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International Programme on the Elimination of Child Labour (IPEC)

Investigating the Worst Forms of Child Labour No. 15

Tanzania
Children Labour in Mining:
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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We would also like to state that all the above-mentioned persons are exonerated from errors found in this work. We take full responsibility for any mistake contained herein.

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A Typical Working Child in Mining¹

Tumijisho² is a 15 year-old boy working full-time at an artisanal mine in Geita. He lives with his mother in a nearby village and has seven brothers and sisters. Tumijisho dropped out of school in standard five because, after his father died, his mother was unable to pay his school fees.

He works seven hours a day, digging and ferrying gold ore and mud from pits, carrying bags of mud on his back to sieving sites, sieving the mud and crushing the gold ore. He is paid in cash at the end of each day. Tumijisho suffers from severe shoulder and back pain and frequent bouts of diarrhoea.

His younger sister, Daria, is 13 years old and works full-time at a food stall -- 10 hours per day. She was raped by a miner one night as she was returning home at 9pm. She is now five months pregnant.

¹ Data based on the results of the research

² All names have been changed for reasons of confidentiality

EXECUTIVE SUMMARY

The mining sector in Tanzania has been a significant employer in the country as proven by a number of studies (Lwakatare, 1993, Chachage, 1995). This is especially true when considering the small-scale mines. The actual population estimates of those employed, however, are made difficult by the miners' nomadic working habits, social organization and politics. The recent study conducted by TANDISCOVERY Ltd (1996) contends that more than 555,000 people are directly involved in mining activities around the country, some as full-time miners, and others involved partly in mining and partly in other economic activities at the same time.

The sector is plagued by various factors which limit its operational and productive capacity to become a reliable source of livelihood for the entire population. Gross inequalities in terms of access to mining rights, distribution of income, inadequate technology and thus productivity, and other constraints have trapped most of its population in poverty.

Within this context, the mining sector in Tanzania was selected as the area of study for this rapid assessment because it was suspected to have a high concentration of child labour. The study did not cover all the mining sites in the country, but rather it covered three main districts, namely Chunya, Geita and Tunduru districts in Mbeya, Mwanza and Ruvuma regions, respectively.

The study set out to explore the following broad objectives: to find out the causes and incidences of child labour in the mining sector in Tanzania; to examine the working conditions, characteristics and consequences of child labour in the mining sector; and to propose tentative measures of intervention to alleviate the child labour phenomenon. The study also aimed to test and evaluate the International Labour Organization (ILO)/UNICEF Rapid Assessment methodology.

The study used both qualitative and quantitative methods. Since the Rapid Assessment methodology is more prone to collecting descriptive information, special efforts were made to collect quantitative data as well to supplement the qualitative information. This was necessary in order to make comparisons of variables such as the level of education and poverty in different households surrounding the mining sites, as well as to verify the causes of child labour. The data collection methods which were commonly used included documentary analysis, child interviews with key informants, observation, and focus group discussions. Most of these methods were useful in generating the information needed for the study. The main limitation of the methodology was its short duration; it failed to fully capture the impact of child labour in the mining sector as there was not enough time to verify these results. The researchers had to depend on the experiences of the children themselves, the key informants, and other secondary sources of information. The exercise of mapping was useful where child labour incidences were concentrated, but in areas like Chunya where working children were widely scattered, it was necessary to have more than one map to show the location of working children. Related to the above circumstances, triangulation was also not easily performed, especially for working children who kept on moving along the river searching for areas likely to have gold deposits.

Main findings:

- Children below the age of 18 years were involved in different activities related to the mining sector, the largest group being children aged between 14–17 years, who accounted for 59% of the total number of children interviewed. It was noted that there were fewer girls (19.7%) than boys (80.3%) involved in child labour in this particular sector. The main explanation for the age concentration of child labourers between the age group of 14–17 years is because these children fall within the age group who should have completed their primary education. Faced with limited chances of joining secondary education

and vocational training, working in the mines can be the only available option. In terms of gender, the far larger proportion of males is due to the fact that mining is considered an activity mostly for males. This was noted in Mlimanjiwa, while in Ngapa the district officials had actually prohibited girls from working in the mines in an effort to keep them from engaging in prostitution related to the mine sites. This accounts for the low involvement of girls in this sector. The highest number of children involved in the mining sector was observed during the school vacations and the lowest during the school terms. Through key informant interviews and observations the researchers were able to come up with the following figures as estimates of children involved in the mining sector in the three locations: Mlimanjiwa – a high of 150 and a low of 70; Mgusu – a high of 150 and a low of 100; Ngapa; - a high of 100 and a low of 40.

- The status and size of the family were noted to be important in analysing the relationship between children and their involvement in child labour. It was noted that 53.8% of the children who had either dropped out of school or had completed their primary education and were now engaged in mining activities, came from either female-headed families or were orphans. Constraints of resources facing female-headed families were likely to have pushed children into child labour. The disintegration of the extended family structure has also led to less accountability of the welfare of orphans by members of the family. Orphans are frequently left to fend for themselves. The average family size in the three study locations was six members per family. This is above the national average family size of five people per family as indicated in the 1988 census. It has been argued that large families were constantly faced with limited resources, this being the motivating factor for children to decide to engage in child labour to either support themselves or their families.
- The most prominent explanation as to why children involve themselves in child labour was related to the economic status of the family, mainly the inability of parents to provide basic needs for their children. Children had to either drop out of school due to lack of funds to support their education or had to work part-time to meet their educational expenses. Children also had to work to support their families and parents were noted to highly value their contributions.
- In this sector children were involved in a number of activities including the actual mining process (88.5% boys) and related activities like working in restaurants, bars and shops, and carrying out other errands. Children as young as 10 years old were involved in the drilling of rocks, washing of rock dust, and collecting and carrying pieces of crushed rocks. They were exposed to hazards which put their health at risk.
- Children received payments, either in kind or in cash, the latter accounting for 76.6%. The daily payments ranged between Tsh. 50/= and 6000/= ³, Mlimanjiwa being the place where children were paid the highest wage. They were forced to use their incomes to either support their families because their families could not raise enough funds to provide for their basic needs, or to support their own education by paying for their school fees and other school expenses.
- Children worked under direct sunshine, exposing them to high temperatures and wind. In Mgusu this was, however, an exception as children involved in the process of gold recovery worked under a shelter provided by their employers.
- Children worked for long hours with little time to rest or play. On average children working in the mine pits worked for a total of six hours per day, but this varied among different age groups. It was noted that children working in the restaurants, bars and shops worked much longer hours (10 hours per day on average) compared to the children working in the mining pits. An important aspect noted was that in this particular category it was the children between the ages of 10–13 years who worked for an

³ USD\$1 = TShs. 887 (September 2001)

average of 14 hours, while children aged between 14 and 17 worked for an average of nine hours. Variations were also noted on the average working hours of children working while attending school and children engaged more permanently in mining activities. Working days varied with respect to the mining site and whether schools were closed or open. During school terms children had to work in the morning or afternoon depending on their timetable. However, during vacations they were free to work everyday. In Ngapa children worked daily irrespective of which day of the week it was.

- Tools and equipment used in the mining process were rudimentary in nature and required muscle power. Such tools included axes, pick axes, vehicle axes, iron rods, chisels, sacks and buckets. Children were forced to strain themselves to get the work done.
- Children worked in very hazardous conditions predisposing themselves to a number of health problems. There were also health risks, which were subtle and indirect, making the adverse effects they caused not immediately noticeable. This was especially true in the case of exposure to mercury. Children were exposed to mercury in the amalgamation process, and mercury was also disposed of into rivers thereby contaminating water sources. This could have adverse effects not only on the children, but also on other members of the community.

Recommendations:

- Efforts must be made to raise the living standards of communities in the mining areas by providing them with improved means of production, hence lowering the value of child labour. There is also the need to encourage the expansion of farming activities to include crops that are viable in the area. Stable markets as well as good prices would further benefit communities surrounding the mining areas.
- The government should initiate policies that would cater to orphans and children coming from poor families. It is necessary to act on the development of social security schemes geared towards the orphans and children coming from poor families.
- Creating community awareness on the worst forms of child labour is an important step in combating child labour. Information should be provided to both parents and children on the negative effects of child labour, physically and mentally. There is a need to build public awareness on the distinction between child work and child labour.
- Improvement of education facilities and further training of teachers should be undertaken as a means to motivate children to remain in school.
- Vocational training schools should be established in these areas to enable school leavers to acquire skills in various fields as their chances for further education are slim.
- Changes should be made in government policy with respect to the licensing of mining permits so as to make miners more accountable for their actions. It is suggested that mining licenses be issued to village governments who will then lease the sites to small-scale miners on condition that they should not employ children. The village governments should have the mandate to revoke contracts made between them and the miners should the latter not abide by the rules.

1. BACKGROUND INFORMATION ON CHILD LABOUR IN THE MINING SECTOR IN TANZANIA

1.1 The mining sector in Tanzania

Mining in Tanzania has been a significant economic activity going back many years. Salt, iron ore and copper were exploited by the indigenous people to meet their household requirements. During the colonial period, the government was in favor of large-scale companies based in Britain and South Africa and tended to discourage small-scale enterprising individuals.

In areas such as Musoma, Mwanza and Chunya districts, gold mining operations had been going on for some time when, by the mid-1920s, they became the country's chief sources of gold. Today, Tanzania's known mineral deposits include coal, copper, nickel, iron ore and uranium. The minerals mined are diamonds in Shinyanga, gemstones in Arusha, Ruvuma and Morogoro regions, and gold in Kahama, Nzega, Geita, Buhemba, Mpanda and Chunya districts. Gold and diamonds make up the largest contribution to Tanzania's mineral exports.

Gold mining has traditionally been undertaken by both large-scale companies, which are subsidiaries of multinational corporations, as well as by artisanal miners. Today, some of the mechanized gold production operations in the country include the Ashanti Gold Mine in Geita, Gold Pride Co. Ltd. in Nzega, Bulyanhulu Gold Mine in Kahama, Mans Mining Co. in Chunya and Pacific Mining Co. in Tunduru.

Alongside the foreign gold mining companies, there are several Tanzanian players. First, there are several artisan miners who, in collaboration with and with assistance from foreign companies, are trying to develop their claims into mechanized mines. These include companies such as Chipake Gold Mine Co. There are local businessmen, most often Asians and Greeks, whose companies deal with the purchasing and selling of gold. Lastly, there are the small-scale miners called artisanal miners.

Originally, the activities of the artisanal miners were chiefly confined to, and focused on, the old gold mines and areas where known alluvial deposits existed. Their numbers increased quite phenomenally in 1976 when the hitherto unknown large gold deposits were discovered at Bulyanhulu, in Kahama. Since then, the small miners have continued making new gold discoveries in many parts of the country every year as illustrated by gold discoveries in Mbinga and Mpanda districts.

Despite the fact that artisanal mining activities are "illegal" from the government's point of view, Bills J.H. (1991) estimates that mining communities of 10,000 to 25,000 people were being "unofficially established" whenever new discoveries were made with a "high degree of internal organization." Within a year of the discovery of Bulyanhulu gold deposits, for example, "50,000 people were reported to be working on the reef or providing support services to miners." Recent estimates state that there are 3,000,000 people operating at gold sites throughout the country. It is further estimated that between eight and 15 tons of gold have been produced by these small-scale diggers annually (Bills, J.H 1991). It was only in 1989 with the liberalization in the mineral trading that many small miners' operations became official. Since then, previously unofficial claimants have begun pegging their claims in the name of a single owner or partnership. Villages under village governments are also known to have pegged claims on behalf of villages. The claim holders do not work in the pits, instead, they lease the claims to other people who are given control of a few metres of strike length. They then become pit owners, employing four to 10 miners who do the actual mining work.

Production relations are indeed exploitative. The claim holder and pit owner normally receive a good share of the gold ore or the final product, while the actual digger receives very little of the end product. The concrete work relations differ from one place to another. For example, the pit owners (as a collective entity) are at the same time the actual diggers who employ no one other than themselves. While the rates of the share of the mined ore between the claim holder and the pit owner/digger may vary, on average the former gets about 30% and the latter takes the rest. In the case of Mgusu gold mines, however, the claim holder receives only one share of the proceeds from each of the gold pits under his jurisdiction.

Production methods are invariably simple and labour intensive as mechanized equipment such as compressors, water pumps and explosives are a rare phenomenon at the sites. Mining is carried out by using pick axes, hammers, chisels and shovels. Gold ore is hoisted to the surface of the pit by using a pail while grinding, crushing and recovery of gold is done with rented equipment and hired labor – mostly men. Gold recovery is done by sluicing and finally by amalgamating with mercury. At some mining sites this activity is exclusively undertaken by child workers.

The fortune makers in this process are mainly the claim holders. They are normally the rural capitalists, some syndicates of small-scale miners, some Asian and Greek businessmen, employees of the official mining sector as well as party and state bureaucrats. The pit owners/diggers' fortunes are, however, mixed. Depending on the richness of the deposit, a few make it -- but the majority do not benefit. Since many pit owners are also diggers, the tendency is to drift to wherever there are better prospects.

Mining communities are highly organized. Once a camp or village has been established then an influx of businessmen ensue and these include, among others, second hand clothes sellers, tailors, beer sellers, prostitutes, food and fruit vendors and hoteliers. In the process, the village community becomes highly differentiated to include a variety of social classes such as very poor, poor, middle and rich people. The way gold mining operations are conducted and the pattern in which villages or camps are organized have great implications for the people in the mining settlements and the physical surroundings. In most cases, land degradation as well as deforestation are the normal and natural consequences. Some of the side effects stem from air pollution due to dust being emitted by crushers, the use of mercury and the danger of exposure to it, and the attendant health implications in terms of neurological problems and birth defects. Other mining related health problems that have been cited by other researchers include diseases which arise from unhealthy sanitary conditions, pulmonary problems and death which arises from major collapses of mine walls and roofs.

1.2 The mining sector in the selected districts

Mining activities take place in several places in Tanzania. Some of these areas include the gold mines in Kahama in Shinyanga region, and Biharamulo in Kagera region and Lindi region. The districts containing minerals which were studied as part of this investigation include Chunya, Geita and Tunduru. Below are descriptions of the mining activities in these districts.

(a) Chunya district

Chunya district is located in the northwestern part of Mbeya region. The district is among the seven districts of Mbeya region. To the north, the district is bordered by Singida and Tabora regions, and to the east, by Mbarali district. Mbozi and Mbeya districts border Chunya in the south, and Rukwa region in the west. The district is covered by an area of 29,219 square kilometers (sq. km) (29,219,000 ha) of which 28,114 sq. km (28,114,000 ha) are land and 1,705 sq. km (1,705,000 ha) are covered with water, including the rivers Sangwe, Lupa, Zira, and part of Lake Rukwa which constitutes the inland water bodies.

According to the 1988 National Census, Chunya district has a population of 164,554 people. In 1996, the district population was estimated to be 194,495 -- 12.4% of the total regional projected population. The

1988 census also shows that the average district household size was 5.0 which was slightly higher than the regional average of 4.9 persons per household, but lower than the national average of 5.2 persons.

Compared with other districts in Mbeya region, Chunya is the least populated district with a population density of six persons per sq. km. Chunya, in fact, may be one of the least populated district in Tanzania. The district's major economic activities are farming and animal husbandry. It is estimated that these two sectors constitute about 50-95 per cent of the district Gross Domestic Product (GDP). Other sectors include fishing, forest activities, and bee keeping. Tobacco is the leading cash crop. Other cash crops are cotton, sorghum and paddy. The main food crops grown are maize, beans, millet, cassava, and sweet potatoes. Despite the existence of abundant arable land and good climatic conditions the district has no large-scale farms. This is largely due to the difficulties encountered in accessing markets because of the poor road network for crop transportation.

The district is characterised by a hilly landscape (stretching from Mbeya hills with a gentle slope covering the Kiwanja division). The district also includes flat lowlands along the Lake Rukwa basin. Organised and systematic gold mining in Chunya started as early as the 1930s under British Companies, at Itumbi and Saza. Both surface alluvial and deep shaft mining methods were practised as early as 1939.

Chunya district is one of the most prominent in Tanzania in terms of mineral wealth. The area covered by gold minerals is about 2,600 kilometers (kms) and lies north of Mbeya town. Gold mining in Chunya started in 1932 following the discovery of gold minerals at Lupa (Lupa Gold fields). However, proper prospecting started in 1934 in Itumbi and in 1937 in Saza. Between 1934 and 1959 about 50.5 tons of gold and 5.5 tons of copper were produced from various mining sites. Some of the medium gold mines which existed included Saza Mines Ltd (1939 -1956), Itumbi Mines Ltd (1937-1960) and Safari Mines Ltd. (1957-1957). A few years after Independence artisanal miners invaded several areas in the district and started mining gold. At the time of this research, artisanal miners continue in this business although their number has been decreasing year after year. From 1981 to 1987, about 13.8 tons of gold were purchased by State Mining Corporation (STAMICO) from artisanal miners. From 1990 to 1994 about 652 kilograms (kgs) of gold from artisanal miners were sold to the National Bank of Commerce - Mkwajuni Branch in Chunya. Between June 1996 and September 1996 about 30 kgs of gold were purchased from artisanal miners by Sang - Sander Holdings Co. Ltd.

There are two types of gold mining found in Chunya today: alluvial gold mining, (dhahabu ya sesa) and reef gold mining (dhahabu ya miamba). Currently, there are about one hundred and fifty artisanal Primary Mining Licenses (PML) who are primary mining licence holders. This number is very small compared to the more than four hundred artisanal miners who owned mining licences in the 1990s. This decrease is caused by many of the miners being discouraged from mining and thus ceasing to continue it, or migrating to other areas like Tunduru and Mererani. Even the few miners who have remained work under very harsh conditions as the gold is said to be deep down in the earth and more modern equipment is now required than when mining started. The irony is that people from Kahama are rushing to Chunya for the same reasons.

As for big miners, there are about forty-five companies that are prospecting license holders and that research gold mining in the district. One of these is Mans Mining Company Ltd. Their number of license holders is the highest when compared to the licenses provided to companies in the previous years.

Problems facing artisanal miners:

- Lack of modern equipment for gold mining in the areas;
- Lack of mining knowledge (geology);
- Lack of capital for running mining business; and
- Lack of reliable market for their gold (minerals).

On the other hand, the mining office faces a number of problems:

- Many people have continued mining gold without holding licenses despite their awareness of the rules and laws guiding mining activities;
- There is illegal use of explosives in the mining areas, and the impact of artisanal mining includes the following consequences:
 - (i) Environmental destruction - artisanal miners cut down trees with no respect for the environment; they also leave the holes they create exposed and dispose of waste haphazardly. Artisanal miners cause soil erosion because of uncontrolled mining. The sources of rivers and streams are also impacted due to people who wash gold sands along the shores. Waste from mercury finds its way into water sources used by members of these particular communities.
 - (ii) Health impact of mining on miners - the main ones include:
 - Tuberculosis (T.B.) and silicosis due to inhaling dusty
 - Improper use of mercury
 - Diarrhoea due to lack of sanitation facilities in the camps
 - Venereal Diseases (VD) due to unprotected sexual activities after getting money in exchange for gold.

Mining in Chunya district is undertaken by small miners. Despite the fact that, the district has a variety of minerals, only gold is mined and sold to legal buyers. During the period of 1990-1994 the National Bank of Commerce (NBC) branches in the district bought 652,960 grams of gold worth Tshs. 2,207,182,625 (approx. USD \$2,488,370). The table below illustrates the amount of gold sold to the NBC during the period under discussion.

Table 1.1 Trend of gold bought by NBC Chunya district, 1990 - 1994

Year	Amount (grams)	Value (Tshs) <i>(USD \$1 = Tshs 887 09/2001)</i>	Percentage increase/decrease
1990	88,035	189,752,255.00	-
1991	204,056	612,168,000.00	+ 131.8
1992	229,426	866,153,653.00	+ 12.4
1993	107,268	429,731,637.00	- 53.2
1994	14,175	109,377,080.00	- 87.8
Total	642,960	2,207,182,625	

Source: DNRO - Chunya

In terms of education Chunya district had 51 primary schools in 1985 and 71 in 1995. Kiwanja division alone had the highest number of schools, 14 and 21, during the respective years. The enrolment rate was 2,607 pupils (i.e. 1,304 girls and 1,303 boys). The number of school age children not enrolled was 998 by 1995.

Generally, school attendance is poor because children have to divide their time between school and working in gold mining. Truancy in this sense is rampant and some parents have failed to foil the problem of their child's truancy because they do not have time to closely supervise them as they are always on the hunt for gold. The problem of dropouts in primary schools is serious. According to available data in 1995, about 606 girls and 497 boys did not continue their primary education, with a gross dropout rate of 30%. The main reasons for high dropouts could be attributed to factors such as marriage, pregnancies, nomadic lifestyles (especially for livestock keepers in Usangu Basin) and above all, truancy and petty trading.

The following table shows how primary school dropouts among girls rose from 44.1% in 1990 to 55.2% in 1995, while that of boys fell from 55.9% in 1990 to 44.8% in 1995.

Table 1.2: The dropout rate by gender in Chunya district primary schools between 1990 –1995

Year	Boys: % dropout	Girls: % dropout
1990	55.9	41.1
1991	55.1	49.9
1992	59.6	40.5
1993	52.7	30.8
1994	47.4	52.6
1995	44.8	55.2

Source: computed from district education office, Chunya

Mlimanjiwa village which is in Kiwanja division has one primary school with seven classes i.e. standard one to standard seven.⁴ Except for standard one that has two streams, the rest have one stream for each class. The total number of pupils was 256 with 129 girls and 127 boys. The number of pupils in each class were as follows: standard 1- two streams (63), standard 2 (36), standard 3 (37), standard 4 (39), standard 5 (26), standard 6 (26) and standard 7 (29). The school had a total of six teachers, which met the requirement. The pupil/teacher ratio was 45:1. However, there were problems registering children for school as parents were not willing to send their children to school due to the hardships of life and the higher school fees. It is also true that in Mlimanjiwa, children did not enrol in school because the parents themselves were not educated and they did not see the importance of their child's education. At the time this research was in progress, the head teacher of the school was complaining that so far only eight parents had registered their children for enrolment in the January 2001 year, and that this was following his house to house visits looking for school-going age children. The required number of school pupils for standard one for the next school calendar (2002) was 66.

There were no data available to show the drop out rates for the whole of Kiwanja division. However, the available data from Mbugani ward with only one primary school (Mlimanjiwa) sufficed to give a picture of this area of study. Out of the enrolled pupils indicated above, there were nine (or 7.1%) and seven (or 4.5%) drop-outs for boys and girls respectively at the time of study. A female teacher who was one of the key informants stated the following:

“Children abandon school once they get money quickly within a short period of time. The initial intention of engaging in mining may be that the children are looking for money to enable them continue with school and buy uniforms. But later one gets the impression that the job is more paying than the dark future of schooling.”

Chunya District is among those districts with the fewest secondary schools. It has four secondary schools, one is a government school and the other three are privately owned. Kiwanja division has one private secondary school located in Itewe. The enrolment in Form One⁵ in all the secondary schools has dropped from 4.2% in 1990 to 4.0% in 1995.

⁴ First to seventh year of primary education; approx. ages 7-15

⁵ First year of secondary education

Table 1.3: Number of pupils selected to join secondary schools in Chunya district between 1990-1995

1990	1991	1992	1993	1994	1995
1622	1697	1558	1861	1374	2612 ⁶

Source: District Education Office Chunya

Moreover, very few standard seven leavers are selected for secondary education. Many of them remain in their villages and get involved in mining activities, while those in other economic zones get involved in different activities, especially the informal sector activities in Chunya town or other neighbouring towns.

(b) Geita district

Geita is one of the seven districts in Mwanza region. It is located in the western part of the city of Mwanza and shares borders with Sengerema district to the northeast, Kagera region in the northwest, Kwimba district to the southeast, Shinyanga region to the south and Kagera region to the west. It occupies a total land area of 6775 sq. km. According to the 1988 population census, Geita was then comprised of 430,199 people with a growth rate of 3.6% per annum. It was projected that, by the year 2000 the district would have 719,565 people with an average house hold size of seven members.

The major economic activities in the district are farming, livestock keeping and fishing; food crops grown include maize, cassava, sweet potatoes and bananas while the main cash crop has always been cotton. The second major economic activity in the district is gold mining; this is characterized by large-scale and small-scale miners.

The main ethnic groups in the district are the “nyantuzu,” “jaluo,” “nyamwezi” and “sukuma.” Like any other area in the lake zone, Geita enjoys the climatic conditions typical to the zone: cool weather interspersed with mild humidity, particularly during the months of December and January. The rainy season normally starts in September and ends in May, while the dry season starts in June and lasts through August.

Mining activity started during the early 1980s. The main activity at the various mining sites is gold mining. The discovery of gold in the area has led to an influx of migrants from both the neighbouring regions of Shinyanga, Mara and Kagera regions, and from distant regions like Kilimanjaro, Morogoro and Arusha. Mining activities are heavily dominated by small-scale miners, however, there are a number of large-scale companies involved in the mining as well. These include Chipaka Goldmines Co. and Ashanti Goldmining Co.

The small-scale mining process is not organized on a household basis as is commonly the case with peasant farming in most of the rural countryside in Tanzania. Rather, production is organized as a joint venture consisting of seven to eight people per gold pit. Each individual member is entrusted with a specific function to perform and shares of output are accorded depending on the value (monetary) and the importance of the service rendered.

(c) Tunduru district

Tunduru district is located in the eastern part of Ruvuma region. Songea rural district and Masasi district (Mtwara region) border Tunduru to the west and east respectively. To the north Nachingwea and Liwale districts (Lindi region) border the district. Ruvuma River forms the boundary to the south. The district covers an area of 18,778 km sq. of which 413 km sq. are covered by bodies of water, 15,700 km sq. are

⁶ The increase in 1995 can be explained by good pupil performance and examination results.

arable land and 2,665 km sq. are forest reserves. Part of the Selous game reserve is within the district. The Muhuwesi and Mwambesi game reserves are also located in the district.

The 1988 census recorded the population of the district at 170,235. In 1996 it was estimated that the population of the district had increased to 204,721, with an average household size of six people. The Yao people form about 60% of the total population of the district. The other ethnic groups are the Makua (20%), Matambwe (8%) and the Ngoni and Matengo (12%). It is estimated that 90% of the total population is Moslem.

The economy in the district is based on subsistence agriculture. Statistics from the district planning office show that about 95% of the population are farmers with an average farm size of 10–20 acres per household. The major food crops are cassava, paddy, maize, sorghum and legumes. Cash crops grown in the district are groundnuts, cashew nuts, millet and tobacco. Other economic activities in the district are bee keeping, fishing, mining and small-scale industries. The district is isolated from other districts in the region. This is mainly due to the poor communications network. The only connecting road is the Songea/Masasi which is not a tarmac road and is thus impassable during the rainy season.

Mining activities in Tunduru district are officially known to have started in 1994. The major activities at various mining sites include mining of gemstones (suppliers, chrusobery, alexandrine, spiriel and garnets), diamonds and gold. These activities are concentrated in Muhuwesi, Majimaji, Mchoteka, Msinji, Mbuyuni and Ngapa. Mining activities in the district have attracted an influx of migrants from both neighboring regions of Mtwara and Lindi and from distant regions like Kilimanjaro, Mwanza and Mara. Initially, small-scale miners dominated mining activities. They kept moving from one area to the next depending on the availability of minerals. Small-scale miners have limited capital and poor working instruments. Their major investments are working tools (spade, pickaxe, sieve, polythene bags) and food to sustain them until they sell whatever mineral they have managed to secure. Poor working instruments are attributed as the major cause of migration among small-scale miners. Their instruments hinder their possibility of exhausting the mining site to its' fullest extent. It is only recently, between 1999 and 2000, that large-scale companies owned in partnership by foreigners and Tanzanians have been involved in mining activities. SR Minerals is carrying out mining activities in Muhuwesi, Ruvuma; North Exploration Company in Mbuyuni; CTZ in Ngapa; and Pacific Mining Company in Msinji. These large companies are equipped with advanced technology. The areas that are considered to be unprofitable by the small-scale miners due to the decline in the quantity of gemstones are the very same areas that the big companies are performing their activities and making large profits.

The participation of children in the mining sector was especially critical between 1995 and 1999, until the district officials stepped forward. Although there are no official statistics on the actual number of children involved in the mining sector, interviews with teachers at both Ngapa and Muhuwesi mining sites revealed that parents and children were very involved in the mining activities. It was only after the intervention by the district officials threatening to take parents of the working children to court, that there was a slight decline in the number of children engaged in mining activities.

Both boys and girls from the age of 10–18 years were involved in different activities in the mining sector. As opposed to grown-ups who come from neighboring and distant regions, children mostly came from within the region (Ngapa, Nakapanya, Tunduru, Muhuwesi, and Nandembo among others) and from the neighboring regions of Lindi and Mtwara. Children were mainly concentrated in areas where small-miners were grouped. At present, the most concentrated area is Ngapa. This is due to the fact that child labour is most valued because it is cheap. Large-scale miners who mostly use advanced technology do not consider child labour to be an added value and are also afraid to employ children.

1.3 History and past research on child labour in the mining sector

A number of scholars who have analyzed the historical genesis of child labour in Tanzania, have attributed it to the emergence and establishment of the colonial economy (see for example Khamsini, 1978; Lemelle, 1986). These studies show that the grim working conditions and hard living conditions that child labourers have been subjected to are all inextricably bound with the quest for super profits which are the fundamental motivating force for mine investment in the country.

Lemelle (1986) reports that child labour in mining occurred first in the Lupa gold fields in 1930. He documents that the early alluvial work which was confined to the Lupa, the Kasanga and Sira Rivers was characterized by the "gang" which consisted of several young boys, the "watoto" (children). These boys operated a sluice device box to separate or recover gold from sand.

Because of the scarcity of development of capital and the scattered nature of the field, little machinery was used and the work was labour intensive and poorly paid. It is reported that the claim holders, mainly Europeans and a few Africans, employed these boys to wash the gravel using primitive methods of box sluicing as well as panning at an extremely low daily wage. However, for the small artisanal miners, employing children was not possible since they had nothing to pay them with. Instead they did all the work themselves or used unpaid labour where situations allowed.

In his study of the conditions of child labour in Colonial Tanganyika, Shivji contends that the employment of children was considerable, particularly in the agricultural sector. In the mining and quarrying sectors, child labour was evident as shown in the table below.

Table 1.4: Distribution of juvenile labour by economic sectors, 1947 & 1951

Sector	1947		1951	
	No	percentage	No	percentage
Agriculture	22,320	91.0	27,277	85.6
Mining and quarrying	385	1.6	425	1.3
Infrastructure	379	1.5	450	1.4
Manufacturing	428	2.0	847	2.7
Commercial and professional	n.a.	-	1,295	4.1
Public service	-	-	31	0.1
Domestic service	n.a	-	957	3.0
Miscellaneous	1,021	4.0	578	1.8
Total labour force	24,533	100	31,860	100.0

Source: Annual Report of labour dept. 1948 [quoted in Shivji]

Though much of child labour was concentrated in agriculture, it was also found in the mining and quarrying sectors. In Musoma mining areas, child labourers were employed to break stone by hand before it was fed to the mills. The standard expectation for the job was to fill one cement drum full of broken stones per day. This task was so grueling and it moved the District Officer at the time who commented as follows: "...the idea of a small child breaking up to 120 pounds (lbs.) of stone a day for 30 days of remuneration of TShs. 2/= seems uncommonly like swatted labour." As for the employers, they contended that child labourers was as efficient and quick as their adult counterparts although they were not prepared to pay commensurate wages. It was argued that children constituted the cheapest labour and filled an important gap, especially during the sortie of labour. In Musoma mining areas, for example, the average

wage for unskilled adult labour was around Tshs. 9/= per month while child labour wages were Tshs.4-5/= per month, and in other cases as low as Tshs. 2/= per month.

The local colonial policy administrators consistently defended child labour. Their main rationalization was that, the work in which child labour was employed was light and not harmful; that in the absence of schools, youngsters were gainfully employed in this way and augmented the meager earnings of their parents. As both Shivji and Lemelle contend, child labour was seen as a necessary phenomenon as it filled in the gap of labour shortage which affected the gold mining industry. The problems were how to create labour supplies in a social formation where none had previously existed, how to get labour to where it was needed, and how to keep labour flowing to these mining sites.

Though the only legislation of importance on child labour was the Employment of Children on Machinery Regulations, which prohibited the employment of children below the age of 16 years, the laws were not enforced by the state. Parents too had an ambivalent attitude towards child labour. They detested child labour as a principle, yet to the extent that the earnings of the children contributed to the common pool and alleviated their deplorable economic conditions, parents were prepared to collude with employers. Herein lies the significance of the economic element in the analysis of child labour in contemporary Tanzania as well.

A recent study by Amma Herman et al (2000) on the gold mining communities in Chunya and Nyarugusu in Geita is quite revealing and persuasive. In this study the nature and types of work or activities performed by children have been enumerated including the working conditions and the working hours. The research was taken further to document the associated occupational hazards such as deaths due to collapsing roofs of lateral pits, injuries, bleeding, etc. The study has also shown that children worked long hours (more than 12 hours a day) but earned little, which was not commensurate with the work carried out. The most cruel and debilitating effects of child labour in this sector were that children revealed signs of subnormal physical conditions (i.e. stunted growth), hunger, and looked both malnourished and older than their age. Overall, in all sectors surveyed (small-scale mining, fishing, commercial agriculture, informal sector, child commercial sexual exploitation, child domestic work and school-based child labour), about 76% of the working children were between five and 15 years old. In the mining sector, 30% of the children interviewed had not enrolled in school⁷.

The main contributing factor to child labour in this study was found to be the low family income or extreme poverty. Thus the use of low paid labour or unpaid child labour in the gold mines in Tanzania has been the necessary condition for the survival of the majority of both artisans and medium-scale diggers. The maintenance of quasi-feudal dependency relationships between claim holders and children explains the serious exploitation of child labourers, as they are not normally paid at the same rate as adults doing the same work.

1.4 Efforts made in the past to combat child labour

Although in Tanzania, as in other parts of Africa, child work is considered to be part of the socialization process, this report is oriented towards looking at child labour as an exploitation of children at hazardous work sites as well as occupations for economic gains. The types of work that children are involved in and their working environment hinders their education, health, and social development and threatens their very lives. Children's work that is carried out to their detriment is actually concomitant to contravening the international law and the national legislation as well. The laws in Tanzania protect the rights of children particularly in regards to employment, and against abuse, and punishment by parents or guardians. This is in accordance with the United Nations Convention on the Rights of the Child (CRC), 1989. Additionally,

⁷ Groves points out in her study that in Mererani 75% of the children interviewed were under the Tanzanian legal age of 16 for mining and 11% had never attended school (see Groves, L.) "Child Miners in Mererani, Tanzania: An Anthropological Perspective" University of Edinburgh (Mimeo), 2000.

the Ministry of Community Development, Women Affairs and Children put forth a 1996 policy, essentially stating the same rights for children as CRC.

There is great concern that working children who are forced to work long hours for low wages are denied their childhood, and future. However, the changing nature of the Tanzanian economy which has taken the form of market forces determining the sphere's economic and social life, has intensified the phenomenon of child labour in the country. It is common today to find a wave of movement of children from the rural areas finding their way into the urban informal sector, especially in the mobile shops where children under 18 are commonly found and known as "Machingas" (Liviga, 1995).

The grave economic condition has been aggravated by severe reductions in the social sector budget. The health and education sectors have been doubly affected in this sphere and rural poverty has worsened (Lugalla, 1997). The removal of subsidies in education for example, has contributed to a situation whereby about 30% of all 10-14 year old children are out of school. The divestiture or closure of many parastatals has meant the retrenchment of tens of thousands of workers, mostly parents who, in turn, have been compelled to enlist the contribution of their children to the household to supplement meager family incomes (ILO, 1997).

Traditionally child work was considered to be important in the socialization process of children for their entry into adulthood. However, the implementation of the market economy oriented policies by Tanzania has resulted in absolute poverty of families both in the urban and rural areas. In turn this has intensified child labour. Due to this, Tanzania created a special ministry to coordinate child development programmes, and encourage non-governmental organizations, individuals etc, to establish centers for children in difficult circumstances. Other steps taken have included the ratification of the UN Convention on the Rights of the Child; the signing of the Organization of African Unity (OAU) charter on the rights of children, the enactment and review of laws aimed at promoting and protecting the rights and interests of children; and the implementation of the National Programme of Action concerning child survival, protection and development in the 1990s. Most recently, in September 2001 Tanzania ratified the ILO Worst Forms of Child Labour Convention (No.182), 1999, which calls for member countries to take immediate and effective measures to secure the prohibition and elimination of the worst forms of child labour as a matter of urgency.

The Ministry of Community Development, Women Affairs and Children, in collaboration with legal institutions, formulated a policy published in 1996 to educate and mobilize the community on the rights of the child and how to put them into practice. The National Labour Board prepared and endorsed the draft policy for implementation of the elimination of worst forms of child labour as per the ILO Worst Forms of Child Labour Convention (No. 182), 1999 and in September 2001, as mentioned earlier, Tanzania ratified this Convention.

From 1994 to 1997 action programmes aimed at combating child labour in the mining sector were implemented. These programmes include those by African Network for Protection and Prevention of Child Abuse and Neglect (ANPPCAN – Tanzania chapter), Ministry of Education, Tanzania Information Service Department and trade unions e.g. Tanzania Mining and Construction Union (TAMICO).

ANPPCAN has participated in preventing child labour in the mining sector through sensitization seminars. Parents, school committees, teachers and community leaders living within the vicinity of mine sites were made aware of the issues surrounding child labour. These seminars included Mbeya (Chunya district), Mwanza (Geita district) and Arusha (Semanjiro district). The Ministry of Education participated in sensitizing primary school teachers, ward secretaries and members of school committees. The campaign of the ministry covered Arusha, Mwanza, Shinyanga, Tanga and Mtwara regions. The Tanzania Information Service Department (TISD) also participated in raising public awareness about all kinds of working children in Tanzania. The campaign was carried out through mass media institutions such as television, radio programmes, newspapers and placards. As a result, in many places where the sensitization seminars

took place, child labour committees were formulated and the village governments enacted by-laws to ensure that child labour is eliminated. However, the effectiveness of the child labour committees remains to be seen, particularly as the committees have been lacking resources to enforce the by-laws. More efforts continue to be made by different actors in the areas surrounding the mining sites, but it must be realized that enacting the by-laws is one thing and eliminating child labour is another. The efforts which have been made thus far, while a good and solid start, need now to address the root causes of the problem.

1.5 Conclusion

Gold mining in Tanzania is an economic activity of significant proportions both at the national and household levels. Though in monetary terms its contribution to the Gross National Product (GNP) is hardly 1% per year, its importance lies in that it provides employment to a sizable number of artisanal gold diggers in the country. This is a positive aspect of the sector. On the other hand, it is in the artisanal gold mines where child labourers are concentrated. Though various and commendable attempts by a number of agencies and organizations have been made towards the elimination of child labour, there is still a lot that remains to be done. It is within this context that this study was initiated and undertaken with a view to examine the magnitude, causes and consequences of child labour in the mining sector in Tanzania.

2. RESEARCH METHODS AND PROCEDURES

2.1 Objectives of the study

This study was prompted by the ILO's aim to eliminate the suffering which children in different sectors of the economy have been undergoing through various forms of child employment. These abuses that they experience have affected their human rights to education and decent lives. In view of the above the study was guided by the following objectives:

- To find out the causes of child labour in the mining sector in Tanzania;
- To examine the activities and working conditions of working children in the mines;
- To assess the consequences resulting from children working in the mines and whether they conform to the features of worst forms of child labour;
- To provide tentative measures to eliminate child labour in the mines; and
- To test and evaluate the Rapid Assessment methodology in studying child labour situations in the mining sector.

2.2 Approach

In an attempt to collect the necessary information on the causes, nature and extent of child labour in the mining sector in Tanzania, both qualitative and quantitative data collection approaches were used. The objective of eliciting quantitative data was essential in determining the magnitude of child labour, revealing demographic characteristics, household expenditure, poverty levels, school enrolment, and dropout rates. Qualitative data was sought to unearth those aspects of child labour which were not directly amenable to quantification, but which determined or influenced the evolution, development and sustenance of child labour. These included, among other things, social processes and relations, views, perceptions and philosophies of the members of the communities under study.

2.3 Sampling

The study took place in three main regions i.e Mbeya, Mwanza, and Ruvuma. Whereas in Mbeya region the study was carried in Chunya district, in Mwanza and Ruvuma regions, the study was carried out in Geita and Tunduru, respectively. These districts were deliberately selected because they were considered to have high concentrations of children working in the mines. However, since it was not possible to study all key locations where mining activities were taking place, with the assistance of key informants (mining officers) in each district, specific mining sites (various key locations) were selected for the study. In Geita, Mgusu was selected as the main key location; Mlimanjiwa and Ngapa were selected in Chunya and Tunduru respectively.

2.3.1 Sampling frame

In undertaking a study like this, various categories of respondents are needed to provide different information regarding the causes, activities, characteristics, working conditions and consequences of child labour in the mining sector. Because of this, the sampling frame included working children, teachers, local leaders, mining officers, and education officers. Table 2.1 below indicates the distribution of the respondents by category from different key locations.

Table: 2.1 Distribution of respondents by category from different key locations

Respondents by category	Areas of study		
	Mlimanjiwa	Mgusu	Tunduru
Region mining officials	2	-	2
District mining officials	1	1	1
District education officials	1	1	1
Social welfare officials	1	1	2
District planning officials	1	1	1
Ward officials	1	1	1
Village officials	2	3	2
Village elders	2	10	6
Teachers	2	4	2
Health officials	-	2	1
Parents of working children	10	30	8
Parents of non-working children	5	-	7
Non-working children	5	4	25
Mine owners	3	-	2
Working children ⁸	35	50	40
Adults working in the mine	6	2	3
TOTAL	77	110	104

Source: Field survey

2.4 Data collection methods:

The Rapid Assessment methodology employs various research instruments in the collection of data. These include reviewing the existing literature, key informant interviews, child interviews, transecting, mapping, focus group discussions, observation, questionnaires and the like. Below, explanations are provided explaining to what extent each method was used and how relevant it was in obtaining the research data.

Literature review

Before the fieldwork began, a literature review was very important to gain insight into the mining sector. This gave the researchers an idea of the size of the mining sector in terms of employees and the incidence and prevalence of child labour in the sector. Among others sources, secondary sources from ILO's International Programme on the Elimination of Child Labour (IPEC) and UNICEF were consulted.

Observation

Direct observation was done before the interview took place. In fact this took place during the transect walks in different key locations in different districts. This provided a well-structured observation. Aspects of child labour in the mines and how recordings were to be made were determined beforehand. The observations included activities performed by children at different work sites; conditions under which children worked; children's physical appearance and health status; the actual number of children involved in mining activities; and the types of hazards children were exposed to. This method was useful especially in the mining sector, since most of the scenarios of the mining activities could be easily observed. The only problem that this method suffered from was that, in situations where children were obliged to work in

⁸ Although a total of 125 working children were interviewed, the analysis uses data from 120 questionnaires as the remaining five were incomplete.

the underground pits, it was not easy for the researchers to go underground to observe first-hand. The researchers needed to rely on the experiences of the children and the key informants.

Key informant interviews

This was another useful tool used by the researchers. Once in the field, among the first people the researchers met and talked to were administrative officers in the districts; among them were the mining officers, who knew quite well where children could be found. Other key informants were community leaders, who could identify parents both with and without working children in the key locations, and still others were teachers and community development officers.

Through these informants, the researchers knew where the children could be found, and the causes and even the conditions in which the children worked. These were of great help, partly because of their knowledge of the area and partly because of their expertise in mining activities, the kinds of hazards children were likely to face and their knowledge of child affairs. Without the kind of assistance given by key informants in the mining sector, the research would have been much more difficult.

Child interviews

Children were obviously the center of this study. Children know their world of work better than any one else. Because of this, great pains were taken to interview working children in different key locations. Local leaders who accompanied the research team facilitated the interviews with the working children. This made it easier to converse with some of the children.

During the course of the interviews there were interruptions from different adult workers and supervisors who wanted to know the kinds of questions being asked. These circumstances somewhat limited the children's freedom of response. Informal interviews were at times also difficult since most of the researchers were new to the area and because they needed more time to build rapport and confidence with the children before the children would reveal their real work life situation to them. All in all, for the working children and non-working children who were interviewed, useful information was collected regarding causes, activities and how the children felt working at such a young age.

Focus group discussion

This was a tool used after holding individual interviews. These group interviews were conducted among working children (five to six members) with a view of learning about their experiences and future expectations. This method also proved to be useful since the researchers were able to gain significant insight into the causes, experiences, and future prospects of children working in mining. The checklist of questions asked in the focus group discussion is attached in the appendix of the report.

Questionnaire

The study demanded both quantitative and qualitative data. Within this context, questionnaires were used to collect quantitative data. The purpose of the questionnaire was first to cross-check the information obtained from other sources, and secondly to find out the relationship between various social economic factors and the causes of child labour in the mining sector. Through the focused questionnaire, the researchers were able to discover the levels of poverty of different households containing working children. Further to this, the researchers were also able to find out the enrolment and drop out rates of pupils in primary schools within the key locations.

This method was found to be useful because it supplemented the qualitative information. More importantly, it helped the researchers make a comparison of various variables such as education and poverty in terms of their effects in causing child labour in mining. By using control groups the researchers

were in a better position to conclude whether poverty, for example, was the main push factor of children joining mining activities or not.

Transect walks and mapping

Transect walks were made in every key location. The purpose was to become familiar with the local situation and to identify areas of working children in the mines. The walks also served to observe the distance between the mining sites and where the children lived. They helped to identify the available social infrastructure in the area under study and in conducting informal interviews with the local key informants. After transect walking, maps were drawn to indicate the layout of the area, indicating locations harboring child labour. In places like Mlimanjiwa, working children were widely scattered along Lupa River, while in other places like Ngapa and Mgusu children were concentrated in particular key locations.

2.5 Limitations of the study

The problems encountered in the field can be generalized as two-fold: logistical and methodological.

Logistical problems

It was not uncommon for working children to run away and hide from the researchers when they saw them approaching. This was most likely due to the children's deduction that the researchers were searching for working children with a view to withdraw them from their jobs which they relied upon. Because of this, researchers had to make frequent visits to the sites, and to some extent they depended on key informants to establish gender distribution and the number of working children at selected work sites.

Doing research at the mining sites of Mlimanjiwa was problematic in relation to the interactions with the claim holders. When the village leaders introduced the researchers to them, they were very hesitant in volunteering information. Because of their suspicion about the type of information they were asked, most often they terminated the conversation by making appointments, as they pretended they were presently busy. In one case the researchers managed to arrange an appointment with a claim holder at the end of the study. But in most cases visits had to be made repeatedly on a frequent basis to enable the researchers to remain within the time allocated for fieldwork and collect the necessary information. Moreover, when addressed in discussions the claim holders would divert the topic just to waste time, and eventually claim they had an urgent task somewhere.

One of the problems that researchers faced revolved around the extent and magnitude of child labour in the village of Mgusu. Village government officials and other key informants were of the opinion that almost every child in the village is either a working child or a potential labourer due to the deteriorating economic conditions prevailing and the limited economic and employment opportunities available in the village. Thus, the researchers could not determine the exact number of working children with any accuracy. Although a small sample of 50 children was taken, these results cannot be used to generalise the findings. It can be concluded from the information obtained from the key informants, however, that at Mgusu mining site child labourers were rampant.

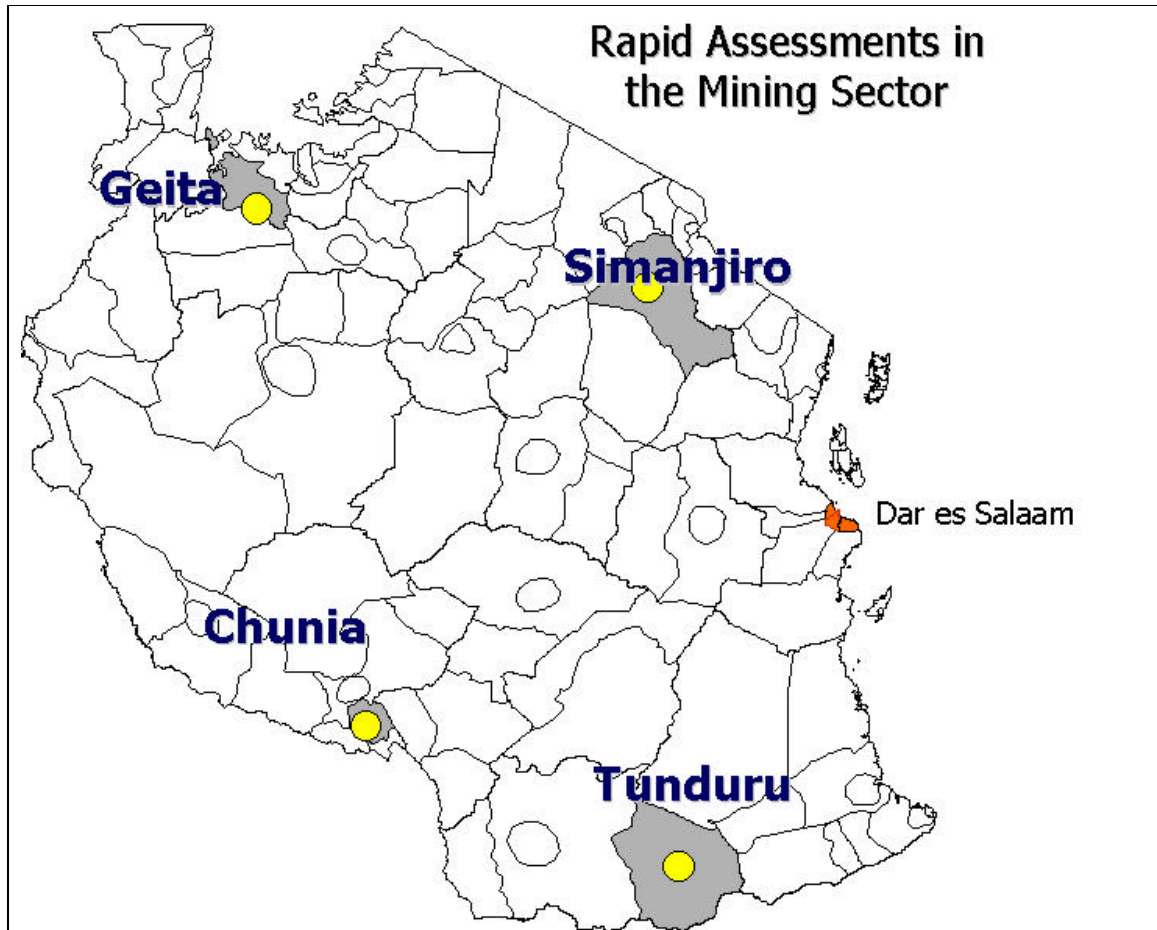
Methodological problems

- Given the small size of the samples drawn in all the districts, it was difficult to make a generalization from the research findings. Because of this, the findings remain specific to the study areas. This means that in order to have a generalized picture of child labour in the mining sector a more detailed study to cover a wider geographical area where mining activities take place (Biharamulo in Kagera region, Kahama in Shinyanga region and Lind region) should be conducted.

- Another problem related to the method concerned the issue of time. Due to the tight workplan that the rapid assessment required, the researchers were unable to verify their findings, for instance, the long-term health implications that come from inhaling dust. The only way the researchers could verify findings was to depend on key informants, or secondary sources of information.
- Observation was a useful method, but could not always be carried out. For example, due to the life threatening dangers involved in actually observing underground, the researchers had to depend on the children's interviews to reveal these experiences.
- Interviewing children needed more time because the children were engaged in their activities, and the researchers had little time to build a rapport and work with the children. This was believed to limit the kind of cooperation received and even the kind of responses.

In the following chapter the area profiles of key locations where the studies took place are explored.

3. DESCRIPTION OF THE STUDY AREAS



3.1 Introduction

The study was carried out in three main districts: Chunya, Mgusu and Tunduru. In each of these districts, key locations were selected by the help of key informants. In Chunya, Mlimanjiwa was the key location, Mgusu was the key location in Geita and Ngapa was the key location Tunduru district. Area profiles for each research site follow below.

3.2 Mgusu key location

Mgusu is one of the villages in Geita district, Mwanza region. Situated in a protected area, it is located approximately 30 kilometers west of Geita township and about eight kilometers to the east of the Geita/Biharamulo truck road. Before the commissioning of the Ashanti Gold Mine in mid-2000, access to the village from Geita was by a shorter road, which used to pass very close to the old Geita gold mine. Today this route no longer exists as it has been blocked off by the management of the Ashanti Gold Mine, who cited reasons of mine security. In its place, a much longer and more cumbersome road has been constructed to the chagrin of many local travellers, particularly small-scale business people whose livelihoods depend on constant traveling on foot or by bicycle to and from Mgusu.

The village lies at the foot of a highly precipitous hill in a Government forest reserve. It is characterized by seemingly ramshackle and semi-permanent houses interspersed with small gardens of maize crops and beans. About one kilometer away - on the western side of the village - at the top of the hill overlooking the village is where the 2,401 gold pits are located. On the eastern side of Mgusu is a river, which forms the eastern boundary of the village, and on all sides the village is bordered by forest and thicket. It is along the riverbank [Mwaloni] where crushers of gold ore are located and it is here that gold is recovered by using gravity and the amalgamation processes.

The history of the village can be traced as far back as 1988 when a native inhabitant at the hilltop discovered gold where the current gold pits are located. In that year, the whole area and site where the present village is located were completely covered with thicket, bush and forest. As a forest reserve, and in line with the government policies over all forms of protected areas in the country, only very limited economic activities were allowed in the area – in this instance bee keeping was the only one. Other activities such as lumbering, firewood collection, charcoal production and other forms of agricultural production/activity were, and still are, prohibited by the government.

At that time, the only villages in existence were those surrounding the forest reserve and these were Sanza, Nyamwilolerwa, Nyakabale, Kibingo, Msasa and Mpofu. The majority of beekeepers originated from these villages.

The discovery of gold in 1988 was made by one of the bee keepers. Information gathered from key informants and through focus group discussions explains that beekeeping had been quite a reliable and flourishing activity amongst the local inhabitants from the neighboring communities. As is always the practice with such an occupation, bee keepers - from time to time - would roam the forest to mend bee hives, collect honey, and take care of other such tasks.

Oral evidence states that it was while undertaking such activities in the forest that the bee keeper stumbled upon a fairly large piece of gold at the hill top where the present gold pits are located. In the process of looking for a better deal or price for his precious stone, the owner found himself moving from one place to another. In so doing, news spread like bush fire to the effect that gold had been discovered in Mgusu; a gold rush ensued and as a result the present Mgusu village was created. People from all corners of the country rushed to Mgusu to try their luck, and today the village is composed of many ethnic and linguistic groups.

Immediately after the discovery of gold and the associated gold rush, an Arab businessman based in Mwanza became the first gold broker to establish his base in Mgusu. It is further stated that one of the original pioneer gold diggers in the village in the late 1980s, later became an agent/associate of this businessman. Gradually, however, the associate evolved into an independent gold broker and sometime in the mid-1990s he left the partnership to form a company of his own - Chipaka Gold Mine Co. Today, the company is in possession of a claim title in Mgusu - with a Primary Mining License covering five plots of 1500/600 square meters per plot. The possession of the title has since been the source of the current tension and conflict between the General Manager on one hand, and the pit owners/diggers on the other.

It should be noted that the above-mentioned conflict is an example of the exploitative production relations that can develop between the mining companies and the pit owners/diggers once the former takes possession of the license and the attendant rights. The claim title confers on the owner dual control: control over both the plot and hence the proceeds, and the producer [person i.e. diggers]. Whether or not the claim holder makes any investments, he is still entitled to a share of the social products [i.e. the proceeds] from the mines. This can lead to the development of a landlord/serf type of relationship between the claim holder and the gold diggers. The pit owners/diggers can be visualized essentially as tenants of the claim holder, as they rent "strike lengths" from him. They must provide the tools, equipment, and food; supervise gold diggers; and produce gold while there are no requirements of the

claim holder. It is this type of relationship that is at the core of the tension, antipathy and the attendant demoralization amongst the Mgusu gold miners. In the end, it has not only influenced but also determined the sagging production levels currently achieved in the village and hence the low standards of living of the gold miners in Mgusu today.

Another equally important factor that has bedeviled Mgusu gold miners is the legal status of their activities and that of the village itself. As a social entity and one located within a Government forest reserve, the village is an anathema on the part of the government, as it has no legal recognition. Hence even the housing units and other social infrastructure that have been established in the village are viewed with disgust from the standpoint of the government, as their existence is in conflict with the status, ethos and functions of a forest reserve.

It is no wonder, therefore, that over the past five years, district level leaders have consistently pestered Mgusu gold miners with threats of eviction and have insisted and impressed villagers to establish temporary shelters/structures as opposed to permanent ones on the ground that their occupation in Mgusu is illegal.

The negative and at times hostile stance on the part of the government officials have led the Mgusu village government leaders to adopt an equally alternative approach towards this problem of recognition and identity: they have lodged an appeal to the ruling party – CCM, which it is hoped, will influence the government to reverse the latter's antagonistic and threatening stance towards the gold miners.

The primary economic activity in Mgusu is gold mining and though supportive services in the informal sector appear to be dominant and pervasive, they are, nevertheless, secondary. Innumerable small-scale income generating activities such as food and fruit vending, second hand clothes selling, water selling, beer selling etc. all depend on gold mining for their economic viability. Agriculture and cattle keeping are prohibited, as Mgusu is squarely located in a forest reserve where such activities attract legal sanctions.

As already mentioned in the preceding sections, there are 2,401 gold mine pits in Mgusu and these are located high up on the hill-top [duara], overlooking the village. Production is simple and labour intensive and except for the crushers, mining is undertaken by using pick axes, hammers, chisels and shovels. Gold ore is extracted from the bottom of the pits [some as deep as 300 meters] and then hoisted to the surface.

The mining process is not organized on the basis of a household, as is commonly the case with peasant farming in most of the rural countryside in Tanzania. Rather, production is organized as a joint venture, which consists of seven to eight people per gold pit. Each individual member is entrusted with a specific function to perform. There is a person whose sole function is to provide food to the miner [the actual digger]; another member ensures that batteries for the torch are in constant supply as light or illumination deep down in the pit is a necessity if the digger is to produce gold ore. There must be a member whose function is to ensure that the rope and pail, which are used to hoist gold ore to the surface, are in good working condition; another maintains the shelter at the entrance to the pit. There is a digger who ensures that the necessary mining instruments/tools are in order; as well as a security guard who keeps watch at the surface of the pit. Lastly, there is a cook who ensures that food is available to the digger. For purposes of coordinating the day-to-day activities and functions, every pit has a chairman as well as a secretary.

Each member of the joint venture is entitled to at least the minimum of one share. However, which activity/function is accorded how many shares depends on a number of factors including accessibility and affordability of inputs, their prices, the rate of wear and tear and the relative importance of the item or service itself. These factors are not fixed once and for all, but are periodically revised and changed in accordance with the actual and concrete conditions in the village and the country as a whole.

After gold ore has been brought to the surface, it is then carried by hired labourers [punda] from the top of the hill down to the riverbank for further processing. For this activity, the labourers are paid Tsh, 1,000/= for each "turbo"⁹ of gold ore. One "turbo" of gold ore contains seven "kinjes"¹⁰ - which is equivalent to 12 pails of gold ore. Grinding and crushing of the ore is undertaken by either rented crushers or by hired labour - mostly adult men. Adult women carry out the process of drying iron ore, while that of gold recovery is assigned to child labourers.

Mgusu has a total population of 7,598 inhabitants with 1,520 households and is multi-national in its composition. Apart from a few Wasumbwa and Walongo who happen to be the native inhabitants in the village, immigrants from ethnic groups originating from other districts in Tanzania heavily dominate Mgusu. These include, among others, the Wanyantuzu, Wajaluo, Wakurya, Wanyamwezi, Wasukuma, Wahaya and Wazinja.

Like any other area in the lake zone, Mgusu village enjoys the normal climatic conditions typical of the zone: cool weather interspersed with mild humidity, particularly during the months of December and January. The rainy season normally starts in September and ends in May while the dry season begins in June and lasts through August. There is also a season called "vuli" which means a period of short rains which lasts for two months, from September to October. There is no cold season.

Since agricultural activities are prohibited in Mgusu, those who possess small gardens around their houses can plant seasonal crops like maize in October and after five months [i.e. in February] the crops are ready for harvesting.

As the process of gold production is a continuous activity throughout the year, it is not circumscribed or limited by any of the seasons described above. Apart from gold mining which constitutes the principal economic activity in the village, there are a number of other subsidiary activities which support gold mining. These include food and fruit vending, beer selling, and water fetching. The majority of people who are engaged in these activities are small business men and women who constantly move between the village, Geita township and other surrounding areas in search of merchandise which they ultimately sell in the village. Once each month there is a general market in the village whereby different commodities are brought from surrounding areas and far off villages.

As alluded to earlier, the majority of gold miners and their families are migrants from different parts of the country whose total economic activity is exclusively gold mining, as no other activities in the village are permissible. The consequences of this are that economic activities are limited and thus employment opportunities have likewise been limited. This has related to a high rate of unemployment in the village. Other activities are not allowed, however, due to the village's location on the protected reserve.

In Mgusu gold production is not mechanized, rather it uses primitive means of production and as such involves a number of production processes which are disjointed both in time and space. Gold pits are all located and concentrated on top of the hill that overlooks the village, about one kilometer away on the western part of the village. The pits are all located here, in very close proximity to one another, approximately five to ten meters apart. Gold ore is extracted from the bottom of these pits and then hoisted to the pit surface by using a pail or sack.

Gold ore is then carried by hired labourers [punda] from the top of the hill down to the riverbank (a distance of about a kilometer) for further processing. Both activities - the extraction of gold ore and its transportation - are activities performed by men only. The recovery of gold from gravel and sand is done at the riverbank. Through transect walking we were able to see four working crushers, sixteen sluice

⁹ "Turbo" is a local term coined by gold diggers to mean a sack which contains the equivalent of twelve (12) pails of gold ore.

¹⁰ "Kinje" is the equivalent of 1.7 pails of gold ore.

boxes and five shelters in which the process of amalgamating gold with mercury is undertaken. It is along the riverbank [Mwaloni] where child labour is concentrated.

3.3 Ngapa key location

Ngapa, located in Nakapanya ward, was another selected study area. It was also assumed that there was a high concentration of small-scale miners and children working there. Ngapa area, meaning the village and the mining site, is located in the northeastern part of Tunduru district. The area is within the Selous game reserve. The village is 65 kms from Tunduru town and the site is an additional 15 kms from the village.

Historically, the indigenous Wagindo and Yao inhabited the whole area. After independence the government committed itself to the policy of socialism and self-reliance. Part of the policy concentrated on establishing rural settlements that were intended to become viable economic, social and political entities and hence the villagization programme of 1974/75 was instituted. People were forced to move from the surrounding areas (among them the present Ngapa mining site) and settle into what is officially known as Ngapa village. The first miners were reported to have come to Ngapa in 1995. With the assistance of the indigenous people, they were able to identify potential mining sites along the Lumesule river. The major signs used were beacons and marks on trees. The German colonialists were believed to have placed the marks and beacons.

The last census carried out in the village in 1998 indicates that there is a total population of 1,496 people and 332 families. This implies an average of 4.5 people per family. The population consists of 672 males and 824 females. Unfortunately, there were no statistics indicating the number of children in the village. The village has a total of 273 males and 397 females that are considered to be economically active. There is no official data with regard to the population at the mining site. It is estimated that there is a population of 300 people, more men than women because of men migrating to the site in search of livelihood to sustain their spouses.

The introduction of mining activities in the area brought with it an influx of migrants. Ngapa village has a mixture of different ethnic groups, among them are the Yao, Ngindo, Makua and Ngoni. The mining site has a much broader ethnic diversity representing groups from all over the country. The Sukuma, Jita, Chagga, Luguru, Wabena and Kinga are among some ethnic groups at the mining site. The main attraction to the area is the possibility of making money and becoming rich and thus people come to Ngapa from far and wide. However, children working at the mining sites are from within the region and neighboring districts of Nachingwea and Masasi. Children have different reasons for migrating to the mines. Some are looking for money to support themselves in their education and in general, and to support their families. There are also children who have been tricked into coming to the mines, either by their peers or adults.

The major economic activity in the village is agriculture. Food crops cultivated are cassava, maize, paddy, sorghum and millet. These are mainly for household consumption. Cashew nuts and simsim are the main cash crops in the area. It is possible for families who harvest cashew nuts to earn between Tsh.150, 000.00 – 200,000.00 for five sacks full of nuts. There are also a few families with livestock, among them goats and poultry. The average size of a family farm is six acres. Some of the farms are located surrounding the village and other are located far from the village. Destruction of the crops by wild animals forces the villagers to move to their farms until the harvest. The average household income at the village is estimated to be Tsh.200, 000/= per household. This is slightly below the district's average household income, which stands at Tsh. 250,000/=.

The other major economic activity at the site is mining. There are also several individuals operating different business ventures such as bars, shops, and restaurants. Before 1990, famine was a common phenomenon in the village. This was mainly attributed to the fact that they had only one single food crop, sorghum. Efforts put forth at different levels in the district have made it possible now to cultivate more

than one crop. This was a great solution to the problem, for there is now plenty of food. Non-availability of food in the mining area, however, is a major problem, especially during the rainy season. People in the area depend on food supplies from Tunduru town, as there are no agricultural activities taking place in the area.

The climatic conditions of the village and the mining site are the same. Heavy rains are experienced during the months of December to May. From June to November it is a dry season, with a cold season in-between, especially from April to August.

Table 3.1: Seasonal calendar for Ngapa village

Heavy rains Dec – May	Dry season June – Oct.	Dry season Oct. – Nov.
Sowing paddy, maize, sorghum, cassava, cashew nuts and simsim	Building houses	Preparing farms
Picking cashew nuts (continuing)	Selling simsim	Start picking cashew nuts
Weeding crops	Traditional ceremonies (jando and unyago)	
Harvesting crops (goes on to July)	Resting and visiting friends	

Source: FGD with elders in Ngapa village, December 2000

With regards to the mining site, activities are conducted almost throughout the year, with the exceptions of the months of March and April when the heavy rains are at their peak. At this particular time, the pits are filled with water and it is difficult to carry out any activities. Miners take this opportunity to visit their home areas.

The village has one primary school and one dispensary. Availability of water in the village is a problem, especially during the dry season. The village has a total of five water pump wells, and only three of them are operational. The village has one mosque and no church. There are four shops, one milling machine and five local restaurants. Availability of transportation is a problem in the village, which becomes more severe during the rainy season. There is no easily available public transportation to and from the village. The only cars passing through the village are cars hired by businessmen and women who are taking supplies to the mining site. There are also three miners who own cars in the area. During the rainy season the roads become impassable, cutting out the area from the neighbouring villages.

The types of housing in the village are very different from those at the mining site. Houses in the village look more permanent than those at the site. The type of housing at the mining site is very temporary, with the exception of four houses. The temporary houses at the mines are built of sticks, and thatched with grass. A good number of them do not have doors, toilets, or bathrooms. The major source of water at the site is the Lumesule river. There is no primary school at the site, nor church, mosque or registered dispensary. An individual with no medical background provides the only available health service. The services are private and one has to pay for treatment. The only available public dispensary is in Ngapa village, 15 kilometers from the site.

3.4 Mlimanjiwa key location

Another key location was Mlimanjiwa village in Chunya District. The village is one of the 19 villages of Kiwanja Division. It lies in the southern part of Chunya town. The village is prominent for its gold mining activities. Other leading areas for mining are Mkwajuni and Mbangala wards in Kwimba Division, Mbeya Rural in the south, Ifumbo in the west, the Chunya /Mbeya Road in the southeast, Kiwanja village in the east and Itewe Hills bordering Mlimanjiwa Village in the northeast, and Chunya town in the north. The village is within Mbugani ward of Kiwanja division and is comprised of three hamlets labeled (A, B) and Kasangamadini- C which lies outside the center of Mlimanjiwa about two kms away. The main hills are

Itewe hills in the northeast and Mlimanjiwa hill is the southwest. The area of the village is not surveyed and therefore there are no actual measurements of the area.

The village itself was started in 1984. It has a total population of 1,156 people: 548 male adults, 232 female adults, 278 male children, 244 female children, three disabled persons and 51 elderly people. It is composed of migrants from other parts of the country who flocked to Mlimanjiwa in search of gold. These include Nyakyusa, Sukuma, Nyamwezi, Kinga, Bena, Ngoni, Zaramo, Makonde, Haya and Nyiramba. They outnumber the original inhabitants, the assimilated Wasafwa popularly known as the “Waguruka,” who make up about one quarter of the total village population. Very few Waguruka used to live here; they were scattered in different locations, and there was no school so children had to walk for about nine kilometres to attend. With the coming of migrants there has been more development than before, including the building of a Mlimanjiwa Primary School - an idea of foreign migrants to the area. Administratively, the village Chairman is in charge of all affairs pertaining to the village. The Ward Executive Secretary and the ten cell leaders assist him. There are also several committees responsible for the various day-to-day activities. Some of these committees are Defense and Security Committee, Financial and Economic Committee, Educational Committee, Health Committee, and Child Labour Committee (which is not operational).

There is one road running from Chunya to Ifumbo via Mlimanjiwa. This earth road is passable throughout the year, however, there are no regular vehicles in the area besides the private car, lorries, and motorcycles owned by two gold tycoons. There is no bus service at all. The total number of bicycles in the village is 36. There is only one milling machine (owned by Mwembe). The villagers get their water from nearby streams surrounding the village as well as River Nyatura that runs from Itewe Hills. There are three churches in the village, but there are no mosques despite a large populations of Moslems. There are no police stations, nor dispensaries and hospitals except for the mobile Maternal Child Health Care (MCH) service. People who fall sick have to travel on foot or by bicycle all the way to Chunya town some 12 kilometers away if they are in need of medical assistance. The most common diseases in the area are malaria, skin rashes and coughs.

Kiwanja Division, in which Mlimanjiwa village is found, lies within the gold mining zone. The zone is characterized by hills running from Mbeya rural district down into a gentle slope covering the whole of the division. The economic activities carried out here include agriculture: maize, beans, millet, cassava, potatoes, sorghum, groundnuts and sunflower. Other activities are livestock keeping, mining (gold) and forest products (timber, honey and beeswax).

Miners in Mlimanjiwa are small-scale diggers who use primitive means of production such as chisels, buckets, and pick-axes. Some of the obstacles they face include lack of capital for modern equipment and a reliable market for their products. Artisanal mining has an adverse impact on the environment: trees are cut haphazardly, soil erosion is a common phenomenon and rivers are contaminated with mercury. Being an extractive industry, gold mining areas are depleted with open trenches and caves, which are also environmental hazards.

3.5 Conclusion

The village of Mgusu is in the “cotton zone” of Mwanza, while the villages of Ngapa and Mlimanjiwa are located in Chunya and Tunduru districts which historically have had the misfortune of being “labour reserve” areas. Lack of a defendable cash crop, poor infrastructure, inadequate or even lack of social services and employment opportunities as well as generalized mass poverty have been the principal conditions which fuel child labour in Ngapa and Mlimanjiwa. In the case of Mgusu, although it does not fall under a similar historical dilemma, its location in a government forest reserve has proved sufficient in projecting the village into the same socio-economic pattern. This explains why the states of these three villages constitute fertile grounds for the phenomenon of child labour.

4. NATURE AND EXTENT OF CHILD LABOUR IN THE MINING SECTOR IN TANZANIA

This chapter presents the nature and extent of child labour in the three study locations and is sub-divided into five parts. The first part presents the demographic variables; the second part presents information on family status and family size of working children; the levels of education of the working children and their reasons for dropping out of school are presented in part three; the nature of activities carried out by children in the sector, remuneration and reasons for their involvement in child labour are presented in part four; and lastly, the chapter provides tentative estimations on the magnitude of child labour in the study areas.

4.1 Demographic variables of working children

In order to address the problem of child labour it is of great importance to understand the demographic variables of children involved in the labour process. Information on age, gender and district of origin was extremely important in order to establish the age group of children involved in child labour in the mining sector, their gender distribution and their place of domicile. It was also important in order to understand migration patterns as related to involvement in child labour. For the purpose of interventions this information is expected to be very useful and was thus collected during the interviews with the working children.

4.1.1 Gender and age

The largest group of children were those 14-17 years of age (59% of the total number of children interviewed). Table 4.1(a) shows that there were fewer girls (19.7%) involved in child labour in the mining sector as compared to boys (80.3%). Several factors were attributed to this particular phenomenon. In Mlimanjiwa this was because mining is considered an activity for men, however, in Ngapa the low number of girls involved in the sector was attributed to efforts by the district government to prohibit girls at the mining sites due to the fact that most of them were engaged in prostitution while they were there.

Table 4.1(a): Gender and age distribution of children working in three locations (N=120)

Age	Male (%)	Female (%)	Total (%)
6<=	0	0	0
7 – 9	7.4	0.8	8.2
10 – 13	27.9	4.9	32.8
14 – 17	45.1	13.9	59.0
Total	80.3	19.7	100.0

Source: Interviews with the working children in Mgusu, Mlimanjiwa and Ngapa mining sites, December 2000

One reason that explains the high involvement of children aged 14–17 years is the fact that at this particular age children are expected to have completed their primary education. With limited chances of joining secondary schools or vocational training, working at the mining sites is considered the only available option. It is thus important to create more opportunities for primary school leavers. It is also important to note that if the government prohibited girls from working at the mining sites which succeeded in reducing the number of girls, then it should also be possible for it to take the same measures with boys.

4.1.2 District of origin

Working children were asked where they come from. Table 4.1(b) shows their responses.

Table 4.1(b): Percentage distribution of migrant working children by area of origin and sex (N=103)

Area of origin	Male (%)	Female (%)	Total (%)
In districts within the region of the study area	39.1	9.1	48.2
In districts of a neighbouring region to the study area	30.8	6.0	36.8
In districts of a distant region to the study area	14.0	1.0	15.0
Total (%)	83.9	16.1	100.0

Source: Interviews with the working children in Mgusu, Mlimanjiwa and Ngapa mining sites, December 2000

Over 85% of all the children had originated from within the region of the study areas or from the neighbouring regions. Of them, 69.9% were boys while 15.1% were girls. It is important to clarify that in Ngapa, the majority of child labourers had moved on their own (independently), while in Mgusu and Mlimanjiwa children were either born there or simply followed their parents/ guardians who, originally had moved from other districts.

The influx of child labourers in Ngapa village can be explained by a number of factors, namely, lack of employment opportunities in the areas of origin as well as generalized mass poverty in the regions and the disintegration of the 'extended' family in Tanzania in general.

4.2 Family status and family size

The main assumption regarding family status as well as family size was that they were contributing factors to the involvement of children working in the mining sector. All of the children interviewed at Ngapa mining site were living with peers, employers or adults, and not with their biological parents. However, in Mgusu only 10% of the children were not living with their biological parents and in Mlimanjiwa 13.3% were not. This is explained by the fact that in Mgusu and Mlimanjiwa, children had either moved to the sites with their parents or were born in the villages, whereas, in the case of Ngapa, children had moved independently to the mining sites in search of quick money or simply for subsistence purposes.

4.2.1 Family status

It is important to examine the family status of working children and establish its relationship to the causes of child labour in the mining sector. Children were asked whom they were living with before they had moved to the mining site; this was especially relevant in the case of Ngapa where a number of children had moved there from their homes. Table 4.2.1 presents the findings, with reference to Ngapa only.

Table 4.2.1(a): Percentage distribution of working children by family status in Ngapa (N=40)

Family status	Nature of contract	
	Working part time	Working full time
Staying with both parents	86.0%	46.2%
Staying with the mother only	7.0%	15.4%
Orphans	7.0%	38.4%
Total	100%	100%

Source: Interviews with the working children in Ngapa mining sites, December 2000

Research findings show that of the children working full time, meaning children who had either dropped out of school or had completed their primary education and were engaged in mining activities, a large

percentage came from either female headed families or were orphans. The majority of children working part time came from families with both parents. This can be explained in light of the disintegration of the extended family, and the greater emphasis on the nuclear family. With the disintegration of the extended family, other forms of welfare should be considered to cater to the disadvantaged children. It was also important to look at the family status of the non-working children to see if there were any significant differences with the families of working children, however, this was only possible in the case of Ngapa and not Mlimanjiwa and Mgusu, for almost all the children at the latter sites were involved in mining activities.

Table 4.2.1(b): Percentage distribution of working and non-working children by family status (N=50)

Family status	Working children	Non-working children
Staying with both parents	60.0%	74.0%
Staying with mother only	12.5%	4.0%
Orphaned	27.5%	22.0%
Total	100%	100%

Source: Interviews with the working and non-working children at Ngapa mining sites, December 2000

Based on the above findings it is difficult to conclude whether children coming from mother-headed families and orphans are more likely to engage in work in the mines. However, it provides a picture of the family status of the working children in comparison to the non-working children.

4.2.2 Family size

It is argued that large families are constantly faced with limited resources, this being a motivating factor for children to decide to engage in child labour to either support themselves or their families. In trying to establish if the size of the family had an influence to the cause of child labour, working children were asked to mention the total number of members of their immediate families. The non-working children were also asked to mention the total number of members of their immediate families to try and make a comparison between the two groups and establish if there was a significant difference. The tables below present the findings.

Table 4.2.2(a): Percentage distribution of working children by family size (N=120)

Family size	%
1 – 2 members	1.6
3- 4 members	12.5
5 – 6 members	36.6
7 – 8 members	14.1
More than 8 members	35.2
Total	100

Source: Interviews with the working children in Mgusu, Mlimanjiwa and Ngapa mining sites, December 2000

Table 4.2.2(b): Percentage distribution of working and non-working children by their family size (N=50)

Family size	Working children	Non-working children
1 - 2 members	10.0	17.0
3 - 4 members	27.5	22.0
5 - 6 members	25.0	35.0
7 - 8 members	17.5	22.0
More than 8 members	20.0	4.0
Total	100	100

Source: Interviews with the working and non-working children in Ngapa mining sites, December 2000

Data from the above table indicate that most of the children interviewed came from families with more than four members. The average family size in Mgusu was 6.8, in Mlimanjiwa was 6.2 and in Ngapa was 6.9. These averages are above the national average family size of five as indicated in the 1988 census. In Table 4.2.4 a comparison is made between the family size of working and non-working children, with reference to Ngapa mining site. Twenty percent of the working children come from families with more than eight members, whereas only 4% of the non-working children come from families with more than eight members, however, it is difficult to draw any significant conclusions based on the above findings. Due to this, family size does not seem to be a factor influencing child labour at the mining sites, at least in Ngapa.

4.3 Education level of working children

In the survey that was administered, information on the level of education was collected for every working child interviewed. The purpose was to understand the education level of the working children. The education profile of the working children shows that 69.9% of the children were still attending primary school. It was also noted that 15.7% of the children between the ages of 10–17 dropped out of school for a number of reasons such as migration, pregnancy, lack of school fees and other school amenities. Thirteen percent of the children interviewed had completed their primary education, whereas just under 1% of the children interviewed had never attended school.

Table 4.3: Percentage distribution of working children in the mining sector by education status and age (N=120)

Education status	Age group				Total
	6<	7-9	10-13	14-17	
Not enrolled in primary education	0.0	0.0	0.8	0.0	0.8
Dropped out of primary education	0.0	0.0	4.4	11.6	16.0
Attending primary education	0.0	7.5	28.3	34.1	69.9
Completed primary education	0.0	0.0	0.0	13.3	13.3
Total	0.0	7.5	33.5	59.0	100.0

Source: Interviews with the working children in Mgusu, Mlimanjiwa and Ngapa mining sites, December 2000

The education profile of the working children as shown in the above table indicates that more than 50% of the children were still attending primary school. This can be explained by the fact that the research was conducted during the month of December when schools were closed for Christmas holidays. At this particular time, children worked to earn money to cover their schooling expenses. Twelve percent of the children who dropped out of school were between the ages of 14 and 17.

4.3.1 Reasons for dropping out of school for working children

The main reason that was given during the interviews with the working children as to why they were unable to complete their primary education, was the inability of their families to pay school fees and provide them with other basic necessities for school. Other reasons mentioned were pregnancy, lack of interest in school and the need to make money quickly. It is important to look into the state of the primary school infrastructure and the performance of pupils as factors that are intertwined in understanding why children drop out of school. It was noted that poor infrastructure, such as lack of enough classrooms, blackboards, desks, and teachers combined with poor performance in the standard seven examinations provide little motivation for children to remain in school. Each of the three villages had one primary school. Mgusu primary school had four teachers, Mlimanjiwa six and Ngapa eight. None of the primary schools provided pupils with food, beverages or library services.

4.4 Nature of activities and remuneration

Several reasons as to why children were engaged in child labour were disclosed during focus group discussions and informal and formal interviews with parents, key informants and the working children. The most prominent explanation was related to economic issues - mainly the inability of families to provide basic needs for their children. This was then linked to children failing to complete their education and hence deciding to earn a living. The wealth status of the family was considered as the most important factor in explaining why children decided to work at the mining sites. Poor families were considered the most affected by this phenomenon. These families had either children who dropped out of school and decided to make a living by working at the sites, or children who worked in the mines on a part-time basis in an attempt to raise money to cover their schooling expenses. These include purchasing uniforms, exercise books and paying school fees and other contributions demanded at school.

It was also explained that some children decided to work at the mining site because they were attracted by the better life there than at home. At the sites they were assured a meal, and had the possibility of making money which allowed them to consider the prospects for becoming rich one day. Parents' value of a child's contribution at home was also explored as a possible factor that encouraged children to work in the mines. Parents of the working children in Mlimanjiwa and Mgusu did little to prevent their children from working in the mines, as that would mean doing without the extra income.

The number of children involved in different activities at the mining sites varied from one activity to another. The actual mining activities involved mostly boys. Girls were primarily involved in restaurant activities, with a small percentage of boys involved in these activities as well. Girls were also employed as bar attendants. Findings are presented in the tables below.

Table 4.4(a): Percentage distribution of working children in different activities in the mining sector by sex (N=120)

Activity	Sex		Total
	Female	Male	
Mining	11.5	88.5	100.0
Selling shops / food stall	75.0	25.0	100.0
Fetching water	0.0	100.0	100.0
Bar attendants	100.0	0.0	100.0
Cooking in restaurants	100.0	0.0	100.0

Source: Interviews with the working children in Mgusu, Mlimanjiwa and Ngapa mining sites, December 2000

The above table indicates that boys rather than the girls carried out the actual mining activities. Girls were mostly involved in activities related to mining, such as cooking for the miners. However, there were exceptions as in the case of Ngapa, where boys who worked in the mines on a part-time basis were mostly

involved in activities like fetching water, firewood and carrying out errands. The two tables below present findings from Ngapa in an attempt to elaborate on the issue.

Table 4.4(b): Analysis of activities in different local locations, as performed by children at Ngapa mining site

Local locations	Nature of activities	Tasks involved	No. of children		Average age of children	Performed by adults as well
			Boys	Girls		
Kambini	Restaurants	Fetching water, cleaning the surroundings and utensils, cooking food and serving customers.	15	5	13	Yes
Kambini	Shop-keeping and stalls	Cleaning of the surroundings and selling commodities.	1	1	14	Yes
Dar mabox Musoma Bariadi Dakika tatu	Mining activities	Digging pits to find mining layers (known as veni). Collecting and carrying the sand to a near by water source (bed of river Lumesule). Washing the sand and checking for minerals (the owner of the claim area has to be present).	21	0	15	Yes
Kambini	Bar	Cleaning the surroundings, serving drinks to customers, stock taking of drinks.	0	3	16	Adults participate as owners and supervisors

Source: Field data, Ngapa, 2000

Table 4.4(c): Daily activity plan of working children at Ngapa mining site

Nature of employment	Mining activities	Restaurants	Bars	Shops and stalls
Part time	These are carried out by children who do not have permanent employment at the mine. They perform these activities in-between other activities. They fetch water for restaurants from 6 – 11am. Then they go to the mining sites and help to carry whatever has been dug to the washing spot and participate in washing. This activity goes on until 4 or 5pm. They then join their colleagues in fetching water for the restaurants until 6pm. Finally they rest until the next day.	The children wake up at 6am. The day begins by cleaning the surroundings and washing utensils. They later fetch water for cooking and washing utensils for different restaurants. These tasks are carried out until 11am. They later become involved in mining activities until 4 or 5pm. Then they fetch water for the restaurants until 6pm. Finally they rest until the next day.	No children are employed on a part-time basis.	No children are employed on a part-time basis.
Full time	The children wake up between 6 and 7am. After taking breakfast they leave for their work sites. Tasks depend on the nature of work planned for that particular day; they could be either digging or collecting mud at the washing site, or sieving the mud and searching for gemstones. These activities are carried out until 12 or 1pm, when they have their lunch and rest. They resume work at 3pm, when the sun has cooled down. They continue to work and end between 4 and 5pm. They close up their activities until the next day.	The children wake up at 5am, and start by cleaning. They are then responsible for preparing doughnuts, pancakes and tea for their customers. They start serving tea at 7am. Between 7 and 9am they have to wash utensils and fetch water. From 9am, they start preparing lunch until it is ready and they start serving customers until 3pm. After 3pm they fetch water, wash the utensils used for lunch and start preparing supper. When supper is ready they are responsible for serving their customers. They work until 10 or 11pm before they close and rest.	The children wake up at 7am. They go to their working place where they clean the surroundings and utensils used the previous night. They then have to report to the owner, after stocktaking. They close until 2pm when the bar is opened to the customers. They are responsible for serving their clients with drinks. The bar closes between 10 and 11pm. They then hand over the daily sales to the owner before they leave.	They wake up at 6am and clean their surroundings. They prepare tea for themselves before going to the shops or stall. They open up at 7am and remain open until 1pm, when they have a few minutes for lunch. They reopen soon after lunch and close at 10pm. Then they eat their supper and rest until the next day.

Source: Field data, Ngapa, 2000

Children as young as 10 were involved in actual mining activities. This is indicated in the table below. These activities include drilling of rocks, washing of rock dust, collecting silt, and carrying pieces of crushed rocks to pounding sites. An analysis of different activities that children were involved in at the three sites shows that children working in the actual mining process worked under the most difficult conditions. Their work sites did not have shelters where they could rest; they worked under direct sunshine; they were exposed to dust; there were no toilets or clean water at the working sites; and in the event of accidents, there were no first aid kits or personal care at the sites. When sieving the mud the children had to step into dirty water with bare feet. In the case of gold mining sites, they were also exposed to mercury. There is great need for action to be taken to prevent children from being exposed to such hazardous conditions. At the age of 10 years a child should be at school, not working and exposed to hazards which could affect his/ her health.

Table 4.4(d): Percentage distribution of working children in different activities in the mining sector by age (N=120)

Activity	Age Group			Total
	7 – 9	10 – 13	14 – 17	
Mining	10.7	34.6	54.7	100.0
Selling shops / food stall	0.0	25.0	75.0	100.0
Fetching water	0.0	22.2	77.8	100.0
Bar attendants	0.0	0.0	100.0	100.0
Cooking in restaurants	0.0	20.0	80.0	100.0

Source: Interviews with the working children in Mgusu, Mlimanjiwa and Ngapa mining sites, December 2000

4.4.1 Remuneration and patterns of expenditure

In all three-study locations it was noted that payments were made directly to the children themselves. The kinds of payments children received varied from one location to another and also depended on the nature of activities they were engaged in, especially in the case of Ngapa. While in Mgusu and Mlimanjiwa payments were made mostly in cash, in Ngapa payments were either made in cash or in kind. The table below presents the findings.

Table 4.4.1 Percentage distribution of the nature of payments made to children by activity (N=120)

Activity	Cash	Kind	Cash/kind	Other
Mining	65.0	0.8	0.0	17.5
Selling shops / food stall	0.0	0.8	0.8	0.0
Fetching water	5.0	0.0	2.5	0.0
Bar attendants	2.5	0.0	0.0	0.0
Cooking in restaurants	4.1	0.0	0.0	0.0
Total	76.6	1.6	3.3	17.5

Source: Interviews with working children in Mgusu, Mlimanjiwa and Ngapa mining sites, December 2000

(NB: "other" refers to payments made only when minerals are obtained.)

Findings from the above table indicate that most of the children (76.6%) were paid in cash, either on a daily or monthly basis. Payments made on a daily basis range between Tsh. 50/= to 6000/=, with Mlimanjiwa being the place where children were paid more when compared to children in Mgusu and Ngapa. Monthly incomes ranged from as low as Tsh. 2500/= to as high as Tsh. 10,000/=. It is possible to say that payments earned by children, especially if payments were made in cash and paid directly to the children, attracted and bound children to working as they held on to the prospect that one day it would be possible for them to earn more money.

Most earnings were made during the rainy seasons. It was explained that the ground is much easier to dig at this time and there is plenty of water to wash the mud, as opposed to the dry seasons when the ground is drier and water is a problem. It should be noted, however, that during the rainy season most pits become filled with water and it is easy for the ground to collapse.

The quest for money was reported by a good number of children interviewed to be the main driving force for working in the mining sector. Children in the sample conceded that their earnings, though meagre, were essential as they were expected by their parents and guardians to support the family. Children narrated that it was important for them to support their families due to the fact that their families could not raise sufficient money to provide the basic needs. Children were also forced to use their incomes on school supplies such as books, fees and stationary. In Mgusu interviews with children reflected that they shouldered a large burden in providing for the family. Working children earned between 50/= Tshs and 6,000 per day; the variations depended on a variety of factors including the age of the child and the nature of the specific tasks involved and performed. Children who earned 100/= per day and below spent most of it buying small items like sweets and bananas, whereas for those who earned more, part of the income was used to subsidize household subsistence requirements. Furthermore, it was observed that the money was also spent for buying school items. The patterns of use of resources earned thus varied among different working groups. Children working part-time spent their earned incomes for educational purposes and rarely shared them among other family members. Children working in restaurants and bars used their incomes to meet their daily basic needs. Due to the small amounts of money they received, they were unable to send money to their families frequently. They did not have a specific pay time or a fixed income amount; these depended on the money available.

In Ngapa it was noted that, children working in the mining sector remitted funds back home more often than children from other working groups. It was explained that the availability of gemstones was the prime determining factor on the frequency and amount sent to their families. Children in this category earned more compared to children from other groups. They had enough money to spend on basic daily necessities and had extra money to send back home.

The pattern of expenditure among working children is considered an important aspect when explaining the involvement of children in the mining sector. Since pupils had to meet their school needs, the only option available at their disposal was to work in the mines. Furthermore, as long as children had an obligation towards their families, working was a way in which they could support their them.

4.5 Estimations of the magnitude of child labour in the mining sector

It has been difficult to estimate the actual number of children involved in the mining sector in the three key locations. Discussions with key informants revealed that there were variations in the number of children working depending on particular seasons. The highest number of children involved in mining activities was reported during school vacations, while the lowest was during the school terms. Through discussions with key informants and observations the researchers were able to estimate the following:

- Ngapa - high: 100 / low: 40
- Mlimanjiwa - high: 150 / low: 70
- Mgusu - high: 150 / low: 100.

The number of children at the mining sites must be understood in relation to other factors. The very prominent factor is distance between the village and the mining sites. Mlimanjiwa and Mgusu villages were close to the mining sites making it quite possible for children to work in the mines during the day and return home in the evening. Whereas in Ngapa, the distance between the village and the mining site made it difficult for children to work at the sites during the day and return home in the evening. Working at the sites for children in Ngapa meant moving away from home.

4.6 Conclusion

In this chapter the main socio-demographic characteristics of working children in the mining sector have been discussed, and the nature of their activities, their remuneration and expenditure patterns highlighted. Above all, the chapter has shown that child labour in the mining sector is rampant and is being condoned by the respective parents or guardians largely due to economic reasons.

In the next chapter, working conditions of children in the mining sector and the effects on their health, safety and development are documented.

5. WORKING CONDITIONS

5.1 Introduction

Working children were involved in a number of activities and tasks which were carried out under various physical and climatic conditions. At all three study sites, children worked under direct sunshine and were thus exposed to high temperatures as well as to wind. They had to perform a range of activities including carrying bags of mud on their heads or backs to the sieving sites, washing sand and grit, removing alluvial sediments and digging sand or mud silk from river basins. In the case of Mgusu, children involved in gold recovery by amalgamating gold with mercury undertook their activities under shelters provided by their employers, but this was an exception to the norm.

This chapter will present and discuss the conditions of children working in the mines. The main variables examined include hours of work, tools, and risks involved in working in the mines.

5.2 Working hours

Children working at the three mining sites worked for long hours and hardly had time to play or rest. It was noted that children working in the mine pits aged between 7-9 years and between 10-13 years, worked for an average of four to five hours per day, while children between the ages of 14-18 worked for an average of seven hours per day. This was an hour less than the working hours of civil servants. A girl working in a restaurant at Ngapa mining site summarized the situation as follows:

“We wake up very early in the morning, between 3.00 and 4.00 am, to prepare tea for our customers and from then we continue working until 10.00 or 11.00pm. We do not get time to rest.”

Table 5.1(a): Mean average working hours of children in the mining pits by age

Age category	Mean
7-9	4.6
10-13	5.3
14-17	7.4
Total	6.3

Source: Interviews with the working children in Mgusu, Mlimanjiwa and Ngapa mining sites, December 2000

Table 5.1(b): Mean average working hours of children in the mining pits by sex

Sex	Mean
F	7.0
M	6.4
Total	6.4

Source: Interviews with the working children in Mgusu, Mlimanjiwa and Ngapa mining sites, December 2000

Children working in restaurants and bars, who were primarily girls, faced a different situation. They worked for much longer hours than their colleagues working in the mining pits. On average, children aged between 10-13 years worked for 14 hours per day, while those aged between 14-17 worked for nine hours per day.

Table 5.1(c): Mean average working hours of children working in restaurants, bars, shops and performing errands by age

Age category	Mean
10-13	14.0
13-17	9.3
Total	10.5

Source: Interviews with the working children in Mgusu, Mlimanjiwa and Ngapa mining sites, December 2000

Variations were noted between the average working hours of children working while attending school and those working on a more permanent basis. Children attending school spent an average of five hours working whereas their counterparts spent nine hours per day working.

5.3 Working days

Working days varied with respect to the mining sites and to whether schools were closed or open. In Mlimanjiwa and Mgusu during school terms work activities were undertaken either during the morning hours or in the afternoon. This depended upon the time of day when children had to attend school. The children whose school timetable required them to attend class in the morning would work in the afternoon and vice versa. On Saturdays, Sundays and holidays children worked throughout the day. In Ngapa, children always worked daily, irrespective of the day of the week.

5.4 Tools and equipment used

In the mining sector the processes of gold and gemstone production involved a number of tasks and activities including the digging and ferrying of gold ore and mud from gold and gem pits and the crushing of gold ore. Also carried out were the recovery of gold ore by using the sluicing and amalgamation methods with mercury and the sieving of mud to obtain gemstones. All these different tasks used different tools and equipment, which were in general very primitive and crude in nature. These included axes, pick axes, vehicle axles, iron rods, chisels, sacks and buckets. The nature of the working tools required muscle power to use. Children had to strain to get their work done. This is a summary of the situation as presented by a child working in Ngapa mining site:

"If you are lucky you can be working with grown-ups who will help you with the heavy tasks, like digging because we use pick axes which are heavy and not easy for someone like me to handle. But there are times you have to use them yourself. It is a very difficult job."

Tasks such as carrying gold ore and mud, the process of sluicing, pounding and crushing of stones subject working children to prolonged standing. At all three research sites no emergency services were available to the working children. It was noted from the interviews with children that whenever injuries occurred children had to resort to parental or guardian help and care.

5.5 Risks facing children working at the mining sites

In the three study locations, working children were affected by many health hazards. In Ngapa, for example, diarrhoea and dysentery seemed to be the most common health hazards affecting the children. This can be attributed to their living conditions. The major source of water in the area was River Lumesule. Unfortunately people bathed and washed near the river, polluting it and making drinking water unsafe. The only available health facility in the mining site was an unregistered dispensary owned by an individual. Depending on the agreements between the children and employers, treatment costs were either

incurred by the employers or the children themselves had to pay their medical bills. The only free medical services available were at the village, requiring a child to walk a distance of 15 kilometers to seek care.

At Mgusu and Mlimanjiwa mining sites children working on the sluice devices faced great hazards as the sluice boxes were placed in rivers, and were waterlogged and damp. These conditions predisposed children to a variety of health risks such as lung-related diseases, fever and bilarzia. In Mgusu, 38 out of 50 working children complained of a variety of health related problems, the most common of which were fever, headaches, pneumonia, stomach aches, dysentery, and malaria. There were other health risks which were subtle and indirect and whose adverse effects could not be immediately observed. The exposure to mercury could have adverse effects on the children and the rest of the villagers. Mercury was disposed of by discharging the alluvial sediments into the river and by burning the amalgam. Mercury contamination caused by the amalgamation of gold in gold mining in Mgusu and Mlimajiwa is an environmental problem of increasing concern. The alluvial sediments that contain mercury contaminate water resources in the villages and in the long run, this could cause debilitating health problems for the whole village population.

Discussions with key informants in the villages together with the mining officials in the districts suggest that mercury contamination caused by the amalgamation of gold was a valid and serious health concern, as well as an environmental problem of great proportion.

5.6 Conclusion

The different aspects of the working conditions that have been outlined in this chapter clearly indicate that the worst forms of child labour prevail at the research sites. The working tools, working hours and working conditions subject children to hazards that can be detrimental to their physical and mental development. Working children are exploited by the mine owners who dictate their payments and working conditions.

6. CAUSES AND SOLUTIONS

Following information in the prior chapters on the general background of the mining sector, the socio-economic conditions under which the mining sector operates, the nature, incidences and magnitude of child labour in this sector, and the working conditions, this chapter attempts to identify the causes of this worst form of child labour. Further to this, possible solutions in accordance with the present situation under the areas of study are suggested.

6.1 Causes

6.1.1 Poverty

Poverty¹¹ has been explained as the main reason for children engaging themselves in child labour. In interviews and focus group discussions at all the three sites, parents and children mentioned poverty of the families as the major contributing factor pushing children to work in the mines. The district officials in Chunya explained that parents were facing hardships in providing for their families; thus children were expected to work to help parents provide for their families. At all three mining sites it was noted that 69.9% of the children working in the mines were forced to do so despite the fact that they were still in primary school. This was explained as the only way they could raise money for their educational expenses. Poverty was also explained as the main reason for primary school dropouts. Data from the three mining locations show that 15.7% of the children were forced to drop out of school due to lack of funds and the inability of their families to cater to their educational needs. For instance, in Ngapa children had to work to provide for their school needs and also had to drop out of school as a result of the inability of the families to support them in their education.

“We parents encourage and like the idea that our children are working in the mines. We do not have money, but when your child pays a visit he gives you money. The child is a student but you make no efforts to stop him from working, until the school threatens to take you to court.”
(Quotation from an FGD with community elders in Ngapa village, December 2000)

A girl working at the mining sites in Ngapa explained that the difficult environment in her home forced her to do without basic school needs, which later forced her to drop out of school. This is a summary of what she had to say:

“The care was not good, I did not have someone to help me. When I went to school, they demanded school fees. I did not have exercise books and my grandmother is old and could not help me.”
(Interview Ngapa, 2000)

¹¹ Poverty was defined as being determined by a person's failure to provide for the basic necessities of the household daily needs as well as failure to educate their children. On the other hand the wealthy families were categorised as families capable of achieving the above, owning a good house, having the ability to cultivate large farms, and been able to employ labourers.

In Mlimanjiwa field observations showed that parents, especially men, consumed money extravagantly and saved no money for their future use. FGD revealed this:

“Listen brother, in our culture of mining the truth is that when one gets the winnings from gold, one thinks of a very expensive life, buying luxurious items, sitting on the bar counter and not building a house or saving his money in a bank. Even the children know this, that’s why those who value education go down to the streams to wash sand and dirt or to dig sand and muddy slit from the river side, and or, crushing stones by using a vehicle axle so that they can get the money to buy note books, clothes and food. The children in Mlimanjiwa, unlike in other areas, are self reliant in many ways and there is no parent who has the guts to prevent his children from working in gold. By the way most of the children help their parents buy food when they are broke.”

6.1.2 Lack of training opportunities

Thirteen percent of the children working at all three mining sites had completed their primary education, but were not selected to join government secondary schools. Discussions with the children in the field revealed that they were forced into working in the mines because they lacked an alternative in terms of opportunity for further training. At all the three sites and their surrounding areas, there was a lack of other training opportunities aside from the primary schools. The nature of primary education does not equip pupils with skills that are useful to them immediately after completing their primary education.

6.1.3 Poor educational facilities and low quality of education

Primary schools in the area were characterised by poor facilities, such as lack of classrooms, desks, textbooks and other necessary teaching equipment. Coupled with this was the issue of non-selection of primary school pupils in joining secondary education. In Ngapa village, between 1990 and 1997 only two students were selected to join secondary education. This was noted to greatly discourage children and parents. A parent from Mlimanjiwa summaries the situation as follows:

“At times we see that it is meaningless to send a child to school because the prospects for being selected to join secondary education are slim; we have only one government secondary in the whole district.”
(FGD Mlimanjiwa, 2000)

6.1.4 Disintegration of the extended family

Traditionally in African families the extended family was a very good social security institution, taking care of orphans, the elderly and widows. However, changes in the relations of productions have led to significant changes in family ties. The role and the functions of the extended family have diminished in that the security provided to orphans, the elderly and widows is no longer seen as being of great importance. In the study, orphans clearly linked the situation of having nobody to take care of them with their involvement in child labour. A child in Mlimanjiwa summaries the above situation as follows:

“After my parents had died there was nobody to take care of me. I stopped going to school for some time, it was only later that my uncle came to collect me and brought me here, but I was told that I have to work to support myself because he also has a family that he has to take care of.”

6.1.5 Marital problems at the household level

It was noted that divorces contributed in one way or another to pushing children out of school and into the working fields. Although the link cannot be firmly established, one would argue based on responses from the working children that no matter how insignificant the comparisons seem in relation to the non-working children, the destabilisation of the family is an aspect to be taken into consideration. A working child from Ngapa summarises the situation as follows in an interview:

“My parents got separated when I was in standard one and my mother got remarried three years later. However, my father died when I was in grade five so I went to stay with my mother. Unfortunately my step father abused me verbally and also beat me and I was forced to go back to my grandmother’s place. My grandmother is old and she could not provide me with the necessary school requirements. I was forced to drop out of school and instead sought employment in the mines where I knew I could work in the restaurants.”

6.1.6 Other factors

In Mgusu, it was noted that an important factor that can be associated with the underlying cause of child labour here is the geographical location of the village. By nature of the fact that the village is in the government forest reserve where people are not allowed to perform other economic activities such as agriculture, families are constrained. Their income depends solely on gold mining. The increase in the village population has meant competition for this only available employment. Children were forced to work to support their families in the competition of these resources. Some children explained that they were brought to the mine area after losing both of their parents. They were then made to work to earn a living on the grounds that they cannot depend on their relatives to support them, as they were incapable of meeting their requirements. Children were therefore forced to become self-reliant by working in gold.

6.2 Solutions

Prescriptions for solutions of any problem often depend on the nature of the cause of the problem and the forces or agencies which are in a position to effect the solutions. Taking this into consideration, the following solutions are suggested.

6.2.1 Raising the standards of living of the communities

At the mining sites as already argued and documented above, the underlying causes of child labour are based on economic factors. The solution to this, therefore, calls for raising the standard of living of the gold miners and the communities surrounding the mining area. This, in turn, requires the need to provide the miners and diggers with improved means of production and facilities which are essential to raise the production of gold. Higher gold production would mean higher income and hence, better standards of living. This would make it unnecessary for children to work in the mines. There is also the need to sensitize people to expand farming activities to include crops that are viable in the areas. Stable markets as well as good prices could be incentives to communities surrounding the mining areas. This would need to go hand in hand with the development of the infrastructure to facilitate easy movement of products.

6.2.2 Development of social security schemes

With the weakening ties of the extended family on one hand, and the AIDS epidemic on the other hand, it is expected that the number of orphans will only increase, leaving even more children to fend for themselves. It is important that the government and the committees at large develop social security schemes that will support orphans in their education. In the past the government has provided subsidies to meet basic requirements and services for those in need. Such an approach would at least ensure that children do not drop out of school as a result of their inability to pay school fees.

6.2.3 Creating community awareness on the worst forms of child labour

It is important to provide information and education to parents and children on the negative effects of child labour on the physical and mental development of working children. In Ngapa, it was noted that the majority of children working in the mines are not from the village. This indicates efforts made by parents of children from the village to educate their own children about the negative aspects of working in the mines. It is thus important to sensitize the communities on the negative effects of child labour from the grassroots level. There is a need to build public awareness surrounding the distinction between child work and child labour. The community should be fully involved in issues of child protection by abandoning norms and values that endanger the lives of children, strengthening positive values and providing services to children in difficult circumstances.

6.2.4 Providing training opportunities for primary school leavers

The current education system does not equip primary school leavers with the necessary skills one would need in life. With only a very slim chance of proceeding on to secondary school, primary school leavers are left without skills and alternatives to work. The establishment of vocational training centers would first provide them with an activity to engage themselves in, and secondly, it would equip them with skills which they could later use to support themselves rather than engaging in child labour.

6.2.5 Improving the quality of education

Poor educational facilities and poor education performances in the standard seven examinations were noted as a factor discouraging both parents and children. To improve the situation and gain the trust of both parents and children it is necessary to provide a more conducive learning environment. Children need to be motivated and the schools need to have the adequate facilities to draw them in. Teachers should be further trained to improve the quality of education children are receiving and to provide children with the opportunity of obtaining secondary education.

6.2.6 Enforcement of employment regulations

Changes in government policy with respect to the licensing of mining permits have provided loopholes to mine owners, enabling them to skirt the rules and regulations governing employment procedure and mining activities. Miners are accountable to the district mining officer, who may well be located very far from the mining site. It is suggested that mining licenses be issued to village governments who will then lease the sites to small-scale miners on the condition that they should not employ children. The village governments should have the mandate to revoke contracts made between them and the miners if they do not abide by the rules. This particular strategy would make supervision possible. In Ngapa, despite the complaints of the village leaders and the community with regards to child labour at the mining sites, they have done nothing about the situation.

7. CONCLUSIONS

It is evident from the research findings that child labour in the mining sector is a problem in Tanzania. Children below the age of 18 years are involved in different work activities related to the mining sector. It is also evident that the conditions under which children work classifies the circumstances as a worst form of child labour. In summary, children work under direct sunshine for long hours with little time to rest or play, using inappropriate tools and equipment that cause strain. They work in very hazardous conditions predisposing them to a number of health problems including exposure to mercury.

In the three study locations, it is estimated that a total of 400 children are involved in child labour in this particular sector. The status and size of the families were noted to be important in analysing the relationship between children and their involvement in child labour. It was noted that children who either dropped out of school or had completed their primary education were now engaged in mining activities. Constraints of resources facing female-headed families were considered as likely to have pushed children into child labour. The disintegration of the extended family ties has also led to less accountability of the welfare of orphans, by members of the family. Orphans were left to fend for themselves. It has been argued that large families are constantly faced with limited resources, this being a motivating factor for children to decide to engage in child labour to either support themselves or their families.

The most prominent explanation as to why children involve themselves in child labour was related to the economic status of the family, mainly the inability of parents to provide basic needs for their children. Children had to either drop out of school due to lack of funds to support their education or had to work part time to meet their educational expenses. Children also had to work to support their families and parents were noted to highly value their contributions.

It was further noted that children received payments, either in kind or cash. They were forced to use their incomes to either support their families or to support their own education by paying for their school fees and buying other school needs.

To address the problem of child labour in these areas possible interventions have been suggested. Among them, raising the standard of living of the gold miners by providing them with improved means of production and facilities which are essential to raise the production of gold. With higher incomes it would be unnecessary for children to work in the mines. There is also the need to sensitize people to expand farming activities to include crops that are viable in the area, as a possible means of increasing household incomes.

The government needs to initiate policies that cater to orphans to avoid dropouts. Information with regard to the negative aspects associated with child labour needs to be disseminated to the community. The community should be fully involved in issues of child protection by abandoning norms and values that endanger the lives of the children, strengthening positive values and providing services to children in difficult circumstances.

The government, local NGOs and civil societies should join hands and work together to ensure that children are protected and have the right to an education, and that they are given the necessary opportunities to develop their physical and mental capabilities in a safe, healthy and caring environment.

REFERENCES

- Amma, H. et al (2001) The Nature and Extent of Child Labour in Tanzania: A Baseline Study. Research.
- Chachage, S. (1994) "The Meek Shall inherit the Earth But not the Mining Rights" in P. Gibbon, (ed) Liberalised Development in Tanzania, Studies on Accumulation Processes and Local Institutions. Nordiska Afrikainstitutet, 1995.
- Khamsini, O. (1978) "The Gold Miners and Mine Workers on the Lupa Goldfield, 1922-1962." Unpublished M.A. Thesis, University of Dar Es Salaam.
- Kimambo, R.H.W. *Mining and Mineral Prospects in Tanzania*. Arusha: East African Publishers, 1984.
- ILO, (1997) Towards Eliminating Child Labour in Tanzania: Highlights of ILO-IPEC Supported Initiatives (1998/1999). ILO.
- Ishengoma, (1995) Child Labour in Plantations in Tanzania: Zanzibar Case Study, National Social Welfare Training Institute, Dar Es Salaam.
- Lemelle, Sidney J. "Capital, State and Labour: a history of the gold mining industry in colonial Tanganyika, 1890-1942." Unpublished Ph.D. Thesis, Los Angeles, University of California, 1986.
- Rwegoshora, H. et al (1997) "A summary Report on the Country Study Towards. A Best Practice Guide on Sustainable Action Against Child Labour for Policy Makers" ILO/IPEC, Dar Es Salaam.
- Shivji, Issa G. *Law, State and the Working Class in Tanzania*. Dar Es Salaam, Tanzania Publishing House, 1986.
- Warioba, Stephen Masirori "History of Labour and Capital on the Musoma Goldfield, 1925-1966." Unpublished M.A. Thesis, Department of History, University of Dar Es Salaam, 1987.

APPENDIX I

Interviewers Name: _____

Date: _____ Place: _____

QUESTIONNAIRE FOR PARENTS/GUARDIANS OF WORKING AND NON-WORKING CHILDREN IN THE MINING SECTOR

SOCIO-DEMOGRAPHIC BACKGROUND

1. Name: _____ Age _____ (years) Sex: _____
Tribe: _____
Religion: _____
What level of education did you attain? _____
Marital Status: Single _____ Married _____ Widowed _____
Divorced: _____
Occupation: _____ Number of Children _____ (own)
Any other dependants: Yes _____ No _____
Number of dependants: _____
What is your home district? _____
When did you come here: _____
Why did you come here? _____
What prompted you to come here? _____

3. What do you consider to be your monthly income ? _____
Which are the main activities which gives income to the household (probe more on this).
E.g. do you have any other source of income besides that given by the already mentioned activities.
.....
.....
.....
.....
4. Do you have land/livestock? Yes _____ No _____
5. a) Who decides on the use of resources in the household? _____
b) Who decides on when to buy food? _____
c) Who decides on when to send children to school? _____
d) Who decides on when to buy clothes for the family? _____
e) Who decides on when to slaughter a goat/hen? _____
6. What items do you have in your house? in the household?
a) sewing machine d) mattress
b) radio/ e) chairs
c) bicycle/motorcycle/car - if car what make? f) tables
7. Can you tell me how much you spend on the following items per week?
a) kerosene/electricity/firewood d) hospital
b) food f) house rent
c) fees (education) g) others (specify)
8. Whose house are you staying in? (Own/Rented - observe the condition of the house)
9. How much would you value the contribution of working children to the household:
(very big, moderate, small, probe more on how)?
.....
.....
.....
.....
10. Would you like your children to work? Yes No
Where? _____
And in the mine? _____
Why? _____
.....
.....
11. a) What is the most important thing a parent can give his/her children?
.....
.....

11. b) Is it important for your child to have an education? Yes / No
At what level?
Primary education Secondary Education Above Secondary Education

And why?

12. Who would you prefer to have this kind of education?
Boys/Girls and why?

.....
.....

13. What major factors determine whether children work in the mines?

.....
.....
.....
.....

Thank you for your cooperation.

Working Child	Non-Working Child

Interviewer's Name:

Date:

INTERVIEW GUIDE FOR WORKING AND NON-WORKING CHILDREN IN THE MINING SECTOR (TUNDURU, GEITA AND MERERANI)

SECTION A: SOCIAL DEMOGRAPHIC PROFILE

1. Name: _____
2. Age: _____
3. Sex: _____
4. Tribe: _____
5. Religion: _____
6. Place of Birth: _____
7. Since when are you here? How did you know of this site?
.....
- 7.1 Where do you come from?
How did you arrive here/who helped you, how much did you pay?
.....
8. When did you start working?
- 8.1 Is this your first job? If No explain previous activities conducted.
.....
- 8.2 How did you secure this particular job?
.....
9. Reasons for working/not working.
- 9.1 Whose decisions was it to work/not work?
.....
10. Have you ever been to school? Yes/No
- 10.1 Are you presently attending school? Yes/No.
If Yes, in what class are you in? When was your last day to attend school?
.....

- If no, why?
- 10.2 Would you like to go back to school? Yes/No
Explain.
.....
11. What is your main source of income?
.....

SECTION B: FAMILY BACKGROUND

1. Where do your parents come from?
- 1.1 Is your farther alive? Yes/No
- 1.2 Is your mother alive? Yes/No
2. Where are you staying now?
- 2.1 With whom are you staying with?
3. No. of children in your family: (based on sex)
You are the _____ born in your family.
4. Major source of income for your parents.
.....
5. Occupation of the head of household. What is the occupation of your parents?
.....
6. What items do your parents own?
- | | | | |
|-----------|--------|---------|--------|
| radio | Yes/No | bicycle | Yes/No |
| mattress | Yes/No | chairs | Yes/No |
| tables | Yes/No | watch | Yes/No |
| livestock | Yes/No | | |
7. What materials is your parents house built of?
- | | | |
|-------------------------|--------|------------------|
| iron corrugated sheets} | Yes/No | roofing material |
| grass thatched } | Yes/No | |
| cement block } | Yes/No | |
| mud walls } | Yes/No | wall material |
| burnt bricks } | Yes/No | |
| earth floor } | Yes/No | |
| cement floor } | Yes/No | floor material |
- does your house have electricity/water tap?

SECTION C: LIVING CONDITIONS

1. Can you explain the type of accomodation you have here in the mines? (probe: bedding, cleanliness, bathroom, toilet, bedroom)
.....

-

 1.1 Average time spent walking from where you leave to your work site.

 2. How often do you take a bath/wash clothes? Where, do you have to pay/who provides this service?

 3. How many meals do you take per day?
 3.1 What do you take
 - in the morning? }
 - in the afternoon? } probe on content
 - in the evening (content)? }

SECTION D: HEALTH RELATED PROBLEMS

1. What illness conditions have you suffered in the past six months?

 2. Where did you go for treatment?
 3. Who paid for your treatment?
 Specifically for working children
 4. What accidents have you had in the past six months as a result of your work? (explain) (Probe - what happened, who was responsible, treatment, costs - who paid) has he/she recovered).

SECTION E: SOCIAL SUPPORT NETWORK

1. If you do not have money and you need some money who can you ask?

 2. Who takes care of you when you are sick?

 3. When you have personal problems whom can you talk to?

 4. When in need for food whom can you ask for some food?

5. When you are injured at your work place or when playing, who do you go to for help?
6. When you are lonely and you need some one to talk to, to whom can you go to?
7. How frequently are in contact with your parents?
Mother [] Father []
- 7.1 When was the last time you had contact with
Father? [] Mother? []
8. Who else do you keep in touch with apart from your parents?
9. Are your children organized to provide support to each other?

SECTION F: PERCEPTION OF WFCL

1. What do you think is good about a child working in the mines?
.....
.....
2. What do you think is bad about a child working in the mines?
.....
.....

SECTION G: WORKING CONDITIONS - WORKING CHILDREN ONLY

1. What activities have you been doing so far? - Define it per day/weak end.
.....
.....
2. Describe your daily schedule and activities done the last day of work. (Probe when he/she wakes up - activities performed until when she/he goes to sleep. Probe for specific and routine tasks involved.
.....
.....
.....
.....
3. Presently what activity are you doing?
.....
.....
4. How many children do you work with? Boys / Girls

5. What activities do elders do?
.....
6. Are you employed on a full time or part time basis?
7. When do you rest/play?
8. In what conditions do you work? (Probe: excessive heat/cold/dust/mud/
moisture/slippery.) Nature of materials used - explosives, mercury, plants, vanish, clothing,
protective gear, availability of drinking water, toilet, fire extinguisher/first aid kit and
medical treatment.
.....
.....
.....
.....
9. Do you experience harassment and abuses at your working place? (Probe sexual abuse,
beatings, verbal abuses.)
.....
.....
10. What is your relationship with your employer? (Probe - Is it based on trust, fear - are you
able to communicate with your employer?)
.....
.....
11. What kind of agreement do you have with your employer?
.....
.....

SECTION H: WORK EARNING AND USE

1. How are you paid?
Cash Kind Both
2. How much?
Daily
Weekly.....
Monthly
3. To whom are the payments being made?
4. When are most earning made? Why?
.....
5. When are least earning made? Why?
.....
6. How do you spend the money you earn?

	For self:	For Family:
Daily		
Weekly		
Monthly		

7. **Who purchases those items?**
8. **Amount sent/given to parents and frequency.**

GUIDE FOR FOCUS GROUP DISCUSSION WITH COMMUNITY MEMBERS

COMMUNITY AWARENESS ON THE CONCEPTION OF WFCL

- 1. History of WFCL in general in the area.**
- 2. Differentiate between child activities in the household and those done outside the household as employment and if there are any similarities.**
- 3. Reasons for WFCL (probe political, cultural and social reasons).**
- 4. Consequences of WFCL.**
- 5. Measures that have been taken to address the situation and their success.**
- 6. Awareness of any institution dealing with the elimination of WFCL.**
- 7. Other measures which can be taken to combat WFCL.**

**GROUP INTERVIEW GUIDE FOR ELDERS IN THE LOCATION
[MINING SECTOR]**

**TOPIC:
SOCIO-ECONOMIC ACTIVITIES, CLIMATIC CONDITIONS
AND SEASONAL CALENDERS**

- 1. In the old times, what were the main economic activities undertaken in the area?**
- 2. Today, what are the main economic activities undertaken by the population in the area?**
For each sector mentioned, probe:
 - population characteristics involved in the activities e.g. if natives or migrants**
 - their tribes, sex, ages, etc.**
- 3. Probe for the types and nature of tools used.**
- 4. How are the products disposed of?**
 - whether for consumption [home] or**
 - for sale**
- 5. What is the average output for each household?**
- 6. How is the production process organised?**
Probe for: sexes involved/engaged in each task.
- 7. What is the commencement period of the production process?**
Probe for
 - words/expressions which denote the periods and tasks involved**
 - different tasks and the corresponding periods in the whole year.**

Ask the respondents to draw a table showing the activities and the corresponding periods in a year.

- 8. What are the general climatic conditions in the area?**
Probe for
 - climatic conditions in the past**
 - climatic conditions to-day and**
 - consequences on the economic activities in the village/ward/division**

**Ask the respondents to draw a table showing the various climatic conditions in the area:
cold, hot, rain periods etc.**

APPENDIX II

MATRIX FOR THE MINING SECTOR

Table 1

Issues/Information Sought	Source (Information Obtained From)	Method/Data Collection
Introduction History of mining activities in Tanzania. Indicating different mining sites and types of minerals found. Contribution of the industry to the national economy.	Individual researchers Prof. C.S.L. Chachage (Department of Sociology, UDSM)	Individual talks and visits Literature review
Background (in relation to each site) Evolution of child labour in Tanzania. History of each site - activities taking place and types of minerals found. Major types of owners - indicating sources of their capital/magnitude of their capital and gender differences General description of the participation of children in the mining sector (No., Age, Sex, Origin).	Prof. Issa Shivji (Faculty of Law, UDSM) ILO Documents :Leme - PhD Thesis (n the mining sector) Ministry of Energy and Minerals Regional/District Mining Officers Owners of the sites Key informants (elders in a particular area). Regional/district Mining Officers Owners of the mines. Child Labour Committees District Mining Officers Key informants (elders in particular areas/village leaders Association of miners Geita - Mwarema Tunduru - AREMA Ward Executive Officers School teachers	Informal interviews and Documentary Sources. Informal Interviews Informal Interviews transect walks

	As above	mapping (space occupied by the working children) As above.
Study Area Profile Location areas - description of the study area. Population Distribution of popl. Gender Age Dependency ratio Ethnic diversity Origin of inhabitants Migration - where - why Socio-economic activities nature of economic activities taking place climatic conditions seasonal calendar Socio and economic infrastructure	District mining officers Key informants - elders. District Planning Officers Ward Executive Officers Ward Executive Officers Key informants - village elders. District Planning Officers Ward Executive Officers Key informants - elders/teachers Regional Economic Profile District Planning Officer Regional Economic Profile	Informal interviews Questionnaire (administered by the researcher) Informal Interviews Documentary sources Informal interviews Informal Int. Informal Int. Group Interview Literature Review Informal Int. Literature Review
Education Analysis No. of schools No. of children attending school (MIF ratio) Dropouts and why (Boys vs girls) Enrollment rate No. of school going age children No. of teachers MIF Teachers pupil ratio	District Education Officers Ward Education Committee Headteachers	 Informal inter. Documentary sources

Services provided at school State of primary school infrastructure	Village govt. Head teacher Visiting primary sch.	- mapping Informal Int. Observation.
Underlying Causes of WFCL Economic reasons Definition of poverty/very poor/rich/wealthy person. Average income of household. Pattern of expenditure. Gender resource and decision making Gender resource ownership Household goods Type of house Occupation of head of household Child's Contribution in household (kind/monetary) Size of family Composition of family + No. of dependants Do parents want their children to work? Value of child's contribution to the household Attitude of parents towards education	Regional Planning Offices District Planning Offices Village Govt. Planning Committees Parents/Guardians of working and non-working children.	Informal Interviews Documentary sources Questionnaire (administered by the researcher)
Assessing the Community awareness on the Conception of WFCL. Is WFCL a problem in the community - how? History of WFCL Reasons of WFCL - probe political reasons, cultural, Consequences of WFCL. Measures which can be taken to combat WFCL. Awareness of any measures/institutions dealing with the elimination of WFCL. Measures that have been taken to address the situation.	Both M/F Community/Members - (selected with the help of village authorities/key informants) Criteria for selection. Talkative Conversant with topic of discussion	FGD observation mapping
Extent and magnitude of WFCL No. of working children.	Key location areas.	Counting of working children (Researcher + field guide/mapping - how many +

		where)
Analysis of Activities Nature of activity (work process) Tasks involved No. of children: boys/Girls in each activity/task Average age of children Activities done by Adult also	Working child Owner of mine/ (incharge of the mine) key location working children working children Working children Working children	Observation Interviews .. working children Informal interview Interviews .. working children Interview .. working children Counting of working children (Researcher and field guide) Interview - working children.
Daily Activity Calendar of Working Children Work schedule Working full/part time When do they rest/play time	Working children	Interview
Features associated with WFCL Natural surrounding Working condition Tools & Equipment Nature of materials used Working hours per day Constraints and abuse	Key location areas Key location area/working children Mine owners Working children As above as above working children Health facility	Observation Observation Interviews Informal Inter. Interview/Observation as above as above Interviews Informal Int. with Health personnel observation

Relationship of child to employer Emergency and personal care.	Working children Working children Key location	Interview Interviews and bserveation
Health Related Problems Physical effects and accidents related to each activity Illness suffered by child in the past six months/where treated/who paid for the treatment?	Working children Working children Non working children	Interview Interview
Analysis of work earning and use Forms of payment Cash/Kind How frequent To whom Use of Earnings For Family Amount sent to parents Nature of contract	Working children	Interviews
Social support Network	Working and non working children	Interviews
General Characteristics of working and non working Ch. Tribe Religion/Place of Birth When started working How did she/he secured the work Reasons for working/not working Whose decision was it to work/not work What is the main source of earnings/income	Working and non working children	Interview (life histories)

Level of education Attitude of child towards education. Physical appearance		
Analysis of institutions e.g. NGO, religious org. - their capabilities willingness to participate in addressing WFCL.	Institutions in the area.	Informal interviews.
Family background Origin Where are you staying now With whom are you staying Major source of income for parent/guidian Household goods Type of house (Migrants by the time they left home) Occupation of head of household Size of family	As above	As above
Living conditions Type of accomodation Sanitary conditions Meals intake per day/content	As above	As above
Perception of WFCL	As above	As above
Characteristics of the Communities surrounding the working children Community perception of child labour (including children) Availability of food Availability of transport Availability/non availability of social amenities	Community member	FGD and informal interviewes, observation, mapping.