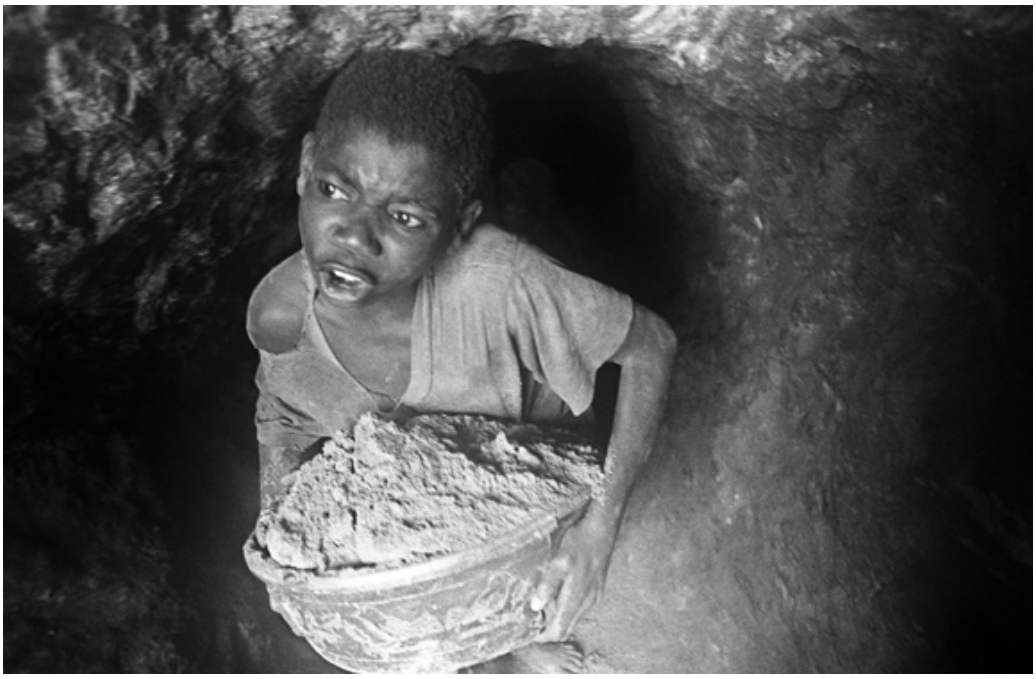
International
Labour
Office

Geneva



Eliminating Child Labour in Mining and Quarrying

Background Document

World Day
Against Child Labour

12 June 2005

International Programme on the Elimination of Child Labour (IPEC)

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1. Introduction

1.1 Why are we targeting child labour in mining and quarrying?

World Day Against Child Labour in 2005 is not just a one-day event, but instead, the launching of a time-bound campaign to eliminate child labour in mining.

The rationale for eliminating child labour in mining and quarrying includes:

- Child labour in mining and quarrying is in virtually all cases, a Worst Form of Child Labour because of the extent and severity of the hazards and the risks of death, injury and disease. There is no justification - poverty included - for children to work in this sector. It is literally back breaking work. It is relatively straightforward, therefore, for governments to legislate to include mining and quarrying activities on their legally-binding, national hazardous child labour lists; thereby making them prohibited activities for children.

- The estimated size of the child labour population in mining and quarrying of 1 million is relatively small in global terms. This means elimination is an achievable goal.

- There is strong government support for elimination of child labour in mining and quarrying. Some 13 governments will, for example, be directly pledging their support on WDACL.

- There is strong industry-wide support from both employers' organisations and trade unions in mining and quarrying for elimination of child labour in these sectors.

- There is strong support from Communities and Small-Scale Mining (CASM): This body is already engaged in improving social and economic conditions, and in eliminating child labour, in small-scale mining. It helps brings action down to the community level and makes the links with NGOs. Without action at the community level it will be impossible to eliminate child labour in mining and quarrying.

- Last but by no least, there is strong child and parental support for elimination. IPEC experience shows that where children are given viable options they wish to attend school and/or receive skills training. Parents equally, given viable options, want their children to be properly educated and taught skills.

1.2 Setting the context: Nature and scale of the problem

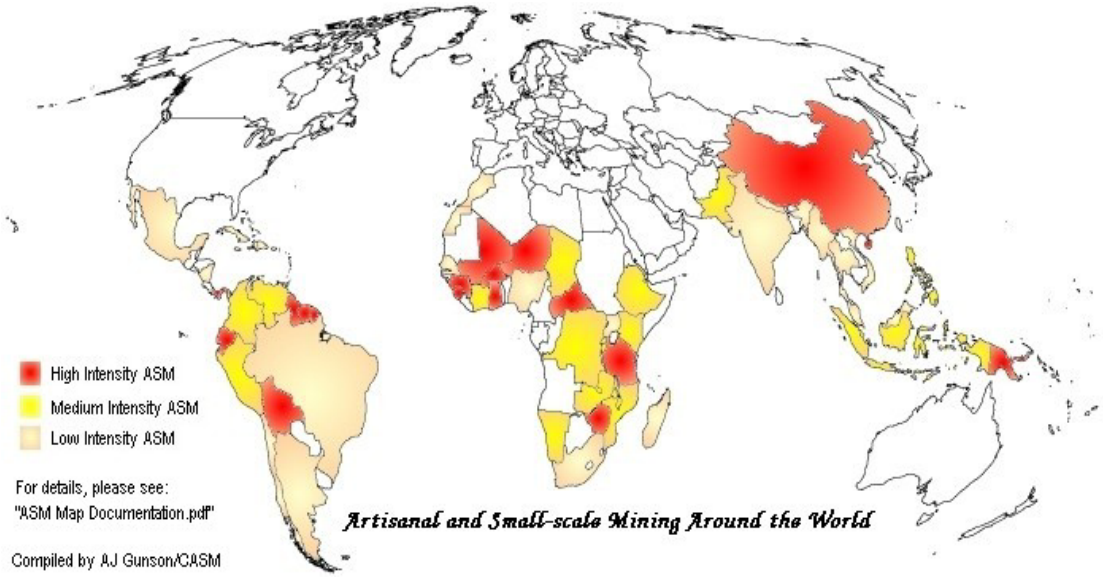
Small-scale mining and quarrying is an important reality in various regions of the world, including Africa, Asia-Pacific, South and Central America, and Europe (see Figure 1). It is estimated that 13 million workers are engaged in small-scale mining and quarrying activities around the world. Regretfully, many of these workers are children[1]. Child labour in mining is a problem related to small scale mines in the informal sector.

Due to the sub-sectors remoteness, informal character and mobility, the number of children involved in mining and quarrying activities is difficult to measure. However, the ILO estimates that nearly 1 million children from 5 to 17 years of age work in mines and quarries. The data is often fragmented and covers at the best the country level. In the Philippines, the mining and quarrying sector employs

[1] "The term *child* shall apply to all persons *under the age of 18"*. Article 2 of ILO Convention concerning the Prohibition and Immediate Action for the Elimination of the Worst Forms of Child Labour, 1999 (No. 182).

an estimated 17,980 children between 5 and 17 years old[2]. In Nepal, it is estimated that 32,000 children work in stone quarries[3].

Figure 1: Occurrence of small-scale mining around the world



Source: CASM's website: http://www.casmsite.org/regional.html.

1.3 Definition of mining and quarrying

The definition of small-scale mining and quarrying is not clear-cut as the basic aspects differ from country to country according to the general development of the mining sector and legal framework. However, typical for the sub-sector is that the activities are often artisanal, family-based and labour-intensive. Despite their small size, their low productivity and the simple equipment used, the small-scale mines and quarries often contribute significantly to national economies.

Informal mining refers to uncontrolled mining activities often operated by family members or of close relatives without any license or formal permission. "The more remote and more informal a small-scale mining activity, the more likely children are to be involved"[4]. The large-scale formal mining sector does not generally employ children in its operations[5].

There are some characteristics of small-scale mining and quarrying that are recurrent around the world, and influence the involvement of children in mining and quarrying activities (see list below). These typical characteristics are also linked to the problems related to child labour in this sub-sector and include:

- Lack of or limited use of mechanization, and a lot of physically demanding work (for which **children** are employed).

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[2] ILO-IPEC ASIADEV. 2003. *In Search for the Pot of Gold: A Case Study of the Experiences of the ILO-IPEC Program on the Elimination of Child Labour in Small Mining Communities in the Province of Camarines Norte, Philippines.*

[3] Aryal, B.R. *et al.* 2005. *Child labour in the mines of Nepal* (Draft report submitted to ILO/IPEC). Lainchuar, Kathmandu, Department of Mines and Geology (DMG).

[4] ILO. 1999. *Social and labour issues in small-scale mines.* Geneva, p. 85.

[5] IPEC. 2004. *Action against child labour in small-scale mining & quarrying: A thematic evaluation.* Geneva.

- Low levels of occupational safety and health protection (posing extreme risks to **children** working in mining).

- Low qualifications required of personnel at all levels of the operation (which allows employers and parents to employ **children** for parts of the work).

- Inefficiency in exploitation and processing of mineral production - low recovery value (where families feel forced to employ their **children** to increase the family income).

- Mining of marginal and/or very small deposits, which are not economically exploitable by mechanized mining (where the tunnels are sometimes so small that only **children** can fit through).

- Low level of productivity (added value is expected from **children** working.

- Low level of salaries and income (in some mining communities the income is less than 1 US$ per family member per day; families think they can increase this to a viable level by employing their **children**).

- Periodic, rather than continual operation. Often local peasants mine seasonally or according to the market price of the ore. This contributes to migration of the families which, in turn, tears the **children** from their education and social networks).

- Lack of social security and healthcare which, in the case of accidents or injuries, result in incapacitation and injuries to their parents forcing children to work in their stead.

- Insufficient knowledge or concern about the environmental hazards common in the mining areas (exposing **children** working in mining and living in mining camps to environmental, social and health hazards).

- Chronic lack of working and investment capital (which is compensated by the use of unskilled workers, including **children**)[6].

Small-scale mining and quarrying includes two broad categories: mining of relatively high-value minerals, such as gold and gemstones, and quarrying of construction materials and industrial minerals. The work related to both of these categories includes risks and health hazards. They are treated jointly in this report.

Box 1 gives examples of types of minerals and products exploited in small-scale mines and quarries in different countries in Africa, Asia, Europe and South America.

[6] IPEC. 2004. *Action against child labour in small-scale mining & quarrying: A thematic evaluation.* Geneva.

Box 1: Minerals and products coming from small-scale mines and quarries

Africa

- Niger: salt, trona (used as animal food), cassiterite, gold, gypsum and construction materials[7].
- Tanzania: diamonds, gemstones (suppliers, chrusobery, alexandrine, spiriel and garnets) and gold[8].
- Senegal: gold, salt, stone breaking[9].

Asia

- Mongolia: coal, fluorspar, gold[10].
- Nepal: non-metallic minerals (limestone, dolomite, marble, magnesite, and talc) and gemstones (quartz, ruby, sapphire, tourmaline and kynite)[11] semi-precious stones (beryl, garnet and tourmaline)[12].
- Philippines: valued minerals such as gold, silver and copper[13].

Europe

- Ukraine: coal[14].

South America

- Bolivia: tin, silver, zinc, gold[15].
- Colombia: clay, gold, emeralds, coal[16].
- Guatemala: stone breaking[17].
- Peru: gold[18].

1.4 Regional differences

Many aspects of child labour in small-scale mining and quarrying are similar in different regions in the world. However, some typical regional characteristics are worth mentioning.

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[7] Alfa, S. *Child labour in small-scale mines in Niger.* In Jennings, N.S. (ed.) 1999. *Child labour in small-scale mining: Examples from Niger, Peru & Philippines.* Geneva, ILO.
[8] Mwami, J.A.; Sanga, A.J.; Nyoni, J. 2002. *Child labour in mining: A rapid assessment*, p. viii. Geneva, ILO.
[9] ILO/CEGID. 2003. *Le travail des enfants dans l'orpaillage, les carrières et l'exploitation du sel.*
[10] Mongolmaa, N. IPEC Mongolia. Undated. *Child labour in the small-scale mining.*
[11] Aryal, B.R. *et al.* 2005. *Child labour in the mines of Nepal* (Draft report submitted to ILO/IPEC). Lainchuar, Kathmandu, Department of Mines and Geology (DMG).
[12] ILO-IPEC. Final progress report for Action Programme No. 0907.336.052. From 1st. October 1996 to 31 July 1997.
[13] ILO-IPEC ASIADEV. 2003. *In search for the pot of gold: A case study of the experiences of the ILO-IPEC Program on the Elimination of Child Labour in Small Mining Communities in the Province of Camarines Norte, Philippines.*
[14] Roldugin, O. *Foxholes : Entire village could go under the surface because of pirate shaft.* Communist.ru, issue 50, published 23 September 2002.
[15] IPEC/ SIRTI/ UNICEF. 2004. *Buscando la luz al final del tunnel: Niños, niñas y adolescentes que trabajan en la minería artesanal en Bolivia.*
[16] ILO/IPEC & MINERCOL. 2001. *The boys and girls who work in Colombia's small-scale mining: Socio-cultural economic and legislative diagnosis.*
[17] ILO/IPEC. 2000. *Evaluation report action program "Children breaking stones in Retalhuleu", Guatemala.*
[18] Martinez-Castilla, Z. *Child labour in traditional mining: Mollehuaca, Peru.* In Jennings, N.S. (ed.) 1999. *Child labour in small-scale mining: Examples from Niger, Peru & Philippines.* Geneva, ILO.

The mining sector in Latin America has a long history and has mining-related policies in place[19]. The involvement of children in the activities related to small-scale mining seems to be part of the mining tradition.

"Asia has an active private sector related to small-scale mining and quarrying and rather stable governments. In South Asia the traditional stratifications of the society often link the elimination of child labour with a fight against social exclusion"[20].

In Africa, threats from a large number of regional and local conflicts and war influences the small-scale mining and quarrying sub-sector. High value "conflict minerals" in war zones are often plundered[21] and the mining sector is spreading out in an uncontrolled way. Extremely weak governments and a high degree of corruption and apathy also typify Africa. Child labour in mining is more recent in Africa, particularly where great numbers of AIDS orphans are concerned. Traditionally in African families the extended family was a very good security institution, taking care of orphans. Today, a disintegration of the traditional extended family, coupled with a growing number of orphans force many children to take care of themselves. Children are attracted by small-scale mining operations (especially in central and southern African mining countries where there are a great number of AIDS orphans)[22] as the work provides them with their basic needs.

1.5 The relation between small-scale and large-scale mining

"There is often a clash of interest between small-scale and large-scale mines. In the eyes of many large mines, small-scale mining is synonymous with illegal mining. Small-scale miners often accuse large-scale mining companies of tying tracts of land with speculative mineral rights, denying their rightful access to mineral resources"[23]. However, careful cooperation between large and small mines can enhance the activities of the latter and the credibility of the former.

The large-scale mining companies can play a pro-active and crucial role in developing win-win situations for all parties concerned. An example of such a measure has been to develop training and employment opportunities for small-scale mining and quarrying workers within the activities of large-scale mining activities[24].

"In many cases, small-scale mining areas are found within large mining concessions granted to big international companies or their local affiliates under different sorts of co-sharing and ownership agreement. Big companies has by necessity started to come in terms with small-scale mines by developing partnership and community relations strategies wherein mutually beneficial agreements are sought to ensure peaceful coexistence. These arrangements include delineation of the concession to a particular area where the small-scale mines can operate as well as provide social development and extension projects and benefits ranging from health care to educational support"[25].

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[19] ILO/IPEC-ILO/SECTOR. 2004. *Action against child labour in small-scale mining & quarrying: A thematic evaluation*. Geneva.
[20] ILO/IPEC-ILO/SECTOR. 2004. *Action against child labour in small-scale mining & quarrying: A thematic evaluation.* Geneva, p. 41
[21] Presentation d'Souza, 29th of April 2004. Washington DC, USA.
[22] ILO/IPEC-ILO/SECTOR. 2004. *Action against child labour in small-scale mining & quarrying: A thematic evaluation.* Geneva.
[23] ILO. 1999. *Social and labour issues in small-scale mines.* Geneva, p. 87.
[24] ILO-IPEC ASIADEV. 2003. *In Search for the Pot of Gold: A Case Study of the Experiences of the ILO-IPEC Program on the Elimination of Child Labour in Small Mining Communities in the Province of Camarines Norte, Philippines.*
[25] ILO-IPEC ASIADEV. 2003. *In Search for the Pot of Gold: A Case Study of the Experiences of the ILO-IPEC Program on the Elimination of Child Labour in Small Mining Communities in the Province of Camarines Norte, Philippines,* p. 2.

The downturn of large mining operations in the late 1970's and 1980's has in many countries resulted in a rapid increase of small-scale mining as a sub-industry of large-scale mining (for more information see Box 2. on Bolivia).

Box 2: The Bolivian "relocalización"

Bolivia has traditionally been considered as a mining country. From the Colonial period the mining activity has been permanent and significant as much for the economic life as for the country's social and political life. But, the mineral operation has also been synonymous to hard and dangerous work of great risks and sacrifices for the miners and their families. In this context, the work of children and adolescents is not a new phenomenon. Nevertheless, in the middle of the 1980's, structural changes gave a new dimension to the mining sector. The international tin crisis and the implementation of a new economic policy gave rise to the closing of the mines that were administrated by the state through the Mining Corporation of Bolivia (Comibol). This signified a massive dismissal of approximately 30,000 mining workers (80% of the manual labour in the national mining (nacionalizada), in a process that was known as "relocalización". The "relocalización" dramatically changed the lives of the mining workers. When losing their sources of work, many turned to the small-scale and cooperative mining sectors, were dedicated to reprocess the tails (mineral remainders) of the few state companies who continued working, or formed cooperatives to operate rented deposits.

Source: IPEC/SIRTI/UNICEF. 2004. Buscando la luz al final del túnel: Niños, niñas y adolescentes que trabajan en la minería artesenal en Bolivia.

1.6 Economic importance of small-scale mining

In the countries where small-scale mining and quarrying exists, its economic and social impact is often important. In Nepal, for example, most of the mines and quarries are of small-scale, but they make a substantial contribution to the economy and the social development of the nation[26]. In Tanzania, gold and diamonds, often exploited in small-scale mines, make up the largest contribution to the mineral exports[27]. Also in Bolivia mining is one of the more important economic activities corresponding to about 40% of the country's foreign currency income coming from exportation. Thirty-two per cent of the mining exports and 85% of the total employment generated by the sector come from mining cooperatives and other small-scale mines, which are sustained by the participation of all family members, including children and adolescents[28].

1.7 Roles and tasks of child workers in mining

Children are working in a wide range of activities related to the whole production line of small-scale mining and quarrying. It covers tasks from cooking and cleaning to the extraction of ore underground and on the surface, its transport and separation and subsequent metal production. Children are often required to do the same work as adult workers[29]:

[26] Aryal, B.R. *et al.* 2005. *Child labour in the mines of Nepal* (Draft report submitted to ILO/IPEC). Lainchuar, Kathmandu, Department of Mines and Geology (DMG).
[27] Mwami, J.A.; Sanga, A.J.; Nyoni, J. 2002. *Child labour in mining: A rapid assessment*, p. viii. Geneva, ILO.
[28] IPEC/ SIRTI/ UNICEF. 2004. *Buscando la luz al final del túnel: Niños, niñas yadolescentes que trabajan en la minería artesenal en Bolivia.*
[29] The list is partly drawn from: IPEC. 2004. *Action against child labour in small-scale mining & quarrying: A thematic evaluation.* Geneva.

In underground mining operations (e.g. in Colombia[30], Niger[31] and Peru[32]) they work in:

- ore extraction (by hammer and chisel, with pick and shovel, etc.);
- assistant in drilling;
- hauling ore on their backs;
- pushing carts;
- cleaning galleries;
- piling up of ore;
- removing water from the mines.

In open cast mines (e.g. in Nepal[33]) in:

- digging pits;
- removal of overburden;
- pushing carts.

In alluvial (river) mining (e.g. in Bolivia[34], Colombia[35], Mongolia[36], Senegal[37] and Tanzania[38]) in:

- digging for sediments;
- assisting in diving for sediments;
- sieving ore and sediments;
- washing and drying of product;
- pushing carts and transporting the sediment.

In mineral concentration and stone crushing (e.g. in Nepal[39], Peru[40] and Tanzania[41]) in:

- piling up of ore, crushed stones or rejects;
- milling of ore;
- carrying stones from the mine or the river;
- crushing rocks;
- picking of gemstones;
- washing gold;
- amalgamating gold and burning of amalgam;
- fetching water for processing the ore.

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[30] ILO/IPEC & MINERCOL. 2001. *The boys and girls who work in Colombia's small-scale mining: Socio-cultural economic and legislative diagnosis.*
[31] Alfa, S. *Child labour in small-scale mines in Niger.* In Jennings, N.S. (ed.) 1999. *Child labour in small-scale mining: Examples from Niger, Peru & Philippines.* Geneva, ILO.
[32] Martinez-Castilla, Z. *Child labour in traditional mining: Mollehuaca, Peru.* In Jennings, N.S. (ed.) 1999. *Child labour in small-scale mining: Examples from Niger, Peru & Philippines.* Geneva, ILO.
[33] Aryal, B.R. *et al.* 2005. *Child labour in the mines of Nepal* (Draft report submitted to ILO/IPEC). Lainchuar, Kathmandu, Department of Mines and Geology (DMG).
[34] IPEC/ SIRTI/ UNICEF. 2004. *Buscando la luz al final del túnel: Niños, niñas y adolescentes que trabajan en la minería artesenal en Bolivia.*
[35] ILO/IPEC & MINERCOL. 2001. *The boys and girls who work in Colombia's small-scale mining: Socio-cultural economic and legislative diagnosis.*
[36] Mongolmaa, N. IPEC Mongolia. Undated. *Child labour in the small-scale mining.*
[37] ILO/CEGID. 2003. *Le travail des enfants dans l'orpaillage, les carrières et l'exploitation du sel.*
[38] Mwami, J.A.; Sanga, A.J.; Nyoni, J. 2002. *Child labour in mining: A rapid assessment*, p. viii. Geneva, ILO.
[39] Aryal, B.R. *et al.* 2005. *Child labour in the mines of Nepal* (Draft report submitted to ILO/IPEC). Lainchuar, Kathmandu, Department of Mines and Geology (DMG).
[40] Martinez-Castilla, Z. *Child labour in traditional mining: Mollehuaca, Peru.* In Jennings, N.S. (ed.) 1999. *Child labour in small-scale mining: Examples from Niger, Peru & Philippines.* Geneva, ILO.
[41] Mwami, J.A.; Sanga, A.J.; Nyoni, J. 2002. *Child labour in mining: A rapid assessment*, p. viii. Geneva, ILO.

In clay extraction and brick making (e.g. in Colombia[42]) in:

- drying of green bricks;
- turning over the green bricks so they dry evenly;
- stacking bricks in drying sheds;
- transporting and carrying of green and fired bricks;
- stacking and unloading kilns;
- removing the clay and preparing it with water;
- loading and unloading the ovens;
- grinding;
- firing bricks.

In mining-related environment and in the household (e.g. in Mongolia[43], the Philippines[44] and Tanzania[45]) in:

- preparation and provision of food for the miners;
- washing clothes;
- working in the household;
- selling food;
- fetching drinking water and food to worksite;
- attending in bars and restaurants;
- fetching fire wood;
- cleaning of bars, restaurants, houses.

In addition, mining camps are often rough places in which to work and live. Some children are engaged in prostitution and there are also confronted by problems related to alcohol and drug abuse, and violence. So mining small-scale mining also involves aspects of the unconditional worst forms of child labour.

Box 3: A typical working child in mining

A "typical" child worker in small-scale mining is a boy or a girl aged 10-15, mainly working above ground, in a family group, digging, crushing or grinding ore, or transporting it in sacks weighing 10-25 kg over distance up to 600 meters. He/she uses adult-size tools (bar, pick, hammer, shovel) and is most unlikely to use any proper protective equipment. He/she receives no direct pay, rather he/she contributes to the expanded earnings of his/her family. If he/she goes to school (unlikely if he/she is over 12 years old) he/she works two to three hours a day after school and all day at the weekends and during vacations. If he/she does not go to school he/she is more likely to work independently of his/her family, doing whatever he/she is told to do with little or no concession to his/her age. If he/she is involved in the processing of gold-bearing ore, he/she is likely to show signs of mercury poisoning. He/she is likely to have respiratory problems, skin disorders and musculo-skeletal problems no matter what sort of mining he/she is involved in.

Source: Drawn from Jennings, N.S. (ed.) 1999. Child labour in small-scale mining: Examples from Niger, Peru & Philippines. *Geneva, ILO. (The original text describes a boy (Author's note).).*

[42] ILO/IPEC & MINERCOL. 2001. *The boys and girls who work in Colombia's small-scale mining: Socio-cultural economic and legislative diagnosis.*
[43] Mongolmaa, N. IPEC Mongolia. Undated. *Child labour in the small-scale mining.*
[44] Año, D.E.F. *A cursory assessment study on the situation of child labour in the quarrying industry.* (First draft for discussion purposes only).
[45] Mwami, J.A.; Sanga, A.J.; Nyoni, J. 2002. *Child labour in mining: A rapid assessment*, p. viii. Geneva, ILO.

1.8 Gender aspects

The proportion of boys and girls working in mining and quarrying activities is sometimes similar. In Nepal for example, where an estimated 32,000 children work in stone quarrying, girls and boys make up about 50% each. These girls and boys perform the same kind of work at the quarrying sites, but the work burden for girls is often bigger because in addition of the mine and quarrying work, girls also do housework[46]. Additionally, the considerable number of girls who are involved in various activities related to small-scale mining and quarrying around the world have the added problem of being more likely to be targets of abuse, such as sexual exploitation.

In Mongolia, a majority of the children working in informal gold-mining communities are boys. However, among the working children who are below the age of 13, the number of girls is larger than the number of boys. The reasons why girls start working earlier may be related to the type of work they undertake. As said above, girls are often working in the household and/or in services related to the mining activities, work that is often accepted and even expected by their parents[47]. In a sample of child labourers in small-scale mines in Colombia, more than half were males (61%). It is interesting to note though that while the majority of children are between 14-17 years of age (37.7%) the greatest concentration among the girls was between 8-11 years of age (33.4%)[48].

In some mining communities on the other hand, mining is considered an activity for men and thus there are fewer girls involved in child labour in the mining sector as compared to boys. According to a study of three mining sites in Tanzania, 19.7% of the child labourers are girls while 80.3% are boys. This imbalance is also explained by "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"[49]. Also in the mining communities in the province of Camarines Norte in the Philippines, there are fewer girls involved in the gold mining activities, with 88% of the child labourers being male[50].

It is interesting to note that there are differences between boys and girls as regards payment for the work they perform in mines in quarries. An illustrative example in this aspect is Colombia. Despite the time that the Colombian children spend in different mining activities, almost 60% receive no payment, 6% are paid in kind and only 34% are paid in money. There are important differences between boys and girls though. "While 40% of the boys are paid in money, only 29.3% of the girls receive this type of income". However, the proportion of both boys and girls that are not paid decreases with the age[51].

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[46] Personal Communication with Uddhav Poudyal. Geneva, April 2005.
[47] ILO-IPEC. 2004. *The informal gold mining sub-sector in Mongolia: A comprehensive sector based project to prevent and eliminate child labour and improve the situation of informal gold miners.*
[48] ILO/IPEC & MINERCOL. 2001. *The boys and girls who work in Colombia's small-scale mining: Socio-cultural economic and legislative diagnosis.*
[49] Mwami, J.A.; Sanga, A.J.; Nyoni, J. 2002. *Child labour in mining: A rapid assessment*, p. viii. Geneva, ILO, p. 27.
[50] ILO-IPEC ASIADEV. 2003. *In search for the pot of gold: A case study of the experiences of the ILO-IPEC Program on the Elimination of Child Labour in Small Mining Communities in the Province of Camarines Norte, Philippines.*
[51] ILO/IPEC & MINERCOL. 2001. *The boys and girls who work in Colombia's small-scale mining: Socio-cultural economic and legislative diagnosis,* p. 51.

2. Main issues

2.1 Occupational safety & health

Mining is one of the three most dangerous occupations to work in along with agriculture and construction. Child labourers in mining are at risk of being killed, severely injured, or suffering serious work-related health problems. Many of the injuries and health problems may result in permanent disability. Ill health problems may not become apparent until the child worker is an adult. Because their bodies and minds are growing and developing, child labourers have an even greater risk of being injured or falling ill than adult workers.

Box 4: Safety and health problems for child labourers in mining and quarrying

Some children start working in mines and quarries at an early age, often alongside their older family members. Like adults, they can face many kinds of dangers to their own safety and health from working in such environments, but the effects of injuries and ill-health on children can be even greater than those on adults.

Children may not realize the dangers they face because of their lack of emotional as well as physical maturity and general work experience. They may be under pressure to work harder than they are physically capable of doing. Working in mines or quarries above ground, they face dangers from such tasks as:

- carrying heavy loads of rocks and stones – leading to back pain, spinal deformity and other musculo-skeletal disorders, quite apart from sheer tiredness;
- breaking up rocks and stones in quarries using chisels and hammers – leading to eye injuries and cuts to and hardening of the hands and forearms;
- using toxic chemicals such as mercury to extract gold from rock, and
- working near machinery and site vehicles, leading to potentially severe injuries or fatalities.

These workplaces are often in remote and inhospitable environments where there is poor sanitation and no access to clean drinking water, and it is necessary to work long hours in the open with little protection from the sun. Moreover, there are often no first aid or medical facilities nearby to help stem the effects of any injuries that do occur.

Working in underground mines, on the other hand, can mean being winched down long vertical shafts on single ropes, crawling along tunnels not much wider than the body and working in cramped conditions in poor air quality. Children in underground mines face specific dangers such as:

- tunnel collapses or rock falls – and children have less strength compared to adults to break themselves free,
- fire and explosion, especially from coalmines, and
- excessive amounts of dust, such as silica, resulting in chronic breathing problems and eventually in lung diseases such as silicosis.

Mines and quarries are hostile environments and working in them is dangerous, especially for children.

A study of the situation of child labourers that perform mine work in Bolivia describes the dangerous working conditions related to mining activities in small-scale mines in the informal sector. Child labourers involved in mining activities are exposed to great risks of accidents or of contracting serious diseases. In the work inside the mine accidents related to the manipulation of explosive charges and blasting are frequent. After an explosion the workers are exposed to toxic gas because of a lack of ventilation in the mining pit. Another risk is the diminution or loss of hearing caused by the noise of the explosions. Prolonged work in uncomfortable positions in narrow caverns and the manipulation of loads of excessive weights are also a frequent cause of health problems, especially for muscles and

bones. In addition, the handling of heavy machinery includes a risk[52]. Even if this particular study was carried out in Bolivia, the elements are recurrent in documentation from numerous other countries.

Interviews with 220 boys and girls working in mines in Nepal showed that the frequency of injury there is very high. Fifty-nine per cent of these child workers answered that they get injured very frequently, frequently or occasionally[53].

A study carried out in three mining districts in Tanzania showed that children are involved in a number of activities and tasks which are carried out under various physical and climatic conditions. In general, children work for long hours and hardly have time to play or rest. They 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. Children often work under direct sunshine and are thus exposed to high temperatures. A positive exception was one mining site, where the children involved in gold recovery by amalgamating gold with mercury undertake their activities under shelters provided by their employers[54].

In gold mining, children are exposed to mercury often used in an indiscriminate way in the amalgamation process to separate the gold from the ore[55]. In the traditional gold mining site in Mollehuaca, Peru many young mineworkers show mercury contamination in their blood and hair. In a study from 1996, the average mercury concentration in the workplaces was almost eight times higher than the maximum established by Peruvian law (0.01mg/m3). It is interesting to note that in Mollehuaca, over 90% of the population was aware of the risks of mine work to their health, but the children consider they have a responsibility to help sustain the family[56]. Workers exposed to mercury can be poisoned resulting in gastrointestinal, hepatic and renal damage, and/or suffer long-term health effects which include permanent damage to the nervous system[57].

The hazards to which child labourers are exposed when involved in various mining activities, from the preparatory activities such as digging, excavating and hauling, to the processing of ores, were also described in a case study of the experiences of the ILO-IPEC Program on the Elimination of Child Labour in small-scale mining communities in the province of Camairnes Norte, Philippines. This study demonstrated the huge risks to which the mineworkers are exposed. Due to the extremely dangerous underground work, poor working conditions, exposure to toxic substances and dust and lack of protective equipment and very limited access to welfare health and safety facilities, the workers often develop health problems. Interesting to note is that the results of this study served as input in the development of information and advocacy materials on the hazards faced by children[58].

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[52] IPEC/ SIRTI/ UNICEF. 2004. *Buscando la luz al final del túnel: Niños, niñas y adolescentes que trabajan en la minería artesenal en Bolivia.*

[53] Aryal, B.R. *et al.* 2005. *Child labour in the mines of Nepal* (Draft report submitted to ILO/IPEC). Lainchuar, Kathmandu, Department of Mines and Geology (DMG).

[54] Mwami, J.A.; Sanga, A.J.; Nyoni, J. 2002. *Child labour in mining: A rapid assessment*, p. viii. Geneva, ILO.

[55] See, for example, Mwami, J.A.; Sanga, A.J.; Nyoni, J. 2002. *Child labour in mining: A rapid assessment*, p. viii. Geneva, ILO; and ILO-IPEC ASIADEV. 2003. *In search for the pot of gold: A case study of the experiences of the ILO-IPEC Program on the Elimination of Child Labour in Small Mining Communities in the Province of Camarines Norte, Philippines.*

[56] Martinez-Castilla, Z. *Child labour in traditional mining: Mollehuaca, Peru.* In Jennings, N.S. (ed.) 1999. *Child labour in small-scale mining: Examples from Niger, Peru & Philippines.* Geneva, ILO.

[57] Dreisbach, R. Handbook of Poisoning. Lange Medical Book, USA, 1987, 12th Ed., pp 238-242.

[58] ILO-IPEC ASIADEV. 2003. *In search for the pot of gold: A case study of the experiences of the ILO-IPEC Program on the Elimination of Child Labour in Small Mining Communities in the Province of Camarines Norte, Philippines.*

2.2 Impact of the living environment/ social problems

Apart from the hazards and risks linked to the mining activities, children in mining are also exposed to a general mining environment with extreme and harsh living conditions and degraded value systems. In addition, social problems such as prostitution and gambling can be linked to small-scale mining areas particularly in times when significant find or harvests are made creating a "gold-rush"[59]. These gold-rush situations (see box 5) are characterized by rapid migration creating unstable communities which are prone to conflict. Typical for these communities is an extremely unstable, unsafe, and unsettled social situation with nearly no social infrastructure for children[60].

Box 5: Gold-rush mining

In the case of gold-rush mining, the location of activities shifts from one place to another regularly. The sites can be mined from established communities nearby or from makeshift locations where the miners and their families live until the site is considered to be emptied and it is time to move to another location. In gold-rush areas, people can migrate from far away places after the lure of gold and move from one known mineral deposit to another based on rumours of gold. Child labour is more likely to be found in gold-rush areas where the settlements are organized on small-scale mining as an occupation, than in indigenous areas where gold mining is an added source of income.

Sometimes the two cases can be intertwined where indigenous communities face pressure of outside migration for the particular purpose of small-scale mining in their areas. In these cases there is a real danger of violent clashes between the parties.

Source: Drawn from: ILO-IPEC ASIADEV. 2003. In search for the pot of gold: A case study of the experiences of the ILO-IPEC Program on the Elimination of Child Labour in Small Mining Communities in the Province of Camarines Norte, Philippines.

Access to health care and other social security services is difficult or non-existent in many small-scale mining and quarrying communities. Among other things this can be explained by their remote locations, informal characteristics and lack of economic resources. A study of some mining communities in Niger shows that when an accident or illness occurs or when a worker gets ill, he or she is often not taken to a medical centre, but is sent home to the family to recover. To get well, the patient either rests, or undergoes traditional treatment practices. The pay-for-treatment system in operation at a medical centre with a policy to recover health care costs, represents a disincentive for patients to visit the centre[61]. A study in Nepal shows that out of 220 children working in mines and quarries, almost 40% do not go to a health centre when they get sick. One reason for this may be the distance to the hospital or health centre from the place of residence: it was found that 61% of the child labourers had to walk more than 45 minutes to reach the nearest hospital or health centre. The cost of the hospital or health centre visit may also be a reason to why the children do not go their[62].

In a study of some mining sites in Tanzania, some of the most common health hazards affecting the children (diarrhoea and dysentery) can be attributed to their living conditions, the major source of water being a river where people bathed and washed and thus made the drinking water unsafe. In addition, the alluvial sediments that contain mercury contaminate the water resources in the villages is

[59] ILO-IPEC ASIADEV. 2003. *In Search for the Pot of Gold: A Case Study of the Experiences of the ILO-IPEC Program on the Elimination of Child Labour in Small Mining Communities in the Province of Camarines Norte, Philippines.*
[60] ILO/IPEC-ILO/SECTOR. 2004. *Action against child labour in small-scale mining & quarrying: A thematic evaluation.* Geneva.
[61] Alfa, S. *Child labour in small-scale mines in Niger.* In Jennings, N.S. (ed.) 1999. *Child labour in small-scale mining: Examples from Niger, Peru & Philippines.* Geneva, ILO.
[62] Aryal, B.R. et al. 2005. *Child labour in the mines of Nepal* (Draft report submitted to ILO/IPEC). Lainchuar, Kathmandu, Department of Mines and Geology (DMG).

an environmental problem that could cause debilitating health problems for the whole village population[63].

The following table shows the hazards present in the living environment surrounding small-scale mines and quarries and their possible health consequences for the populations of mining and quarrying communities.

Table 1: Hazards and risks in the general mining environment

Hazards/risks in the living environment	Possible consequences
Exposure to: • subhuman living conditions (lacking sanitation, drinking water, extreme geographical and climatic locations); • complicated dependency relations; • degrading social environment (criminality, prostitution); • exposure to STD, AIDS, etc.; • inequality between men and women (men dispose of economic resources); erosion of family and social structure; • violent behaviour towards child workers; • violent conflicts among miners and with surrounding communities; • lack of law and order.	• Deterioration of ethical value system; • injuries or death due to crime or violence; • omission of schooling and education; • vulnerability to diseases due to lack of hygiene and sanitation; • exacerbation of injuries and illnesses due to lack of health services.

2.3 Regulatory aspects of small-scale mining and quarrying

Many of the problems related to small-scale mining in general and child labour in mining in particular, are linked to the fact that mining activities often take place in the informal sector and in remote areas. Coupled with the mobility of the mining operations, this makes it a difficult sub-sector to bring under administrative control in terms of occupational health, environmental protection or tax collection (see Box 4 on the regulatory framework for small-scale mines in Niger, and how many of these mines stand outside the umbrella of the law, lacking labour inspections). In addition, the use of child labour in mining is strongly linked to the poverty that reigns in the remote mining districts where other forms of occupations are hard to find. Much of this informal small-scale mining is isolated from the mainstream of economic development, which in turn contributes to its legal isolation, preventing it from becoming a recognized economic activity with wide benefits to the people concerned, their region and the country as a whole[64].

[63] Mwami, J.A.; Sanga, A.J.; Nyoni, J. 2002. *Child labour in mining: A rapid assessment*, p. viii. Geneva, ILO.
[64] ILO. 1999. *Social and labour issues in small-scale mines.* Geneva.

Box 6: Regulatory framework for small-scale mines in Niger

In legal terms, no operations can be carried out without an artisanal operations authorization, an operations permit (small-scale mining) or an authorization to open and operate a known quarry (specified under articles 9, 15, 32, 45 and 71 of the "Mining Law" ordinance, number 93-16 and dated 2 March 1993).

In addition to the Mines administration, which considers the applications for authorizations and permits, each department has a management team whose task, among others, is to supervise and oversee mining activities. It also gives the worker advice and directives. Teams at the department and arrondissement (administrative district) level lead the task of supervising and overseeing the sites and advising workers. However, most artisanal operations are carried out without authorization.

Given the miserable situation in which many people live, the Administration has turned a blind eye to these activities.

As to the overview of the trona mining in Birni Ngaouré in the Boboye region, and the salt-mining sites in Tounouga, Foga there are no specific legal provisions or regulations protecting workers against the risks involved in trona production (sold as animal feed) nor in the salt mining. A lack of funding has prevented mines inspectors from visiting the sites in Birni Ngaouré for nearly ten years. Workers at the trona and salt-mining sites have no group or individual protective equipment. As in the country's other informal sectors, there are no initial or periodic medical examinations; neither is there any social security cover.

Source: Drawn from: Alfa, S. Child labour in small-scale mines in Niger. *In Jennings, N.S. (ed.) 1999.* Child labour in small-scale mining: Examples from Niger, Peru & Philippines. *Geneva, ILO.*

2.4 Poverty and other causes of child labour in mining and quarrying

At the macro-level small-scale mining and quarrying has certainly not reached its full potential what regards output. The productivity of small-scale mines and quarries are lower than they could be. Among other things, the economic hardship is due to the use of primitive technologies and the fact that miners cannot always operate throughout the year (in Nepal, for example, they only operate for about six to eight months as the mining work stops during the rainy season)[65]. Moreover, returns to national economies economy could probably be greater if effective tax, purchase, pricing and foreign exchange regimes were in place and implemented[66].

Poverty is one of the main causes of child labour in mining. In a study of three mining sites in Tanzania, poverty was explained to be the main reason for children to engage in child labour. This was mentioned both by parents and children in interviews and focus group discussions at the mining sites. Children were expected to work to help their parents provide for their families[67].

A survey carried out in Nepal showed that social discrimination, poor economical status and lack of compulsory education are the major causes that force families, and their children into mine work. Sixty per cent of the child labourers in the survey come from underprivileged Janajati and Dalits castes. These children also start to work at a younger age[68].

Also in Colombia, poverty related reasons have shown to be the main causes for children to work in mining activities. The family's difficult economic situation was the primary reason that most of the

[65] Aryal, B.R. *et al.* 2005. *Child labour in the mines of Nepal* (Draft report submitted to ILO/IPEC). Lainchuar, Kathmandu, Department of Mines and Geology (DMG).
[66] ILO. 1999. *Social and labour issues in small-scale mines.* Geneva.
[67] Mwami, J.A.; Sanga, A.J.; Nyoni, J. 2002. *Child labour in mining: A rapid assessment*, p. viii. Geneva, ILO.
[68] Aryal, B.R. *et al.* 2005. *Child labour in the mines of Nepal* (Draft report submitted to ILO/IPEC). Lainchuar, Kathmandu, Department of Mines and Geology (DMG).

children (47.3%) resorted to working in the mines, and a requirement to help with household expenses was the second reason (15.7%).

Nevertheless, as shown in Table 1 below, the problem with child labour in mining contains many different explanations. For example, the third reason put forward by the 1,580 children surveyed in Colombia was that they work because they like to have their own money (13.7%), and the fourth reason given by the children was that the work forms and makes him/her an honest person.

Table 2: Reasons for working in mining by sex and age (Colombia)

All children	Males					Females					Total all
	Age – years				Total	Age - years				Total	
	5-7	8-11	12-13	14-17		5-7	8-11	12-13	14-17		
	%	%	%	%	%	%	%	%	%	%	%
a) The family's difficult economical situation	41.1	48.3	45.7	45.8	45.9	51.3	49.2	47.8	50.0	49.6	47.3
b) Must pay his/her schooling	2.4	4.3	6.6	6.5	5.3	2.3	5.7	3.8	4.7	4.4	5.0
c) Must help with household expenses	12.5	14.0	16.2	19.2	16.2	14.2	13.2	15.5	16.3	14.8	15.7
d) Work forms and makes him/her an honest person	18.8	14.7	9.2	8.9	12.0	14.2	13.5	13.7	10.5	12.7	12.3
e) It separates him/her from bad habits	9.8	5.7	4.0	3.6	5.1	5.3	4.9	4.8	4.0	4.8	5.0
f) Likes to work in order to have hi/her own money	12.2	12.1	17.7	15.8	14.6	9.9	11.9	13.9	13.6	12.4	13.7
g) Other reasons	3.1	1.0	0.6	0.2	0.9	2.9	1.6	0.4	0.9	1.3	1.1

Source: ILO/IPEC & MINERCOL. 2001. The boys and girls who work in Colombia's small-scale mining: Socio-cultural economic and legislative diagnosis.

The example of Colombia illustrates that poverty is only one of many reasons behind child labour in mining and quarrying. Many different social and psychological aspects tend to favour the insertion of children into the work.

For example, the high prevalence of child labour in many countries is among other things due to the fact that child work is often considered part of the socialisation process. In addition, as regards underground work in the small-scale mines, it can be "useful" to engage children for work in narrow passages.

In general, in the mining communities of Bolivia, Ecuador and Peru, the population regards boys over 14 as fit to work with the adults. On the other hand, they perceive that the pallaqueo activities (consists of recuperating the gold remains not captured by the miners) performed by boys and girls are not real work but rather a help for themselves and their families[69]. Also in Colombia, because of the informal character of the small-scale mining, the work done by children tends to be considered as "help" and not as work, in the same way as other activities done by children are not valued by their parents as work (caring for animals, woodcutting, farming activities, caring for younger siblings, housework etc).

[69] IPEC Evaluation. March 2005. *Program for the prevention and progressive elimination of child labour in small-scale traditional gold mining in South America: Phase II.*

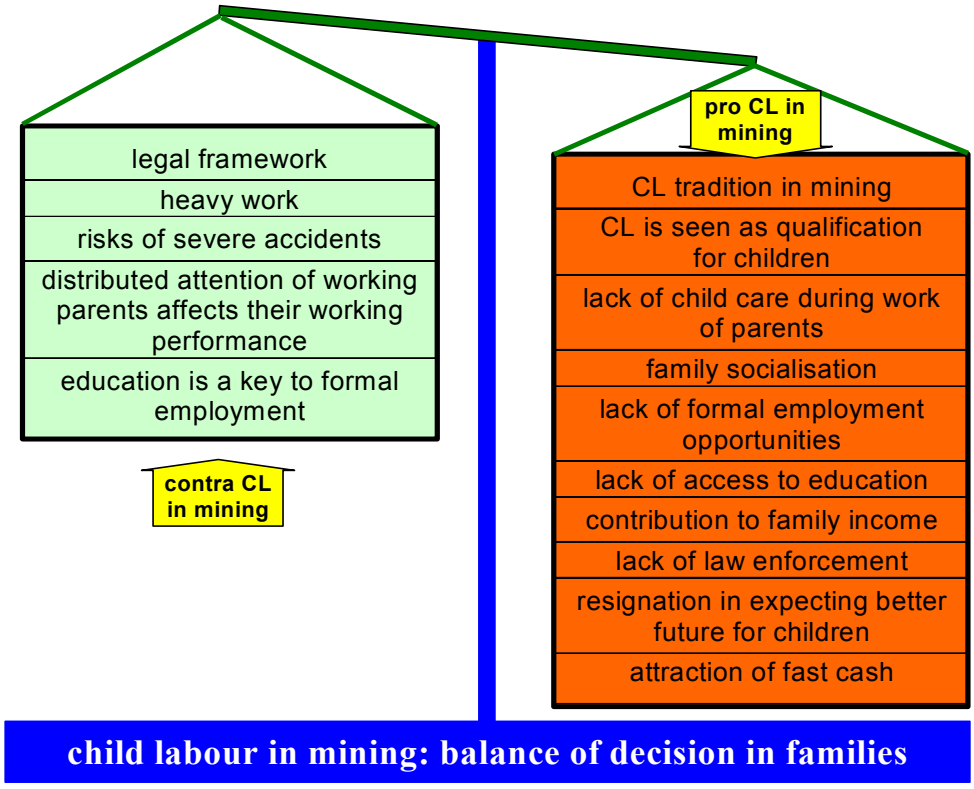
One step in the elimination in mining and quarrying is thus the parents' recognition that the work performed by their children is real work[70].

Typical for small-scale mining and quarrying is that the whole family is involved in the working process. The working children's contribution to their families both as regards work performed and income is often important. However, many children in mining and quarrying do not get any remuneration for their work they only receive basic sustenance (in-kind payment). Besides, when they do receive payment for their work, the wages of children are normally inferior to the wages of adults.

In a Bolivian study it was shown that even if only half of the small-scale mining workers under the age of 19 receive remuneration for their work, their contribution to the household is important. In general the children contribute with 14% of the household's total income, with 20% of the remunerated working hours and 69% of the non-remunerated working hours[71].

The figure below shows the trade-offs that families face when deciding to employ children in mining and quarrying.

Figure 2: Balance of decision in families



Source: ILO/IPEC-ILO/SECTOR. 2004. Action against child labour in small-scale mining & quarrying: A thematic evaluation. *Geneva.*

[70] ILO/IPEC & MINERCOL. 2001. *The boys and girls who work in Colombia's small-scale mining: Socio-cultural economic and legislative diagnosis.*

[71] IPEC/ SIRTI/ UNICEF. 2004. *Buscando la luz al final del túnel: Niños, niñas y adolescentes que trabajan en la minería artesenal en Bolivia.*

2.5 Neglect of education

Small-scale mining and quarrying districts often suffer from high school dropouts because of the work of children. Families face a dilemma of their children's earning versus learning. Miners can seldom afford education and children are sent to work because the children's contribution is perceived to be essential for family survival. No or difficult access to good and adequate education, especially secondary education, is also common and children with no access to education have little alternative but to enter the labour market.

In the Tanzanian study, poverty was explained as the main reason for primary school dropouts. Almost 16% of the children had to drop out of school due to lack of resources and because their families' could not provide for their educational needs. At the mining sites almost 70% of the children working in the mines were forced to stop their studies even if they were only in primary school. This was explained to be the only way to raise money for their educational expenses[72].

Primary schools in this Tanzanian mining area were characterized by poor facilities, such as lack of classrooms, desks, textbooks and other necessary teaching equipment. In addition, not many of the children had access to secondary education. Thirteen per cent of the children working at the three mining sites had completed their primary education, but were not selected to join governmental secondary schools. In one village, between 1990 and 1997 only two students were selected to join secondary education, which was discouraging for the children and parents. Indeed, discussions with the children revealed that they were forced into working in the mines because the lack of alternatives and opportunities for further training. In addition, the nature of the primary education does not equip the pupils in the mining areas with skills that are directly useful to them when finishing their primary education[73].

A majority of the surveyed Nepali children working in mines and quarries start to work before the age of 14 years, and 11% start before 8 years. This illustrates that during the age of the children's primary to lower secondary education they are already working. Either they combine the work with school, or they have completely dropped out of school[74].

On the other hand, poverty and lack of facilities are not the only reasons why parents send their children to work instead of school. The fact that child work is often considered part of the socialisation process result in a high prevalence of child labour instead of schooling in many countries.

The parents tend to consider their children's work as a social asset. In for example Colombia, mining is and old activity, inherited from one generation to the next, where the son learns the only work his father has known and the only one in the family's history. A majority of the family run mines have been configured by their own working dynamics which has structured solid social and cultural patterns and legitimised the division of work based on age and gender, accepting the presence of children in the mines. The well-rooted traditions tend to consolidate values that justify and rationalize the formative value that parents attribute to child labour in the mines. In this context it is interesting to note that out of 1341 boys and girls working in small-scale mining in Colombia, over 85% say that their own families have trained them for the mining work[75].

The concept of free time and recreation is almost absent from the daily lives of the children working in mining and quarrying. When interviewing child labourers working in mining in Colombia about leisure time activities, some answered that they did homework, went to work at the mine, helped in

[72] Mwami, J.A.; Sanga, A.J.; Nyoni, J. 2002. *Child labour in mining: A rapid assessment*, p. viii. Geneva, ILO.
[73] Mwami, J.A.; Sanga, A.J.; Nyoni, J. 2002. *Child labour in mining: A rapid assessment*, p. viii. Geneva, ILO.
[74] Aryal, B.R. et al. 2005. *Child labour in the mines of Nepal* (Draft report submitted to ILO/IPEC). Lainchuar, Kathmandu, Department of Mines and Geology (DMG).
[75] ILO/IPEC & MINERCOL. 2001. *The boys and girls who work in Colombia's small-scale mining: Socio-cultural economic and legislative diagnosis.*

domestic chores or went to look for work. The children who dedicated their leisure time to more "playful" activities said that in their free time they watched television, rode bicycle, played with toy cars, or played soccer or basketball. Interesting to note is that the girls associated the concept of free time with domestic tasks[76].

[76] ILO/IPEC & MINERCOL. 2001. *The boys and girls who work in Colombia's small-scale mining: Socio-cultural economic and legislative diagnosis.*

3. International standards

Almost all work performed by children in mining and quarrying is hazardous and considered to be one of the worst forms of child labour, defined by the Worst Forms of Child Labour Convention, 1999 (No. 182). The worst forms of child labour comprises, inter alia, work which, by its nature or the circumstances in which it is carried out, is likely to harm the health, safety and morals of children. As to April 2005, 153 of the ILO's 178 member States had ratified this Convention. Each Member which ratifies Convention No. 182 must take immediate and effective measures to secure the prohibition and elimination of the worst forms of child labour, for children under 18 years of age, as a matter of urgency.

The types of work to be classified as likely to harm the health, safety or morals of children is to be determined by national laws or regulations or by the competent authority, after consultation the organizations of employers and workers concerned. The Worst Forms of Child Labour Recommendation, 1999 (No. 190), which accompanies Convention No. 182, specifies that in determining what types of work that is hazardous, and in identifying where they exist, consideration should especially be given to:

- work which exposes children to physical, psychological or sexual abuse;
- work underground, under water, at dangerous heights or in confined spaces;
- work with dangerous machinery, equipment and tools, or which involves the manual handling or transport of heavy loads;
- work in an unhealthy environment which may, for example, expose children to hazardous substances, agents or processes, or to temperatures, noise levels, or vibration damaging to their health, and
- work under particularly difficult conditions such as work for long hours or during the night or where the child is unreasonably confined to the premises of the employer[77].

Convention No. 182 is relatively new, but it follows some points of the Minimum Age Convention, 1973 (No. 138). This Convention sets the general minimum age for admission to employment to 15 years or, in a member State whose economy and educational facilities are insufficiently developed, to 14 years. However, the minimum age for admission to any type of work which is likely to jeopardize the health, safety or morals of young persons shall not be less than 18 years. Convention No. 138 applies to all sectors, and is a revision of several earlier Conventions stipulating minimum ages for admission to work in different sectors. Among these the Minimum Age (Underground Work) Convention, 1965 (No. 123), which specifies that persons under the age of 16 years shall not work in underground in mines or quarries. Its accompanying Recommendation (No. 124 of 1965) suggests each country to specify jobs and conditions which are harmful to health or may endanger the safety of the worker, for which the minimum age should never be less than 18 years. Moreover, it recommends member States to progressively raise the minimum age for admission to employment and work underground, with a view of attaining 18 years.

In addition, the UN Convention of the Rights of the Child, which was adopted in 1989 and has been ratified by nearly all United Nation member States, includes the rights for children to be protected from hazardous work. In the Convention a child is defined as every human being below the age of eighteen. Children have the right to be protected from economic exploitation and from performing any work that is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral or social development. The Convention also recognizes the right of the child to education and requests State Parties to take measures to encourage regular attendance at schools and the reduction of dropout rates, which is a frequent problem among working children[78].

[77] Recommendation No. 190, paragraph 3(a-e).

[78] The full text of the Convention of the Rights of the Child is available at: http://www.unicef.org/crc/fulltext.htm.

4. Examples of successful IPEC projects on elimination in different countries

4.1 Gold mining in South America: 2,667 boys and girls withdrawn

One good example is the programme for the prevention and progressive elimination of child labour in small-scale traditional gold mining in South America, executed by IPEC with financial support of the United States Department of Labour (USDOL)[79]. This programme had regional, national and local components, and aimed at contributing to the elimination of child labour in small-scale mining in Bolivia, Ecuador and Peru.

In general, by applying a comprehensive strategy, the programme achieved to position within the countries an issue previously unknown, to generate flexible intervention models that can be adapted to any mining community, to build the NGO's capacities to tackle these issues, and to take important steps toward establishing a public policy aimed at eradicating child labour in small-scale mining (for example, all three countries have now ratified Convention No. 182).

The programme also made impact on the direct beneficiaries, their families and communities. In particular, it was able to withdraw 2,667 children from mining work and to prevent 5,845 children from entering it. It was not able to withdraw all the children from labour because some families in the mining communities were still in very vulnerable economic conditions and refused to withdraw their children despite the programme's efforts.

There were many successful intervention elements in the different mining communities, including:

- establishment or improvement of social services, such as education services for children and health services for all the population;
- improvement of the technology for mining exploitation and in the health conditions and job security;
- impulse to micro-enterprises for mothers/fathers of children that had been working in mining and generation of income-producing alternatives for women;
- creation and strengthening of grass-roots organizations, and
- impulse to a local development processes with the participation of various actors.

The program was able to encourage the development of interest groups and grass-root organizations. This organization process improved the social cohesion in the mining communities and established a feeling that change is possible. The communities' awareness and participation in the project showed to be key elements for lasting outcomes and for the acceptance of the project at a local level. The Action Programmes were able to carry out child labour monitoring activities with the participation of community members, who collected information on the children's work activities.

The enterprises' participation in the project was also an important factor for achieving the results. The monitoring procedures applied in Bella Rica and Santa Filomena, showed to be successful and inspired several other Action Programmes. In these mining communities, the mining cooperative or firm prohibited work for children under 18 and they now watch closely that children or teenagers are not hired.

The experiences from Bella Rica and Santa Filomena show that the greater the degree of formalization, the greater the possibilities for change in the mining communities. As expressed in the

[79] Source for this example: ILO-IPEC. 2005. *Final valuation: Program for the prevention and progressive elimination of child labour in small-scale traditional gold mining in South America, Phase II.* P.260.03.200.052 – RLA/02/P50/USA.

final evaluation of the project: "Formalization through the creation of regulations contributes to a better organization of the production activities and consequently of the mining communities, and this influences the capacity for change. Likewise, it enables the building of leadership in the communities and therefore the generation of authorities. Regulations and authorities acknowledged by everyone are key elements for any change process"[80].

4.2 Elimination of child labour in the Khejenim quartz mine, Nepal

Another example treats a much smaller but nevertheless successful project on the elimination of child labour in the Khejenim quartz mine in the district Taplejung situated in northern Nepal, where the 50 working children were withdrawn from the mine[81].

The following major programme objectives were obtained:

- **Remove children from employment in the mine**

- **Provide non-formal education for the children and place them in a formal education programme**

The children were provided non-formal education and placed in a formal school programme by assisting the community in construction of a school building and obtaining the recognition of the school by His Majesty's Government. A five membered local management committee was formed in order to enlist the participation of the community in providing non-formal education to children and establishing and running the school. In addition, the children were provided with mid-day meals under a supplementary nutritional programme.

- **Provide day-care services for the pre-school aged children**

Fifteen targeted pre-school children were provided day care services. A day care management committee was organized in order to run the centre systematically and a woman was hired and provided training as needed. As for the school aged children, supplementary nutrition was given as a mid-day meal. After the phase out of the project, the parents were responsible to manage this mid-day meal and the mining company was responsible to bear the salary of a facilitator.

- **Provide health education and care to the community**

Primary health services were provided by two trained persons to the mining community including the target children. A local health club was established in the village and two persons were trained for six months on basic primary health. Necessary medicines and medical equipments were purchased and handed over to the club by utilizing a revolving fund. During the six first months, the health workers had checked up about 500 people and had sold medicines amounting Rs. 4,000

- **Provide the parents of the children with functional education and opportunities for initiating income generating activities**

As part of the awareness raising on child labour and other issues 40 parents were provided functional education. Two facilitators were recruited and trained to run the programme. The participation of women appeared to be more satisfactory than that of men. Mothers of the targeted children assisted to undertake income-generating activities through the use of revolving fund. A two-day training was arranged and rules for fund management committee were prepared in order to manage the fund systematically. Five user groups were organised before operating the fund, which was distributed for one year. The users then had to pay the amount within one year. The fund was distributed for different

[80] ILO-IPEC. 2005. *Final valuation: Program for the prevention and progressive elimination of child labour in small-scale traditional gold mining in South America, Phase II.* P.260.03.200.052 – RLA/02/P50/USA, p. 33.
[81] Source for this example: ILO-IPEC. Final progress report for Action Programme No. 0907.336.052. From 1st of October 1996 to 31 July 1997.

purposes: pig raising (14 mothers/guardians), goat raising (10 mother/guardians), cardamom planting (5 mothers/guardians) and small shops (2 mothers/guardians).

4.3 Prevention and withdrawal of children from child labour in the TAMICO sector, Tanzania

In 1998 and 1999 IPEC TFTU (Tanzania Federation of Free Trade Unions) worked together in a project on the prevention and withdrawal from child labour in the Tanzanian Mining and Construction Sector (TAMICO)[82].

During the period August to October 1998, child labour activities in the two districts under the TAMICO sector were realized with some interesting achievements. About 90 parents, teachers, employers, local and religious leaders and children were sensitized on child labour problems in twelve mines in Tanzania. Seminars were held on the following subjects: 1) the reasons for child labour, 2) its negative consequences, 3) sustainable actions and measures to eliminate and prevent child labour, 4) roles of different social groups, individuals and society members in the efforts to eliminate and prevent child labour. Two child labour committees were formed in four villages with the task of forming by-laws to prevent child labour in their respective areas. The project also developed a dialogue with village governments and employers who signed an arrangement to stop child labour in their areas.

The implementation of the project was very successful and enabled the creation of sustainability and capacity at the local level to deal with child labour problems. To a large extent, this was thanks to the involvement of parents, employers, local leaders, community group leaders and religious leaders in the implementation of the programme at the grass-root level.

During this part of the project, 160 children were withdrawn from child labour in 12 mines in two districts. From January to August 1999 the programme continued the work on the prevention and withdrawal of children from child labour in the TAMICO sector in two other Tanzanian districts[83].

[82] Source for this example: TFTU/ILO-IPEC. 1998. Quarterly progress report of the child labour programme on the prevention and withdrawal of children from child labour under TAMICO sector. Action Programme No. P.090.92.159.260.

[83] TFTU/ILO-IPEC. 1999. Progress report of the child labour programme on the prevention and withdrawal of children from child labour under TAMICO sector. Action Programme No. P.090.92.159.260.