a) _____

(b) _____

(c) _____

(d) _____

30. How are the problems solved?

(a) _____

(b) _____

(c) _____

(d) _____

31. What type of activities do children perform on coffee and horticulture farms?

(a) _____

(b) _____

(c) _____

(d) _____

32. How many times (seasons) do children work on coffee and horticulture farms?

(a) _____

(b) _____

(c) _____

33. Who owns the coffee and horticulture farms in this ward? _____

INTERVENTIONS

34. What should be done to do away with child labour?

(a) _____

(b) _____

(c) _____

(d) _____

35. What should the village government do to alleviate the problem of child labour?

(a) _____

(b) _____

(c) _____