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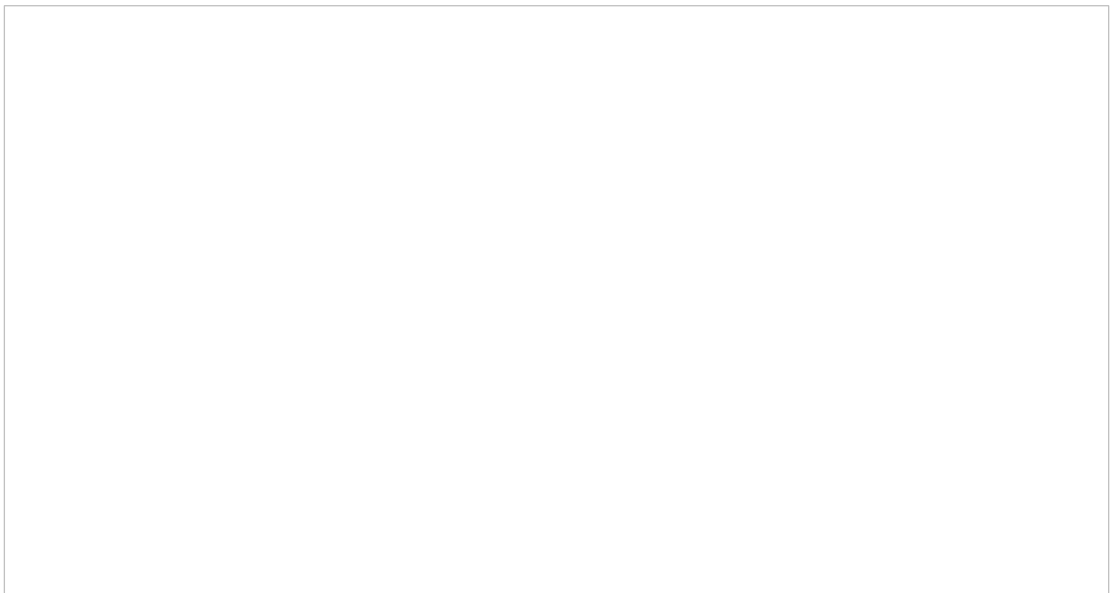
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Child Labor, Mercury, and Artisanal Gold Mining in Mali



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In many poor rural areas around the world, men, women, and children work in artisanal gold mining to make a living. Artisanal or small-scale mining is mining through labor-intensive, low-tech methods, and belongs to the informal sector of the economy. It is estimated that about 12 percent of global gold production comes from artisanal mines.

Mining is one of the most hazardous work sectors in the world, yet child labor is common in artisanal mining. This report looks at the use of child labor in Malis artisanal gold mines, located in the large gold belt of West Africa. Mali is Africa's third largest gold producer after South Africa and Ghana; gold is Mali's most important export product.

It is estimated that between 20,000 and 40,000 children work in Mali's artisanal gold mining sector. Many of them start working as young as six years old. These children are subjected to some of the worst forms of child labor, leading to injury, exposure to toxic chemicals, and even death. They dig shafts and work underground, pull up, carry and crush the ore, and pan it for gold. Many children suffer serious pain in their heads, necks, arms, or backs, and risk long-term spinal injury from carrying heavy weights and from enduring repetitive motion. Children have sustained injuries from falling rocks and sharp tools, and have fallen into shafts. In addition, they risk grave injury when working in unstable shafts, which sometimes collapse.

Child miners are also exposed to mercury, a highly toxic substance, when they mix gold with mercury and then burn the amalgam to separate out the gold. Mercury attacks the central nervous system and is particularly harmful to children. Child laborers risk mercury poisoning, which results in a range of neurological conditions, including tremors, coordination problems, vision impairment, headaches, memory loss, and concentration problems. The toxic effects of mercury are not immediately noticeable, but develop over time: it is hard to detect for people who are not medical experts. Most adult and child artisanal miners are unaware of the grave health risks connected with the use of mercury.

The majority of child laborers lives with and work alongside their parents who send their children into mining work to increase the family income. Most parents are artisanal miners themselves, and are paid little for the gold they mine, while traders and some local government officials make considerable profit from it. However, some children also live or work with other people—relatives, acquaintances, or strangers, and are economically exploited by them. A significant proportion of child laborers are migrants, coming from different parts of Mali or from neighboring countries, such as Burkina Faso and Guinea. Some of them may be victims of trafficking. Young girls in artisanal mining areas are also sometimes victims of sexual exploitation and abuse.

Many children working in artisanal mining never go to school, missing out on essential life skills as well as job options for the future. The government has largely failed to make education accessible and available for these children. School fees, lack of infrastructure, and poor quality of education deter many parents in mining areas from sending their children to school. Schools have also sometimes failed to enroll and integrate children who have migrated to mines. Nevertheless, some child laborers attend school but struggle to keep up, as they are working in the mines during holidays, weekends, and other spare time.

In the view of Human Rights Watch, with some exceptions, Malian and international gold companies operating in Mali have not done enough to address the issue of child labor in the supply chain. Much of the gold from Mali's artisanal mines is bought by small traders who supply middlemen and trading houses in Bamako, the country's capital. A few trading houses export the gold to Switzerland, the United Arab Emirates (in particular Dubai), Belgium, and other countries.

Under international law, the government of Mali is obligated to protect children from the worst forms of child labor, and from economic exploitation, trafficking, and abuse. It also has an obligation to ensure free and compulsory primary education for all. The government must take measures to avoid occupational accidents and diseases, and reduce the population's exposure to harmful substances. International development partners should assist poorer nations, such as Mali, to fulfill their obligations under international law. Businesses, under international law and other norms, also have a responsibility to identify, prevent, mitigate, and account for their impact on human rights through policies and due diligence measures.

Encouragingly, the government of Mali has taken some important measures to protect children's rights. It has outlawed hazardous child labor in artisanal mines and, in June 2011, adopted a National Action Plan for the Elimination of Child Labor in Mali. The government has also made some progress in improving access to education, though net enrollment remains low at 60.6 percent. With regard to mercury, the government supports mercury reduction measures through the upcoming global treaty on mercury.

Yet, the government has not put its full political weight behind these efforts. Existing initiatives, such as the work of the National Unit to Combat Child Labor, tend to be isolated, understaffed, and lack full support from other ministries. Health policy lacks a strategy to prevent or treat health problems related to mercury use or other mining-related conditions. Child laborers, including those in artisanal mining areas, have not benefitted from governments' education policy, and the education system has not been adapted to their needs. Mining policy has focused on industrial mining, carried out by international companies, and has largely neglected problems related to artisanal mining, including child labor. Meanwhile, local government officials and traditional authorities such as local chiefs have benefitted financially from artisanal mining. Government policies on crucial areas such as health, education, and artisanal mining, are also sometimes undermined by the laissez-faire attitude of local government officials, who carry considerable weight in the current decentralized governance structure. Such attitude effectively undermines the governments' efforts to address child rights issues, including child labor in artisanal gold mining.

Donors, United Nations agencies, and civil society groups have undertaken some important initiatives on child labor, education, or artisanal mining in Mali. For example, the International Labor Organization (ILO) and a Malian non-governmental organization, Réseau d'Appui et de Conseils, have assisted children in leaving mining work and starting school. But such initiatives have been limited in scope, suffered from paucity of funding, and lacked consistent political backing. The United States and the European Commission have drastically reduced their funding for international child labor programs in Mali, contributing to a funding crisis at the ILO. At the international level, the ILO has failed to follow up on its 2005 call to action *Minors out of Mining*, in which 15 governments—including Mali—committed to eliminating child labor in their artisanal mining sector by 2015.

Hazardous child labor in Mali's artisanal mines can only be ended if different actors—central and local governments, civil society, UN agencies, donors, artisanal miners, gold traders and companies—prioritize its elimination, give it their full political support, and provide financial support to efforts aimed at ending it. There is an urgent need for feasible and concrete solutions that can bring about change.

As a first step, the government should take immediate measures to end the use of mercury by children working in artisanal mining, through a public announcement reiterating the ban on such hazardous work for children, an information campaign in mining areas, and regular labor inspections.

Beyond this immediate step, the government and all relevant stakeholders should come together to implement the government's action plan on child labor. The government should also take steps to improve access to education in mining zones, by abolishing all school fees, introducing state support for community schools, and establishing a social protection scheme for vulnerable children. The government and other actors should provide stronger support for artisanal gold miners, such as support in the creation of cooperatives, and the introduction of alternative technologies that reduce the use of mercury. The government should also address the health impact of mercury on artisanal miners, in particular on children, and address other mining-related health problems. International donors and UN agencies should support the government in its efforts to eliminate hazardous child labor in artisanal mining, politically, financially, and with technical expertise. There is the need to convene a national roundtable on hazardous child labor in artisanal mining in Mali, to bring together all relevant actors—government, civil society, UN, donors, experts, and business—and create momentum for concerted action.

Malian and international companies should recognize their responsibility regarding child labor and other human rights issues. Companies should introduce thorough due diligence processes and engage in meaningful dialogue with their suppliers and their government, urging measures towards the elimination of child labor within a specific time frame, for example, two years. They should also directly support projects that aim to eliminate child labor, such as education and health programs for children in artisanal mining areas. An immediate and total boycott of gold from Mali is not the answer to human rights violations in Mali's artisanal gold mines. Boycott risks reducing the income of impoverished artisanal mining communities and may even increase child labor as families seek to boost their income.

At the regional level, the Economic Community of West African States (ECOWAS) should ensure that the future ECOWAS Mining Code prohibits child labor in artisanal mining, including the use of mercury, and mandates governments to take steps to reduce the use of mercury. At the international level, the future global treaty on mercury should oblige governments to take measures that end the practice of child laborers working with mercury. The ILO should build on its past efforts to end child labor in artisanal mining by reviving its *Minors out of Mining* initiative.

Field research for this report was carried out between February and April 2011 in Bamako and in the mining areas in Western and Southern Mali. Human Rights Watch researchers visited three mining sites in Kniba circle, in the Kayes region of Western Mali: Baroya (Sitakili commune), Tabakoto (Sitakili commune), and Sensoko (Kniba

commune) and one mine in Worognan (Mena commune) in Kolondiba circle, in the Sikasso region of Southern Mali (see map).

Human Rights Watch interviewed over 150 people including 41 children working in mining areas (24 boys and 17 girls) for this report.^[1] Thirty-three of these children worked in gold mining, and the other eight, among them seven girls, worked as child laborers in other sectors such as childcare, domestic work, agriculture, or in small scale enterprises. Five of the forty-one children were immigrants; two were from Burkina Faso, and three were from Guinea. We also interviewed three young adults, ages eighteen and nineteen, two of whom were working in a gold mine, and one as a sex worker at a mining site.

While the majority of the children interviewed lived with their parents, five lived with relatives or other guardians, and seven were living on their own.

We also interviewed a wide range of other actors in mining areas, including parents and guardians of child workers, adult miners, teachers and principals, health workers and health experts, village chiefs, *tombolomas* (traditional mining chiefs), NGO activists, and sex workers. In addition, Human Rights Watch researchers held meetings with gold traders in mining areas and in Bamako, with representatives of UN agencies and donor governments. We interviewed the Minister of Labor and Civil Service and his staff, as well as officials in the Ministry of Mines, the Ministry of Health, the Ministry of Environment and Sanitation, the Ministry of Education, and the Ministry of Promotion of Women, Child and Family Affairs. We also interviewed local government officials in Kniba and Kolondiba circles.

We also interviewed international companies importing gold or other products through complex supply chains, including two companies importing gold from Mali's artisanal mines. Outside Mali, we also interviewed several international experts on artisanal gold mining, mercury use, and health effects of mercury.

Interviews with child laborers were carried out in a quiet setting, without other adults present. The names of the interviewees were kept confidential. All names of children used in this report are pseudonyms. We arranged for a local NGO to intervene in the case of one child who was abused at home. When we interviewed children, we adapted the length and content of the interview to the age and maturity of the child. Interviews with children under the age of 10 did not last longer than 15 minutes, while those with older children took up to an hour.

Most interviews were conducted in Bambara through the help of an interpreter. Bambara is the mother tongue of about four million Malians of the Bambara ethnic group; it is also a lingua franca in Mali and several other West African countries. Three interviews with Guinean children and one with an 18-year-old from Guinea were conducted in French. One interview with an 18-year-old sex worker was conducted in English.

One challenge during this research was the assessment of the children's age. Some children did not know their exact age. Parents or guardians were also sometimes unable to state the precise age of the child. In Mali, almost half of all births are not registered, making it difficult to obtain information on the real age of the children we interviewed.^[2] We only considered interviewees as children when we were certain that they were children, judging their age by their own assessment, the assessment of relatives, and their physical appearance. Because of this, we did not include the statement of a boy who claimed he was 18, even though he looked younger.

In addition to interviews, we carried out desk research, consulting a wide array of written documents from government, UN, NGO, media, academic, company, and other sources.

Gold has been mined for many centuries in Mali. Large West African kingdoms, including the Mali Empire (approximately 1235-1400), built their wealth on gold from the Bambouk region of Western Mali and the Trans-Saharan gold trade.^[3] Gold has remained a central commodity during colonialism and in Mali's postcolonial economy.

Since 1999, gold has been Mali's number one export commodity, followed by cotton. In 2008, gold accounted for about 75 percent of all Malian exports.^[4] While gold prices have dramatically increased over the last decade, prices for other commodities, such as cotton, have fallen. Mali is currently the third largest gold producer on the African continent, after South Africa and Ghana, and the thirteenth largest gold producer in the world.^[5] Since 2005, Mali's gold production has been around 50 tons per year worth more than US \$2.9 billion at September 2011 prices.^[6]

The main gold mining regions lie in Western and Southern Mali, specifically in the Kniba area on the Senegalese-Malian border (historically known as Bambouk); the area around Kangaba less than 100 kilometers southwest of the capital; and in several areas in the Sikasso region (see map). While mining in Kniba and Kangaba dates hundreds of years back, many mines in the Sikasso region have been opened in recent years. The gold belt in the Sahel zone includes several other countries, such as Guinea, Senegal, Burkina Faso, Ghana, Niger, and Nigeria.

Historically, Malian miners have practiced artisanal mining, known as *orpaillage* in French. Today, the practice still exists. Artisanal or small-scale mining is carried out by individuals, groups, families, or cooperatives with minimal or no mechanization, using labor-intensive excavation and processing methods. Artisanal miners (*orpaillieurs*) operate with limited capital investment, often in the informal sector of the economy, and are not employed by a large company.^[7] Mali's artisanal mines produce an estimated four tons of gold per year, according to official records; the real number might be higher, though.^[8] Due to rising gold prices, artisanal mining has attracted increasing numbers of people in Mali and the West African region over the last decade.^[9]

The majority of gold produced today comes from large industrial mines. Among the important multinational companies in Mali are Anglo Gold Ashanti, Randgold (both South African multinational companies), IAMGOLD, Avion Gold (two Canadian corporations), Resolute Mining (from Australia), and Avnel Gold Mining (from the United Kingdom). These companies operate several large industrial mines, such as the Morila, Sadiola, Yatela, and Loulo mines, in joint ventures with the Malian government; the government holds a minority stake of about 20 percent.^[10] A new mining law is currently underway; it will increase the government share in industrial mines, and oblige mining companies to implement local development projects.^[11]

Despite its wealth in gold, Mali remains a very poor country. The 2010 Human Development Index, which measures health, education and income, ranks Mali as 160th out of 169 countries.^[12] About 50 percent of the population is living on less than one dollar per day,^[13] and social indicators are very low. Almost 20 percent of all children die before their fifth birthday, and adults have, on average, attended school for only 1.4 years.^[14] Human rights and development organizations have commented critically on the limited benefit of Mali's gold sector for the wider population, including a lack of revenue transparency.^[15]

There are over 350 artisanal mining sites across Western and Southern Mali; their precise number is unknown even to the government.^[16]

Estimates put the number of artisanal gold miners in Mali between 100,000 and 200,000.^[17] Around 20 percent of artisanal gold miners are children.^[18] Based on these estimates, the number of child laborers in Mali's artisanal mines is between 20,000 and 40,000.

The work process is organized by groups of artisanal miners who agree at the outset how they will divide the gold mined. Groups may consist of adults and children. Artisanal mines have attracted workers from many parts of Mali, as well as from other countries in the West African subregion, such as Guinea and Burkina Faso.

Under the Mining Code, artisanal mining is legal in specified geographical areas called artisanal gold mining corridors (*couloirs d'orpaillage*).^[19] In reality, most artisanal mining sites lie outside these corridors.^[20]

The government usually tolerates these activities, in part because mayors and other local authorities, as well as traditional authorities, sometimes benefit financially from the presence of artisanal mines. In the context of decentralization during the 1990s, oversight over and taxing of artisanal mining has been relegated to the local authorities.^[21] Sometimes, artisanal miners have to pay money or part of their gold to traditional authorities who have customary ownership over the land. According to customary practices that are still relevant today, traditional authorities such as village chiefs are considered the owners of all land belonging to a particular area.^[22] They have the authority to open or close a mine. On behalf of the village chief, the *tomboloma* (traditional mining chief) deals with management issues at the mine. He assigns each group of miners a shaft and, in some areas, receives a payment for it.^[23] He also manages conflicts among miners.

Mayors also sometimes charge for shafts or get other revenue from the mine.^[24] A mayor in Kolondiba circle moved his office from the regular town hall in the commune's central town to a mining site when the mine was opened during 2010, and was receiving one third of each payment for each newly assigned shaft when we visited. His *tomboloma* explained:

In addition, miners frequently pay part of their earnings to more wealthy and powerful gold miners who rent out machines and equipment miners cannot afford to buy themselves. Such gold miners are persons of status and influence in the community, most commonly traditional authorities (or notables) or local government officials. For example, one mayor told Human Rights Watch that he owned a mine where he was renting out machines.^[26] His advisor had 70 to 80 people working for him on eight

sites.[27] The relationship between the wealthy gold miners and the ordinary artisanal miners sometimes resembles a relationship between an employer and an employee. Some wealthy gold miners also lend money to poorer miners, creating a burden of debt. Community leaders at one mining site described how the debt creates severe pressure on the artisanal miners, who try to pay the money back within a month, and they cited this as one of the reasons why parents send their children to work in the mines.[28]

Artisanal miners who have been assigned a particular shaft sometimes hire others to work for them. They are considered owners of the shaft. Several artisanal miners in the Kniba region explained that they had to give two out of three bags of ore to the owner of the shaft.[29]

In some areas, miners have set up cooperatives or economic interest groups to invest together in equipment, improve efficiency of the work process, and increase income.[30]

Child labor is very common in Mali and other parts of West Africa. In the context of poverty, child labor is a common strategy to increase household income. Malis official figures state that about two-thirds of children in Mali work, and about 40 percent of all children between the ages of five and fourteen perform hazardous labor. In absolute figures, an estimated 2.4 million children are doing work that is considered harmful.[31] Child labor puts children at a disadvantage in accessing an education and the wider labor market, and exposes children to a range of human rights abuses, including labor exploitation, violence, and trafficking.[32]

The majority of children in Mali work in agriculture. Other sectors include domestic work almost entirely performed by girls husbandry, fishery, handicraft, commerce, and artisanal mining, including artisanal gold mining and quarrying. Another form of child labor is the forced begging by pupils of Quranic schools (*talibs*) who are exploited by their teachers.[33]

There is a long history of child migration in West Africa.[34] Younger children are often sent to live with relatives, a practice called *confiage* (child fostering).[35] For adolescents older children under the age of 18 leaving the village and seeking economic independence have been an important rite of passage in the past and present.[36]

While child fostering and migration can benefit a child's access to education and upbringing, it can also lead to exploitation and trafficking.[37] Trafficking of children into various work sectors has increasingly become a problem in West Africa, including Mali. Most of the trafficking is done through small, informal networks, including families and acquaintances. In addition to internal trafficking, there is cross-border trafficking between Mali and its neighboring countries.[38]

Mali has ratified a great number of international treaties, including the International Covenant on Social, Economic and Cultural Rights (ICESCR), the Convention on the Rights of the Child (CRC) and its Optional Protocol on the Sale of Children, Child Prostitution and Child Pornography, and the Protocol to Prevent, Suppress, and Punish Trafficking in Persons, especially Women and Children.[39] Furthermore, Mali has ratified binding ILO Conventions, in particular the Worst Forms of Child Labor Convention (Convention 182) and the Minimum Age Convention (Convention 138).[40] At the regional level, Mali is a state party to the African Charter on Human and Peoples Rights and the African Charter on the Rights and Welfare of the Child.[41] In Mali, international treaties have primacy over national legislation.[42]

Child labor is defined by the ILO as work that is mentally, physically, socially, or morally dangerous and harmful to children and interferes with their schooling.[43] International law does not prohibit all types of work for children. Certain types of activities are permitted when they do not interfere with the child's schooling and do not harm the child.[44] The Minimum Age Convention and Worst Forms of Child Labor Convention spell out in detail what types of work amount to child labor, depending on the child's age, the type and hours of work performed, the impact on education, and other factors.

According to the CRC, all children have the right to be protected from economic exploitation.[45] Economic exploitation refers to situations where children are taken advantage of for the purpose of material interests, including through child labor, sexual exploitation, and trafficking.[46]

The Worst Forms of Child Labor Convention defines the worst forms of child labor as all forms of slavery or practices similar to slavery, such as the sale and trafficking of children and forced or compulsory labor, as well as work which, by its nature or the circumstances in which it is carried out, is likely to harm the health, safety or morals of children.[47] The latter type of work is also defined as hazardous work.

According to the ILO, mining counts among the most hazardous sectors and occupations.[48] Under the Worst Forms of Child Labor Convention, hazardous work includes work that exposes children to abuse, work underground, work with dangerous machinery, equipment, and tools, work that involves the manual handling or transport of heavy loads, work in an unhealthy environment that exposes children to hazardous substances, agents, or processes, or to temperatures damaging to their health, and work under particularly difficult conditions such as working long hours.[49] The Convention calls upon states to define hazardous occupation in national legislation.[50]

For work other than the worst forms of child labor, international law requires states to set a minimum age for admission into employment and work. The Minimum Age Convention states that the minimum age shall not be less than the age of compulsory schooling and, in any case, shall not be less than 15 years.[51] As an exception, developing countries are allowed to specify a lower minimum age at 14 years at the moment of ratification.[52]

The Minimum Age Convention also permits light work from the age of 13. Light work is defined as work which is not likely to be harmful to their health and development; and not such as to prejudice their attendance at school, their participation in vocational orientation or training programs [] or their capacity to benefit from the instruction received.[53]

Both the CRC and the ICESCR lay down the principle of free and compulsory primary education.[54] In addition, higher education, including secondary schooling as well as vocational training, should be made available and accessible to all.[55] States are required to protect children from work that interferes with their education.[56]

While the rights under the ICESCR are subject to progressive realization, states have a minimum core obligation to ensure the satisfaction of, at the very least, minimum essential levels of each of the rights. These are not subject to progressive realization but have to be fulfilled immediately.[57] In particular, states have to provide primary education for all, on a non-discriminatory basis.[58] They also have to ensure that primary education is free of charge and compulsory. To realize the right to primary education, states have to develop and implement plans of action; where a State party is clearly lacking in financial resources, the international community has an obligation to assist.[59]

The CRC urges states to implement measures, where necessary, within the framework of international cooperation.[60] Similarly, the African Charter on the Rights and the Welfare of the Child provides that every child has the right to an education and stipulates that free and compulsory basic education should be achieved progressively.[61]

The right to the highest attainable standard of health is enshrined in international human rights law. The ICESCR, the CRC, the African Charter on Human and Peoples Rights, and the African Charter on the Rights and the Welfare of the Child recognize the right to physical and mental health as well as the right of access to health care services for the sick.[62] Several international and regional legal instruments also require states to protect children from work that is harmful to their health or physical development.[63]

With regards to hazardous work environments, state parties to the ICESCR have the obligation to improve all aspects of environmental and industrial hygiene, for example, through preventive measures to avoid occupational accidents and diseases, and the prevention and reduction of the populations exposure to harmful substances such as harmful chemicals.[64]

The full realization of the right to the highest attainable standard of health has to be achieved progressively.[65] In addition, states face core obligations that have to be met immediately, including essential primary health care, access to health services on a non-discriminatory basis, and access to an adequate supply of safe and potable water.[66] Obligations of comparable priority include the provision of reproductive, maternal, and child health care, and of education and access to information concerning the main health problems in the community.[67]

The CRC and other international treaties to which Mali is a party protect children from violence and abuse. Although parents or legal guardians have the primary responsibility for children in their care, states have an immediate obligation to protect children from all forms of physical or mental violence, injury and abuse, neglect or negligent treatment, maltreatment, or exploitation, including sexual abuse.[68] Sexual exploitation and abuse of children is prohibited in all forms.[69]

Trafficking in persons is prohibited under international law.[70] Having a slightly broader scope than trafficking in adults, trafficking in children is defined as the

recruitment, transportation, transfer, harboring or receipt of a child for the purpose of exploitation.^[71] Exploitation includes at a minimum, the exploitation of the prostitution of others or other forms of sexual exploitation, forced labor or services, slavery or practices similar to slavery, servitude, or the removal of organs.^[72] Trafficking of children is also classified as a worst form of child labor.^[73]

Although governments have the primary responsibility for promoting and ensuring respect for human rights, private entities such as companies have human rights responsibilities as well. This basic principle has achieved wide international recognition and is reflected in international norms, most recently with the adoption of the Guiding Principles on Business and Human Rights by the UN Human Rights Council in June 2011.^[74]

The Guiding Principles were elaborated by John Ruggie, former United Nations special representative of the secretary general on the issue of human rights and transnational corporations and other business enterprises. The Principles lack guidance with regards to government regulation of companies human rights impacts and have failed to call for mandatory monitoring and reporting of companies human rights impacts. Nonetheless, they serve as a useful guide to many of the human rights obligations of businesses and of the governments that oversee their activities. The Principles place particular emphasis on the concept of human rights due diligence, the idea that companies must have a process to identify, prevent, mitigate, and account for their impact on human rights. According to the Guiding Principles, corporations should monitor their impact on an ongoing basis and have processes in place that enable the remediation of adverse human rights impacts they cause or to which they contribute.^[75]

Businesses can also choose to join the UN Global Compact, a voluntary initiative which incorporates human rights commitments. The 10 principles of the Global Compact cover general human rights, labor rights, and environmental and anti-corruption standards that are derived from the Universal Declaration on Human Rights and other texts. Businesses committing to this voluntary corporate responsibility initiative agree to uphold the effective abolition of child labor.^[76]

In May 2011 the Organization for Economic Cooperation and Development (OECD) adopted a Recommendation of the Council on Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas.^[77] The Recommendation is not legally enforceable, but calls upon member states and others to implement a due diligence framework in the mineral supply chain, and a model supply chain policy. The model policy states, We will neither tolerate nor by any means profit from, contribute to, assist with or facilitate the commission by any party of any forms of forced or compulsory labor [and] the worst forms of child labour.^[78] The OECD is now in the process of developing supplements relating to specific minerals, including a supplement on the gold supply chain.^[79]

Under the 1992 Malian labor law, children are allowed to work from the age of 14, in violation of international law, which sets the age at 15.^[80] Malian law prohibits forced, compulsory, and hazardous labor, or work that exceeds childrens forces or may harm their morals, for anyone under age 18.^[81]

The government has drawn up a national list of hazardous work for children, which prohibits the use of children in many forms of labor in traditional gold mining. Specifically, it prohibits digging of shafts, cutting and carrying of wood for underground shafts, transport of rock from the shaft, crushing, grinding, panning in water, and the use of explosives, mercury, and cyanide.^[82] A decree also stipulates how much weight children are allowed to carry, according to their age, gender, and mode of transport.^[83]

Mercury is not prohibited in Mali, but it is listed in the governments list of dangerous waste, subjecting it to strict rules for trade.^[84]

According to the law on education, education is free (*gratuit*) in Mali; this means that any school fees are illegal.^[85] The same law also stipulates that education is compulsory; parents have an obligation to place their children in school during a nine-year period of basic education (*enseignement fondamental*), starting at age six.^[86]

The Penal Code contains protections against violence, child neglect, and child trafficking.^[87] Child trafficking is defined as displacement of a child in conditions that are exploitative and turn the child into a commodity.^[88] A new initiative for a separate anti-trafficking law is currently underway.^[89]

The Child Protection Code spells out key protections for children, such as the right to be treated equally and the right to be free from violence, neglect, sexual abuse, and exploitation.^[90] The Code specifically bans economic exploitation, including trafficking or child labor that harms the childs education, health, morals, or development. It puts the minimum age for child labor at 15.^[91]

It is estimated that between 20,000 and 40,000 children work in Malis artisanal gold mines.^[92] Girls and boys are both active in artisanal gold mining, in roughly equal numbers.^[93] They work under conditions that result in short-term and long-term health problems and bar them from getting an education. Their right to health, to education, and to protection from child labor and abuse is violated on a daily basis.

Children are sent into child labor to increase the family income. Many parents of child laborers are artisanal miners, and they often earn very little. Artisanal miners frequently have to pay money or part of their ore or gold to traditional or local authorities, or to miners who out rent machines or hire them as their workforce. Some artisanal miners are also in debt, putting pressure on them to send their children to work in the mines, in order to boost family income.

Most children go with a parent or sibling to the mine, and work alongside them. Others, however, are sent to live and work with another family, following a tradition of child fostering, or live and work by themselves. Other adults, such as relatives or even strangers, sometimes also take advantage of the vulnerability of children, and economically exploit them by sending them to work in the mines without pay.

The government has failed to effectively address child labor in artisanal mining. It has not enforced current law banning hazardous forms of child labor, and has done too little to make education available and accessible in artisanal mining areas. The government has also failed to address child protection issues, mining-related health problems, and environmental health issues related to mercury in artisanal mining.

Digging and constructing shafts or pits is the first phase of the gold mining process, and is physically demanding. Boys as young as six do this work. One boy, about six years of age, complained that digging shafts caused him pain in the palms of his hands.^[94] Another boy, Moussa S., also about six years old, told Human Rights Watch:

Hamidou S., estimated to be eight years old, told us that he also dug shafts with a pickaxe, resulting in back and neck pain.^[96]

Shafts are estimated to be at least 30 meters deep, and sometimes more.^[97] Those who climb into shafts and work underground are considered doing mans work, even though some are also children. Oumar K., about 14, described his experience:

There are very few security precautions to ensure that shafts are stable or that those underground can get up safely. Oumar K. explained that he took turns with another person once every hour to ensure that the person underground still had enough strength to climb up.^[99]

Some miners perform magic rituals that they believe will protect them from accidents. The boys working underground put on a brave face, but barely manage to conceal their fear and frustration. Ibrahim K., who migrated from neighboring Guinea to Mali to work in artisanal mines, said:

Outside the shaft, children and adults pull up the ore with buckets. This task is commonly called *tirer la corde* (pulling the rope). Several children told us that pulling and transporting the ore caused them pain and that they wanted to stop this work. Karim S., a boy who worked at Worognan mining site with his older brother, told us about his pain:

Lansana K., a 13-year-old boy who digs shafts and pulls up heavy buckets, complained:

Once the ore has been pulled out of the shaft, it has to be transported to places where it is bagged for storage or crushed, ground, and panned. Most workers/adults and children/carry the ore on their shoulders, while some others use small carts to transport the load. Several boys interviewed complained about pain from transporting ore. One of them was 15-year-old Djibril C., who said:

Another boy, who was 14 years old, told us that he transported the ore from the shaft to the place where it is put into sacks. Although he used a cart with a donkey for this, he said he often felt stiff from lifting weight and being bent over, concluding: I feel that the work is too much for me.^[104]

Some children also carry heavy loads of water in the mines, mostly for use in gold panning (and sometimes for drinking). This is mostly done by girls and poses the same health problems as other transport work.^[105]

Hard and rocky ore must be crushed and ground before it can be panned for gold. When crushing machines and mills for grinding are available, miners rent them to break and grind up the earth.^[106] The machines are loud and produce a lot of fumes. Men and adolescent boys usually operate the machines, and they often spend many hours a day at crushing machines or mills without any protective gear.^[107]

When there are no machines to crush the rock, artisanal miners pound it manually, usually with a hammer or a pestle and mortar. This work is sometimes carried out by girls or boys.^[108] It can lead to accidents, as well as short-term and long-term back injury.

Once the ore has been ground to a fine sandy quality, it is washed (or panned) for gold. Gold panning is the basic technique to recover gold from ore. The circular shaking of ore and water in a pan causes the gold to settle to the bottom of the pan, while the lighter material can be washed off the top. This work is largely considered women's and girls' work.^[109] Of the 10 girl miners we interviewed, nine said that they panned for gold. Some boys pan for gold, too.^[110]

Several girls mentioned back pains, headaches, and general fatigue caused by gold panning.^[111] Eleven-year-old Susanne D. said:

Aminata C., a 13-year-old girl from Baroya mine, told us:

Sometimes, prior to panning, the ore is further concentrated into a gold-rich material through sluices. Sluices are inclined troughs that are lined in the bottom with a carpet or other material that captures gold particles.^[114] Children also do this work.

Artisanal gold miners in Mali and all over the world use mercury, a white-silvery liquid metal to extract gold from ore, because it is inexpensive and easy to use.^[115] In Mali, amalgamation is often carried out by women and children (girls and boys).^[116] Mercury is mixed into the ground-up, sandy ore and binds to the gold, creating an amalgam. After the amalgam has been recuperated from the sandy material, it is heated to evaporate the mercury, leaving gold behind.

The use of mercury in Mali's artisanal mining sites put child laborers at grave risk of mercury poisoning, primarily through mercury vapor. Mercury is a toxic substance that attacks the central nervous system and is particularly harmful to children.^[117]

Of the 33 children interviewed working in artisanal mining, 14 said they were themselves carrying out amalgamation. The youngest was six years old.^[118] Susanne D., 11, told us how she works with mercury:

None of the children we spoke with knew why mercury is dangerous or how to protect themselves. Some had never heard at all that there is any health risk associated with the use of mercury. Fatimata N., a girl from Burkina Faso, told us:

Some artisanal miners consider mercury a powerful, magic substance. Mohamed S., 16, who carries out amalgamation, explained:

Although mercury is a dangerous product under Malian government regulations, the mercury trade is flourishing. Frequently gold traders also deal in mercury. Traders told us that they receive mercury from countries in the subregion, notably Ghana and Burkina Faso.^[122] Mercury traders are present in gold mining areas and sell mercury on site. Human Rights Watch learned of one town where mercury was even sold in a shop that had about 25 kilograms of mercury in stock.^[123] In some areas, traders provide mercury for free to the miners, so miners will sell the gold to them.

Mercury traders provide mercury directly to children. Mariam D. in Worognan said:

Another boy told us that he received mercury from the local trader. Oumar K. said he mixes mercury and the sandy ore and then takes the amalgam back to the trader, who burns it while Oumar K. watches. Asked about health risks, he said that he did not know that mercury is dangerous.^[125]

Mercury, a toxic substance that attacks the central nervous system, is particularly harmful to children. It can cause, among other things, developmental problems. There is no known safe level of exposure.^[126] Mercury can also attack the cardiovascular system, the kidneys, the gastrointestinal tract, the immune system, and the lungs. Symptoms of exposure to mercury include tremors, twitching, vision impairment, headaches, and memory and concentration loss. Higher levels of mercury exposure may result in kidney failure, respiratory failure, and even death. The chemical can also affect women's reproductive health, for example by reducing fertility and leading to miscarriages.^[127] Most people are exposed to dangerous levels of mercury either through inhalation of mercury vapor or through the consumption of mercury-contaminated fish.^[128]

Artisanal miners, including child laborers, are exposed to mercury through the inhalation of vapors that develop when the amalgam is smelted. They are also exposed to mercury through skin contact, though the health risk is less severe compared to inhalation of mercury vapor. ^[129] Researchers have described mercury intoxication an invisible epidemic.^[130]

Although there are no studies on Malian children, a study on mercury exposure of children in artisanal gold mines in Indonesia and Zimbabwe found that children living in the mines had significantly higher levels of mercury in their blood, hair, and urine than those living elsewhere.^[131] Child laborers those living in the mining area and working with mercury had the highest level of mercury concentration in blood, hair, and urine. They also showed symptoms of mercury intoxication, such as coordination problems (ataxia), tremors, and memory problems. The main cause for this was the exposure to mercury vapors when burning the amalgam to recover the gold.^[132]

Mercury is particularly harmful to unborn babies and infants, and can be transmitted in utero and through breast milk. It is therefore of concern that women miners work with mercury when they are pregnant or breastfeeding.^[133] In addition, small children inhale the mercury vapor when they are present near amalgamation sites, either at the mine or in the home. During one visit, we observed a woman with a baby on her lap assisting another woman with amalgamation by holding the mercury in her hands.^[134]

Children are also exposed to mercury through contaminated waters and the consumption of fish that live in them.^[135] Women miners in Sensoko told us that they regularly empty the water used for amalgamation into the river.^[136] This is dangerous because in water, mercury may convert into its most toxic form, methylmercury, which accumulates in fish and reaches the population through fish consumption.^[137] In Worognan, Human Rights Watch researchers observed how artisanal miners empty water on the ground, right next to houses, after being used for amalgamation. A local gold trader confirmed that it was a common practice to empty water on the ground in residential areas.^[138]

The Use of Mercury in Artisanal Mining: A Global Toxic Threat

Mercury is used by artisanal miners in at least 70 countries around the world including countries across the Sahel gold belt. There are 13 to 15 million artisanal miners working worldwide who risk being directly exposed to mercury; many of them are women and children.^[139] The chemical is affecting the environmental health of many more people globally. An estimated 1,000 tonnes of mercury are released from artisanal miners each year around 400 tonnes go into the atmosphere, and around 600 tonnes are discharged into rivers, lakes, and soil. China, Indonesia, and Colombia are among the countries with the highest estimated emissions.^[140]

Mercury is the cheapest and easiest gold extraction method. Mercury-free gold extraction methods require more capital, training, and organization than many artisanal miners have access to. Industrial mines have phased out the use of mercury and switched to cyanide processing, which poses another set of serious health risks. Occasionally cyanide has been promoted as an alternative to mercury for artisanal miners, and resulted in the parallel use of both mercury and cyanide. This is particularly dangerous, as cyanide can exacerbate mercury's negative impacts on the environment.

In the absence of a safe and practicable mercury-free alternative, several methods are being promoted by the UN and NGOs to reduce the use of and exposure to mercury, such as emission-reducing technology (small containers that retain mercury vapor, known as retorts, or fume hoods), recycling mercury, and methods to concentrate the gold before amalgamation.^[141] In recognition of the global threat posed by mercury, a global treaty for the reduction of mercury is underway and scheduled for adoption in 2013.^[142]

Children in mining areas suffer from respiratory diseases, ranging from bronchitis to pneumonia and tuberculosis (TB).^[143] In the mining areas, respiratory diseases are partly caused by the dust emanating from artisanal mines during the work process, and can affect child laborers as well as other children living in the vicinity. Mory C., an 11-year-old boy from Baroya, complained:

Respiratory diseases are common among miners around the globe, and one disease, silicosis, has been specifically associated with mining.^[145] Doctors in Mali do not

have the equipment and capacity to diagnose silicosis, so there are no data on the prevalence of silicosis for the country.[\[146\]](#)

Of 33 child laborers interviewed, 21 said that they suffered from back pain, neck pain, headaches, or pains in their arms, hands, or joints. Digging, pulling, lifting, and carrying heavy ore caused such pain. For example, Oumar K. complained about the health consequences of digging shafts, working underground, and pulling up heavy buckets:

Such hard labor can affect childrens long-term growth, leading to skeletal deformation of the back and neck, and accelerating joint deterioration.[\[148\]](#)

Extended periods of bending over to dig or pan, and repetitive movements, such as crushing rock with manual tools, can result in similar pain and in long-term physical consequences.[\[149\]](#)

Children in mining areas risk injury from sharp tools, flying and falling rock, and frequently collapsing shafts. For example, in February 2011, a 15-year-old boy in Tabakoto cut himself with a hoe in the tibia (shinbone).[\[150\]](#) Children crushing stone may be cut by flying rock shards or cut themselves with tools.[\[151\]](#)

The transport of ore can also lead to accidents, as is illustrated by the experience of Mamadou S., who was about six years old:

The father of Mamadou S. insisted that work in the mine was good for the education and training of his son, and claimed that Mamadou was four years old.[\[153\]](#)

Child laborers sometimes fall down shafts when they work underground, or fall while climbing down or up, as do adults.[\[154\]](#) A nurse in Tabakoto treated an 11-year-old boy who fell into a shaft and fractured his hand.[\[155\]](#)

As described above by Oumar K., a child laborer, shafts do collapse.[\[156\]](#) These frequently result in fractures, open wounds, back injuries, and other injuries, and can even lead to death.[\[157\]](#) A doctor in Kolondiba circle noted that there are shaft collapses in Mpkadiassa and Worognan mines every month, although Human Rights Watch has not been able to verify this.[\[158\]](#)

Several cases of mine collapses illustrate the potential danger for child laborers, even though no children were affected in these incidents. In April 2010, an adult died at a Kniba mine when his head was smashed during a shaft collapse, and two others died from other shaft collapses in the area during the same year.[\[159\]](#) At least three workers were killed in a shaft collapse in Worognan mine in late 2010 or early 2011, spreading fear among many workers. While the mayor put the number of victims at three and tried to downplay the incident, other workers at the mine said that the number of victims could have been higher.[\[160\]](#) A Ministry of Labor official also witnessed a shaft collapse during a visit to a mine in Kniba region.[\[161\]](#)

Even children who do not participate in the gold mining visit the mines and are exposed to risks. This includes children who are taken by their parents to the mine due to lack of childcare. Older siblings faced the difficult task of protecting younger siblings from falling into shafts and other accidents.[\[162\]](#) A doctor in Kniba treated two children who fell into a shaft in a mine near Kniba. The children were around five and six years old.[\[163\]](#) In Baroya, a boy of about three years fell into a shaft and injured his arm.[\[164\]](#)

The children we interviewed said work days often lasted for as long as 11 hours, from 7 or 8 a.m. to about 6 p.m.[\[165\]](#) An ILO study on child labor in artisanal mining in Mali found that children averaged nine hours of work a day.[\[166\]](#) The work day is nearly continuous. For example, Haroun C., 12, who has never attended school, told Human Rights Watch that he works at the mine from 9 a.m. to 7 p.m., and that his joints hurt him at night.[\[167\]](#) Some children said they took lunch breaks or rested for a moment when they felt exhausted or in pain.[\[168\]](#)

Artisanal mines usually have one day of rest per week for everyone, including children. This is thought of as a day for the spirits of mining.[\[169\]](#)

Some child laborers attend school, but work full days in gold mining during holidays and weekends. They sometimes also work at the mines after school or skip lessons to go the mines.[\[170\]](#) Of 33 child miners interviewed, 16 went to school. Most of these children were younger and attended primary school. One child laborer who attends school was 12-year-old Issa S., who complained the impact of long work hours on his health:

Children who work in artisanal mines are often not paid. If they do get paid, they give most of the money to their parents or guardians; adolescents who are by themselves often send money to their parents. When children work for people other than their parents, they face an additional risk of abuse and exploitation.

Many children contribute to the production process but do not obtain the gold at the end of it. Their work is considered part of a group work product.[\[172\]](#)

Some child laborers get paid. Pay is irregular, varies greatly, and is based on the amount of gold mined.[\[173\]](#) Most commonly, child laborers give the money to their parents or guardians, to add to the family income. Of 17 children who told us that they were earning money, 13 had to give it to their parents or guardians.[\[174\]](#)

When parents are not present, children sometimes earn money to send it to them. One such child was Nanfadima A., 11, who said:

A 15-year-old boy, Abdoulaye M., also sent money home:

Another boy, Timoko K., 15, also earned money for his parents who lived far away. He was subjected to the same exploitative rules as adult artisanal miners, having to give two-thirds of his ore to another gold miner who is considered the owner of the shaft:

Some adolescents earn money for themselves, particularly when they have migrated and live alone. Still, this was not always enough to survive. Ibrahim K., 15, said:

Adolescents have occasionally earned a significant amount of money, and kept some of it for themselves. The prospect of earning money encouraged them to work in artisanal mining, while they were largely unaware of the risks. One boy, Julani M., told us that he once earned 30,000 CFA francs (about \$65) in two days, and that he bought clothes with the money.[\[179\]](#) Several adolescent girls told us proudly that they earned money. One of them, Fatimata N. from Burkina Faso, said that she had once earned 80,000 CFA francs (about \$174), and kept a portion to buy herself clothes. She concluded: The work is good for me.[\[180\]](#) Assatou S., 17, earned her own money and used it for her *trousseau* (clothes and other items for a wedding). She said:

Some parents also occasionally rewarded their children with small amounts of money or a decigram of gold. For example, Moussa S., who is six years old, sometimes gets 100 CFA francs (about \$0.21) as a gift from his father.[\[182\]](#)

According to the ILO, about 20 percent of children in artisanal mining work for adults who are not their parents, such as an employer or a relative. This frequently results in economic exploitation.[\[183\]](#)

One such case was Boubacar S., who lived with guardians. His biological parents were working somewhere else, and placed him with a family with whom they were acquainted. Boubacar said he earns about 1,000 CFA francs (about US\$2.18) per day and has to hand over his earnings to his guardian immediately. He told us in tears:

Boubacars teacher confirmed that the boy was treated badly by his stepfather. The stepfather had told him that he would not pay the school fees if the child refused to do the work he asked him to do.[\[185\]](#)

Mariam D., the girl in Worognan who was very upset that her stepmother was taking the money she earned told Human Rights Watch:

Conditions for child trafficking are ripe in Malis artisanal mines because of exploitative labor conditions, as described above. Children who migrate without parents and work for other adults are particularly vulnerable to trafficking. According to the ILO, about two-thirds of child laborers surveyed in Malian artisanal mines are migrants.[\[187\]](#) A regional survey about artisanal mining found that 10 percent of child laborers in artisanal mines in Guinea, Mali, and Burkina Faso were foreigners from other West African countries who lived in the mines without their parents.[\[188\]](#)

During our research, we met several children who were victims of exploitation and whose situations might have amounted to trafficking. One was Boubacar S., 14, from Sensoko, in the Kniba area, whose situation is described above.[\[189\]](#) He was living with guardians who treated him as if I am not a human being. They forced him to work in artisanal mining and brick making. His parents were gold miners who moved to another gold mine in Mali; they were not in contact with him.[\[190\]](#)

Human Rights Watch also interviewed children from Burkina Faso and Guinea who might have been victims of trafficking. Salif E., 15, was sent from Burkina Faso to Mali by his parents, and travelled to Worognan mine with two other boys who were relatives. They were accompanied by the head of the Burkinabe community, who was Salif's uncle, and they also worked for him.[\[191\]](#) When we interviewed Salif, he had been in the mine for about three weeks and had not yet been paid.

Leaders of migrant communities play a key role in organizing life of the foreign mining workers.[\[192\]](#) The head of the Burkinabe community in Worognan, Salif E.'s uncle, explained that around 60 persons were working for him. A local gold trader confirmed that he employed several children.[\[193\]](#)

The majority of children in child labor dislike the work they do, but do it to help their parents, according to a recent survey.[\[194\]](#) Even when children are not victims of trafficking, they often experience a degree of coercion when working in artisanal mining. The decision to send children to work in the mines—whether by themselves, with the family, or other guardians—is almost always made by parents, and children have little say in the matter. This situation of coercion gets worse when parents or guardians exert psychological pressure or threaten physical abuse.

Several children told us that they would like to leave gold mining work, if they could.[\[195\]](#) This was the case of Mariam D., whose stepmother made her work in the mine whenever there was no school and obliged her to hand over all the earnings. The girl was upset about this, but did not know how to get out of this situation. She told Human Rights Watch: I don't want to work in the mines. I want to stay in school.[\[196\]](#)

Aminata C., who is 13 years old, said she panned for gold and amalgamated gold with mercury. Although her father gave her pain medicine when she suffered from the effects of the hard work, she said her father insisted that she continue working:

Hamidou S., who was about eight years old and in third grade, said:

In some cases, children feel they would like to leave the work, but cannot. In the above-mentioned ILO study, 39 percent of children interviewed stated that they could not stop and leave the gold mining work as they wish.[\[199\]](#)

The existence of artisanal gold mines often leads to the creation of small commercial centers. Children perform many other forms of child labor in these communities. Some work in artisanal gold mining and do other work at the same time.

Agriculture and domestic labor are the most common forms of child labor in Mali.[\[200\]](#) Boys frequently work in agriculture, sometimes leaving the mines during the harvest. Others work entirely in agriculture.[\[201\]](#)

Many girls in mining communities do domestic labor, in their own families or the host families they live with.[\[202\]](#) While most of the domestic work is done in the home, some takes place at the mine. Women often take smaller children with them to the mine because they lack childcare, and use their older children to look after the small siblings.[\[203\]](#) Children frequently have to carry younger siblings on their back, feed them, and protect them from injury. In one case, a mother told us that her four-year-old daughter was looking after her little sister in the mine.[\[204\]](#)

Children also work in other businesses. For example, they sell water or food, or make bricks or clothing.[\[205\]](#) In addition, children are involved in sex work, one of the worst forms of child labor.[\[206\]](#)

Child labor is common and is widely accepted in Mali. A recent survey on attitudes towards child labor confirms that parents commonly view child labor as acceptable.[\[207\]](#) Teaching a child how to mine gold is considered part of socialization.[\[208\]](#) Government officials also told Human Rights Watch that child labor was part of Malian culture. A ministry official described child labor as educative (*socialisant*), as it teaches children the value of work.[\[209\]](#)

We interviewed a miner who claimed to own gold worth well over US\$10,000. He sent his son Mamadou S. to the mine although he did not need the income. He said:

Community leaders in Worognan emphasized what they saw as positive effect of children working in gold mining, namely that the community now had the means to buy larger items such as new roofs, bicycles, or machines for agriculture.[\[211\]](#)

Sexual exploitation is common in mining areas, particularly in large mines that bring together many different populations from within and outside Mali.[\[212\]](#) Child prostitution is inherently harmful and a worst form of child labor under international law. International law also prohibits sexual exploitation.

Some girls self-identify as sex workers. NGOs working on HIV prevention and treatment in mining areas have reached out to adult and child sex workers in artisanal mines in the Sikasso and the Kayes region, including in large sites such as Alhamdoulaye and Massiogo in Kadiolo circle, MPkadiassa in Kolondiba circle, and Hamdallaye in Kniba circle.[\[213\]](#)

One NGO found that over 12 percent of the sex workers they worked with were between the ages of 15 and 19. It also found that the large majority of sex workers were foreigners, mostly from Nigeria and Côte d'Ivoire.[\[214\]](#)

In Worognan mine, in the Sikasso region, women and girls, mostly Nigerians, worked as sex workers. Stella A., an 18-year-old sex worker, told us about the climate of violence in which she works:

Mariam D., about 11 years old, worked in Worognan mine and described her surroundings:

Many girls engage in sexual relations to escape poverty, trading sex for food or other goods, without considering this sex work. Some of these girls come to work in small local businesses such as restaurants, but are encouraged by restaurant owners or other employers or guardians to engage in sexual relations.[\[217\]](#) An advisor to a village chief interviewed by Save the Children described the situation in a mine in Kadiolo circle:

Traditional and local authorities in Kolondiba circle have expressed concern about sexual exploitation in mines. A local government official responsible for social affairs complained about transient relationships masked as informal marriages between adult miners and girls or young women.[\[219\]](#)

There is a heightened risk of HIV infection for girls who engage in sex work or multiple sexual relations. While HIV prevalence is only one percent in Mali, it is significantly higher among sex workers. HIV prevalence was at 35 percent among sex workers in 2006.[\[220\]](#) Health workers and organizations working on HIV concur that mining areas are high-risk zones for HIV infection, due to the presence of a large number of sex workers and men without family.[\[221\]](#) However, there is no data on HIV prevalence in mining areas.

There have been some cases of rape in artisanal mining areas. Government officials in Kolondiba circle described rape as common.[\[222\]](#)

In December 2010, an eight-year-old girl was raped in MPkadiassa mine (Kolondiba circle), allegedly by a 53-year-old man.[\[223\]](#) According to security forces, there had been several other recent cases of rape in MPkadiassa, including of girls.[\[224\]](#) According to the gendarmerie, a 15-year-old girl was raped in Worognan mine in February 2011.[\[225\]](#) A suspect was detained, but had not yet been tried when Human Rights Watch visited the mine.[\[226\]](#)

Gendarmes in Worognan said that the zone was frequently the scene of violence. They complained that they lacked staff and a building.[\[227\]](#)

The Malian government has the primary political and legal responsibility to address child rights violations in Mali. Mali's democratically elected government has shown its will to address human rights violations by ratifying a large number of international human rights instruments. However, government policies and programs on child labor and the rights of children have had a little impact because they lacked political and financial support, or have not been implemented.

International donors have an important role to play in supporting the government in the realization of rights. In 2009, the five top donors to Mali were the United States, the European Union, the African Development Bank, the World Bank, and China. Other important bilateral donors include France, Canada, the Netherlands, Germany, and Japan.[\[228\]](#) While some donors are involved in initiatives relating to child labor and child protection, these areas have not received the attention they should.

UN agencies and NGOs are also addressing child labor and mining issues in Mali and other nations. While the ILO and NGOs have carried out some important programs in Mali, these have been limited in scope. Unfortunately, the ILO has failed to follow up on a global campaign for the elimination of child labor in artisanal mining, in

which 15 governments pledged to end child labor in mining by 2015.

In 2006, the government created a National Unit to Combat Child Labor in the Ministry of Labor (*Cellule nationale de lutte contre le travail des enfants*, hereafter referred to as Child Labor Unit). The unit has conducted studies on child labor and drawn up a list of hazardous labor which prohibits almost all gold mining activities for children, such as digging shafts, transporting rock, crushing and grinding ore, panning in water, and using mercury.^[229]

However, the governments efforts to end child labor have been undermined by poor implementation of policies and have lacked a full political commitment from all government institutions. The Child Labor Unit operates somewhat in isolation and lacks funding as well as political support from other ministries.^[230] Efforts to curb child labor have also been hampered by the small number of labor inspectors in Mali.^[231] Labor inspectors have been criticized for achieving little.^[232] Besides, there have been very few labor inspections in the mining areas; the few that took place were requested and funded by the ILO.^[233]

Most recently, the Child Labor Unit has led the drafting process for an action plan to combat child labor.^[234] The action plan for the elimination of child labor (*Plan d'action pour l'élimination du travail des enfants au Mali* or PANETEM) was adopted in June 2011. It seeks to eliminate the worst forms of child labor by 2015, and all child labor by 2020. During the first phase, it proposes to identify children working in the most hazardous jobs or who have been trafficked and withdraw them from these exploitative conditions. It also aims to provide these children with access to education, vocational training, and support, and to offer income-generating activities for concerned families. In addition, the action plan envisages a law on child trafficking, prosecution of child traffickers and those responsible for commercial sexual exploitation, and an increase of the minimum age of employment from 14 to 15 to comply with Malis international commitments.^[235] Unfortunately, the action plan does not adequately address the disastrous health implications of child labor, including the use of mercury in artisanal gold mines. It also lacks a strategy towards companies who might benefit from child labor directly or through their supply chains.^[236]

Despite these shortcomings, the action plan has created an opportunity to improve the lives of over two million children working in harmful conditions in Mali. It remains uncertain whether the government itself will fully support the action plan, at the risk of hurting the interests of influential economic operators. The government also faces the challenge of securing sufficient financial support for the US\$100 million plan.^[237]

Most programs on child labor in Mali are donor-funded and have recently experienced drastic cuts. Until 2010, the US provided significant funding to ILO/IPEC in Mali, which implemented child labor programs through Malian partner NGOs.^[238] One ILO/IPEC program included a regional study on artisanal mining in Mali, Niger, and Burkina Faso, and efforts to withdraw children working artisanal gold mining in all three countries.^[239] Unfortunately, the US has stopped funding child labor programs in Mali since the start of 2011. This situation was not specific to Mali: US funding to IPEC programs around the world was reduced from US\$49 million in 2010 to US\$27 million in 2011.^[240]

The European Commission (EC) has been another major donor for ILO/IPEC in Mali for several years, but has decided to cut funds. In 2011, the EC will fund ILO/IPEC in Mali with US\$202,000, less than half of its support in 2010.^[241] The EC funds an ILO/ IPEC project called TACKLE, which aims to move children from work to school in Mali and 10 other countries, and which addresses child labor in mining.^[242] Other bilateral and NGO donors also fund child labor programs in Mali, including the Netherlands and Spain.^[243]

Several Malian NGOs run programs that aim to withdraw children from child labor in artisanal gold mining, improve access to education, and raise awareness around child labor in mining communities. Some of these projects are funded by the above-mentioned donors.

The NGO Réseau d'Appui et de Conseils (RAC) has implemented several successful programs with ILO/IPEC in support of child laborers in Knibas artisanal gold mines. The NGO has succeeded in withdrawing over 1,300 children from work in artisanal mining, and has boosted access to education in artisanal mining communities (see box).^[244] More recently, ILO/IPEC also started working with an NGO, Jiekatanie, on child labor in Sikassos artisanal mines.^[245]

However, donors only provide funding for limited periods and for specific projects. As ILO/IPEC funds come to an end, there is a risk that communities will lack support, and that children who have stopped working in artisanal mining will start again.

An Education Project in Artisanal Mining Areas

As part of its global program to end child labor through education, ILO/IPEC has developed a program in several artisanal mining communities around Kniba, together with its partner NGO Réseau d'Appui et de Conseils (RAC).^[246] This program could serve as a model for similar efforts elsewhere.

In three villages in the Kniba area, ILO/IPEC and RAC renovated old school buildings or built new ones, built nurseries and hired nursery staff, provided furniture and education material, hired nursery teachers, and established free school meals. Beyond this immediate support, ILO/IPEC and RAC helped create a more supportive environment for the school. They raised awareness around child labor in the community through large meetings and radio spots and strengthened school management committees charged with running the school locally.^[247]

They also worked closely with community leaders and local government authorities to garner their support. Community leaders in each village signed a pledge that they will send their children to school and support the village school.^[248] The project also supported the issuance of birth certificates by the local administration and urged authorities to start supporting community schools in the area, thus making a transition from community to public school.

When the project started, enrolment rates were low. The school director in Baroya village told Human Rights Watch:

Before [the project started], the population said this school is a haunted place. There was one child in sixth grade. Then, RAC really built this school up.^[249]

In Sensoko, the number of pupils rose from 36 in 2007 to 97 in 2010, according to RAC. In addition, the newly-opened nursery had 64 children. The director of the school said:

The change started in 2009. Then, few children went to school. Now, around 65 percent go to school. Before, perhaps 10 percent went to school.^[250]

Overall, ILO and RAC found that 424 children were victims of the worst forms of child labor in just these three villages and assisted them in leaving work and getting access to education. The project also found that a much larger number of children were at risk of doing child labor, and provided 1,360 children with material for school.^[251]

In 2005, the ILO started a major campaign to combat child labor in artisanal mining worldwide. It brought together governments, trade unions, and employers from around the world to join its call for Minors out of Mining! with the goal of eliminating child labor in mining by 2015.^[252] It included a detailed program of action, including regularization of small-scale mining operations and activities to withdraw children found to be working in mining.

In June 2005, 15 countries, including Mali, publicly committed to the goal of eliminating child labor in mining by 2015, and signed a pledge to this effect.^[253] In addition, the US government, the Ghanaian government, the International Federation of Chemical, Energy, Mine and General Workers' Unions (ICEM), and the International Council on Mining and Metals (ICMM), an association of mining companies, pledged to support the ILO and governments in their efforts to eliminate child labor in mining.^[254]

Sadly, the initiative fizzled with no concrete achievements or follow-up. ILO has complained about a lack of commitment among some of the signing parties, including a change of leadership in the workers and employers associations. ILO/IPEC has also complained about a lack of funding for work on child labor in mining.^[255] Six years later, the initiative is largely forgotten.^[256]

While the government has taken some steps to deal with child abuse and trafficking, the capacity of the government to prevent such child rights violations is very limited, and the child protection system in Mali is not fully functional.^[257]

In 1999, the government established the National Directorate for Child and Family Support, but the directorate has a vague legal mandate to develop and carry out programs and action plans in support of children and the family.^[258]

The directorate has conducted a study on child abuse and runs two shelters in Bamako for abuse victims.^[259] However, the directorate only addresses cases in an ad-hoc

manner. Rural areas such as mining zones are far removed from its reach. Most existing child protection work, including efforts to prevent child abuse and trafficking, is undertaken by NGOs and community-based organizations, but even these organizations rarely work in mining areas.^[260]

In recent years, the Malian government and its neighbors have made some efforts to combat trafficking in West Africa, laid out in the 2006 ECOWAS Plan of Action Against Trafficking in Persons.^[261] NGOs cooperate with the Malian police and UN agencies in identifying trafficking victims and in some cases return them to their home country.^[262] However, there have been few prosecutions.^[263]

In some artisanal mining areas, NGOs have created local vigilance committees.^[264] The committees composed of a range of actors—teachers, local authorities, and civil society actors—that carry out awareness-raising and prevention activities on trafficking in the community. Unfortunately, studies have observed that local vigilance committees in Malis rural areas have sometimes prevented migration altogether, rather than differentiating between migration and trafficking, curtailing childrens right to freedom of movement, and in some cases repatriating them against their will.^[265]

Child mortality is extremely high in Mali. Almost one in five children die before their fifth birthday. Diarrhea, pneumonia, and malaria are the three leading causes of child mortality in Mali, and are also very common in mining areas.^[266]

Children who work in artisanal mining are exposed to several additional grave health risks, connected to the unhealthy environment they live in and the hazardous work they perform. However, access to health care to treat these mining-related health conditions is very poor, due to serious gaps in health policies. In particular, the government has failed to take effective preventative action on mercury, such as awareness-raising about the risks connected to mercury, and introduction of technologies that reduce exposure to mercury.

Mali is a country with poor access to health care, compared to other West African countries. More than half of the population lives more than five kilometers from the nearest health facility.^[267] Mali also has an acute shortage of health workers. There is one physician per 20,000 patients, and three nurses or midwives per 10,000 patients, far below the Africa-wide average.^[268]

There are few health facilities per population, and overall access to local health services remains poor, despite efforts to bring health services closer to communities under the current health strategy.^[269] Mali has a pyramid health structure, with community health centers (*Centres de sant communautaires, CSCOM*) at the community level, referral health centers (*Centres de sant de reference, CSREF*) at the level of the health district, and regional and national hospitals at the top. The health system relies on user fees that are paid by patients. As a result, access to health care is difficult for the poor, and community health centers are underutilized.^[270]

Some specific health services are free of charge, notably health care for children under the age of five, caesarean sections, and treatment of HIV and a few other diseases. Access to health care has improved in these specific areas.^[271]

Health care access in artisanal mining areas is often very limited, despite the heightened risk of health problems stemming from mining. For example, there is only one referral health center, with few medical doctors, in the health district of Kniba, serving 208,000 inhabitants. There are 19 community health centers, which are staffed with nurses and midwives.^[272]

In some mines, there is a health worker, such as a nurse, who runs a small pharmacy and refers cases to the nearest community health center. However, many other mines have no public health facility. This is the case in one of the largest artisanal mines in the Kniba region, Hamdallaye.^[273]

In the absence of public health services, several NGOs run HIV-prevention and treatment programs in artisanal mining areas, but have limited resources to provide more general healthcare. They do general awareness-raising, disseminate condoms, reach out to sex workers, and assist patients in getting access to voluntary counseling and testing, and treatment if necessary.^[274]

Artisanal mining areas also lack sexual and reproductive health services, including antenatal services and maternity wards.^[275] A doctor complained that mines do not have specialized services for survivors of sexual violence either.^[276]

Some patients seek the help of traditional healers or resort to self-medication for their children.^[277] Four child laborers told Human Rights Watch that they were regularly taking tablets against their pain.^[278]

The government has done virtually nothing to research, diagnose, or treat mercury-related illnesses and conditions in Mali. It lacks data on mercury intoxication of adults or children in artisanal mining areas.^[279] There is little capacity in the Ministry of Health and throughout the health system to diagnose mercury intoxication and to treat it.^[280] In particular, the government lacks a longer-term strategy on how to address the health threat from mercury, including mercury poisoning in children. The current health strategy on child health does not deal with the issue at all.^[281] Even a recent environmental health report of the government hardly addresses the problem. It simply states that mercury is used in artisanal mining, but that the quantities are unknown.^[282]

The Ministry of Environment deals with issues related to mercury through its focal point on Strategic Approaches to International Chemicals Management (SAICM)^[283] and hosted a regional conference on artisanal gold mining in Francophone West Africa in 2009, with a particular focus on the use of mercury.^[284] However, there is little concrete action on the ground, such as training for artisanal miners regarding the risks of mercury and the introduction of retorts or other alternative technologies.

With the support of United Nations Industrial Development Organization (UNIDO), donors, and experts, the government will start to develop an action plan for the reduction of mercury in artisanal mining in 2012.^[285] International donors—France, the US, and the Global Environment Facility—also agreed in mid-2011 to start several other projects on artisanal mining in Mali, Burkina Faso, and Senegal, with a focus on mercury reduction.^[286] This is a promising development, and it is hoped that the programs, which will be implemented by NGOs and UNIDO, will give attention to the special situation of child laborers using mercury, and childrens exposure to mercury more generally.

At the international level, states are currently negotiating a legally binding instrument on mercury. In 2009 the Governing Council of the United Nations Environment Program (UNEP) agreed on the need to develop such a treaty, and it is scheduled for adoption in 2013.^[287] The current draft of the treaty does not foresee specific measures to protect children working with amalgam.^[288]

Mali, together with Nigeria, is one of the African countries represented on the Intergovernmental Negotiating Committee (INC) for the treaty, and therefore plays an important role in the drafting process. For example, Mali has taken a leading role in developing a common African position in favor of mandatory national action plans to reduce mercury in artisanal gold mining.^[289]

Lack of access to education is one of the causes of child labor in artisanal mining. Access to education is generally very poor in Mali and in the artisanal mining areas in particular. In 2009-2010, the net enrolment rate was 60.6 per cent, and only 56.3 per cent of children completed primary school.^[290] Education policies have largely failed to benefit vulnerable groups, such as child laborers in mining areas and in other sectors. In the mining areas, school buildings and infrastructure are lacking, and school fees create barriers in impoverished mining communities. Furthermore, education authorities and schools themselves have largely failed to reach out to families of migrant children to ensure their education.

Since many artisanal mines are located in remote areas, physical access to schools is often a problem. Many long-time mining villages in the Kniba region do not have schools. For example, one of the large mines south of Kniba, Hamdallaye, did not have a school when a local NGO visited in May 2010.^[291] When new artisanal mining communities spring up in some areas, they are even more likely to have insufficient schools.^[292]

The public schools that do exist in mining areas are often in a very poor state. The large majority of schools are too small, lacking separate classrooms for each year group.^[293] For example, the school in Worogman has only two rooms for six grades, and therefore only runs two grades at any time; during our visit, it was running a first and a sixth grade class.^[294] Other schools group several grades together and teach them in the same room.^[295] About half of all schools do not have latrines—a practical problem that deters girls from school attendance and lack a canteen, sports facilities, or a room for teachers.^[296]

Some mines have community schools, private schools, or madrasas (Islamic schools). However, the demand for community-based schools is fairly low in mining areas; this means that the government has an even greater obligation to ensure public schools are available.^[297]

School fees are unlawful in Mali, yet parents usually pay school fees for children who attend. Community schools charge fees, and even public schools sometimes

require parents to pay in money or in kind, for example, food for the teacher.

School fees discourage parents from sending their children to school rather than to the mine. Teachers, parents, and child laborers told us that school fees were one of the reasons why children do not attend school. A group of seven women in Sensoko, Kniba area, explained that they could not pay school fees for all of the children in a family, and therefore sent some children to work full-time in the gold mine instead. Every month, they pay to the local school 800 CFA francs (about US\$ 1.75) per child. This group of women had a total of 29 school-age children working in the mine; of these, 18 were also attending school.[\[298\]](#)

Karim S., a child laborer at Worognan mine, talked about his desire to attend school:

Another child laborer, Oumar K., explained that he had been in school but dropped out because his parents could not pay the school fees any longer. He was in school until fourth grade, but was not allowed back after an illness because his parents had not paid the school fees. His three sisters were also not attending school.[\[300\]](#)

When parents in Mali have to make choices about school attendance, they send boys more frequently than girls. Girls are often used to do domestic work instead, or are married before reaching adulthood.[\[301\]](#) The situation is no different in mining areas. Susanne J., 11, told Human Rights Watch:

Some parents justify their child's work in the mine with the need to earn money for school fees. Lansana K., a school boy in fifth grade, complained:

Similarly, Hamidou S., who is only in third grade, used the money earned at the mine to buy school material.[\[304\]](#)

The use of school fees to support schools results in other problems, too. Teachers confirmed that, The big problem is that the parents don't all pay their part.[\[305\]](#) A member of a school management committee complained that they have all the difficulties of the world to get parents to pay their contribution to the school.[\[306\]](#) As a result, teachers sometimes receive no salary, or only part of a salary.[\[307\]](#)

Many artisanal miners migrate from mine to mine. This creates a serious problem for their children's education. According to the ILO, two-thirds of children working in artisanal mining are migrants.[\[308\]](#) Some children move with their parents from mine to mine every couple of months. For example, in 2010, many artisanal miners migrated between several mines in the Sikasso region, namely the mines at Kola, Kkoro, Kalankan, and Worognan.[\[309\]](#) Fatimata N., an adolescent girl from Burkina Faso who never attended school, told us that she started gold mining at an early age. She first worked in mining in Burkina Faso, and then came with her guardiansher aunt and uncle to Mali to mine gold there. They lived for about a month in a Kkoro mining site (Bougouni circle), and then moved to Worognan.[\[310\]](#)

An education official explained what happens when a new mine is being opened:

Schools in mines seem poorly prepared for the arrival of migrants. One school director told us that there were no migrant children at all in his school, even though the community had received several thousand migrants over the previous year. The school had 30 children enrolled, even though the number of residents was estimated to be above 4,000.[\[312\]](#)

Some child laborers do go to school. This creates a double burden for the children and often results in poor school performance. Mory C., an 11-year-old boy from Baroya, told us about his experience:

Some children cannot keep up with school. Nanfadima A., 11, told us she had to repeat a class. She worked in the mine during school holidays and after school during the week:

Pupils who work in artisanal mining frequently do not turn up at school, resulting in high rates of absenteeism and dropout.[\[315\]](#) School directors and teachers described the negative effects of artisanal mining on pupils' performance.[\[316\]](#) One teacher for grades five and six explained that about half of the children in his class were working at the mine. He said:

The Malian government aims to provide education for all, and support the education-related Millennium Development Goals,[\[318\]](#) through access to education up to grade nine (basic education), better access to education for girls, teacher training, and non-formal education. Decentralization is a key element in the government's strategy, aiming to strengthen community ownership over education.[\[319\]](#) Donors provide significant funding to the education sector, including sector budget support. In 2009, donors gave US\$161 million in official assistance for education in Mali.[\[320\]](#) Donors have also helped fund a remarkable expansion of community schools.[\[321\]](#)

However, education policies have given insufficient attention to children who are vulnerable due to their economic status, gender, family situation, health, or other reasons. The current government education program fails to propose specific measures to reach out to vulnerable children, with the notable exception of children with disabilities and children in nomadic communities.[\[322\]](#)

Though the number of children enrolled in primary school has significantly increased since 1998, many children of primary school age are still out of school.[\[323\]](#) Mali remains far below the average in Sub-Saharan Africa.[\[324\]](#) Access to secondary education is even lower.[\[325\]](#) A significant number of children have never been enrolled in school. Of those who do, many do not attend school regularly and drop out early.[\[326\]](#)

There is also a large gender disparity in education. The net enrolment rate for girls is 54.6 percent, compared with 66.8 percent for boys, and only 48.6 percent of girls complete primary school, compared with 64.1 percent of boys.[\[327\]](#) In higher education, the gender gap is even bigger.[\[328\]](#) While the government has emphasized increasing girls' access to education, the majority of the children officially out of school are girls. In 2007-2008, over half the girls between 7 and 12 were out of school.[\[329\]](#)

As illustrated above, one reason for low enrollment is cost. Parents have to pay expenses for school, such as registration fees, books, materials, uniforms, or fees for the school management committee.[\[330\]](#) In many African countries, school fees and indirect costs of schooling are major obstacles to obtaining an education for the poor. By contrast, the abolition of school fees has been proven to increase school enrollment and attendance significantly, particularly among the poor and among girls; it is also required by international law.[\[331\]](#) Other obstacles to schooling include the distance to school and the quality of education.[\[332\]](#) High student-teacher ratios, little or no teacher training, and insufficient supplies adversely affect the quality of education.[\[333\]](#)

An alternative to the public school system are community schools that are largely independent. A community school is any not-for-profit school created and managed by a community or association. Official local authority recognition is granted for any school meeting a set of simple criteria.[\[334\]](#) The recognition of community schools has expanded the access to education, but has formalized the paying of school fees and lowered education standards, as the majority of teachers are untrained.[\[335\]](#)

One strategy to improve access to education in areas with high degrees of mobility and migration is the creation of mobile schools. In northern Mali, mobile schools have been established for nomadic groups in recent years. Teachers move together with the nomads and teach in tents that are provided by the community.[\[336\]](#) The experience from northern Mali could serve as a useful model for Mali's mining zones.

Social protection schemes could boost access to education for child laborers in artisanal mining zones and elsewhere. Social protection is a set of policy measures aimed at increasing access to basic social services and reduce vulnerability to economic and social shocks. It comprises social assistance (such as cash transfers and free school meals), social services for poor households, as well as social insurance and related legislation.[\[337\]](#)

Until now, Mali has not had a consistent social protection policy and has implemented social protection measures only partially, without particular attention to the needs of vulnerable children. Cash transfer programs have been used in several countries to support access to education for vulnerable children.[\[338\]](#)

An earlier, successful social protection scheme for vulnerable children in Mali has been ended. From 2002 to 2007, Mali had a cash transfer program for mothers, aiming to enable them to send their children to school. It also covered artisanal mining areas in the Kayes region. Under this *bourse maman* (mothers scholarship), destitute mothers were given a monthly stipend (the equivalent of US\$11) if they agreed to send their children to school and keep them at school. If children dropped out of school, the cash transfers were ended.[\[339\]](#) The program was modeled after a successful cash transfer program in Brazil, the *bolsa familia*.[\[340\]](#) Although the *bourse maman* program led to increased enrollment rates and lower drop-out rates, it was ended, possibly due to skepticism among some donors towards cash transfer programs.[\[341\]](#)

The current government policy recognizes the importance of free school meals as an incentive for poor families to send their children to school. The government has

proposed a law to set up a National Centre for School Canteens, tasked with coordination and oversight over the creation of school canteens.^[342] At present, school canteens are being established in 166 communes affected by drought and hunger, notably in northern Mali. Artisanal mining zones in western and southern Mali are currently not benefitting from such free school meals. By the governments own admission, the number of school canteens is far too small in Mali.^[343]

A newly adopted government plan on social protection could finally bring change, if properly implemented. After a long process of consultations, the Malian government drafted a national action plan on social protection in 2010, and adopted it in August 2011. The action plan includes a cash transfer program for vulnerable populations and free school meals.^[344] At time of writing it had not been decided if the program would target vulnerable children and orphans in particular.^[345]

Given the prevalence of child labor in Malian artisanal mines, it is likely that, unless domestic and international companies trading in artisanal gold implement adequate due diligence processes, gold produced through the use of child labor will find its way into their supply chains. International norms require businesses to identify their impact on human rights through due diligence, prevent human rights violations that could occur through their action, and mitigate and account for human rights abuses that do occur because of their action. Human Rights Watch is aware of only two companies, Kaloti Jewellery International from Dubai and Tony Goetz from Belgium, that have put in place due diligence processes. Other companies trading in artisanal gold from Mali may have implemented such processes, although Human Rights Watch has not been able to establish this. Human Rights Watch has not been able to obtain information on the processes and policies of many companies which trade in gold from artisanal mines.

At the national level, the government of Mali has failed to take action to engage businesses on their responsibility in this area.

All over Malis artisanal mining zones, small gold traders buy the gold mined by children and adults. Sometimes, the traders assist with amalgamation; in other cases, they buy the raw gold after amalgamation.

Gold prices vary and have risen to record heights in 2011. In April 2011, traders paid artisanal miners between 10,000 CFA francs (about US\$21.94) and 17,500 CFA francs (about \$38.40) per gram of gold.^[346] In Bamako, traders paid between 21,000 and 21,200 CFA francs (about \$46.06 and \$46.40) for a gram of gold, when gold was trading at about 21,400 CFA francs (about \$46.94) per gram internationally.^[347]

Most of the gold from artisanal mines is sold by local traders, who visit the mines, to larger traders in Bamako, sometimes through middlemen. These larger traders run trading houses that are usually registered as limited companies. Trading relationships are often stable and well-established; several traders in the mining areas confirmed that they always sold to the same trading house in Bamako.^[348] In one case, a smaller gold dealer described his counterpart in Bamako as his boss, and in another case, a Bamako-based trader showed a list of people buying gold for him in mines.^[349] Some wealthy gold miners also trade in the gold from their mine or shaft; one such gold miner in the Kniba area established his own company in Bamako, cutting out the middlemen altogether.^[350]

There is also trade with gold across the borders to Guinea or other neighboring countries, going both ways.^[351] While some of the gold is smuggled from Malis mines to neighboring countries, more significant amounts of gold are being imported, for example from Guinea and Burkina Faso.^[352]

Traders in Mali and the subregion have a responsibility to ensure that they are not buying gold mined by children, but many of the traders interviewed by Human Rights Watch showed little awareness or concern about their responsibility.^[353] One trader in Kniba denied that there are children below the age of adolescence working in the mines.^[354] Another one acknowledged the problem, but said he could not do anything to change the situation.^[355] The owner of a trading house in Bamako maintained that he did not know anything about child labor, and that he had never visited an artisanal mine.^[356] Another trader in Bamako said he knew nothing about the risks associated with mercury use.^[357]

Many traders even buy gold directly from children, a clear indication of their tacit support for child labor.^[358] One trader commented:

Malian artisanal miners and mining operators are organized in several associations, including the *Union des opérateurs miniers au Mali* (UNOMIN), the *Fédération nationale des orpailleurs au Mali* (FNOM), and the *Association des femmes minières au Mali* (AFEMIN). In some cases, they have helped miners create cooperatives or economic interest groups, or provided them with equipment.^[360] Professionalizing the artisanal mining sector could help increase miners income and, as a result, reduce child labor.^[361]

However, so far, this has not been the case. Worse, there has been insufficient emphasis among certain organisations on problems such as child labor, mercury use, and exploitation of poor miners. For instance, members of the newly established Mali Mining Chamber, the representative body for small- and large-scale mining businesses, denied that child labor is a problem.^[362] The president of the Mining Chamber told Human Rights Watch:

He also defended the use of child labor, should it occur, by saying that parents in different work sectors in Mali often take their children to work with them. Another member of the Mining Chamber defended child labor as part of a child's upbringing (*socialization*).^[364]

In contrast, the head of the National Federation of Malian Gold Miners expressed concern about the use of child labor and said he was keen to take action on this.^[365]

Malis official figures put the amount of artisanally mined gold exported per year at around four tonnes, worth around US\$230 million at September 2011 prices. However, the real amount might be higher, as some of the gold is probably smuggled out the country. A further set of figures obtained from the Ministry of Industry, Investment and Business of Mali, states that during the first half of 2011, nine international companies bought artisanally mined gold worth over US\$83 million.^[366]

Export statistics obtained from the Ministry of the Economy and Finances of Mali show that Switzerland is the most important trading partner in artisanally mined gold for Mali.^[367] Between January 2009 and May 2011, US\$34 million worth of artisanally mined gold were exported from Mali to Switzerland.^[368]

Between January and June 2011, the Swiss company Decafin was the sole recipient of the exports to Switzerland, according to the data obtained from the Ministry of Industry, Investment and Business.^[369] Decafin is a Geneva-based company, founded in 1977, that trades in precious metals and also operates as a finance institute.^[370] In a letter to Decafin, Human Rights Watch described the use of child labor in artisanal gold mines, and asked the company to provide information on its policies and procedures on the prevention of child rights violations, and how it monitors the situation of children in artisanal mines. Decafin, through its lawyer said that Decafin only acts at the end of the supply chain and that it has no contacts whatsoever with the producing companies nor with the Malian government.^[371] Following a meeting with Human Rights Watch, the company sent a second letter through its lawyer, stating that it acts at the end of a supply chain composed of at least four intermediaries and is unable to exert any pressure on producers in, or the government of, Mali. However, the company said that it would question its suppliers and the Mali Mining Chamber about the conditions in which the gold is mined. The letter also described the Guiding Principles on Business and Human Rights as the company's code of conduct.^[372]

The second most important destination for artisanally mined gold from Mali is the United Arab Emirates, and specifically Dubai. Companies in the United Arab Emirates bought approximately US\$18 million worth of gold between January 2009 and June 2011.^[373]

The statistics obtained from the Ministry of Industry, Investment and Business name four companies which, it states, are based in Dubai and bought artisanally mined gold in the first half of 2011: Kaloti Jewellery International, Mayer, Globe Gold, and Salor DMCC.^[374] Human Rights Watch has been unable to obtain contact details for Mayer, Globe Gold, and Salor DMCC, and therefore has not been able to reach them. As a result it is not known to Human Rights Watch whether these companies operate due diligence procedures in relation to any artisanally mined gold which may have been produced through the use of child labor.

In response to a letter outlining the findings of Human Rights Watch's research on child labor in Malis artisanal mines, Kaloti Jewellery International shared with Human Rights Watch its policy on child labor and other human rights issues.^[375] The company also shared documents signed by two Malian traders in which they stated that the undersigned hereby guarantees that these Metals are conflict-free, free from child labor and have been sourced through proper mining channels, based on personal knowledge.^[376] Kaloti Jewellery International informed Human Rights Watch that it recently suspended all gold imports from its Malian clients, a step that Human Rights Watch neither recommended nor supported, due to the potentially harmful economic consequences for artisanal mining communities, including children.^[377] The managing director of Kaloti also expressed interest in supporting initiatives to end the use of child labor in this sector, for example projects to improve access to education.^[378] Human Rights Watch continues to be in dialogue with Kaloti Jewellery International about measures that international companies should take to curb child labor.

Mali also exports gold to several other European and North American countries, Thailand, and China. One trader reported that international buyers have come

occasionally straight to the mines and bought there.[\[379\]](#)

According to the figures obtained from the Ministry of the Economy and Finances, between 2009 and 2011, the third largest business partner after Switzerland and the United Arab Emirates was Belgium.[\[380\]](#) During the first half of 2011, a Belgian company, Tony Goetz, imported about 60 kilograms, worth close to US\$ 3 million.[\[381\]](#) In response to a letter from Human Rights Watch about the use of child labor in Malis artisanal gold mines, Tony Goetz stated that artisanal mines that make use of highly toxic mercury are not among the suppliers of Tony Goetz NV, and that their suppliers have acknowledged that they do not use child labor. The company also said that the amount of gold purchased from Malian suppliers by Tony Goetz represents only a very negligible amount of the total purchases of the company (i.e. less than 0.5% of the total purchases).[\[382\]](#)

The Malian government policy on mining is primarily focused on large-scale mining, which accounts for the majority of Malis gold exports, and the need to attract international investors. Where the government does deal with artisanal mining, its approach is mostly characterized by a laissez-faire attitude and a neglect of the pervasive poverty, child labor, and mercury use in artisanal mines. The government tolerates most artisanal mining activities, including those outside the legally established mining corridors. According to one official, 97 percent of artisanal mining sites lie outside the corridors.[\[383\]](#) The government has failed to regulate and support the sector, a step that could increase miners incomes and help eliminate child labor.

One reason for this situation is that many local government officials and traditional authorities benefit from artisanal mining, by raising fees for shafts or getting part of the gold production as customary owner of the land.[\[384\]](#) Sometimes, local government officials even become gold miners themselves, and receive considerable income through the miners working for them. An official from the ministry of mines said that there are conflicts of interest when the mayor is gold miner.[\[385\]](#) As a result, local government authorities who have oversight over artisanal mining do not take their regulatory role seriously, and are unlikely to take action on child labor. One government official told Human Rights Watch: Mayors sometimes make money with the mines, so they don't provide good oversight.[\[386\]](#) It is therefore not surprising that government officials at the central level consider artisanal mining difficult, and that the government usually avoids addressing child labor.[\[387\]](#)

While shying away from some of the difficult issues, the government has recognized the need to get better information about the sector. It is presently carrying out a study on the economic output of artisanal gold mines in Mali, jointly with the World Bank.[\[388\]](#) According to one official from the Ministry of Mines, there is a desire to regulate the sector better, for example, by clearly demarcating areas that are prohibited for artisanal mining.[\[389\]](#) Government officials have announced the closure of mines that are located in classified forests or near water currents, but it remains unclear whether this policy will be implemented.[\[390\]](#) In Kolondiba circle, the government announced the closure of a mine, but then closed the site only for the rainy season, when most artisanal miners leave to work in agriculture for a few months.[\[391\]](#) While it is possible that some artisanal mining sites will be closed in the future as part of an effort to protect the environment, it seems unlikely that larger parts of the sector will be outlawed or severely restricted. The new draft mining law continues to use the concept of mining corridors, but strengthens involvement of the Ministries of Mines and Environment, indicating a desire to control artisanal mining to some extent from the central government.[\[392\]](#) The recent establishment of the Mali Mining Chamber also indicates support for the sector, in particular wealthier artisanal miners and gold traders.

In August 2011, Mali became a member of the Extractive Industries Transparency Initiative (EITI).[\[393\]](#) EITI is a voluntary global initiative that requires its members to disclose information about oil, mining and gas company payments to governments. It brings together governments, companies, and civil society. Countries who apply to become EITI members have to undergo a process of validation.[\[394\]](#)

EITI is almost entirely focused on the obligations of governments and of international oil, mining, and gas companies, and gives little attention to national and international companies trading in gold from artisanal mines. Nevertheless, by committing to transparency standards in the large-scale mining sector, the Malian government has established an important principle that could be extended to the artisanal mining sector in the future.

Most Malian civil society groups working on mining focus on the large-scale mining sector. They monitor and document the conduct of the government and large-scale mining companies with regards to transparency, environmental impacts, and benefit for the local population. NGOs provide an important counter-perspective to the government, for example, by submitting a shadow report on the government to EITI or by documenting the environmental damage caused by mining companies.[\[395\]](#)

Occasionally, civil society groups also work on artisanal mining. *Fondation pour le Développement du Sahel*, one of the leading NGOs in this area, has carried out a small study on mercury use in Kangaba.[\[396\]](#)

At the regional level, the Economic Community of West African States (ECOWAS) adopted a directive on mining in 2009, and is about to adopt a mining policy in 2011. A legally binding mining code is scheduled for 2014.[\[397\]](#) The aim of this process is to harmonize approaches to mining and avoid a race to the bottom in which states offer incentives for international mining companies without sufficiently protecting state revenue.

The directive underlines the obligation of states, holders of mining rights, and other mining businesses to respect human rights, including child rights, to protect the environment, and to work transparently. However it hardly mentions artisanal mining.[\[398\]](#)

The policy, which ministers validated in June 2011 and which will be adopted later in 2011 by heads of state, addresses artisanal mining issues.[\[399\]](#) It calls for the regulation and development of artisanal mining, and commits member states to improve artisanal mining activities through changes in the regulatory framework as well as the formation of cooperatives of artisanal miners, programs of technical and financial assistance, and other capacity-building measures. It also calls on states to promote the harmonious co-existence between large-scale mineral operators and ASM [artisanal and small-scale mining] operators.[\[400\]](#)

The future mining code could become an important regional tool if it contains a clear prohibition of child labor in artisanal gold mining, and mandates measures to reduce the use of mercury in artisanal mining.

Businesses are increasingly recognizing that they have to adhere to human rights standards, including child rights and environmental standards. A range of voluntary standards and codes has been developed at the international level, some of them general, others specific to the mining sector. However, so far their impact has been very limited in Malis artisanal mining sector.

Some initiatives seek to specifically ensure a child labor free supply chain of artisanally mined gold. Most importantly, two organizations with experience in fair trade labeling and artisanal gold mining recently published the Fairtrade and Fairmined Standard for Gold from Artisanal and Small-Scale Mining. Under this fair trade label, producers have to be organized in artisanal and small-scale miners organizations, adhere to ILO Conventions 138 and 182, and exclude the use of hazardous child labor in artisanal gold mining. The standard also requires producers to help adolescents access training and employment opportunities.[\[401\]](#) Furthermore, producers are to use mercury reducing techniques, and to abandon certain risky practices, such as whole ore amalgamation, amalgam burning in homes, and mercury use by children, pregnant women, and persons with certain chronic diseases.[\[402\]](#)

The fair-trade label presents an opportunity to promote best practices and to highlight the need for due diligence. However, there are difficulties with its implementation. It is generally difficult to guarantee the validity of the fair trade label, as the use of child labor in allegedly certified products has shown.[\[403\]](#) At present, the label is limited to Latin America, but during 2012, several African countries will be assessed for participation in the scheme.[\[404\]](#) The above-mentioned regional project on mercury reduction will examine the feasibility of introducing the label in Africa, including in Mali, in the future.[\[405\]](#)

Businesses active in the diamond and gold market have also started an initiative to promote ethical standards, and come together to create the Council for Responsible Jewellery. The organization operates a system of certification for its members, who undergo independent verification to qualify.[\[406\]](#)

International NGOs have embarked on a promising campaign No Dirty Gold that urges retailers to make changes in the gold mining industry, in particular regarding the environmental damage caused by gold mining. The campaign has developed a set of broad principles and is urging retailers to sign on to them. The principles include adherence to international conventions and the respect of labor standards, but do not mention child labor.[\[407\]](#)

Child labor in Malis artisanal gold mines exposes children to grave health hazards and often prevents them from getting an education. Child miners also sometimes suffer economic exploitation, coercion, trafficking, and physical and sexual abuse.

Children are sent into child labor to increase the family income; in addition, child labor is socially accepted and viewed as useful educative experience. Many parents of child laborers are artisanal miners living in poverty and who only earn a fraction of the gold they mine, as they have to pay fees to traditional or local authorities and to miners who hire them as workforce or who rent out machines.

The government of Mali has failed to address child labor in artisanal gold mining effectively. While it has taken some important measures to protect children's rights, it has not put its full political weight behind these efforts. Existing initiatives tend to be isolated and lack full political and financial support. In addition, central government policies have sometimes been undermined by the laissez-faire attitude of local government officials. In the context of decentralization, the central government has relegated much responsibility for crucial areas such as education, health, and artisanal mining to local authorities, but these authorities have not done enough to address child labor and children's poor access to education and healthcare.

Child labor policies have not fully been implemented and lack teeth. There have been hardly any inspections of child labor in artisanal gold mines, and the law on child labor is not being enforced.

The government's education policies have failed to benefit child laborers, including those in artisanal mining areas, and failed to adapt to their needs. School fees, lack of school infrastructure, and poor quality of education deter many parents from sending their children to school. The government has largely failed to make education accessible and available for vulnerable children such as child laborers.

Mining policies focus on industrial mining, carried out by international companies, and have largely neglected problems related to artisanal mining, including child labor. The government tends to support powerful, wealthy miners and traders in the sector, and benefits financially from artisanal mines at the local level, but is providing virtually no support for ordinary artisanal miners.

In the area of health policy, the government has failed to develop a strategy and concrete measures to prevent or treat health problems related to mercury use or other mining-related conditions in artisanal mining zones.

Donors, UN agencies, and civil society groups have undertaken some useful initiatives on child labor, education, or artisanal mining in Mali, but these have been piecemeal, suffered from lack of reliable funding, and lacked consistent political backing. In particular, the ILO is suffering a funding crisis after the United States and the European Commission drastically reduced their funding. At the international level, the ILO has failed to follow up on its 2005 call to action Minors out of Mining, in which 15 governments including Mali committed to eliminating child labor in their artisanal mining sector by 2015.

Malian and international gold companies have not done enough to address child labor in the supply chain, for example, by monitoring the mines that supply them to check if no child labor is being used, and by pressing suppliers to end the use of child labor if it is being found. The Malian government has not held traditional authorities and powerful miners at the mining sites to account, for example through regular labor inspections, nor has it urged national traders to ensure a child-labor free supply chain.

Hazardous child labor in Mali's artisanal mines can only be ended if different actors—government, civil society, UN, donors, artisanal miners and gold traders and companies—prioritize its elimination, give their full political support to it, and provide financial support to efforts aimed at ending it.

The government needs to ensure that relevant national ministries—the Ministry of Labor and Civil Service, the Ministry of Mines, the Ministry of Health, the Ministry of Environment and Sanitation, the Ministry of Education, and the Ministry of Promotion of Women, Child and Family Affairs—as well as local authorities all work together. Different government ministries and institutions should take the lead on different recommendations, spelled out below, depending on their expertise, and work closely with all other ministries concerned.

As a first step, the government should immediately take steps to end the use of mercury by children working in artisanal mining. In addition, the government and all stakeholders concerned should come together to support and implement the recently adopted National Action Plan on Child Labor. They should also take steps to improve access to education in artisanal mining areas, including through an abolition of all school fees, state support for community schools, and a social protection scheme for vulnerable children. In order to strengthen artisanal mining communities and improve environmental health, the government and others should provide support and capacity-building to artisanal miners, including on technologies that reduce the use of mercury, and address the health impact of mercury on artisanal miners, in particular on children. A national roundtable on hazardous child labor in artisanal mining should serve as forum to bring the relevant actors together and create momentum for concerted action.

Malian and international companies should recognize their responsibility regarding child labor and other human rights issues, through due diligence processes and pressure on suppliers and the government to bring about a measurable reduction of child labor. An immediate and total boycott of gold from Mali is not the answer to human rights violations in Mali's artisanal gold mines. Boycott risks reducing the income of impoverished artisanal mining communities and may even increase child labor as families seek to boost their income.

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Clive Baldwin, senior legal advisor, participated in the field research. Judit Costa, associate in the Children's Rights Division, and Katharina Theil, Roland Algrant intern in the Children's Rights Division, assisted with desk research. Katharina Theil also provided an early draft of the section on international law.

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Production assistance was provided by Judit Costa and Noah Beaudette, associates in the Children's Rights division; Anna Lopriore, creative manager; Grace Choi, publications director; Kathy Mills, publications specialist; and Fitzroy Hepkins, mail manager.

We would like to thank Ben Silverstone of Doughty Street Chambers in London; Susan Gunn and Benjamin Smith of the International Labor Organization; Marcello Veiga, Professor of Mining Engineering at the University of British Columbia (Canada); and Stephan Bse O'Reilly, Assistant Professor of Public Health, University for Health Sciences, Medical Informatics and Technology (Austria), for providing critical advice on specialist issues and commenting on this report, or sections of it.

Most of all, we would like to thank the many Malian children who took the courage to share their stories with us. We are also grateful for the support and hospitality by NGO activists, traditional authorities, miners, teachers, health workers, and others we met in the course of conducting this research. We would also like to thank the Malian government for its openness to discuss the issues of this report with us.

Human Rights Watch does not have information on whether the exporters listed below operate policies and/or due diligence procedures in relation to the trading of artisanally mined gold which may be produced through the use of child labor.



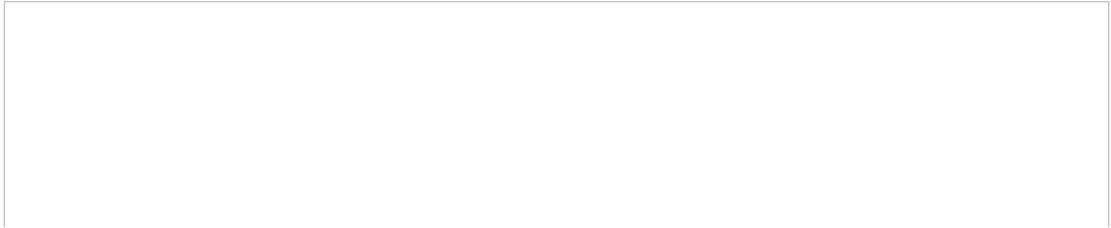
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Human Rights Watch has not been able to make contact with any of the individuals or companies named below, except for Decafin, Kaloti and Tony Goetz. Other than in relation to these three companies, therefore, Human Rights Watch has no information on whether the individuals or companies listed here operate policies and / or due diligence procedures in relation to the trading of gold which may be produced through the use of child labor.

Human Rights Watch assumes that the name Kaloute refers to Kaloti.



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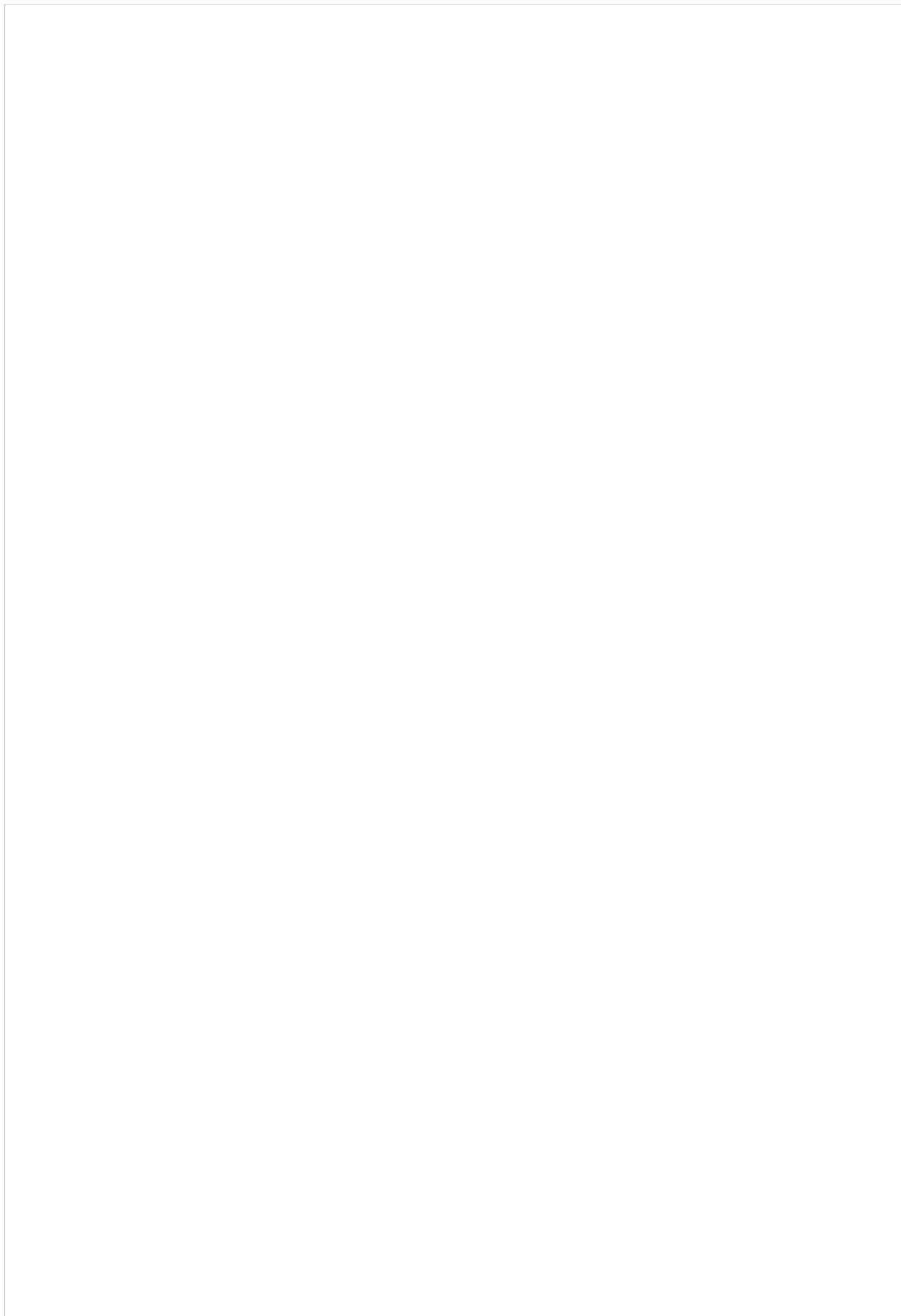
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[1] Two local consultants carried out 16 of the 41 interviews with children. In this report, the word "child" refers to anyone under the age of 18. The Convention on the Rights of the Child states, "For the purposes of the present Convention, a child means every human being below the age of 18 years unless under the law applicable to the child, majority is attained earlier." Convention on the Rights of the Child (CRC), adopted November 20, 1989, G.A. Res. 44/25, annex, 44 U.N. GAOR Supp. (No. 49) at 167, U.N. Doc. A/44/49 (1989), entered into force September 2, 1990, ratified by Mali on September 20, 1990. When this report uses the term adolescents, it refers to older children.

[2] UNICEF, Mali Statistics, http://www.unicef.org/infobycountry/mali_statistics.html (accessed July 26, 2011).

[3] Jacob E. Mabe, ed., *Das Afrika-Lexikon* (Stuttgart: J.B. Metzler Verlag, 2001), p. 373; Joseph Ki-Zerbo, *Die Geschichte Schwarzafrikas* (Frankfurt am Main: Fischer, 1990), pp. 131-145.

[4] Claire Mainguy, Natural resources and development: The gold sector in Mali, *Resources Policy*, vol. 36 (2011), pp. 123-131.

[5] Ibid.

[6] Ministre des Mines, 2009 Annuaire Statistique du secteur mines et gologie, December 2010, Bamako, p. 9. As of September 2011, gold was trading at over \$1800 an ounce.

[7] Thomas Hentschel, Felix Hruschka, and Michael Priester, *Artisanal and Small-Scale Mining: Challenges and Opportunities*, (London: International Institute for

Environment and Development and WBCSD, 2003), <http://pubs.iied.org/pdfs/9268IIED.pdf> (accessed June 1, 2011), p. 5; Samuel J. Spiegel, Socioeconomic dimensions of mercury pollution abatement: Engaging artisanal mining communities in Sub-Saharan Africa, *Ecological Economics*, vol. 68 (2009), pp. 3072-3083.

[8]Ministre des Mines, 2009 Annuaire Statistique du secteur mines et gologie, December 2010, Bamako, p. 9. The head of the Malian federation of artisanal gold miners estimates the total production to be as high as 20 tons per year. Human Rights Watch interview with Morike Sissoko, president of the *Federation nationale des orpailleurs au Mali* (FNOM), Kniba, April 2, 2011.

[9] Sadia Mohammed Banchirigah, How have reforms fuelled the expansion of artisanal mining? Evidence from sub-Saharan Africa, *Resources Policy*, vol. 31 (2006), pp. 165-171.

[10] Oxfam, Hidden Treasures. In search of Malis gold-mining revenues, 2006, <http://www.oxfamamerica.org/files/hidden-treasure.pdf> (accessed June 1, 2011); Mainguy, The gold sector in Mali, *Resources Policy*, pp. 123-131; Olof Drakenberg, Mining in Mali - A background note for the Swedish International Development Cooperation Agency, July 2010, <http://www.hgu.gu.se/Files/nationalekonomi/EEU/Helpdesk/EnvPolicyBrief/2010/Mining%20in%20Mali%20a%20background%20note%20for%20Sida%20final.pdf> (accessed June 1, 2011).

[11] Ministre des Mines, Code Minier (Projet), May 28, 2010; Human Rights Watch interview with Aliou Haidara, Publish What You Pay, Mali, Bamako, February 16, 2011; Human Rights Watch interview with government official, Ministry of Mines, April 6, 2011.

[12] United Nations Development Program (UNDP), International Human Development Indicators, 2010, <http://hdrstats.undp.org/en/countries/profiles/MLI.html> (accessed June 1, 2011).

[13] UN, Millennium Development Goal Indicators, July 7, 2011, <http://unstats.un.org/unsd/mdg/SeriesDetail.aspx?srid=580> (accessed June 1, 2011). The figure for Mali is from 2006.

[14] UNDP, International Human Development Indicators.

[15] Oxfam, Hidden Treasures; International Federation for Human Rights, Gold Mining and Human Rights in Mali, September 2007, http://www.fidh.org/IMG/pdf/Mali_mines_final-en.pdf (accessed June 1, 2011); Human Rights Watch interview with Hon. Moussa Coumbere, Kolondiba, April 7, 2011.

[16] Seydou Keita, Etude sur les mines artisanales et les exploitations minières petite chelle au Mali, International Institute for Environment and Development, August 2001, pp. 10-11.

[17] A study from 2001 found that there are more than 200,000 artisanal gold miners in Mali. In 2009, a Malian government official put the number also at 200,000 at a workshop presentation. See UNIDO/ Direction nationale de l'assainissement et du contrôle des pollutions et des nuisances, Atelier sous-régional d'information des pays de l'Afrique de l'Ouest francophones sur les problèmes liés l'orpaillage. Rapport de synthèse, December 2009, p. 28. An ILO study cites the National Directorate for Geology and Mines as saying that there are about 100,000 artisanal gold miners in Mali. International Labour Organization (ILO), Etude transfrontalière sur le travail des enfants dans l'orpaillage au Burkina Faso, au Mali et au Niger. Volet pays Mali, March 2010, p.9.

[18] ILO, Etude transfrontalière sur le travail des enfants, p. 9.

[19] Ordonnance no.99-032/P-RM portant Code Minier en République du Mali, August 19, 1999, art. 57.

[20] Human Rights Watch interview with government official, Ministry of Mines, April 6, 2011.

[21] Code Minier, art. 57. International Institute for Environment and Development (IIED), Legal tools for citizen empowerment: Increasing local participation and benefit in Malis mining sector, 2008, <http://www.indiaenvironmentportal.org.in/files/12554IIED.pdf> (accessed June 24, 2011), p. 21.

[22] The Land Tenure Code recognizes customary practices relating to land tenure, with some exceptions. USAID Mali, Mali Land Tenure Assessment Report, September 2010, pp. 7-8, 20; Netherlands Development Organization (SNV)/ Helvetas Mali/ Pact/ Deutscher Entwicklungsdienst/ Deutsche Gesellschaft für Internationale Zusammenarbeit, *Guide juridique. Les ressources naturelles, les collectifs et leurs territoires* (Bamako: Communiconcon 2007), pp. 12-13.

[23] Human Rights Watch interview with *tomboloma* and mayor, Worognan, April 9, 2011; ILO, Etude transfrontalière des enfants dans l'orpaillage, p. 32; Seydou Keita, Etude, pp. 16-17.

[24] Human Rights Watch interview with official from National Directorate for Mines, Bamako, February 15, 2011; Human Rights Watch interview with government official, Ministry of Mines, Bamako, April 6, 2011; Human Rights Watch interview with village chief and community leaders, Baroya, April 3, 2011.

[25] Human Rights Watch interview with *tomboloma* and mayor, Worognan, April 9, 2011.

[26] Human Rights Watch interview with mayor of Tabakoto, Tabakoto, April 3, 2011; Human Rights Watch interview with advisor to mayor, Baroya, April 3, 2011; Human Rights Watch interview with gold trader, Kniba, April 4, 2011; Seydou Keita, Etude, p. 16.

[27] Human Rights Watch interview with advisor to mayor, Baroya, April 3, 2011.

[28] Human Rights Watch interview with village chief and community leaders, Baroya, April 3, 2011.

[29] Human Rights Watch interview with Timoko K., 15, Baroya, April 3, 2011; Human Rights Watch interview with Yacouba C., 16, Baroya, April 3, 2011; Human Rights Watch interview with village chief and community leaders, Baroya, April 3, 2011. The practice is also identified by Seydou Keita, Etude, p. 16.

[30] Seydou Keita, Etude, pp. 16-17; Email communication from Sidiki Coulibaly, ONG Réseau d'Appui et de Conseils (RAC), May 23, 2011.

[31] Ministre du Travail et de la Fonction Publique, Plan d'action national pour l'élimination du travail des enfants au Mali, April 2010, p. 10.

[32] Understanding Childs Work (ILO/UNICEF/World Bank Group), Comprendre le travail des enfants au Mali, Rome, May 2009, pp. i-iii.

[33] ILO/IPEC Mali, Etude CAP. Travail des enfants au Mali, Bamako, September 2008, pp. 29-33; Understanding Childs Work, Comprendre le travail des enfants au Mali, pp. 25-30; US Department of Labor, 2009 Findings on the Worst Forms of Child Labor, 2010, <http://www.dol.gov/ilab/programs/ocft/pdf/2009OCFTreport.pdf> (accessed August 9, 2011), pp. 417-425. On forced begging, see also Human Rights Watch, *Off the Backs Of the Children: Forced Begging and Other Abuses Against Talibs in Senegal*, April 2010, <http://www.hrw.org/en/reports/2010/04/15/back-children-0>.

[34] Loretta E. Bass, *Child Labor in Sub-Saharan Africa*, (Boulder: Lynn Rienner 2004); Morten Bs and Anne Hatly, Child Labour in West Africa: Different Work Different Vulnerabilities, *International Migration*, vol. 46 (3), 2008, pp. 3-25.

[35] Fafo Institute of International Studies, Travel to Uncertainty. A study of child relocation in Burkina Faso, Ghana and Mali, Oslo 2004, <http://www.fafo.no/pub/rapp/440/440.pdf> (accessed June 1, 2011).

[36] Sarah Castle and Asse Diarra, The International Migration of Young Malians: Tradition, Necessity or Rite of Passage, London School of Hygiene and Tropical Medicine, October 2003 (unpublished paper).

[37] Child trafficking occurs when children are recruited, transferred, transported, harbored, or received for the purpose of exploitation. Exploitation can mean sexual exploitation, forced labor or services, slavery or practices akin to slavery, or servitude. For details, see section II.

[38] Understanding Childs Work, Comprendre le travail des enfants au Mali, pp. 44-46; US Department of State, Trafficking in Persons Report, 10th edition, June 2010, <http://www.state.gov/documents/organization/142979.pdf> (accessed June 24, 2011), pp. 227-228; Human Rights Watch, *Borderline Slavery Child Trafficking in Togo*, vol.15, no. 8(A), April 2003, <http://www.hrw.org/sites/default/files/reports/togo0403.pdf>.

[39] International Covenant on Economic, Social and Cultural Rights (ICESCR), adopted December 16, 1966, G.A. Res. 2200A (XXI), 21 U.N. GAOR Supp. (No. 16) at 49, U.N. Doc. A/6316 (1966), 993 U.N.T.S. 3, entered into force January 3, 1976, ratified by Mali on July 16, 1974; Optional Protocol to the Convention on the Rights of the Child on the Sale of Children, Child Prostitution and Child Pornography, adopted May 25, 2000, G.A. Res. 54/263, Annex II, 54 U.N. GAOR Supp. (No. 49) at 6, U.N. Doc. A/54/49, Vol. III (2000), entered into force January 18, 2002, ratified by Mali on May 16, 2002; Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children, Supplementing the United Nations Convention on Transnational Organized Crime (Trafficking Protocol), adopted November 15, 2000, G.A. Res. 55/25, annex II, 55 U.N. GAOR Supp. (No. 49) at 60, U.N. Doc. A/45/49 (Vol. I) (2001), entered into force December 25, 2003, ratified by Mali on April 12, 2002.

[40] ILO Convention No. 182 concerning the Prohibition and Immediate Action for the Elimination of the Worst Forms of Child Labor (Worst Forms of Child Labor Convention), adopted June 17, 1999, 38 I.L.M. 1207, entered into force November 19, 2000, ratified by Mali on July 14, 2000; ILO Convention No. 138 concerning the Minimum Age for Admission and Employment (Minimum Age Convention), adopted June 26, 1973, 1015 U.N.T.S. 297, entered into force June 19, 1976, ratified by Mali on March 11, 2003.

[41] African [Banjul] Charter on Humans and Peoples Rights (Banjul Charter), adopted June 27, 1981, OAU Doc. CAB/LEG/67/3 rev. 5, 21 I.L.M. 58 (1982), entered into force October 21, 1986, ratified by Mali on December 21, 1981; African Charter on the Rights and Welfare of the Child, OAU Doc. CAB/LEG/24.9/49 (1990), entered into force November 29, 1999, ratified by Mali on June 3, 1998.

[42] Constitution, art.116.

[43] ILO/IPEC, About Child Labor, <http://www.ilo.org/ipec/facts/lang--en/index.htm> (accessed on June 21, 2011). See also ILO, *Child Labor A textbook for university students*, (Geneva: ILO, 2004), p. 16.

[44] ILO, *Child Labor*, p. 17.

[45] CRC, art. 32.

[46] The Committee on the Rights of the Child devoted one day of its fourth session to a general discussion on the issue of economic exploitation. See CRC/C/20, 4th session, October 4, 1993, <http://www.ohchr.org/EN/HRBodies/CRC/Documents/Recommendations/exploit.pdf> (accessed June 20, 2011), pp. 3-4.

[47] Worst Forms of Child Labor Convention, art. 3.

[48] International Labor Organization, Programme on Safety and Health at Work and the Environment, Hazardous Work, http://www.ilo.org/safework/areasofwork/lang-en/WCMS_DOC_SAF_ARE_HAZ_EN/index.htm (accessed June 8, 2011).

[49] ILO, R 190, Worst Forms of Child Labor Recommendation, 1999, <http://www.ilo.org/ilolex/cgi-lex/convde.pl?R190> (accessed June 6, 2011), para. 3.

[50] Worst Forms of Child Labor Convention, art. 4.

[51] Minimum Age Convention, art. 2(3).

[52] Minimum Age Convention, art. 2(4).

[53] Minimum Age Convention, art. 7.

[54] CRC, art. 28(1)a; ICESCR, art. 13(2)a. The Worst Forms of Child Labor Convention, art. 7, also stipulates that States shall take measures to ensure access to free basic education.

[55] CRC, art. 28; ICESCR, art. 13.

[56] CRC, art. 32.

[57] UN Committee on Economic, Social and Cultural Rights (CESCR), General Comment No. 3, art. 2, para. 1, The Nature of States Parties Obligations, UN Doc. E/1991/23, annex III at 86 (1990), para. 10.

[58] CESCR, General Comment No.13, art. 13, The Right to Education, UN Doc. E/C.12/1999/10 (1999), para. 57.

[59] CESR, General Comment No.11, Plans of Action for Primary Education, UN Doc E/C.12/1999/4 (1999), paras 6-9.

[60] CRC, art. 4.

[61] African Charter on the Rights and Welfare of the Child, art. 11. The Protocol to the African Charter on Human and Peoples Rights on the Rights of Women in Africa urges states to promote the enrolment and retention of girls in schools and other training institutions (art 12, 2(c)), <http://www.africa-union.org/root/au/Documents/Treaties/Text/Protocol%20on%20the%20Rights%20of%20Women.pdf> (accessed September 8, 2011).

[62] ICESCR, art. 12; Banjul Charter, art. 16; CRC, art. 24; African Charter on the Rights and the Wellbeing of the Child, art. 14.

[63] CRC, art. 32(1); Worst Forms of Child Labor Convention, art. 3(d); African Charter on the Rights and the Wellbeing of the Child, art. 15(1).

[64] CESCR, General Comment No. 14, Article 12, The Right to the Highest Attainable Standard of Health, UN Doc. E/C.12/2000/4 (2000), para. 15.

[65] OHCHR, WHO, The Right to Health, p. 23.

[66] CESCR, General Comment No. 14, para. 43.

[67] CESCR, General Comment No. 14, para. 44.

[68] CRC, art. 19(1).

[69] CRC, art. 34; African Charter on the Rights and Wellbeing of the Child, art. 16(1), art. 27.

[70] Trafficking Protocol, art. 2; CRC, African Charter on the Rights and the Wellbeing of the Child, art. 29.

[71] Trafficking Protocol, art. 3(c).

[72] Trafficking Protocol, art. 3(a).

[73] Worst Forms of Child Labor Convention, art. 3(a).

- [74] United Nations Human Rights Council, Report of the Special Representative of the Secretary-General on the issue of human rights and transnational corporations and other business enterprises, John Ruggie: Guiding Principles on Business and Human Rights: Implementing the United Nations Protect, Respect and Remedy Framework, A/HRC/17/31, March 21, 2011, <http://www.ohchr.org/documents/issues/business/A.HRC.17.31.pdf> (accessed August 11, 2011), principle 12. There is, however, as yet no shared understanding of the full scope of businesses human rights responsibilities, whether these are or should be binding under international law, and if so, how they can best be enforced.
- [75] Ibid., principles 15-24.
- [76] United Nations Global Compact, The Ten Principles, <http://www.unglobalcompact.org/AboutTheGC/TheTenPrinciples/index.html>. (accessed June 9, 2011), principles 5, 7, 9.
- [77] OECD, Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas, December 2010, http://www.oecd.org/document/36/0,3746,en_2649_34889_44307940_1_1_1_1,00.html (accessed August 11, 2011). Although the OECD Recommendation was initiated by concern regarding minerals from conflict areas, it also concerns minerals from non-conflict areas so-called high risk areas where any of these human rights violations occur, including the worst forms of child labor.
- [78] Ibid., Annex II, Model Supply Chain Policy for a Responsible Global Supply Chain of Minerals from Conflict-Affected and High-Risk Areas.
- [79] OECD, Working Group Meeting on Due Diligence in the Gold Supply Chain, May 4, 2011, http://www.oecd.org/document/44/0,3746,en_2649_34889_47679852_1_1_1_1,00.html (accessed August 11, 2011).
- [80] Loi n 92-020 portant code du travail en République du Mali, September 23, 1992, art.187, <http://www.droit-afrique.com/images/textes/Mali/Mali%20-%20Code%20du%20Travail.pdf> (accessed June 6, 2011). As an exception, developing countries are allowed to specify a lower minimum age at 14 years at the moment of ratification. Mali, however, did not make use of this provision. Minimum Age Convention, art. 2(4).
- [81] Code du travail, art.185; Loi n 00-26 bis / AN-RM portant ratification de l'ordonnance N 00-006/P-RM autorisant la satisfaction de la convention n 182 sur l'interdiction des pires formes du travail des enfants, June 16, 2000.
- [82] Order No. 09-0151/MTFPRE SG completing the list of hazardous work prohibited for children under 18 years, (Arrt n 09-0151/MTFPRE SG complétant la liste des travaux dangereux interdits aux enfants de moins de 18 ans), February 4, 2009.
- [83] Decret n 96-178/ P-RM portant application de diverses dispositions de la loi n 92 -020 du 23 septembre 1992 portant code du travail en République du Mali, art. D 189.23.
- [84] Decret n 07-135/P-RM fixant la liste des déchets dangereux, 2007.
- [85] Loi n 99-046 portant loi d'orientation sur l'éducation, December 28, 1999, art. 7.
- [86] Loi n 99-046 portant loi d'orientation sur l'éducation, arts. 26, 34.
- [87] Loi n 01-079 portant Code pénal, August 20, 2001.
- [88] Code pénal, art. 244.
- [89] Human Rights Watch interview with a member of National Assembly, Hon. Moussa Coumbere, Kolondiba, April 7, 2011.
- [90] Code de protection de l'enfant, Ordonnance N 02-062/P-RM, June 5, 2002. The Code is an ordinance, a legally binding standard adopted by the government without parliamentary approval.
- [91] Ibid., arts. 20, 58.
- [92] For the estimates of numbers, see section I.
- [93] ILO, Etude transfrontalière sur le travail des enfants, p.5.
- [94] Human Rights Watch interview with Alpha K., estimated age six, Baroya, April 3, 2011.
- [95] Human Rights Watch interview with Moussa S., estimated age six, Baroya, April 3, 2011.
- [96] Human Rights Watch interview with Hamidou S., estimated age eight, Baroya, April 3, 2011.
- [97] Save the Children found shafts up to 50 meters deep. Save the Children, Recherche sur les enfants travailleurs dans les placers au Mali, Burkina Faso, en Guinée, December 2008, p. 28.
- [98] Human Rights Watch interview with Oumar K., estimated age 14, Sensoko, April 4, 2011.
- [99] Human Rights Watch interview with Oumar K., estimated age 14, Sensoko, April 4, 2011.
- [100] Human Rights Watch interview with Ibrahim K., age 15, Worognan, April 9, 2011.
- [101] Human Rights Watch interview with Karim S., estimated age 14, Worognan, April 8, 2011.
- [102] Human Rights Watch interview with Lansana K., 13, Baroya, April 3, 2011.
- [103] Human Rights Watch interview with Djibril C., estimated age 15, Worognan, April 8, 2011.
- [104] Human Rights Watch interview with Boubacar S., estimated age 14, Sensoko, April 4, 2011.
- [105] Human Rights Watch interview with Anne M., age 11, Baroya, April 3, 2011; Human Rights Watch interview with Susanne D., age 11, Worognan, April 8, 2011; ILO, *Girls in Mining. Research Findings from Ghana, Niger, Peru, and United Republic of Tanzania*, (Geneva: ILO 2007), pp. 3-5.
- [106] For the description of different machines used in artisanal gold mining, see UN Industrial Development Organization (UNIDO)/Global Mercury Project, Manual for Training Artisanal and Small-Scale Gold Miners, 2006, http://www.globalmercuryproject.org/documents/non_country%20specific/training%20manual%20for%20miners%20Marcello%2015.pdf (accessed June 24, 2011).
- [107] Observations during Human Rights Watch visits to artisanal mines.
- [108] Human Rights Watch interview with seven women gold miners, Sensoko, April 4, 2011; Human Rights Watch interview with Seydou S., 16, Baroya, April 3, 2011.
- [109] Human Rights Watch interview with seven women gold miners, Sensoko, April 4, 2011; Save the Children, Recherche sur les enfants travailleurs, December 2008, p. 31; ILO, *Girls in Mining*.

[110] Human Rights Watch interview with Abdoulaye M., age 15, Baroya, April 3, 2011; Human Rights Watch interview with Seydou S., age 16, Baroya, April 3, 2011; Human Rights Watch interview with Timoko K., age 15, Baroya, April 3, 2011.

[111] Human Rights Watch interview with Nanfadima A., estimated age 11, Tabokoto, April 2, 2011; Human Rights Watch interview with Susanne D., age 11, Worognan, April 8, 2011; Human Rights Watch interview with Rokia K., age 13, Baroya, April 3, 2011; Human Rights Watch interview with Aminata C., age 13, Baroya, April 3, 2011.

[112] Human Rights Watch interview with Susanne D., age 11, Worognan, April 8, 2011.

[113] Human Rights Watch interview with Aminata C., age 13, Baroya, April 3, 2011.

[114] UNIDO/Global Mercury Project, Manual for Training.

[115] On the use of mercury in artisanal mining globally and in Africa, see Kevin H. Telmer and Marcello M. Veiga, World Emissions of Mercury from Artisanal and Small Scale Gold Mining, 2008,

<http://www.mercurywatch.org/userfiles/file/Telmer%20and%20Veiga%202009%20Springer.pdf> (accessed August 11, 2011); Samuel J. Spiegel, Socioeconomic dimensions of mercury pollution abatement: Engaging artisanal mining communities in Sub-Saharan Africa, *Ecological Economics*, vol. 68 (2009), pp. 3072-3082. For the situation in Mali, see Fondation du Sahel pour le Développement, Etude sur le mercure: cas de l'orpaillage traditionnel dans le cercle de Kangaba, November 2010.

[116] Human Rights Watch interview with seven women gold miners, Sensoko, April 4, 2011; Human Rights Watch interview with Dorine S., woman gold miner, Tabakoto, April 2, 2011.

[117] For more details on the health impact, see section below.

[118] Human Rights Watch interview with Mamadou S., estimated age six, Baroya, April 3, 2011.

[119] Human Rights Watch interview with Susanne D., age 11, Worognan, April 8, 2011.

[120] Human Rights Watch interview with Fatimata N., estimated age 15, Worognan, April 9, 2011.

[121] Human Rights Watch interview with Mohamed S., age 16, Baroya, April 3, 2011.

[122] Human Rights Watch interview with gold trader, Kniba, April 1, 2011; Human Rights Watch interview with gold trader, Kniba, April 4, 2011; Human Rights Watch interview with seven women gold miners, Sensoko, April 4, 2011; Human Rights Watch interview with gold trader, Worognan, April 9, 2011.

[123] Local NGO interview with shop owner, Kniba area, April 2, 2011.

[124] Human Rights Watch interview with Mariam D., age 11, Worognan, April 8, 2011. The trader was probably ill-informed himself, since he did not mention that the most severe risk stems from inhalation of mercury vapor; swallowing metallic mercury is usually less dangerous.

[125] Human Rights Watch interview with Oumar K., estimated age 14, Sensoko, April 4, 2011.

[126] Stephan Bose-O'Reilly et al., Mercury Exposure and Childrens Health, *Current Problems in Pediatric and Adolescent Health Care*, vol. 40, (2010), pp. 186-215.

[127] Mercury Toxicity and How it Affects Our Health, 1998, <http://www.mercurysafety.co.uk/hlthinfo.htm> (accessed September 8, 2011)

[128] Marcello Veiga and Randy Baker, Protocols for Environmental and Health Assessment of Mercury Released by Artisanal and Small-Scale Gold Miners, Global Mercury Project, 2004, pp. 68-74.

[129] Ibid.

[130] Samuel J. Spiegel, Occupational Health, Mercury Exposure, and Environmental Justice: Learning from Experiences in Tanzania, *American Journal of Public Health*, vol. 99, supplement 3, (2009), pp. 550-558.

[131] Stephan Bose-O'Reilly et al., Mercury as serious health hazard for children in gold mining areas, *Environmental Research*, vol. 107, (2008), pp. 89-97.

[132] Ibid. See also ILO, *Children in hazardous work. What we know. What we need to do*, pp. 32-36.

[133] Stephan Bose-O'Reilly et al., Mercury Exposure and Childrens Health, pp. 190-191.

[134] Human Rights Watch visit to Baroya mine, April 3, 2011.

[135] Stephan Bose-O'Reilly et al., Mercury Exposure and Childrens Health, pp.188-189; Blacksmith Institute/Green Cross Switzerland, Worlds Worst Pollution Problems Report 2010. Top Six Toxic Threats, 2010, pp. 33-38, <http://www.gci.ch/communication/publications> (accessed July 8, 2011). Mercury in its organic form accumulates in fish, which is a source of food in Malian mining areas.

[136] Human Rights Watch interview with seven women gold miners, Sensoko, April 4, 2011.

[137] Veiga and Baker, Protocols, p. 67.

[138] Human Rights Watch interview with gold trader, Worognan, April 9, 2011.

[139] Blacksmith Institute/Green Cross Switzerland, Worlds Worst Pollution Problems Report 2010. Top Six Toxic Threats.

[140] Kevin H. Telmer and Marcello M. Veiga, World Emissions of Mercury from Artisanal and Small Scale Gold Mining; Kevin Telmer, Mercury in ASM, Extent, Causes and Solutions, powerpoint presentation, 2009.

[141] Kevin H. Telmer and Marcello M. Veiga, World Emissions of Mercury from Artisanal and Small Scale Gold Mining, p.164; Samuel J. Spiegel, Socioeconomic dimensions of mercury pollution abatement.

[142] See section VII below.

[143] Human Rights Watch interview with Dr. Keita Ntji, CSREF Kolondiba, at group interview with prfet and six officials, Kolondiba, April 8, 2011; Human Rights Watch interview with private doctor, Kniba, April 4, 2011; Human Rights Watch interview with Dr. Coulibaly, CSREF, Kniba, April 2, 2011; Local NGO interview with nurse, CSCOM, Tabakoto, Kniba, April 2, 2011.

[144] Human Rights Watch interview with Mory C., age 11, Baroya, April 3, 2011.

[145] Brendan Girdler-Brown et al., Three Decades of Silicosis: Disease Trends at Autopsy in South African Gold Miners, *Environmental Health Perspectives*, no. 118, vol. 3 (2010), p. 421.

[146] HRW interview with pulmonologist, Hospital Point G, Bamako, March 29, 2011.

- [147] Human Rights Watch interview with Oumar K., estimated age 14, Sensoko, April 4, 2011.
- [148] ILO, *Children in hazardous work. What we know. What we need to do*, (Geneva: ILO 2011), http://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/@publ/documents/publication/wcms_155428.pdf (accessed August 12, 2011).
- [149] Ibid.; ILO; *Girls in Mining*, p. 7.
- [150] Local NGO interview with nurse, CSCOM, Tabakoto, Kniba, April 2, 2011.
- [151] ILO, *Girls in Mining*, p.3-5; ILO, *Children in hazardous work*.
- [152] Human Rights Watch interview with Mamadou S., estimated age six, Baroya, April 3, 2011.
- [153] Human Rights Watch interview with father, Baroya, April 3, 2011.
- [154] Human Rights Watch interview with private doctor, Kniba, April 4, 2011; Human Rights Watch interview with Oumar K., estimated age 14, Sensoko, April 4, 2011.
- [155] Local NGO interview with nurse, CSCOM, Tabakoto, Kniba, April 2, 2011.
- [156] See section III.
- [157] Human Rights Watch interview with health worker, CSCOM, Kniba, April 3, 2011; Human Rights Watch interview with Dr. Coulibaly, CSREF, Kniba, April 2, 2011.
- [158] Human Rights Watch interview with Dr. Keita Ntji, CSREF Kolondiba, at group interview with *prfet* and six officials, Kolondiba, April 8, 2011.
- [159] Human Rights Watch interview with private doctor, Kniba, April 4, 2011.
- [160] Human Rights Watch interview with mayor, Worognan, April 8, 2011; Human Rights Watch interview with Ibrahim K., age 15, Worognan, April 9, 2011. Human Rights Watch interview with Binta M., age 15, April 9, 2011.
- [161] Human Rights Watch interview with Boucary Togo, director of the National Unit to Combat Child Labor, Bamako, March 29, 2011.
- [162] Human Rights Watch interview with private doctor, Kniba, April 4, 2011.
- [163] Human Rights Watch interview with Dr. Coulibaly, CSREF, Kniba, April 2, 2011.
- [164] Human Rights Watch interview with Lansana K., 13, Baroya, April 3, 2011.
- [165] Human Rights Watch interview with Issa S., age 12, Tabakoto, April 2, 2011; Human Rights Watch interview with Salif E., age 15, Worognan, April 9, 2011.
- [166] ILO, *Etude transfrontalière sur le travail des enfants dans l'orpaillage*, p. 39.
- [167] Human Rights Watch interview with Haroun C., age 12, Tabakoto, April 2, 2011.
- [168] Human Rights Watch interview with Djibril C., age 15, Worognan, April 8, 2011; Human Rights Watch interview with Susanne D., 11, Worognan, April 8, 2011.
- [169] ILO, *Etude transfrontalière sur le travail des enfants dans l'orpaillage*, p. 39; Human Rights Watch interview with representative of RAC, Kniba, April 2, 2011.
- [170] Human Rights Watch interview with Nanfadima A., estimated age 11, Tabakoto, April 2, 2011; Human Rights Watch interview with seven women gold miners, Sensoko, April 4, 2011; Human Rights Watch interview with school director, Worognan, April 8, 2011.
- [171] Human Rights Watch interview with Issa S., age 12, Tabakoto, April 2, 2011.
- [172] The ILO study found that 55 percent of children working with their family are not paid. ILO, *Etude transfrontalière sur le travail des enfants dans l'orpaillage*, p. 55. The study looked at the situation of children working with their parents and those living and working with other persons.
- [173] This was also the finding in a regional study: Save the Children, *Recherche sur les enfants travailleurs*, p. 51. It found that children do not receive a salary but a meager amount depending on the mood of the employer.
- [174] This included two children who were told to earn money for school materials.
- [175] Human Rights Watch interview with Nanfadima A., estimated age 11, Tabakoto, April 2, 2011. It was not clear whether her father picked up the money or how she otherwise sent him the money.
- [176] Human Rights Watch interview with Abdoulaye M., age 15, Baroya, April 3, 2011.
- [177] Human Rights Watch interview with Timoko K., age 15, Baroya, April 3, 2011.
- [178] Human Rights Watch interview with Ibrahim K., age 15, Worognan, April 9, 2011.
- [179] Human Rights Watch interview with Julani M., estimated age 16, Worognan, April 8, 2011.
- [180] Human Rights Watch interview with Fatimata N., estimated age 15, Worognan, April 9, 2011. She sent most of the money to her parents in Burkina Faso.
- [181] Human Rights Watch interview with Assatou S., age 17, Worognan, April 9, 2011.
- [182] Human Rights Watch interview with Moussa S., age six, Baroya, April 3, 2011; Human Rights Watch interview with Hamidou S., estimated age eight, Baroya, April 3, 2011.
- [183] ILO, *Etude transfrontalière sur le travail des enfants dans l'orpaillage*, p. 58.
- [184] Human Rights Watch interview with Boubacar S., estimated age 14, Sensoko, April 4, 2011. Boubacar first described his guardian as father, then later explained that he was a guardian and not the biological father, and went on to call him a stepfather.
- [185] Human Rights Watch interview with teacher from Sensoko, Kniba, April 2, 2011.
- [186] Human Rights Watch interview with Mariam D., estimated age 11, Worognan, April 8, 2011.
- [187] ILO, *Etude transfrontalière sur le travail des enfants dans l'orpaillage*, pp. 34-35.
- [188] Save the Children, *Recherche sur les enfants travailleurs*, pp. 37-38.

[189] See subsection on pay.

[190] Human Rights Watch interview with Boubacar S., estimated age 14, Sensoko, April 4, 2011.

[191] Human Rights Watch interview with Salif E., age 15, Worognan, April 9, 2011.

[192] ILO, Etude transfrontalière sur le travail des enfants dans l'orpaillage, p. 60.

[193] Human Rights Watch interview with head of Burkinabe community, Worognan, April 9, 2011; Human Rights Watch interview with gold trader, Worognan, April 9, 2011.

[194] ILO/IPEC, Etude CAP, p. 44.

[195] Human Rights Watch interview with Madjou, estimated aged seven, Tabakoto, April 2, 2011; Human Rights Watch interview with Mamadou S., estimated age six, Baroya, April 3, 2011; Human Rights Watch interview with Issa S., age 12, Tabakoto, April 2, 2011.

[196] Human Rights Watch interview with Mariam D., estimated age 11, Worognan, April 8, 2011.

[197] Human Rights Watch interview with Aminata C., age 13, Baroya, April 3, 2011.

[198] Human Rights Watch interview with Hamidou S., estimated age eight, Baroya, April 3, 2011.

[199] ILO, Etude transfrontalière sur le travail des enfants dans l'orpaillage, p. 58.

[200] On child labor in Mali, see section I.

[201] Human Rights Watch interview with Abderrahmane S., age 14, Baroya, April 3, 2011; Human Rights Watch interview with Julani M., estimated age 16, Worognan, April 8, 2011; Human Rights Watch interview with Alexandre A., age 11, Worognan, April 8, 2011.

[202] Human Rights Watch interview with school director and teacher from Sensoko, Kniba, April 2, 2011; Human Rights Watch interview with Evelynne, age 9, Baroya, April 3, 2011; Human Rights Watch interview with Rokia K., age 13, Baroya, April 3, 2011; Human Rights Watch interview with Fanta D., age 12, Baroya, April 3, 2011; Human Rights Watch interview with Kadiatou K., age 11, Baroya, April 3, 2011. On child domestic labor in neighboring Guinea and the use of Malian girls there, see Human Rights Watch, *Bottom of the Ladder: Exploitation and Abuse of Girl Domestic Workers in Guinea*, June 2007, <http://www.hrw.org/en/reports/2007/06/14/bottom-ladder-0>.

[203] Human Rights Watch interview with school director and two teachers, Baroya, April 3, 2011; Human Rights Watch interview with Mactar, age eight, Tabakoto, April 2, 2011; Human Rights Watch interview with Anne M., 10, Baroya, April 3, 2011.

[204] Human Rights Watch interview with woman gold miner, Tabakoto, April 2, 2011.

[205] Human Rights Watch interview with Binta M., age 15, Worognan, April 9, 2011; Human Rights Watch interview with Christine, age 17, Worognan, April 9, 2011; Human Rights Watch interview with Rokia K., age 13, Baroya, April 3, 2011.

[206] On sex work, see section IV.

[207] ILO/IPEC, Etude CAP, p. 46.

[208] On child labor as social practice, see Loretta E. Bass, *Child Labor*.

[209] Human Rights Watch interview with representative of the National Statistics Institute (INSTAT), Bamako, April 6, 2011. An official of the Mining Chamber spoke of child labor as socialization. Human Rights Watch interview with legal advisor, Mali Mining Chamber, Bamako, April 11, 2011.

[210] Human Rights Watch interview with father, Baroya, April 3, 2011; Human Rights Watch interview with Mamadou S., estimated age six, Baroya, April 3, 2011.

[211] Human Rights Watch interview with village chief and elders, Worognan, April 8, 2011.

[212] Sexual exploitation of girls in mining areas is also common in many other countries. ILO, *Girls in Mining*, p. 6.

[213] Human Rights Watch interviews with representative of CLUEDUCA, May 27 and June 8, 2011; Human Rights Watch telephone interview with representative of Soutoura, June 30, 2011; Human Rights Watch telephone interview with representative of SOS SIDA, August 12, 2011; SOS SIDA, Rapport d'activités de la campagne de sensibilisation dans les zones minières des cercles de Kadiolo et Sikasso, December 2009.

[214] These 15 to 19 year olds were 44 (of 357) sex workers who newly registered with the NGO during the second half of 2010. Collectif du Groupe d'Intervention au Mali pour la Promotion et le Développement Socio-sanitaire (CO-GIMPDS), Rapport suivi monitoring. 2^{me} semestre 2010, p. 10. Migration and trafficking of Nigerian women and girls is common in West Africa. Cte d'Ivoire/Nigeria: Combat Trafficking for Prostitution, Human Rights Watch news release, August 26, 2010, <http://www.hrw.org/news/2010/08/26/c-te-d-ivoirenigeria-combat-trafficking-prostitution>.

[215] Human Rights Watch interview with Stella A., Worognan, April 9, 2011. Another sex worker and local *gendarmes* confirmed that there are underage girls working as sex workers in Worognan. However, we were unable to identify any child sex workers for interviews. The *gendarmes* is part of the security force and sharing responsibility for internal security with the police. They are in charge of rural areas.

[216] Human Rights Watch interview with Mariam D., estimated age 11, Worognan, April 8, 2011.

[217] Save the Children, Recherche sur les enfants travailleurs, pp. 42-43.

[218] Save the Children, Recherche sur les enfants travailleurs, p. 39.

[219] Human Rights Watch group interview with *prfet* and six officials, Kolondiba, April 8, 2011; Human Rights Watch interview with three *gendarmes*, Worognan, April 9, 2011.

[220] Sex workers are defined as belonging to the most-at-risk populations. UNAIDS, Global Report: UNAIDS report on the global AIDS epidemic 2010, 2010, http://www.unaids.org/documents/20101123_GlobalReport_Annexes1_em.pdf, (accessed July 5, 2011), p. 242. There are no more recent figures, and also no specific figures on HIV among child sex workers.

[221] Human Rights Watch interviews with Mr. Samoura, CLUEDUCA, May 27 and June 8, 2011; Email communication from Mahamadou Camara, SOS SIDA, July 21, 2011; SOS SIDA, Rapport d'activités.

[222] Human Rights Watch group interview with *prfet* and six officials, Kolondiba, April 8, 2011.

[223] Gendarmerie de Kolondiba, Rape Statistics for Worognan and MPdiassa mining sites 2010-2011, (Statistique des cas de viol dans les sites d'orpaillage de Worognan et MPdiassa 2010-2011), (on file with Human Rights Watch). Human Rights Watch does not have national-level statistics about sexual violence.

[224] Human Rights Watch group interview with *prfet* and six officials, Kolondiba, April 8, 2011; Human Rights Watch interview with three *gendarmes*, Worognan,

April 9, 2011.

[225] Gendarmerie de Kolondiba, Statistique des cas de viol dans les sites d'orpaillage de Worognan et MPdiassa, 2010-2011 (on file with Human Rights Watch).

[226] Human Rights Watch interview with three *gendarmes*, Worognan, April 9, 2011.

[227] Human Rights Watch interview with three *gendarmes*, Worognan, April 9, 2011.

[228] Ministère de l'Economie et des Finances, Rapport Final, January 2011, <http://www.oecd.org/dataoecd/61/1/47083517.pdf> (accessed August 9, 2011), p. 17. The policy framework for development aid is laid down in the governments Growth and Poverty Reduction Strategy Framework. The current framework covers the period 2007-2011, and a new framework is currently being developed. Ministère de l'Economie et des Finances, Elaboration du CSRP 2012-2017 et Préparation de la Revue du CSRP 2007-2011 portant sur l'Année 2010, May 2011, http://www.mali-apd.org/IMG/file/pdf/DOCUMENTS_CLES/1_CSCRPTDR_CSCRPTDR_2012_2017_Mai%202011.pdf (accessed August 9, 2011), p. 3.

[229] See also section II.

[230] At the time of the creation of the Child Labor Unit, there was insufficient support in parliament for the institution, delaying a law on the unit by several years. Loi No. 10050 portant ratification de l'ordonnance no. 10-036/P-RM du 5 août 2010 portant création de la cellule nationale de lutte contre le travail des enfants, December 23, 2010. The law was adopted four years after the creation of the unit.

[231] There were 56 labor inspectors and 45 labor controllers in 2009. Email communication from Boucary Togo, director of the National Unit to Combat Child Labor, to Human Rights Watch, July 29, 2011.

[232] Human Rights Watch interview with international agency representatives, Bamako, February 15, 2011; US Department of Labor, 2009 Findings on the Worst Forms of Child Labor, 2010, <http://www.dol.gov/ilab/programs/ocft/pdf/2009OCFTreport.pdf> (accessed August 9, 2011), pp. 417-425.

[233] Human Rights Watch telephone interview with Boucary Togo, September 6, 2011; Human Rights Watch interview with Fatou Keita, ILO, Bamako, October 19, 2011.

[234] Human Rights Watch interview with Boucary Togo, director of the National Unit to Combat Child Labor, Bamako, March 29, 2011.

[235] Ministère du Travail et de la Fonction Publique, "Plan d'action national pour l'élimination du travail des enfants au Mali," April 2010, pp. 54-100. On the minimum age for employment, see section II.

[236] Mali: Enforce New Plan to Curb Child Labor, Human Rights Watch news release, June 15, 2011, <http://www.hrw.org/news/2011/06/15/mali-enforce-new-plan-curb-child-labor>.

[237] Email communication from Boucary Togo, director of the National Unit to Combat Child Labor, to Human Rights Watch, July 28, 2011.

[238] International Labour Organization, Supplement to the IPEC Implementation Report, March 2011, <http://www.ilo.org/ipecinfor/product/viewProduct.do?productId=16255> (accessed August 3, 2011), p. 26. In 2010, the US funded ILO/IPEC in Mali with US\$465,000; in 2011, it stopped funding ILO/IPEC in Mali.

[239] US Department of Labor, ILAB in Mali, undated, <http://www.dol.gov/ilab/map/countries/mali.htm> (accessed August 9, 2011); ILO, Evaluation Summaries; Support for the Preparation of the Mali Time-Bound Programme, undated, http://www.ilo.org/wcmsp5/groups/public/---ed_mas/---eval/documents/publication/wcms_126888.pdf (accessed August 9, 2011).

[240] ILO, Supplement, p. 31.

[241] ILO, Supplement, p. 26.

[242] ILO, Tackle child labor through education: moving children from work to school in 11 countries, undated, www.ilo.org/ipecinfor/product/download.do?type=document&id=8511 (accessed August 14, 2011).

[243] ILO/IPEC, *IPEC action against child labour Highlights 2010*, (Geneva: ILO, 2011), <http://www.ilo.org/ipecinfor/product/viewProduct.do?productId=15735> (accessed August 9, 2011); Human Rights Watch interview with Fatou Keita and Almoustapha Tour, ILO/IPEC, Bamako, March 31, 2011.

[244] Réseau d'Appui et de Conseils (RAC), Rapport d'activités 2009, Bamako, March 2010; Human Rights Watch interview with Fouta Keita, ILO/IPEC Mali, February 15, 2011; See details of a RAC project below, in section VI.

[245] Human Rights Watch interview with Fatou Keita and Almoustapha Tour, ILO/IPEC, Bamako, March 31, 2011; Human Rights Watch interview with representative of Jiekatanie, Kolondiba, April 7, 2011.

[246] ILO, Tackle child labor through education. For a critical perspective, see Gavin Hilson, A load too heavy: Critical reflections on the child labor problem in Africa's small-scale mining sector, *Children and Youth Services Review*, vol. 30 (2008), pp. 1233-1245.

[247] School management committees were established under the decentralized education system to manage primary schools, and are composed of parents. They are given technical assistance, such as training and financial management, by education authorities at district level called *centres d'animation pédagogique*, or CAP. See also section VII. on education.

[248] Human Rights Watch interview with representative of RAC, Kniba, April 2, 2011; Human Rights Watch interview with representative of ILO Mali, Bamako, April 12, 2011; Human Rights Watch interview with school director and two teachers, Baroya, April 3, 2011; Human Rights Watch interview with village chief and community leaders, Baroya, April 3, 2011; Human Rights Watch interview with school director and teacher from Sensoko, Kniba, April 2, 2011.

[249] Human Rights Watch interview with school director and two teachers, Baroya, April 3, 2011.

[250] Human Rights Watch interview with school director and teacher from Sensoko, Kniba, April 2, 2011.

[251] RAC, Rapport synthétique sur les activités réalisées dans le cadre du PA1/Tackle du 11 avril 2009 au 31 mars 2011, June 2011; Human Rights Watch interview with Fatou Keita, ILO/IPEC, Bamako, April 12, 2011.

[252] ILO/IPEC, *Minors out of mining! Partnership for global action against child labor in small-scale mining*, (Geneva: ILO 2006).

[253] The other countries who signed the pledge were Brazil, Burkina Faso, Colombia, Côte d'Ivoire, Ecuador, Ghana, Mongolia, Nicaragua, Pakistan, Peru, Philippines, Senegal, Tanzania, and Togo.

[254] ILO/IPEC, *Minors out of mining!*, p. 12.

[255] Email communication from Susan Gunn, ILO/IPEC, to Human Rights Watch, August 8, 2011.

[256] Human Rights Watch telephone interview with Nick Grisewood, Global March Against Child Labor, May 26, 2011.

[257] Human Rights Watch interview with Ayoubou Gouanl, deputy director Direction nationale de la promotion de l'enfant et de la famille, Bamako, March 30, 2011. For a definition of child protection, see UNICEF, Strengthening child protection systems, 2010, http://www.unicef.org/protection/index_52852.html (accessed September 5,

2011).

[258] Ordonnance no. 99-010/PM-RM portant cration de la direction nationale de la promotion de lenfant et de la famille, April 1, 1999.

[259] A study by the Directorate identified around 32,000 victims of exploitation and abuse in Mali. Human Rights Watch interview with Ayoub Gouanl, deputy director Direction nationale de la promotion de lenfant et de la famille, Bamako, March 30, 2011.

[260] Human Rights Watch interview with Ayoub Gouanl, deputy director Direction nationale de la promotion de lenfant et de la famille, Bamako, March 30, 2011; Human Rights Watch interview with representatives of Environnement et Dveloppement du Tiers Monde (ENDA) and Rseau daction Fod et Yagine (RAFY), Bamako, February 14, 2011.

[261] Confrence ministrielle conjointe CEDEAO/CEEAC sur la lutte contre la traite des personnes, Rsolution sur la lutte contre la traite des personnes, Abuja, July 7, 2007.

[262] Human Rights Watch interview with representatives of ENDA and RAFY, Bamako, February 14, 2011.

[263] US State Department, Trafficking in Persons Report 2011.

[264] Guamina, Prsentation de quelques expriences de Guamina dans le domaine du trafic des enfants, undated, on file with Human Rights Watch; Human Rights Watch interview with members of local vigilance committee, Baroya, April 3, 2011; Human Rights Watch interview with representative of Jiekatanie, Kolondiba, April 9, 2011.

[265] Castle et al., The International Migration of Young Malians; Mike Dottridge and Olivier Feneyrol, Action to strengthen indigenous child protection mechanisms in West Africa to prevent migrant children from being subjected to abuse, May 2007, http://www.childtrafficking.com/Docs/dottridge_oct07.pdf (accessed October 14, 2011).

[266] World Health Organization, Mali: health profile, April 4, 2011, <http://www.who.int/gho/countries/mli.pdf> (accessed August 15, 2011). Human Rights Watch interview with Dr. Coulibaly, CSREF, Kniba, April 2, 2011; CSREF Kniba, Situation des maladies prioritaires, en nombre absolu, (undated); CSREF Kniba, Situation des maladies potentiel pidmique, en nombre absolu (undated) (on file with Human Rights Watch).

[267] Ministre de la promotion de la femme, de lenfant et de la famille/ UNICEF, Bulletin statistique 2009. La femme et lenfant en chiffres au Mali, August 2010, p. 40.

[268] WHO, Mali: health profile, April 2011, <http://www.who.int/gho/countries/mli.pdf> (accessed July 12, 2011).

[269] Ministre de la Sant, Prodess II Prolong 2009-2011. Composante Sant, http://www.mali-apd.org/IMG/file/pdf/2_Description%20et%20fonctionnement%20des%20groupes%20thematiques/9_%20Sante/PRODESSIIPROLONGE.pdf (accessed August 15, 2011).

[270] Mamadou Kani Konate, Bakary Kant, Fatoumata Djnpo, Politique de sant communautaire et viabilit conomique et sociale des centres de sant communautaires au Mali: Etude de cas en milieu urbain et rural, draft, September 2003, [http://www.unrds.org/unrds/website/document.nsf/\(httpPublications\)/F4478C9C2C2D0794C1256E200039D082?OpenDocument](http://www.unrds.org/unrds/website/document.nsf/(httpPublications)/F4478C9C2C2D0794C1256E200039D082?OpenDocument) (accessed August 15, 2011).

[271] Ministre de la Sant, Lapproche sectorielle dans le domaine de la sant au Mali, December 2009, <http://www.btctb.org/files/web/publication/Lapproche%20sectorielle%20dans%20le%20domaine%20de%20la%20Sant%C3%A9%20au%20Mali.pdf>, pp. 75-76 (accessed July 12, 2011); Ministerial Leadership Initiative, What do we know in 2011 about the new free care policies in Mali? 2011, http://www.ministerial-leadership.org/sites/default/files/events/event_files/Microsoft%20Word%20-%20Eng-Synthese2%20Free%20care%20Mali%204%2026%2011.pdf (accessed August 14, 2011).

[272] Human Rights Watch interview with Dr. Coulibaly, CSREF, Kniba, April 2, 2011.

[273] Human Rights Watch interview with private doctor, Kniba, April 4, 2011.

[274] Human Rights Watch interviews with representative of CLUEDUCA, May 27 and June 8, 2011; Human Rights Watch telephone interview with representative of Soutoura, June 30, 2011; Human Rights Watch telephone interview with representative of SOS SIDA, August 12, 2011; SOS SIDA, Rapport dactivits de la campagne de sensibilisation dans les zones minières des cercles de Kadiolo et Sikasso; Collectif du Groupe dIntervention au Mali pour la Promotion et le Dveloppement Socio-sanaire (CO-GIMPDS), Rapport suivi monitoring. 2me semestre 2010.

[275] ILO, Etude transfrontalière sur les enfants dans lorpillage, p. 44.

[276] Human Rights Watch interview with Dr. Coulibaly, CSREF, Kniba, April 2, 2011.

[277] ILO, Etude transfrontalière sur les enfants dans lorpillage, p. 44; Human Rights Watch interview with Dr. Coulibaly, CSREF, Kniba, April 2, 2011.

[278] Human Rights Watch interview with Karim S., estimated age 14, Worognan, April 8, 2011; Human Rights Watch interview with Lansana K., age 13, Baroya, April 3, 2011; Human Rights Watch interview with Susanne D., age 11, Worognan, April 8, 2011; Human Rights Watch interview with Yacouba C., age 16, Baroya, April 3, 2011; Human Rights Watch interview with Aminata C., age 13, Baroya, April 3, 2011.

[279] Human Rights Watch interview with director of environmental health and hygiene department, Ministry of Health, Bamako, March 29, 2011.

[280] Human Rights Watch interview with Prof. Maiga, toxicologist, Bamako, March 29, 2011; Human Rights Watch telephone interview with representative of RAC, June 28, 2011; Human Rights Watch interview with private doctor, Kniba, April 4, 2011.

[281] Human Rights Watch interview with director of child health section, Ministry of Health, March 29, 2011.

[282] Ministre de la Sant/ Ministre de lEnvironnement et Assainissement, Analyse de la situation et estimation des besoins en sant et environnement au Mali dans le cadre de la mise en uvre de la dclaration de Libreville, June 2010, p. 24.

[283] For more information on SAICM, see Strategic Approach to International Chemicals Management (SAICM), <http://www.saicm.org/index.php?ql=h&content=home> (accessed August 10 2011).

[284] UNIDO/ Direction nationale de lassainissement et du contrle des pollutions et des nuisances, Atelier sous-régional dinformation des pays de lAfrique de lOuest francophone sur les problèmes liés lorpillage, December 2009.

[285] Human Rights Watch interview with Dr. Oumar Ciss, SAICM focal point, Direction nationale de lassainissement et du contrle des pollutions et des nuisances, Bamako, April 11, 2011.

[286] The two international NGOs are the Artisanal Gold Council and the Blacksmith Institute. Artisanal Gold Council, Current Projects, undated, <http://www.artisanalgold.org/projects> (accessed August 10, 2011); Global Environment Facility, Project Title: Improve the Health and Environment of Artisanal Gold Mining Communities by Reducing Mercury Emissions and Promoting Sound Chemical Management, April 2011; Human Rights Watch interview with Blacksmith focal point in Senegal, Bamako, April 1, 2011.

[287] United Nations Environment Program (UNEP), The Negotiating Process, undated, <http://www.unep.org/hazardoussubstances/MercuryNot/MercuryNegotiations/tabid/3320/language/en-US/Default.aspx> (accessed August 10, 2011).

- [288] UNEP, INC Meeting Documents, undated, <http://www.unep.org/hazardoussubstances/Mercury/Negotiations/INC3/INC3MeetingDocuments/tabid/3487/language/en-US/Default.aspx> (accessed August 15, 2011), section F and Annex E.
- [289] INC3 African Group, Submission by African Group on ASGM, 2011, <http://www.unep.org/hazardoussubstances/Portals/9/Mercury/Documents/INC3/Africa%20additional%20submission%20ASGM.pdf> (accessed September 28, 2011).
- [290] The net enrolment rate is the share of children of primary school age that are currently enrolled in school. Ministre de l'Education, de l'Alphabétisation et de Langues nationales, Annuaire National des Statistiques Scolaires de l'Enseignement Fondamental (ANSSEF) 2009-2010, 2010, p. 91.
- [291] Human Rights Watch telephone interview with representative of RAC, June 28, 2011.
- [292] Ministre du Travail, de la Fonction Publique et de la Réforme de l'Etat, Rapport de la mission de prospection pour l'élaboration et la mise en œuvre d'un programme d'action de lutte contre les pires formes de travail des enfants dans l'artisanat traditionnel dans la région de Sikassodu 5 au 8 septembre 2010, September 2010, pp. 5-6.
- [293] Oxfam, Delivering Education for All in Mali, June 2009, <http://www.oxfam.org/sites/www.oxfam.org/files/delivering-education-for-all-mali-report-07-06-09.pdf> (accessed on June 24, 2011), p. 18.
- [294] Human Rights Watch interview with teacher, Worognan, June 8, 2011.
- [295] Human Rights Watch interview with school director and teacher from Sensoko, Kniba, April 2, 2011; Human Rights Watch interview with school director and teachers, Baroya, April 3, 2011.
- [296] ILO, Etude transfrontalière sur le travail des enfants dans l'artisanat, pp. 45-46; Human Rights Watch interview with representative of RAC, Kniba, April 2, 2011; Human Rights Watch visits to schools in Baroya, Sensoko, and Worognan. For latrines, see UNICEF, Girl friendly/ child-friendly schools provide a brighter future for Mali, August 18, 2011, http://www.unicef.org/infobycountry/mali_59595.html (accessed September 7, 2011).
- [297] ILO, Etude transfrontalière sur le travail des enfants dans l'artisanat, pp. 45-46.
- [298] Human Rights Watch interview with seven women gold miners, Sensoko, April 4, 2011.
- [299] Human Rights Watch interview with Karim S., estimated age 14, Worognan, April 8, 2011.
- [300] Human Rights Watch interview with Oumar K., estimated age 14, Sensoko, April 4, 2011.
- [301] On the gender gap in Mali's education system, see above.
- [302] Human Rights Watch interview with Susanne D., age 11, Worognan, April 8, 2011.
- [303] Human Rights Watch interview with Lansana K., age 13, Baroya, April 3, 2011.
- [304] Human Rights Watch interview with Hamidou S., estimated age 8, Baroya, April 3, 2011.
- [305] Human Rights Watch interview with school director and teacher from Sensoko, Kniba, April 2, 2011.
- [306] Human Rights Watch interview with two members of school management committee, Baroya, April 3, 2011; Human Rights Watch interview with school director, Worognan, April 8, 2011.
- [307] Human Rights Watch interview with representative of RAC, Kniba, April 2, 2011; Human Rights Watch interview with school director and teacher from Sensoko, Kniba, April 2, 2011.
- [308] ILO, Etude transfrontalière sur le travail des enfants dans l'artisanat, pp. 34-37.
- [309] Human Rights Watch interview with tomboloma and mayor, Worognan, April 9, 2011; Human Rights Watch interview with head of Burkinabe community, Worognan, April 9, 2011; Human Rights Watch interview with Anglique M., 16, Worognan, April 9, 2011; Human Rights Watch interview with local NGO active in Kola mine, February 17, 2011; Human Rights Watch telephone interview with local government official in Bougouni, March 2011.
- [310] Human Rights Watch interview with Fatimata N., estimated age 15, Worognan, April 9, 2011.
- [311] Human Rights Watch interview with Yaya Sogodogo, CAP Director, at group interview with *préfet* and six officials, Kolondiba, April 8, 2011.
- [312] Human Rights Watch interview with school director, Worognan, April 8, 2011.
- [313] Human Rights Watch interview with Mory C., age 11, Baroya, April 3, 2011.
- [314] Human Rights Watch interview with Nanfadima A., estimated age 11, Tabokoto, April 2, 2011.
- [315] Human Rights Watch interview with school director, Worognan, April 8, 2011; ILO, Etude transfrontalière des enfants dans l'artisanat, pp. 45-46.
- [316] Human Rights Watch interview with school director and teacher from Sensoko, Kniba, April 2, 2011.
- [317] Human Rights Watch interview with school director and two teachers, Baroya, April 3, 2011.
- [318] Millennium Development Goal (MDG) 2 aims to achieve universal primary education: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling. MDG 3 aims to eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015. United Nations, Millennium Development Goals, <http://www.un.org/millenniumgoals/index.shtml> (accessed August 8, 2011).
- [319] Government of Mali, Programme décennal de développement de l'éducation (PRODEC): Les grandes orientations de la politique éducative," 2000, p.8-9, http://www.education.gov.ml/IMG/pdf/1_Grandes_Orientations_2000.pdf (accessed August 1, 2011); Government of Mali, Programme d'investissement pour le Secteur de l'Education: Descriptif de la Troisième Phase 2010-2012, March 18, 2010, pp.5-8, http://www.education.gov.ml/IMG/pdf/le_Descriptif_PISE_III_18mars10_VF.pdf (accessed August 9, 2011).
- [320] Education For All Fast Track Initiative, Mali, July 25, 2011, <http://www.educationfasttrack.org/partners/developing-countries/mali/> (accessed August 9, 2011); Oxfam, Delivering Education for All, p. 24; Overseas Development Institute (ODI)/Mokoro, Sector Budget Support in Practice. Case Study Education Sector in Mali, November 2009, p. 12.
- [321] USAID, Meeting EFA: Mali Community Schools; Oxfam, Delivering Education For All, p. 19.
- [322] Government of Mali, Programme d'investissement pour le Secteur de l'Education 2010-2012, pp. 15-16.
- [323] World Bank, *Le système éducatif malien Analyse sectorielle pour une amélioration de la qualité et de l'efficacité du système*, (Washington: World Bank, 2010), p. 10.
- [324] In 2009, the net school enrolment rate at the primary level was 77 percent in Sub-Saharan Africa. See UNESCO, Universal Primary Education, UIS Fact Sheet, May 2011, no. 8, <http://www.uis.unesco.org/FactSheets/Documents/fs8-2011-en.pdf> (accessed on June 28, 2011), p. 1. In 2009-2010, the gross school enrolment rate at

primary level was 79.5 percent in Mali, also significantly below the regional average. The gross enrollment rate is the number of children enrolled in primary school, regardless of their age, divided by the population of the age group that officially corresponds to primary school level.

[325] Ministre de l'Education, de l'Alphabétisation et de Langues nationales, *Annuaire National*, p. 88.

[326] World Bank, *Le système ducatif malien*, p. XXIII.

[327] Ministre de l'Education, de l'Alphabétisation et de Langues nationales, *Annuaire National* pp. 85, 91.

[328] World Bank, *Le système ducatif malien*, p. XXVI.

[329] Oxfam, *Delivering Education for All*, p. 12.

[330] *Ibid.*, p. 19.

[331] Klaus Deininger, Does cost of schooling affect enrolment by the poor? Universal primary education in Uganda, *Economics of Education Review*, vol.22, (2003); Samer Al-Samarrai and Hassan Zaman, Abolishing School Fees in Malawi: The Impact on Education Access and Equity, *Education Economics*, vol. 15, no. 3 (2007), p. 370.

[332] World Bank, *Le système ducatif malien*, p. 14.

[333] Oxfam, *Delivering Education For All*, p. 18; Ministre de l'Education, *Annuaire*, p. 13.

[334] USAID, Meeting EFA: Mali Community Schools, 2006, <http://futureofschooling.org/uploads/USAID-MaliCaseStudy.pdf> (accessed June 27, 2011), pp. 1-2.

[335] Oxfam, *Delivering Education For All*, pp. 17-19.

[336] Welthungerhilfe, Mobiles Lernen: In Mali geht die Schule mit auf Wanderschaft, May 17, 2011, <http://www.welthungerhilfe.de/mobile-schule-mali.html> (accessed August 9, 2011); Human Rights Watch interview with representative of Ministry of Education, Literacy, and National Languages, Bamako, February 16, 2011. The government program foresees the introduction of more mobile schools for nomads in the future: Government of Mali, Programme d'Investissement pour le Secteur de l'Education 2010-2012, pp. 29-30.

[337] Overseas Development Institute/UNICEF, Strengthening social protection for children in west and Central Africa, 2009, http://www.unicef.org/wcaro/wcaro_22_UNICEF_ODIbriefing_paper_SocialProtection_LOW.pdf (accessed June 23, 2011), pp. 1-2.

[338] Overseas Development Institute, Tackling child vulnerabilities through social protection: Lessons from West and Central Africa. Background Note, July 2010, London.

[339] Human Rights Watch interview with Gustave Nbi, UNICEF, Bamako, March 29, 2011; Overseas Development Institute, Government of Mali, UNICEF, La protection sociale et les enfants en Afrique du l'Ouest et du Center: Le cas du Mali, February 2009, http://www.unicef.org/wcaro/wcaro_mali_Protection_sociale_Mali_FR_s.pdf, pp. 79-83.

[340] World Bank, Bolsa Familia: Changing the Lives of Millions in Brazil, <http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/LACEXT/BRAZILEXTN/0,,contentMDK:21447054~pagePK:141137~piPK:141127~theSitePK:322341,00.html> (accessed June 24, 2011).

[341] Human Rights Watch telephone interview with Gustave Nbi, UNICEF, February 25, 2011; Evaluation de l'initiative bourse-maman dans 09 coles de Kayes et de Mopti, undated (on file with Human Rights Watch).

[342] Draft law on National Centre for School Canteens (on file at Human Rights Watch).

[343] Government of Mali, Programme d'Investissement pour le Secteur de l'Education 2010-2012, pp. 28-30; Human Rights Watch interview with representative of Ministry of Education, Literacy, and National Languages, Bamako, February 16, 2011.

[344] Government of Mali, Plan d'action nationale d'extension de la protection sociale 2010-2014 au Mali, Draft 3, Slingu, May 2010, pp. 24-26.

[345] Human Rights Watch interview with Gustave Nbi, UNICEF, Bamako, March 29, 2011.

[346] Human Rights Watch interview with gold trader, Kniba, April 4, 2011; Human Rights Watch interview with gold trader, Worognan, April 9, 2011; Human Rights Watch interview with Oumar K., estimated age 14, Sensoko, April 4, 2011.

[347] Human Rights Watch interview with gold trader, Bamako, April 6, 2011; Human Rights Watch interview with gold trader, Kniba, April 1, 2011.

[348] Human Rights Watch interview with gold trader, Kniba, April 4, 2011; Human Rights Watch interview with gold trader, Worognan, April 9, 2011.

[349] Human Rights Watch interview with gold trader, Kniba, April 1, 2011; Human Rights Watch interview with gold trader, Bamako, April 6, 2011.

[350] Human Rights Watch interview with Morike Sissoko, president of the FNOM, Kniba, April 2, 2011.

[351] Human Rights Watch interview with gold trader, Kniba, April 1, 2011; Human Rights Watch interview with Morike Sissoko, president of the FNOM, Kniba, April 2, 2011.

[352] Global Environment Facility, Improve the Health and Environment of Artisanal Gold Mining Communities, p. 7. Human Rights Watch interview with gold trader, Bamako, April 6, 2011; Human Rights Watch interview with gold trader, Bamako, March 30, 2011.

[353] Human Rights Watch interviewed 12 gold traders at mining sites, in Kniba, and in the capital between March 30 and April 11, 2011.

[354] Human Rights Watch interview with gold trader, Kniba, April 1, 2011.

[355] Human Rights Watch interview with gold trader, Kniba, April 4, 2011.

[356] Human Rights Watch interview with gold trader, Bamako, April 11, 2011.

[357] Human Rights Watch interview with gold trader, Bamako, March 30, 2011.

[358] Several children told us that they are selling their gold to traders themselves, and two traders also told us that they bought from children. Human Rights Watch interview with Nanfadima A., estimated age 11, Tabokoto, April 2, 2011; Human Rights Watch interview with Oumar K., estimated age 14, Sensoko, April 4, 2011; Human Rights Watch interview with Susanne D., age 11, Worognan, April 8, 2011; Human Rights Watch interview with Fatimata N., estimated age 15, Worognan, April 9, 2011; Human Rights Watch interview with Abdoulaye M., age 15, Baroya, April 3, 2011; Human Rights Watch interview with gold trader, Worognan, April 9, 2011.

[359] Human Rights Watch interview with gold trader, Kniba, April 4, 2011.

[360] Human Rights Watch telephone interview with representative of the Association des femmes minières au Mali (AFEMIN), May 26, 2011; Human Rights Watch interview with Morike Sissoko, president of the FNOM, Kniba, April 2, 2011; Human Rights Watch interview with Abdoulaye Pona, president of the Mali Mining

Chamber, Bamako, April 11, 2011.

[361] Hilson, A load too heavy, *Children and Youth Services Review*, pp. 1233-1245.

[362] On the creation of the Mining Chamber, see Abdoul Karim Maga, *Chambre des Mines du Mali: Abdoulaye Pona aux commandes*, *L'Indicateur Renouveau*, February 25, 2011, <http://ankamali.net/economie/1313-lindicateur-renouveau-chambre-des-mines-du-mali--abdoulaye-pona-aux-commandes> (accessed August 10, 2011).

[363] Human Rights Watch interview with Abdoulaye Pona, president of the Mali Mining Chamber, Bamako, April 11, 2011.

[364] Human Rights Watch interview with legal advisor, Mali Mining Chamber, Bamako, April 11, 2011.

[365] Human Rights Watch interview with Morike Sissoko, president of the FNOM, Kniba, April 2, 2011.

[366] The total amount of artisanally mined gold exported during that period was 1722,5 kg. This calculation is based on the gold price of June 30, 2011. For details, see Annex II, *Ministre de l'Industrie, de l'Investissement et du Commerce, Situation des intentions d'exportation d'or artisanal du 1er janvier au 30 juin 2011*, Bamako, July 14, 2011.

[367] See Annex I, *Ministre de l'Economie et des Finances, Tableaux statistiques des exportations d'or des mines artisanales au titre des années 2009, 2010 et 2011*, Bamako, July 19, 2011.

[368] See Annex I. For the period 2009-2010, Human Rights Watch does not have the names of companies in Switzerland that imported the gold.

[369] See Annex II.

[370] For more information on Decafin, see <http://www.decafin.ch/> (accessed August 15, 2011). In 2008, an article by the Associated Press also reported that Decafin was buying gold from artisanal mines in Mali. Rukmini Callimachi and Bradley Klapper, *Exploited Children Stories*, *Associated Press*, August 11, 2008, <http://www.ap.org/media/pdf/calimachi.pdf> (accessed August 15, 2011).

[371] Letter from Marc Henzelin, Lalive, to Human Rights Watch, August 10, 2011 (translated by Human Rights Watch). See the Human Rights Watch letter and the full response in Annex III.

[372] Letter from Marc Henzelin, Lalive, to Human Rights Watch, September 27, 2011.

[373] See Annex I.

[374] See Annex II.

[375] See Annex IV, Letter from Tareq El-Mdaka, Managing Director, Kaloti Jewellery International DMCC, to Human Rights Watch, July 30, 2011.

[376] Kaloti Jewellery International DMCC, *Source of Funds, Metals and Equities*. One of the declarations is of September 20, 2010; the other one is undated.

[377] Letter from Tareq El-Mdaka, Managing Director, Kaloti Jewellery International DMCC, to Human Rights Watch, July 30, 2011.

[378] Human Rights Watch telephone interview with Tareq El-Mdaka, Managing Director, Kaloti Jewellery International DMCC, November 2, 2011.

[379] Human Rights Watch interview with gold trader, Kniba, April 1, 2011.

[380] See Annex I. The estimate is based on June 2011 gold prices.

[381] See Annex II.

[382] See Annex V.

[383] Human Rights Watch interview with government official, Ministry of Mines, Bamako, April 6, 2011.

[384] See section II for details.

[385] Human Rights Watch interview with government official, Ministry of Mines, Bamako, April 6, 2011.

[386] Human Rights Watch interview with representative of international agency, February 14, 2011.

[387] Human Rights Watch interview with government official, Ministry of Mines, Bamako, March 30, 2011; Human Rights Watch interview with official from National Directorate for Mines, February 15, 2011.

[388] Human Rights Watch interview with representative of the National Statistics Institute (INSTAT), Bamako, April 6, 2011; Human Rights Watch interview with government official, Ministry of Mines, Bamako, April 6, 2011.

[389] Human Rights Watch interview with government official, Ministry of Mines, Bamako, April 6, 2011.

[390] Human Rights Watch interview with government official, Ministry of Mines, Bamako, April 6, 2011.

[391] Human Rights Watch interview with préfet, Kolondiba, April 8, 2011; Email correspondence from local NGO in Kolondiba, June 1 and 6, 2011. There was one large-scale eviction in 2010 at the large artisanal mine of Massiogo in the Sikasso region, but it occurred only after an industrial mine with an exploration permit complained to the government about the presence of artisanal miners. After the company urged the government to expel the artisanal miners, tens of thousands of miners were evicted from Massiogo in May 2010; Email communication from representative of CLUEDUCA to Human Rights Watch, June 7, 2011; Human Rights Watch interview with government official, Ministry of Mines, Bamako, March 30, 2011.

[392] *Ministre des Mines, Code Minier (Projet)*, arts. 42-46.

[393] Extractive Industries Transparency Initiative (EITI), Mali, January 10, 2011, <http://eiti.org/node/74> (accessed August 11, 2011).

[394] EITI, What is the EITI, <http://eiti.org/> (accessed August 10, 2011). Companies can also commit to the EITI standard, though there is no similar validation process. AngloGold Ashanti and Gold Fields are two international gold companies with operations in Mali who have committed to the EITI standard.

[395] Human Rights Watch interview with Aliou Haidara, *Publish What You Pay*, Mali, Bamako, February 16, 2011; Human Rights Watch interview with Timoko Sangare, *Fondation pour le Développement du Sahel*, Bamako, April 6, 2011.

[396] *Fondation pour le Développement du Sahel (FDS), Etude sur le mercure*, November 2010.

[397] ECOWAS sets up committee on mining reforms, Oxfam (America) news release, October 27, 2010, <http://www.oxfamamerica.org/articles/ecowas-sets-up-committee-on-mining-reforms> (accessed August 10, 2011); Human Rights Watch telephone interview with representative of OXFAM, August 26, 2011.

[398] ECOWAS, Directive C/DIR.3/05/09 on the Harmonization of Guiding Principles and Policies in the Mining Sector, Abuja, May 26-27, 2009, art.15.

[399] Ministers validate ECOWAS Mineral Development Policy, PANAPRESS, June 7, 2011, <http://www.panapress.com/Ministers-validate-ECOWAS-Mineral-Development-Policy--12-777113-100-lang2-index.html> (accessed September 8, 2011).

[400] ECOWAS Industry and Mines Directorate, ECOWAS Mineral Development Policy. Revised Draft, April 2011, art. 2.8.

[401] Alliance for Responsible Mining/ Fairtrade Labelling Organizations International, Fairtrade and Fairmined Standard for Gold from Artisanal and Small-Scale Mining, Including Associated Precious Metals, March 15, 2010, http://www.communitymining.org/attachments/034_Gold%20Standard%20Mar%202010%20EN.pdf (accessed August 10, 2011), sec. 4.4.

[402] Association for Responsible Mining/ Fairtrade Labelling Organizations International, Fairtrade and Fairmined Standard, sec. 3.1.

[403] Paul Kenyon, Chocolate: The Bitter Truth, *BBC*, March 24, 2010 http://news.bbc.co.uk/panorama/hi/front_page/newsid_8583000/8583499.stm (accessed August 15, 2011).

[404] Human Rights Watch interview with Ronald Koepke, consultant on the gold standard for ARM and Fairtrade Labelling Organizations International, March 7, 2011.

[405] Email communication from Aliou Bakhom, ONG *La Lumire*, August 10, 2011; Global Environment Facility, Improve the Health and Environment of Artisanal Gold Mining Communities.

[406] Responsible Jewellery Council (RJC), Fast Facts, undated, http://www.responsiblejewellery.com/downloads/Fast_Facts_RJC_Nov_2010.pdf (accessed August 10, 2011); Responsible Jewellery Council, Principles and Code of Practices, December 2009, http://www.responsiblejewellery.com/downloads/boxed_set_2009/S001_2009_RJC Prin COP.pdf (accessed August 10, 2011), p. 12.

[407] Earthworks, The Golden Rules, undated, <http://www.nodirtygold.org/goldenrules.cfm> (accessed August 10, 2011).

Hazardous Work, Mercury Poisoning, and Disease

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