

Briefing paper No. 4

Children Working in Mines and Quarries

*Evidence from
West and Central
Africa*

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Acronyms and abbreviations

ANPPCAN	African Network for the Prevention and Protection Against Child Abuse and Neglect
ASM	Artisanal and Small-scale Mines
CFA	Communauté Financière Africaine (African Financial Community)
ECOWAS	Economic Community of West African States
ENDA	Environnement et Développement du Tiers Monde
ICI	International Cocoa Initiative
ILO	International Labour Organization
ILO-IPEC	ILO International Programme on the Elimination of Child Labour
LUTRENA	Lutte contre le Trafic des Enfants en Afrique de l’Ouest et du Centre
MAEJT	Mouvement Africain des Enfants et Jeunes Travailleurs
UCW	Understanding Children’s Work
WACAP	West Africa Cocoa Agriculture Project

Preface

A third of all children in West and Central Africa are estimated to work full- or part-time, paid or unpaid. Many of children are involved in hazardous and harmful economic activities, such as working in mines. Some are also exploited for sex and trafficked. Even if the work itself is not hazardous, many working children do not have access to education or drop out of school due to the opportunity costs for parents of keeping children in school and out of work. However, some children do combine work and school and earning an income may enable children to continue their schooling. Where the quality of education is poor or children are exposed to violence in schools, some children may prefer work to school. In some contexts, children derive a sense of meaning and responsibility from their work and the contributions they make to the family. To take them away from work without replacing the meaning and status they may receive can result in worse outcomes.

The prevention and response to child labour and exploitation in the region has fallen short in terms of quality, impact and scale. Over the past decade, much has been learned about what works and what doesn't in relation to child labour, exploitation and trafficking. Internationally, Understanding Children's Work (UCW) has done much to strengthen the evidence base. Many other organizations and researchers from different academic perspectives have contributed to a more differentiated analysis of children's work and of prevention and response efforts (e.g. Bourdillon, Myers, White, Boyden, Liebel, Woodhead).

Reviews and evaluations of anti-trafficking efforts have highlighted the need to distinguish between child migration and child trafficking and to avoid labelling all forms of child movement as child trafficking. These evaluations also emphasise the need for a better understanding of child mobility and the cultural, social and economic foundations of children's work in a broader context of social and economic mobility. A regional child mobility initiative was launched in 2008 to improve understanding of the cultural foundations of 'child labour', 'child migration' and 'child trafficking' and the role children's work and mobility plays in children's socialisation. The work done by the child mobility initiative is an important effort to rethink and redevelop prevention and responses to child labour that take social and cultural concepts of child development and education, social mobility and social protection into account. From this perspective, children and migration are linked to transitions within the life course and to rites of passage, whereby migration is part of becoming an adult, to earn cash and to get married. This perspective complements, and to some extent challenges, other approaches to child labour that focus more narrowly on poverty reduction, human resource development, or the application of international labour standards.

Five thematic briefing papers have been developed for types of child labour that have particular relevance for children in West and Central Africa. The focus is on the most pressing forms of child labour in the region, types of work that are receiving the greatest level of attention and have seen most resistance to change: Children in artisanal quarries and mines; Talibé children (Qur'ānic school pupils who are begging) in Sahelian countries; Children in commercial agriculture; Children in the informal urban sector; and Child domestic workers.

The purpose of the child labour briefing papers is to synthesise the empirical evidence of effective approaches to child labour and exploitation and identify approaches that have not worked or are unlikely to work with the current levels of human and financial resources. The briefing papers are aimed towards professionals working on child protection, education and social policy in countries in West and Central Africa. Each briefing paper presents evidence on the following aspects: description of the phenomenon, situation, trends, scale, impact on children; effective approaches to preventing child labour and exploitation.

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Introduction

This briefing paper focuses on boys and girls working in mines and quarries in West and Central Africa. Most children work in artisanal and small-scale mines (ASM), using labour-intensive methods to extract minerals and precious stones¹.^[21, 22] Children generally *do not* work in large-scale industrial mines with deep subterranean shafts or highly mechanised methods of extraction. Artisanal and small-scale mines operate within the informal economy and on the borderline between legality and illegality.^[18] Contrary to the common perception of miners being primarily migrants, a large proportion of workers comes from surrounding villages^[9, 13] or nearby mining towns.^[29, 33, 36] Artisanal mining is often a family activity^[20, 36] where children of all ages engage in various types of work and play in the quarries and mining sites where their parents also work. Mining is an alternative to other work in the informal economy and may attract seasonal workers from surrounding villages, or longer-term migrants.^[4, 14, 38]

International agencies and non-governmental organisations generally consider children's work in ASM among the worst forms of child labour due to the health risks for children. Accordingly, the ILO Convention No. 182 states that all children under the age of eighteen must be protected from such work.^[17, 19] **Protection work is challenging due to the remoteness and informality of many mines and their transient populations.**^[18, 21] **Little data exist on the extent and nature of children's work in mines and quarries.**

Based on a review of a broad range of literature – spanning from newspaper articles, to reports of commissioned research, to Master and Doctoral theses, to peer reviewed academic publications – this briefing paper aims to unpack the circumstances in which children work in mining sites. It draws on the increasing body of child-centred research that allows us to begin **exploring the different types of work that boys and girls, younger and older children do in mines and quarries and, most importantly, on their aspirations for the future. This allows to present a nuanced perspective on children's dreams, strategies and tactics**, whether they have begun working in mining on their own initiative or have been put to work by their parents or guardians. Some of the reviewed literature contains detailed information on children's work in mines and quarries but lacks analytical depth. These findings are presented with other studies to provide a comparative analysis.

Situating Children's Work in ASM in the 2000s

A typical child worker in an ASM is a boy or a girl above ten years of age who, depending on social and cultural practices, is involved in digging, crushing, grinding and washing ore or in support services and petty trade. In some places the proportion

Quarries and mines, Democratic Republic of Congo.

In 2009, children working in quarries and mines in Katanga were mostly boys; almost half were aged 14-17 years, around one-third 10-13 years, and 20 per cent of the children were below 10 years. (Sample N=20 children, though 70 adult miners and 10 women were also interviewed).^[30, p. 26]

Granit quarry, Burkina Faso. In 2003, 61% of children working in the Pissy quarry in Ouagadougou were boys and 39% girls. Girls were slightly younger than boys; the average age for girls and boys was 12.6 and 13.3 years respectively. (Sample N=155).^[41, p. 5-8]

Tin and gold mining, Democratic Republic of Congo.

In 2009, the children working in mining in the Province of Maniema were mainly boys; over one-third was aged 15-18 years, almost half of them 11-14 years, and 15 per cent were below 10 years. (Sample N=46) Children constituted 30-35% of the total labour force in the mines.^[33, p. 11, 35]

Alluvial diamond mining, Sierra Leone.

In 2006, 73% of children working in mining sites in Kono District were boys and 27% girls. Girls were generally younger than boys; three-quarters of the girls were below 14 years, whereas nearly half of the boys were in the age group 14-17 years. 15 per cent of the children were below 10 years. (Sample N=618)^[3, p. 35]

¹ No common definition of ASM has been established, but generally the term covers mining by individuals, groups, families or cooperatives with minimal or no mechanisation. Sometimes a distinction is made between the mining of high-value minerals and quarry mining of industrial minerals and construction materials.^[12, 16]

of boys equals that of girls working in mining sites and quarries,^[21, 41] while others are dominated by male workers.^[3, 30, 33] Older boys are more often directly involved in the excavation of minerals and precious stones,^[33] though older girls are increasingly becoming involved in the extraction, transportation and processing stages of mining.^[20] Younger boys and girls tend to work in petty trade, bring food to the pits, run errands, and carry gravel and water within the mining site. This is a result of the physical strength needed for different tasks. Small boys and girls are unable to perform some of the heavy digging tasks and most people will not employ smaller children on a regular basis.^[3, p. 35]

Reasons Why Children Work in Mines and Quarries

Poverty is the most important reason for children of school-going age to work. Rural families diversify their revenues by taking up mining.^[2, 3, 14] In mining sites abandoned by large mining corporations (e.g., Kalima^[29] and Mbuji Mayi in Democratic Republic of Congo^[2]) retrenched miners and their families often remain in the towns constructed by the mining companies. If the price of mineral dust or gravel crushed in the old mining dumps falls, many experience increased poverty due to lack of alternatives.^[2] Some families and individual children work in quarries or mines to ward off starvation. In such cases, **children's labour contribution may be important for household food security**, especially if few alternative opportunities exist to earning an income.^[2, 3, 23, 28, 30, 33] Children whose parents are incapacitated by illness or disability may make significant contributions to the household food security.^[14]

The withdrawal of large-scale commercial mining corporations is not always detrimental to the local economy. In some mining sites in Maniema Province, Democratic Republic of Congo, more people work in ASM than were employed by the mining company. Moreover, miners can earn more because the mining company does not make most of the profit and those who do the manual labour are not automatically at the bottom of the hierarchy and receive the lowest salary. While miners may be better off economically, the provision of social services in the old mining towns is abysmal.^[29] Rural ASM communities experience a lack of provision of public education and health facilities.^[13, 14, 24, 29] **Children may enter mining work for lack of alternative options, including the opportunity to pursue primary and secondary schooling.**

Kono District, Sierra Leone. 55% of children working in mining fields come from the surrounding villages.^[3, p. 36]

Katanga Province, Democratic Republic of Congo. Three-quarters of the children working in the mines come from low-income families where the parents are either unemployed or farmers. The parents of the rest are traders and salaried workers who are unable to make ends meet in their primary occupations.^[30, p. 26]

Some younger children accompany their parents to play in the mining sites, while their mother or older sister keep an eye on them while working on the mining site.^[2] **This can be the result of a lack of childcare away from the mining site, or a need of the entire family to work to make ends meet. However, it can also be a choice motivated by beliefs in children's learning from being present in places of work.**^[27] Convictions about learning through observation and practice do not exclude formal education *per se*. In Kono District, Sierra Leone, 47 per cent of the children doing work related to mining had never been to school, 40 per cent of the children combined school and work, while 13 per cent had to drop out of school, primarily due to lack of money. Even through poor children have little chance of getting well-paid formal employment, many children and adults feel the need for formal education.^[3] Not sending children to school is not based on ignorance but a result of poverty.^[13, 33] **A key theme emerging from recent research with children and adults is that those who can afford to keep their children in school are unlikely to take them out of school to work full time, even in times of crisis.**^[3, 13, 14, 24, 33] **Many children of mining or farming families are obliged to work to help finance their own education, and it is their primary reason for working in mining sites.**

Gender and age influence how children justify their work in mining sites and how they see themselves benefit from this work in the future. Boys, in particular, explain their involvement in mining with the wish to

earn money to pursue an education. However, girls are not always in the minority in schools. In Kono District, Sierra Leone, for example, more girls than boys were enrolled in school in 2006. Older boys worked as miners and earned relatively good money, whereas girls were not allowed to work in the pits and mostly worked in petty trade with a much smaller return. The difference in earning capacities between boys and girls may have had the effect that older boys were more likely to combine school and work if parents had problems paying fees for all their children.^[3] Since gender-specific patterns of work and schooling vary from one place to another, **it is important to examine gender differences in occupations, earning capacities and school enrolment and retention rates.**

Children who are not in school and who are above the minimum age for admission into paid employment have few opportunities for finding work in their home region. In northern Ghana, the unemployment rate for youth aged 15-24 years is between 70 and 90 per cent, whereas the national average is 30 per cent.^[15] **In many cases, mining is the most lucrative activity locally and an alternative to labour migration.**

The dream of discovering ore or a big diamond entices people, including children, into mining and underlies the willingness to do hard work and take great physical and social risks. Some children decide for themselves to work in mining, others are encouraged to do so by their parents. Recent studies found that **most children perceive mining as a temporary occupation. They see mining activities as a means to pursue education or to move into economic activities with higher returns and less hardship.** A common strategy of girls is to leave mining communities to become traders in larger cities.^[3, 8, 20, 33]

Ways in Which Children Become Workers in Mining Sites

Working alongside a parent or relative is the most common way for children to enter work in quarries and mining sites; 70 to 80 per cent of children begin by working with a parent, grandparent or sibling.^[23, 30] Two issues influence whether children become full-time or part-time workers; the first is whether they attend school or not, the second whether they come from farming households which need their labour, or from families whose livelihoods are based on off-farm work.

Children who relocate to mining camps may work and live with a relative. This practice is similar to that of rural children who work on a relative's farm or for a relative living in an urban area. While the literature often explains these two types of migration in terms of fostering, **little attention has been paid to the way in which relocation to mining camps comes about. It is important to examine the extent to which children live with relatives and children's participation in such decisions.**

Sometimes **migration to mining camps is explained as the result of trafficking.** One such example is the relocation of boys aged 6-18 years from Benin to Nigeria, where they work in quarries outside Abeokuta. While outsiders label the people with whom the children travel as 'traffickers/employers' because they recruit, accommodate and employ the children and make a profit, the boys consider such as persons their boss. Three categories of people are involved in the recruitment of boys in Benin; older migrants established in Nigeria since the 1970s, 'second generation' migrants who have grown up in Nigeria but maintain bonds with relatives

Maniema Province, Democratic Republic of Congo.

The father of a 12-year-old boy working in a goldmine explained that he allowed his son to dig because "if the boy finds some gold he can buy his notebooks, so when I don't have money he can buy them by himself".^[33, p. 39]

Kono District, Sierra Leone. Some of the young men working on a fixed daily salary of 6,000 Leones (US\$ 2.52), worked to help their families and to save up money for their school fees of approx. 200,000 Leones per year (US\$ 84).^[3, p. 27, 45]

Maniema Province, Democratic Republic of Congo.

Children working in a tin mine explained that they only worked because they had no other choice, because they were required to pay school fees, otherwise they would not work in the mine.^[33, p. 55]

Loba Province, Burkina Faso. Girls and women working in artisanal gold mining camps were attracted to the economic opportunities and the greater personal freedom that followed higher incomes and living away from in-laws or extended families. They were less interested than men in seeking adventure and engaging in conspicuous consumption.^[38, p. 18]

in Benin, and young return migrants below 20 years of age. They recruit children from their own extended family, as well as from regions with a high frequency of child migration to work in the quarries. In both cases, arrangements are made between adults and the boys know little about the kind of life they will be living in Nigeria. Recruiters also bring those children to Nigeria who are knowledgeable about work in the quarries and who wish to become migrant workers.^[34, p. 18-21]

Recruitment practices are interwoven with networks of migrants and extended families. These **social networks provide social security, ensure continued contact between migrant children and their parents and assist children need care and support. Moreover, in many communities, it is common for children to live with relatives, especially as they grow older.** Little is known about children's active involvement in recruitment processes. Children may be cajoled by family members into relocating, but older children often find work in mines by requesting work from those who manage digging teams or who employ young people to pound or wash gravel.^[3, 8] Children have the option of leaving an exploitative employer.

The choices available to children are embedded in cultural norms. Such norms inform the gender and generational division of work in mining sites. In Burkina Faso, for example, gold panning was traditionally an occupation for post-menopausal women. Today alluvial mining is a family activity, whereas deep-shaft mining is exclusively a male domain. This has to do with physical strength but also with the idea that menstrual blood or traces of sexual intercourse on women's bodies may 'chase away' the gold.^[38] **Boys and girls experience different constraints regarding occupations in which they can engage.**

Terms of Employment and Working Conditions

Many artisanal and small-scale mines are open-cast pits where miners work in small teams to dig wide holes, move gravel to secondary sites where it is washed, sifted or crushed to extract stones or ore. Such holes are usually not deeper than 5 meters and often a shovel, a sieve and a head pan are enough to get started. In some of the more developed sites, low-level technology, such as pumps, dredging gear and diggers may be used.^[3, 33] Some mining sites involve work in deeper shafts. In Niger, gold mines have shafts that are 50-80 metres deep^[24] and in Congo some shafts are deeper than 60 metres, thereby exceeding the maximum depth allowed by the Congolese code of mining.^[33]

Dilaberi Province, Niger. 15-year-old Adamou worked in a large artisanal gold mine where he spent his days breaking loose rocks 50 to 80 meters below ground, filling a bucket with rocks that was then hoisted to the surface. More than 100 children between the ages of 10 and 16 were estimated to be working in the site in 2005.^[24]

The extraction of minerals and precious stones in ASM is governed by complex social hierarchies of land owners, licence holders, buyers, watchmen, employers, miners, auxiliary workers, and others who can eke out a living on the sites.^[3, 34] **Children, whether directly involved in mining or indirectly through a range of auxiliary services, are usually at the bottom of this hierarchy due to their age and lack of wealth.** They usually do menial tasks,^[14, 28] but their age and gender shape the work they do.

The hardest work of digging and crushing rock is primarily done by boys older than fourteen years because it requires physical strength to dig up wet sand in alluvial mines or to break loose rocks. Boys in this age group also transport gravel and rocks from the pits to the sites where washing and crushing is done.^[3, 33] In the alluvial diamond mines in Kono District, Sierra Leone, 31 per cent of the children did this kind of work,^[3] as did 55 per cent of the interviewed children in the copper and cobalt mines in Katanga Province, Democratic Republic of Congo.^[30] **Although few girls are involved in digging, older girls do labour intensive tasks,** such as wet and dry panning for precious stones, transporting gravel from the pits, sorting rocks, assisting in the amalgamation process, and crushing stone.^[20, 38]

Most children directly involved in mining work full-time five to seven days a week and often eight to ten hours per day.^[3, 33, 34] In Kono District, Sierra Leone, 70 per cent of the child diggers worked six to seven days a week and 44 per cent of them worked eight to ten hours per day. In Maniema Province, Democratic Republic

of Congo, children working in the old mining sites abandoned by large-scale mining companies usually worked five days a week because security men frequently barred their access on Saturdays and Sundays. These children walked six to twelve kilometres to reach the mining site and to pay between 100 and 500 Congolese francs [US\$ 0.10-0.52] as an entrance fee to the security men guarding the site. Just like adult diggers, child diggers organise themselves in teams.^[29, 33]

Some boys and the few girls directly involved in mining are paid a fixed salary per day, a commission or a share of the gravel dug out. In the latter case, the complex hierarchy in quarries and mines determines the size of the pile divided between landowners, licence-holders, managers and team leaders. Individual diggers may be paid in different ways. Some get their own pile of gravel to wash or crush; others get a share from the proceedings of the team leader's pile.^[3, 33, 34] In Kono District, Sierra Leone, 50 per cent of the diggers are paid in this way but some children earn less than what they are entitled to because their inexperience makes them easy to trick. However, they receive the same treatment as the rest of the crew regarding support in case of illness.^[3, 28] In Maniema Province, Democratic Republic of Congo, some of the children who work in peer crews sell the gold they find directly to traders, but they may also use an older brother or friend who is able to negotiate a better price for them.^[33, p. 46-47] In Ghana, girls involved in panning and brokering are paid by the buyer upon delivery.^[20]

Children who receive a fixed daily salary rarely know the exact proceeds of their work as they are not involved in the final stages of extraction or in price negotiations.^[3, 34] In Kono District, Sierra Leone, one-third of the miners are paid fixed salaries, 5-6,000 Leones [US\$ 2.10-2.52] per day in 2006. **Ninety-two per cent of the miners were paid daily, because they were employed as casual labour and therefore not guaranteed work every day.** Nevertheless, the income was relatively good compared to other types of jobs and those who had established links with employers were more likely to get work.^[3, p. 45, 67] **Over one-third of the girls involved in mining in Ghana were paid daily and 30 per cent once a week.**^[20] In contrast, boys from Benin working on a two-year contract in a quarry in Ogun State, Nigeria were paid small sums of money during their contract but were sometimes given a bicycle or a radio at the end of their stay if they had completed several contracts. A sum of 75-150,000 CFA francs (US\$158-316) was transferred to their parents every two years, amounting to a monthly wage of 3-6,000 CFA francs [US\$ 6.32-12.65].^[34]

Younger boys and girls who work in support functions around the mines often work with a parent, brother, or another relative doing tasks ranging from transporting sand or gravel to the washing or crushing sites, collecting water, preparing food and running errands. Their earnings are related to the kind of work they do, how many hours they work and how they are related to the diggers.^[3, 28, 33] Girls often begin working early, especially with domestic tasks, and girls as young as 9 years old assist their mothers with the preparation of food and drink and with bringing it out to family members who work as diggers or they sell food to other people working on the site.^[20] Generally, these younger children work fewer hours than the children involved

Maniema Province, Democratic Republic of Congo. Some children work in teams with their age mates. As soon as they arrive at the gold mine in the morning and are allocated a pit, they divide the tasks among themselves and start working. Usually the older boys do the hardest tasks, such as digging and pouring the soil into the sieves, while the younger ones sieve the sand and carry water to clean the sand.

A group of seven boys aged 10 - 17 years worked for a man from their village who had discovered gold. They shared the gold they found. "When we share, he gets a surplus and that is what we pay to him: we leave to him a part of our gold. We sell all our gold together and then we share the money equally to have transparency among us"^[33, p. 46-47]

Loba Province, Burkina Faso. Girls are hired on a daily basis to pound gold ore and are paid according to the quantity they pound. Girls can pound 3-5 bowls of ore per day, which amounts to 1,000-1,500 CFA francs [US\$ 2.11-3.16] and is more than what a girl earns as a waitress in the city. The girls prefer to be paid in cash because gold may anger the earth deity and produce "bitter money" that cannot be invested in lasting goods.^[38, p. 19]

directly in mining. In Kono District, Sierra Leone, only 18 per cent of the younger children worked eight to ten hours per day.^[3] Some of the girls involved in preparing food to sell to miners do however work long hours: More than half the girls work over six hours per day and over five days a week.^[20] **More than one-fourth of the children in support services in Kono District, Sierra Leone, did not receive any benefits other than food and clothing.**^[3] Finally, children hawk various items in the mining sites, often biscuits, cigarettes, soft drinks and other small things that they can easily carry around. **The majority of hawkers are girls aged 10-13 years who walk long distances to cover all corners of the mining sites to sell their goods.** Most of them work for an older family member or a trader who pays a commission of what the children sell.

Children combining school and work usually work from mid-afternoon to dusk during school days and full-time on weekends and during the summer school break from June to September.^[21, 33] Some are allowed to work formally when concession owners acknowledge the need of children to work to earn money for their school fees.^[14]

Risks and Abuses

Children who work in mining sites face several physical and social risks with immediate or long-term effects. **Physical risks are linked to the work itself:** with the arduous work of digging or pounding, the use of adult-sized tools, the transport of rock, gravel or sand, and the lack of protective equipment, such as boots and helmets.^[18, 21, 30, 33] Both boys and girls complain about muscle cramps, pain in their back and chest, and irritation, cuts and burns on the skin. Many children take pain-killers to suppress the pain.^[3, 18, 20, 26] Apart from the immediate risks of accidents, work that exceeds children's strength may impact negatively on their growth and development, especially if their calorie-intake is too low.^[33] However, those working in direct mining earn a higher income and often eat better than children in support functions and petty trade.^[3]

Most children doing mining work are older than fourteen years. **Adult-sized tools may not cause risks in themselves for older adolescents. Whether weights lifted and transported by children is too heavy depends on the child's physical stature and the technique used for carrying the load.** While protective equipment could prevent some injuries, existing types of protective equipment may not be suitable for the current working practices in ASM and may therefore be rejected by miners.

With the exception of children transporting gravel, sand, water, and food, **the risks faced by children in support functions and petty trade in the mining sites have not received much attention.** Young children's work is assumed often to exceed their physical strength but little evidence has been provided in support of this assumption. It is imperative to examine what these occupations entail in each local context.

Another set of risks encountered by children working in mining sites are **physical risks linked with the work place** and the exposure to dust, high levels of noise and, in some sites, toxic chemicals.^[18, 26, 30, 33] Children in gold mining may be exposed to lead or mercury poisoning,^[15a, 21] and child miners working underground or in deep holes are at risk of tunnels or holes caving in, falling of rocks, rocks splintering and of themselves slipping during the work.^[18] Among the immediate consequences are injuries of different degrees of seriousness which also may affect children's future health and ability to work. Other long-term consequences include respiratory diseases and loss of hearing.^[18, 26] While those working in support functions and petty-trade are also subject to dust, chemical vapours and noise, they may be exposed less than those working in confined spaces and in the amalgamation process.

The main concern raised in a number of studies for the youngest children are the **social risks. The exposure to a particular lifestyle associated with mining camps, namely the conspicuous consumption of alcohol and women.** It is assumed that children are exposed to an undesirable social environment where law and order is absent, family structures are disintegrating, criminality, violence and prostitution is rampant and children are exposed to a range of sexually transmitted diseases.^[18, 26, 33] A causal link is made between the possible consequences of these social risks and children not being in school.

Several issues related to social risk need to be examined in greater detail. First, many farmers have diversified their sources of income to include mining work – sometimes instead of migration - and a large proportion of children come from such farming households. It is important to examine how income from mining affects the social dynamics in farming villages compared to other sources of economic transformation. Second, the social organisation of mining camps is complex, since migrant miners are a diverse group that includes children coming without their parents, single men and women, and families. Some of the young miners spend their money immediately and openly on sex and alcohol, which raises concerns for the moral environment children are living in. However, not only is drinking and other conspicuous consumption an investment in social relationships in many societies,^[6, 8, 37] gender differences in consumption are overlooked. Children are exposed to a range of lifestyles and economic strategies, just as they would be in other places with a heterogeneous population.

Despite the fact that some women run their own businesses, are involved in panning gold or are licence-holders,^[20, 21, 38] unmarried or divorced women living in mining communities are often assumed to be sex workers. As a result, **adolescent girls are seen as either promiscuous or as vulnerable to sexual abuse and exploitation, without examining what work they actually do and the risks they themselves link with their everyday lives.**

While sexual exploitation, alcohol and drug use, and violence are prevalent and visible in many unplanned mining towns, the effects on children and children's actual life experiences have to be studied in detail, rather than basing well-meaning programmes on sweeping moralistic generalisations and assumptions.

Long-Term Implications for Children of Work in Mines and Quarries

Access to remote artisanal and small-scale mines is challenging, especially to those located in conflict zones. It is difficult to document all types of work carried out by children in mining sites, as well as other activities in which these children engage in, such as education and training, sports, play and religious or associational activities. Knowledge is also lacking about local norms that may protect children from a variety of risks in places of work, play and residence. As a consequence, policy recommendations emerging from **research tend to use children's work as diggers or porters as a measure of exploitation without exploring what children themselves think about possible occupations, potential earnings and, most importantly, what kind of trade-offs children of poor families have to make.** The hazards should not be ignored but the failure to see children as social persons who navigate their circumstances as best they can, for example by working to pay school fees, hinders identifying how best to protect and support these children and their families.

Child Development, Education and Learning

It is important to look at local practices of child rearing to understand the underlying ideologies among adults for the expectations they have of boys and girls of different ages but also for understanding the expectations children and young people have of their parents. Early child protection work in mining sites was based on investigative journalism and a limited number of studies, which brought to light the worst cases of exploitation and of children working in hazardous conditions. However, **insufficient knowledge about the communities, the ways in which poverty affects their lives and how they are excluded from national development initiatives has resulted in assumptions about poor or illiterate parents being ignorant of what is in the best**

Maniema Province, Democratic Republic of Congo.

One support function is working as a porter, this is a tough job. Children load water or sand in a basin, others help lifting the basin and placing on their heads, so they can carry their load to the washing and sieving site. Their pace is fast and even, as they cross mining sites and dodge branches of trees, holes, logs and rocks. A basin filled with wet sand is heavy and the task is commonly done by boys aged above 12 years.

Children wear no protective clothing and they actually work with as few clothes as possible, if not naked, due to the high temperatures and the humidity of the forest. No helmets or gloves are used, nor ropes to secure those who go down the hole. Children wear no shoes because it is easier to maintain equilibrium on bare feet while moving around the marshy mine.^[33, p. 49-52]

interests of their children. Another assumption is that childhoods in mining sites are bad or even lost.^[3, 13] Such assumptions may also influence how observations in ASM sites are interpreted. For example, children playing in mining sites sliding down the rubble piles on bits of plastic sheeting may be seen as resisting a dull life of hard and monotonous work.^[2] Yet, **the fact that children combine work and play is not a form of resistance to deep poverty alone but a characteristic of the everyday of most children whose socialisation involves work in different forms.**^[7, 25, 31]

Parents or relatives who initiate a child to mining work take some responsibility for the child's socialisation, in that the child learns practical skills through observation and participation. Generally, children begin to learn the skills of mining from the age of six or seven years but they do so through everyday observation while doing support functions for the people they accompany to the mining site. They are also encouraged to do lighter tasks for themselves, such as panning, looking for small pieces of mineral on the sites,^[2, 33] which are on the borderline between work and play. **Through this work children observe the mining work and establish social relations with the mining crews. This facilitates children's entry into a crew once they are strong enough to do digging.**^[3] Deciding whether a boy is strong enough to become a digger is subjective. Some employers recruit young children because they can pay them less and they are seen to be more malleable.

Through the work, children also learn about economic skills and responsibilities,^[33] just as they do in farming households where they are given small plots of land, animals or poultry to generate their first income. Children learn about the organisation of the household economy and the interdependencies between household members. The head of household has one set of responsibilities, usually long term, and married women and adult or adolescent children have other sets of responsibilities which usually are more immediate.^[39] **By encouraging children to work for themselves, parents expect their children to begin meeting some of their own needs, especially clothing, shoes, hairstyling, etc.** Consequently, even when they work with their parents, children may feel and say that they work for themselves and their own upkeep, as did 64 per cent of the children working in the Pissy quarry in Ouagadougou, Burkina Faso.^[41]

When the household head cannot afford to pay school fees, children are often encouraged to work to contribute to paying for their schooling rather than to quit school altogether.^[1, 5, 11, 32] Although an outcome of poverty, it is important to stress that children's wages often are spent in accordance with their aspirations for education, clothing or to move into other types of income-generation. The hard physical work and long working hours in mining sites is one reason among many why children may have difficulties in keeping up with school work.^[3, 20]

Work Trajectories and Upward Social Mobility

Mining sites may offer good prospects for improving children and young people's social position^[8] compared to farm work and petty trade. Such prospects go beyond economic independence, even if this is the justification used by some children to explain why they began to work in mining sites.^[3, 8] Children do not automatically become independent by increasing their individual economic activities. Work and income give them a different position within the family because they contribute to the domestic budget directly or

Maniema Province, Democratic Republic of Congo.

Young children aged six to twelve years are sometimes encouraged to learn mining work by being given sand to sieve that others have already sieved. In the process of learning the circular movements of panning, they may also find a little gold.^[33, p. 51]

Seno Province, Burkina Faso. Among agro-pastoralists, gold mining was the single most important source of off-farm income in the mid-1990s, and boys aged 15-19 years spent most time in the

^[4, p. 34-36]

Maniema Province, Democratic Republic of Congo.

35 per cent of the children working in mining sites aspired to become persons of authority but did not specify in which way, while 26 per cent would like to become a doctor, 9 per cent a teacher and 7 per cent a mechanic. 13 per cent did not answer the question and 7 per cent stated that it was a question of fate.^[33, p. 59]

indirectly by buying their own clothes and necessities. More importantly, working children become part of the interdependencies within the household: they can be called upon in situations of need,^[40] they work more diligently and by taking up more social and economic responsibilities children are seen as 'good children'^[10] and are accorded a higher social position.^[35]

An important finding in recent studies is that most children perceive mining as a temporary occupation, as a means to pursue education or move into economic activities with higher returns and less toil.^[3, 8, 20, 33] Trajectories aiming at higher returns begin at the mining site where young children do auxiliary work and only become diggers once a team leader assesses that they have the physical strength needed. **The sense of temporality is important for pushing children into physically tougher work; those who work in support functions and petty trade seek to move to work with a higher earning potential, whereas those involved in digging remain with this type of work for longer.** Older children may seek to recruit younger children to work with them to move up the social ladder. This is happening in peer teams in Maniema Province, Democratic Republic of Congo^[cf. 33] and in the recruitment of boys from Benin who work in the Abeokuta quarry in Nigeria.^[cf. 34]

While some children dream of white collar work – inspired by the school curriculum and teachers, by people of authority they encounter or by the earning prospects in the public sector - many children are acutely aware of the limitations linked with their origin in remote rural areas and their parents' poverty. **Entering the formal labour market is difficult for poor rural children and their aspirations may lie within ASM.** One imagined route is 'the big find' which most miners hope will allow them to leave behind the hard work in the mines.^[9] Another way to upward social mobility requires children to aspire to become team leaders, employers, machine owners, and licence holders – persons of authority in the local context.^[3, 33, 38] Despite the awareness of the limitations and the fact that not all adults succeed in obtaining obtain licences, machines or other assets that allow them to progress economically and socially within ASM, children tend to look for those who do.

Policy and Programme Initiatives

This paper examines and assesses the effectiveness of programme initiatives to protect children working in mining sites from hazards impacting negatively on their human capital. Given the paucity in statistical data on children's work, **effectiveness cannot be measured in numbers of working children or children doing hazardous work.** Instead, a more qualitative assessment is needed of whether policies and programmes are based on a nuanced understanding of the circumstances in which children work in mining sites, of local notions of childhood and of alternatives to work in mining sites.

International policy is premised upon the belief that children should not be present at mining sites because the work children do exceeds their physical capabilities and the physical and social environment of mining sites is detrimental to children's well-being. Moreover, a causal link between children's work and low school enrolment and retention rates is made, and a recent ILO report states that "the progressive elimination of child labour is at risk when education is not valued or of a poor quality and when natural occurrences, economic depression or conflict upset the balance in communities".^[20, p. 18]

National policy environments are more ambiguous. On the one hand, much legislation reiterates international conventions and policy recommendations. On the other hand, enforcement of child protection legislation tends to be relaxed and the social services to support the education of children of poor families in remote rural communities and unplanned urban settlements insufficient to meet the needs of all children. In this environment, parents sometimes become the scapegoats and children's lack of schooling is explained as an outcome of 'gold fever' - the dream of quick wealth – where parents spend their time digging or washing at the expense of supervising their children.^[26, 13, 14]

Preventing Children's Work in Mines and Quarries: prohibition, awareness raising and education

International conventions aim to eliminate children's work in mining sites. Prohibition is supported by the United Nations Convention on the Rights of the Child, the ILO Convention No. 138 stipulating the minimum age for admission to paid employment, the ILO convention No. 182 calling for the elimination of the worst forms of child labour for all children below the age of 18 years, and the ILO Recommendation No. 190 which adds specifications to Convention No. 182 related to mining work in industrial exploitation and ASM.^[18]

Despite international pressure, the prohibition of children's work in mining sites has proved ineffective. The difficulties encountered are explained from two different perspectives. The remoteness and informality of ASM explains how both artisanal miners and mining companies evade labour market regulations because they operate on the borderline between legality and illegality. Additionally, cultural explanations are advanced to argue that people in remote areas are backward,^[18, p. 16] implicitly contending that adults let children work because they do not know better. Another perspective highlights the complexity of poverty in remote rural areas and the lack of government provision of social service.^[14, 29]

Programmes focusing on awareness-raising campaigns and capacity-building come from the universal rights perspective. They are rooted in the assumption that children work in mining sites because their parents and guardians are unaware of the dangers and that child protection legislation is not enforced because authorities are unaware of the extent of children's work or their vulnerability in mining sites.

ILO, among others, supports the development of national policies to regularise the entire mining sector.^[18, 19] One of the difficulties is the lack of alignment and coherence of legislation concerning the mining sector. There are numerous contradictions and inconsistencies regarding the mining code, small-scale mining laws, labour codes and environmental laws, and legislation related to child protection and education.^[18, 19] Policy reform may be able to eliminate contradictions in national legislation but, **due to decentralisation**

and the financial constraints on local institutions that serve remote rural communities and sites abandoned by mining companies, legislation is likely to remain unenforced. This point is further supported by the cases where intermediaries are involved in children's relocation to mines and quarries. Prevention programmes aiming to repatriate children may have had an impact but few intermediaries have been prosecuted and it is difficult to monitor the number of children who migrate again to work in mines after a visit home.^[34]

ILO also supports 'downstream actions' that monitor mining areas to prevent children from working and sending them to school or vocational training.^[18, 19] Drawing on successes from around the world, ILO believes that the involvement of local political and religious leaders can help change people's view of children's work in mines. According to an ILO evaluation, the success of awareness-raising campaigns relies on dialogue and on the existence of opportunities for full-time education as the primary alternative to work in mining sites.^[18]

First, from the universal rights perspective it is assumed that children are not in school because of their parents' poverty or lack of consideration for education. However, research taking a grounded perspective to

Dilaber Province, Niger.

Awareness-raising campaigns reduced the number of children working in two large ASM. The campaigns aimed at informing children, parents and community leaders about the dangers and laws involved with child labour in mining. Even girls who were above the legal working age (14 years) in Komabangou and Mbanga are now excluded from performing the more hazardous tasks until the age of 18.^[20, p. 9]

Northern Province, Ghana.

An IPEC-financed project in Ghana aimed to withdraw children from mining work and sending them to state schools, where no such schools existed. The project then endeavoured to send children to private schools but failed to raise money for school fees. Instead of acknowledging the short-coming when children felt obliged to combine work and schooling, the project staff threatened to withdraw funding for school supplies and other assistance to the children's families, thereby threatening to make life even more difficult for these children.^[132, 14]

children's work in ASM highlights that **low enrolment rates do not only result from poverty but also from the absence of public primary and secondary schools that provide free education close to mining sites.**^[13, 14, 29]

Second, it has been suggested that “in some Central African countries, children often decided to work at mining sites because they were attracted by the better life there than at home”.^[18, p. 22-23] Such an argument echoes an age-old contention that rural-to-urban migrants are attracted by ‘bright city lights’ and miners by ‘gold fever’. Such an argument denies children the capacity of making rational decisions about what is best for them immediately and in the future. Research taking a grounded perspective suggests that **the age of working children needs to be taken into consideration, since older children may find it embarrassing to go back to primary school** when they are old enough to be at secondary school. Moreover, they may not want to forego their income,^[30] since some level of economic independence is a sign of their social position as almost adults.^[35]

Third, based on policy responses in Latin America, ILO advocates against a combination of work and schooling, arguing that work affects children’s performance in school negatively and that recreational and leisure activities should be encouraged to help children’s development.^[18, p. 24-25] **Such advice does not take into account the importance of children's work to keep them in education** or the social status they gain from being able to pay some of their own fees and other school-related expenses. Moreover, **the type of work children do and how they are remunerated determine their ability to combine education and work.** For example, if they work in a digging team on a regular basis it can be difficult to take time off to go to school,^[3] unless all other diggers are also students. Children who work part-time to continue their schooling may be obliged to agree to a lower income. **Rather than prohibiting all children’s work in mining sites, it may be necessary to explore a range of flexible arrangements that allow older children to combine relatively safe and part-time income earning options with schooling.**^[3, 14]

Even if the mining sector were regulated and children were prevented from engaging in direct mining activities, it would be necessary to examine the extent to which children are pushed into auxiliary activities with lower returns and whether urban migration of children from villages near former ASM sites would increase.

The viability of the idea of providing care for pre-schoolers and school-aged children outside of school hours also needs consideration. This relates especially to the kind of care poor parents are able to provide for younger children, and whether they see children’s presence at the mining site as an impediment to their productivity.

Most interventions aim to eliminate children’s work in mining sites. No policy or programme responses have aimed to provide child protection services for children working in ASM or to work to protect children's rights as workers in mining sites. General child protection and education initiatives aim at postponing children’s entry into the labour market. In this context, recent attention has been drawn to the potential of social transfers to poor parents in order to support and encourage them to keep their children in school.

Questions that Need Further Investigation

- How do gender differences in occupations, earning capacities and school enrolment and retention rates intersect?
- What work do young girls actually do? Which risks are they exposed to in their everyday lives?
- How does relocation to mining camps come about? (Are children fostered to relatives? Do children reiterate kin relationships to enter work in ASM? Do children migrate independently?)
- How are children recruited into different types of work?

- Who are the main decision-makers in deciding whether a job is appropriate?
- What are the dynamics of social networks for children working on mining sites?
- How does income from mining affect the social dynamics in farming villages compared to other sources of economic opportunities?
- Are the existing types of protective equipment suitable for the current working practices in ASM or could a different design or a realistic change in working practices reduce the physical risks linked with mining activities?
- Which risks do children in support functions and petty trade encounter in their work in mining sites?
- How does diversity among people working in ASM sites affect children's aspirations?

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