The Mopani copper mine, Zambia

How European development money has fed a mining scandal

December 2010
The mission of "Counter Balance: Challenging the EIB" is to make the European Investment Bank an open and progressive institution delivering on EU development goals and promoting sustainable development to empower people affected by its work. The Counter Balance coalition consists of the following NGOs: CEE Bankwatch Network (Central and Eastern Europe), les Amis de la Terre (France), urgewald (Germany), Campagna per la Riforma della Banca Mondiale (Italy), Both Ends (Netherlands), Bretton Woods Project (United Kingdom).

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The European Investment Bank (EIB) is the financial institution of the European Union (EU). It invests in projects that contribute to achieving the EU’s objectives. In Africa, the EIB supports European cooperation and development policies. It acts on a mandate from the Cotonou Agreements, the top priorities of which are poverty alleviation, sustainable development, and the gradual integration of the African, Caribbean and Pacific (ACP) states into the global economy.

When we examine the EIB’s activities in Africa, we find that it invests millions of Euros in large mining projects. Since 2000, loans amounting to 650 million Euros have been granted to mining companies on the continent. From 2000 to 2007, over 80% of EIB funding in Zambia went to the mining sector.

Even though the mining industry is highly controversial, the EIB considers that these investments can contribute to development, mainly because they create tax revenue for the host states and jobs for the local populations. It recognizes that the mines can have heavy environmental impacts, but claims that it pays “particular attention to environmental sustainability”, and “strong attention to the social and governance acceptability of projects.”

Focus on a controversial project: Mopani

The present report examines the real impacts on development and the environment of a project funded by the EIB: the Mopani copper mine in Zambia. This mine belongs to the consortium Mopani Copper Mine (MCM), whose main shareholder is the Swiss firm Glencore. MCM owns the mines at Nkana and Mufufila, both situated in the Copperbelt, a mineral-rich area stretching across a part of Zambia and the Democratic Republic of Congo. The Mufufila mine borders on the towns of Kantanshi, Kankoyo and Mufufila. It consists of an underground mine, a concentrator, a smelter and a refinery.

In February 2005 the EIB granted a EUR 48 million loan to MCM for the construction of a new smelter at the Mufufila mine. The aim of this loan was to make it possible to reduce pollution in the area by cutting dust and sulfur emissions, to safeguard jobs, and to alleviate poverty through economic growth and the spin-off of MCM’s activity (wages, taxes, social services).


1. Introduction

The Mopani copper mine, Zambia. How European development money has fed a mining scandal.
Mining is a key activity in Zambia. It is important to be aware of its history and current situation if we are to understand the situation at Mopani.

1. The privatization of Zambia’s mines: opacity and corruption

“Whatever the weaknesses of Zambia’s negotiators, there is no excuse for massive multinational investors to blackmail one of the world’s poorest countries to provide special concessions from its national laws.”

Alastair Fraser and John Lungu, For Whom the Windfall?

Zambia is an inland country in southern Africa that is particularly rich in mineral resources, especially copper. At the end of the 19th century, the country was colonized by the British. Zambia gained independence in 1964, and its economy has been largely dependent on copper mining and exports.

2. Zambia’s mines: a key sector for development?

The process of privatization of the mines from 1997 to 2000 was characterized by Zambia’s weakness and a context of rampant corruption. Frederick Chiluba’s presidency (1991-2001) has been called the “decade of plundering”. Power during the privatization, this former president was prosecuted and sentenced for misappropriation of funds by the London High Court in 2007. The sentence will not be applied in Zambia.

In this context, privatization negotiations took place in opaque conditions, resulting in the mines being sold off. Dr. M. Mpande, professor at the University of Zambia (Lusaka) and former vice-minister of mining, explained: 

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The privatization process went hand-in-hand with a new Investment Act and a Mines and Minerals Act passed in 1995, both of which were particularly favourable to investors. In particular, they set up an attractive tax system for the mining companies and allowed for the repatriation of their profits back to their home countries.

In parallel, the private companies buying the mines signed “development agreements” with the Zambian government, which established their rights and obligations. These were to remain secret for a long time, but the publication of some of them revealed that they granted even more exemptions and privileges to the mining consortia, with regard to taxes, the environment and social issues. Moreover, these agreements provided for “periods of stability” of up to 20 years, in which the mining companies would be exempted de facto from any laws that parliament might pass during that period, and from any other amendment to the national legal framework.

2. A tax system that deprives the state of mining profits

“In 2007, mining revenues contributed something like 0.2% of the GDP in Zambia: this looks more like a statistical error” — M. Kapil Kapoor, country representative for Zambia at the World Bank, Lusaka, March 2009

With the new legislation and development agreements, the mining companies benefit from a highly favourable tax system in Zambia: the right to carry forward their losses over 15 to 20 years, 100 per cent foreign currency retention, no withholding tax, various tax and special tax exemptions ranging from customs duties to penalties for environmental pollution.

One of the most symbolic aspects of these tax exemptions is royalty rates. An IMF study estimated that, in 2001, the average royalty rate for minerals in developing countries was between 5 and 10%. Yet in the Zambian legislation passed for privatization, it was set beneath this average, at 3%. And the development agreements make provision for even lower rates, right down to 0.6%.

These exorbitant advantages have been justified by the necessity to attract private investors to the country — a questionable argument, for when it comes to exploiting resources investors have no choice but to go to wherever these resources are located. The relevance of this system is therefore doubtful. In 2004 the consulting firm McKinsey acknowledged that: “popular measures seeking to attract investors, such as temporary tax exemptions, only serve to inflate the value of investments that would probably be made in any case.”

In addition to this tax system, there is a problem with tax collection and control over multinationals by the Zambian tax administration. The Zambian Revenue Authority (ZRA), which collects taxes on the government’s behalf, acknowledges that the size of the firms and the complexity of their operations make its mission “a real challenge”. It lacks resources and automatically finds itself in a position of weakness faced with huge corporations operating internationally and skilled in tax optimization.

All these factors lead to a situation where mining companies contribute virtually nothing to Zambia’s budget. Various sources of information exist on these companies’ effective participation in the Zambian budget, but they all tend to show that this participation is weak at best — and at worst, negative.

A World Bank report thus recognizes that tax incentives and low tax rates enable the mining sector to benefit from a marginal effective tax rate of around 0%.

According to the ZRA, only one out of the 12 mining companies in Zambia pays tax on its profits; the others do not pay their fair share of the tax legislation in force. With regard to other taxes, the ZRA considers that the mining sector contributes no more than 10 to 15% of Zambia’s tax revenue, and most of that is from the income taxes paid by the mines’ employees. Taking into account only what is paid by the firms’ themselves, the ZRA recognizes that their contribution dips to 4% of the total of Zambia’s tax revenues.

Dr. M. Mpande considers that the situation is even more serious than that. He explains that not only do the mining companies pay no taxes, they also ask the Zambian government to exempt the VAT that they pay. In the final analysis, the mining companies’ contribution to the Zambian budget is negative.

The companies’ resistance to taxation or the short-lived fate of the windfall tax

One consequence of Zambia’s “attractive” tax system: from 2004 to 2008, copper prices soared on the international markets, without the country benefiting one iota from the exceptional profits generated by the mining companies. In fact, the share of revenue benefiting the country was halved from 34% in 2003 to 17% in 2006, whereas exports doubled (2005-2006), totaling 2.78 billion dollars.

Faced with this situation, and following multiple campaigns by NGOs, the government decided to change its tax system and to introduce a “windfall tax” on companies’ exceptional profits. The companies did not take kindly to this threat to their advantages and reacted strongly against the insecurity that this change of system created for them. Lucy Beleza, from Caritas Zambia explained: “To my knowledge, only two firms paid windfall tax, and they then laid charges against the government.”

The mining companies referred to the stability clauses of the development agreements and threatened to close the mines after the financial crisis of 2008. Under pressure, the government backtracked and replaced the windfall tax by a variable profit tax. Dr. Mpande, who is not very clear on this point, believes that the companies will not readily reveal their profits, and that the Zambian authorities will never be able to collect this tax based on complex calculations. Considering that only one mining company now pays income tax, it seems highly unlikely that the others will start contributing to this new levy.

3. Communities heavily impacted by privatization

Zambia is experiencing very serious social problems. Currently, 68% of its population is living under the poverty threshold, life expectancy is under 40 years, and the rate of HIV/AIDS prevalence very high (around 15%).

It is estimated that 10 million Zambians are threatened with malnutrition, and general infrastructure and social services are nonexistent in a deplorable state. Unfortunately, it does not seem that the mining sector is improving the situation, especially since privatization.

In the days when the mines were run by ZCCM, the company took care of all the public services in the neighbouring communities: hospitals, schools, maintenance of infrastructure, activity centres for women, recreation for children, etc. After privatization, the private mining companies discontinued most of these social activities, which have not been taken over by the state or the municipal authorities.

Generally, the mining towns have been abandoned and much of the services and infrastructure is in a deplorable state. Roads, in particular, are badly damaged due to a constant flow of trucks to and from the mines, and no one takes responsibility for repairing them. Hospitals and public schools now charge fees, whereas in the days of ZCCM these services were available free-of-charge to all the mining employees and their families.

Most recreational activities (recreational centres, sports facilities, centres for women) have been discontinued.

Privatization has, moreover, been accompanied by massive employee layoffs. In 1991, despite the crisis in the sector, 56,582 people were still employed by the mines. The government however had to implement a large-scale retrenchment programme to prepare the sale of the sector, and in 1997 only 31,500 employees were left.
were left in the mines. After privatization, new social plans cut this figure further: in 2004, the year preceding the EIB loan, the Zambian mines had no more than 19,900 workers.\(^{12}\)

Clearly, the mining companies’ objectives did not include the creation or stabilization of employment. Miners’ wages are, moreover, very low, sometimes below the “basic needs basket” level, a price index of the basic needs of a family of six. These workers also live in constant fear of retrenchment at short notice with too little compensation to survive.

Finally, even though the mining companies have started to recruit again, they now do so on different terms, contributing to the precarious situation of most workers. Many jobs are outsourced to sub-contractors who offer fewer social benefits than those of permanent employees (conditions of access to the mine hospital, wages, etc.). This precariousness makes it difficult to organize unions and causes serious problems of insecurity on the mines. For instance, sub-contractors who pay excessively low wages tend to dig underground galleries that are longer – they are paid per metre – but less safe, thus exposing miners to rock falls that can be fatal.\(^ {13}\)

The deterioration of living and employment conditions throughout the Copperbelt has generated resentment within local communities who find the heavy impacts of mining activity less and less tolerable. The mines drain many resources. It takes on average 13 to 28 cubic metres of water per second for the copper mines to function, and the mines buy water licenses for a few thousand dollars a year only. Likewise, Mr Kapil Kapoor, country representative for Zambia at the World Bank, confirmed that the mines consume over half of Zambia’s electricity.\(^ {14}\) Finally, the concessions include resources such as wood, fertile land and rivers, of which the local populations are consequently deprived.

\(^ {12}\) Alastair Fraser and John Lungu, “For Whom the Windfall?”, 2007, p. 21.
\(^ {14}\) Interview with M. Kapil Kapoor, Lusaka, March 2009.

### 4. Environmental impacts poorly managed

“The regulatory dispositions for the mining sector are currently so weak that they do not deter polluters... Identification and monitoring of environmental risks resulting from mining activities is often inadequate.” World Bank, “Environmental project for the Copperbelt”.\(^ {15}\)

From an environmental point of view, mining companies in Zambia benefit from exceptional rights. Their mandatory environmental management plans take precedence over national legislation and enable them, for example, to exceed the emission levels set by law.

Patson Zulu, director of the Environmental Council of Zambia (ECZ)\(^ {16}\), explained to us that the mining companies are granted emission permits renewed annually. If their emissions exceed estimates, the companies simply have to pay more for their licenses.\(^ {17}\)

Emission standards are therefore dispensatory for firms, which can exceed their thresholds by paying more for their licenses. The ECZ does not really have the means to wield any more control than that over the mining giants operating in the Copperbelt.

In addition to this slack legislation, the companies are largely self-regulated since they supply their own emission readings to the ECZ. The public agency has neither the equipment nor the human resources to carry out independent controls.

\(^ {15}\) Khadija Sharife, “Zambia: Riches to rags”, 4 December 2009.
\(^ {16}\) ECZ is the government agency responsible for implementing the environmental law in Zambia.
\(^ {17}\) Interview with Patson Zulu, Lusaka, March 2009.

Finally, any decision by the ECZ can be quashed by a ministerial ruling. Patson Zulu explained to us that several environmental impact studies refused by the ECZ were subsequently approved by the Ministry of the Environment: “You’ve got to have friends in the government”\(^ {18}\).

As a consequence, the Copperbelt is seriously polluted. The Kafue National Park – the second largest national park in the world, and one of the places with the most endangered wildlife species – is threatened by the pollution of the Kafue River running through it.

Pollution also affects the local communities exposed to toxic waste. Traditional activities such as agriculture, livestock farming and fishing are all adversely affected by air, ground and water pollution.

Environment: “You’ve got to have friends in the government”\(^ {18}\).

Mining contracts signed in questionable conditions, tax systems that are highly disadvantageous to the government, negative social consequences and poor management of environmental impacts: all these conditions should have alerted the EIB and dissuaded it from funding mining projects in Zambia that were unlikely to correspond to its development mandate. Yet the bank has invested millions of euros in the country’s freshly privatized mines, notably at Mopani.

\(^ {18}\) Interview with Patson Zulu, March 2009.
In 2000, in the context of privatization of the mines, a consortium composed of the Swiss company Glencore (73.1%), the Canadian First Quantum (16.9%) and ZCCM (10%) bought the Nikana and Mulufila mines. In the same year McM signed a development agreement with the Zambian government.

In 2005 the EIB granted the consortium a EUR 48 million loan.

1. A minimal contribution to the Zambian budget

"If they weren’t making profits, they should have left." Pepino Musakalu, farmer and former miner, Kankoyo, August 2010

The EIB claims that “MCM has been very successful in turnaround the loss-making mining activities, generating added value, reflected in [...] royalties and corporate taxes”19. Denounced in a Christian Aid report “A rich seam: Who benefits from rising commodity prices?”, January 2007.

In 2005 the EIB granted the consortium a EUR 48 million loan.

In 2008 McM also refused to pay the windfall tax. It is therefore one of the companies that pays the least taxes in a sector that, as it is, pays very little.

Glencore, a giant shareholder

Glencore, the majority shareholder of the consortium McM, is a particularly opaque corporation founded in 1974 by Marc Rich, a historical American businessman sentenced in the US for embargo violation and tax evasion. The corporation is based in the canton of Zug, in Switzerland, and has one of the country’s highest turnovers, along with Nestle.

In 2008 Glencore earned the “worst corporations of the year” Public Eye Award for the multinational with the most irresponsible behaviour – and its record is indeed astounding. In the “oil for food” affair, it is cited in the United Nations report for having paid secret commissions to former Iraqi president Saddam Hussein. In Columbus, on the site of the Cortez gold mines, it razed entire villages and forcibly appropriated their inhabitants’ land with the complicity of government authorities and the army. In France it was implicated in the Medefor scandal as the company’s main operator when it closed subsidiary MetaEurop Nord, retraining the employees without due notice and leaving behind a heavily polluted site without any cleaning up. In Zambia it was quoted by the Minister of Finance as one of the companies implicated in a corruption affair concerning cobalt sales in 1998 and 1999.

It is surprising that the EIB agreed to finance a consortium in which Glencore is the main shareholder. Considering its turnover, this company should not have difficulties raising funds on private markets. Moreover, given its legal, environmental and human rights record, Glencore was perhaps not the best candidate to receive public funds for development.

Finally, note that Glencore is the main shareholder not only of Mopani mine but also of Xstrata, the firm that built the smelter in Kitwe financed by the EIB. The mining branch of Xstrata also has a long history tainted by various scandals, and has been responsible for constant violations of environmental, economic, social, cultural and political rights in the countries in which it develops its projects.

Apart from this information, we were unable to obtain quantitative data on the revenue generated by Mopani on the share thereof that goes into Zambian state coffers. The ZRA refers to an obligation of confidentiality when refusing to disclose the amount of taxes paid by a company. This situation is somewhat surprising, in so far as the EIB publicly supports the Initiative for Transparency in the Extractive Industries (ITEI) and has committed to introducing “greater transparency and consistency in reporting on payments at a project level”.

A very worrying aspect of Mopani’s tax management stems from the fact that its main shareholder, Glencore, is registered in Switzerland, a tax haven. The World Trade Organization (WTO) reported that in 2008 over half of Zambia’s copper exports went to Switzerland. It is very unlikely that this was all for Swiss consumption, and as the WTO report modestly states, these exports probably have more to do with accounting operations than with real transfers of minerals.

Another suspect element concerns the price of these transactions, for the price of copper exported from Zambia is far lower than that of copper exported by Switzerland. Given the complexity of prices per type of copper, it is difficult to imagine that such variations in rates stem from differences in quality.

2. Public services abandoned

“...It’s Baghdad … It’s as if there had been a war, except there was no war...”. Inhabitant of Kankoyo, public meeting, 21 August 2010.

On arrival near the Mufurila site one is shocked by the extent of the poverty and the deterioration of the living conditions that characterizes the urban environment of Kitwe.

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Transparency in the Extractive Industries (ITEI) and the Initiative for Transparency in the Extractive Industries - Transparency International (ITEI). What is ITEI?

Inhabitant of Kankoyo, public meeting, 21 August 2010.

These anomalies in processes of commercialization of copper between Zambia and Switzerland suggest that the mining companies use “tax optimization” procedures, especially price transfers. As Glencore is based in Switzerland, the company would find it easy to implement this type of practice.

Despite this situation, the EIB does not mention any form of control of Mopani Copper Mine’s tax practices in any public document.

To conclude, the EIB’s argument that McM participates to poverty alleviation through tax contributions seems unfounded. It seems, on the contrary, that Mopani has benefited from the lowest possible rates of taxation and has evaded all profit taxes. Furthermore, it is likely that the company practices tax optimization that enables it also to evade the few taxes that remain to be paid.

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After privatization, MCM discontinued these activities and services, except for building a farm for retired employees, and a programme to combat malaria and HIV/AIDS, which seems to be intended more to avoid workers’ absenteeism than to improve the life of the local populations. Although the firm does have a private hospital, only its employees have access to it, and admission charges are far too high for the rest of the population which has to use the public hospital. A parishioner explained: “MCM is a private company, they come for the profits, they don’t feel responsible for the community”.

Nowadays the schools and hospitals charge fees and most of the services available in the days when the mines were nationalized no longer exist. The EIB does not seem to be fully aware of this situation, since the bank claims that “MCM will continue to contribute to the provision of adequate housing, school and clinic services”.

3. Forced expulsions and violation of human rights

“It’s difficult for the communities to defend their rights. When we organize things, the company doesn’t show up, they hide...”

Lucy Bwalya Munthali, head of the Economic Justice programme, Caritas Zambia, August 2010

The EIB claims that it “also pays high attention to the social and governance accountability of projects, based among other things on the EIB guidelines on vulnerable groups, occupational and community health and safety and labour rights”.29

The situation at Mufulira strongly undermines this claim: the behaviour of Mopani Copper Mines’ towards the local communities is scandalous and violates its own commitments.

In 2001, Oxfam Canada and the Zambian NGO Development Community Project (DECOP) laid charges against Mopani. They accused it of forcibly expelling subsistence farmers in the Mufulira area, in violation of the OECD’s guiding principles, especially with regard to human rights.

They referred the matter to the National Contact Point (NCP), a government service responsible for promoting the OECD guiding principles and conducting inquiries. The NCP consequently organized the signing of an agreement between Mopani and DECOP to put a stop to these abuses. Yet since 2002 Mopani has systematically violated the terms of this agreement30. It has expelled over a hundred farmers and their families, leaving them in situations of extreme poverty and depriving them of their land and means of subsistence.

Although the company has granted permits to certain farmers, the terms of these permits are so restrictive and precarious that they show total disregard for internationally recognized human rights and the OECD guiding principles.

A report by Toronto University law faculty explains that “Mopani is issuing licences that effectively prohibit the progressive realization of a number of human rights including the right to life, the right to a adequate standard of living, the right to adequate food, clothing and housing, the right to be free from hunger, the right to health, the right to education and the right to employment”.

Financial crisis and massive layoffs

The repercussions of the subprimes crisis have been felt as far as Zambia. The crisis caused a dip in the price of copper and massive layoffs, including by Mopani. No one was prepared for this: the workers were “sacked” without notice. During a mission to the area in 2009, we spoke with several retrenched miners. They explained that due to very low wages, most of them had to take out bank loans. When they were laid off, all their compensation went to paying back their loans and they found themselves with nothing. Due to pollution of the soil, they were not even able to farm their land. Some of them went to look for fields nine days’ walk from their home, and would consequently spend several days a week away from home. As most of them had been able to buy their own house at a low price in the days of ZCCM, they were unable to afford to move with their families. In February 2009 four retrenched workers committed suicide. “When people lose their jobs they lose everything”, we were told.

NGOs, notably the Amnesty International office in Mufulira, fear that the situation may lead to problems of famine, extreme poverty and migration. Increasing alcoholism is another problem regularly mentioned by NGOs and churches.

The situation does not only affect the retrenched worker, it also impacts on the whole family. Many people depend on the miners. When a father loses his job, his children have to leave school because they are unable to pay the fees. Many children are left to their own devices in the villages, to play in the streets or harvest sugar cane. In the best of cases, they remain at school without paying fees, but this creates problems for schools, which lack the funds to pay teachers and buy equipment. Women are easily tempted to resort to prostitution to earn some income for their family. This in turn increases risks of HIV/AIDS contamination and unwanted pregnancies, especially among teenagers. Another effect of job losses is that the workers immediately lose access to the Malcolm Watson hospital, which belongs to Mopani. They therefore have to go to the public Ronald Ross hospital, where admission fees are affordable, but this hospital was not prepared for so many new patients; it lacks staff, medicines and resources to treat them all.

A permanent worker earns 2.5 million Kwacha, or 1.7 million Kwacha net (around 260 Euros). This corresponds to slightly less than the value of the “basic needs basket” at Kitwe.

As the EIB granted its loan to Mopani in 2005, it must have been informed of the complaint filed by the NGOs in 2001. It should have been essential for the EIB to ensure that Mopani fulfilled its obligations, before granting the consortium a loan on behalf of the EU – something that it clearly did not do.

32 Ibid Note 34.

26 Interview with Papino Musakalu, farmer and former miner, Kankoyo, August 2010.
27 The national mining company, see Part 1 of this report.
28 Interview at Kankoyo in March 2009.
29 EIB, “Summarized description of the project” (see Annex 1).
31 Umuchinshi Initiative, University of Toronto, “Can the OECD’s Guiding Principles serve as a safeguard for mine workers in Zambia?”
32 Ibid Note 34.
4. Temporary, dangerous and poorly paid jobs

The EIB also justifies its involvement in the Mopani project by referring to the safeguarding of at least 1,210 jobs and the stabilization of 4,800 others at MCM. It considers moreover that the company's mining activities generate an added value that positively affects salaries.

In general, the mining sector's capacity to create many jobs is highly questionable: it is a largely mechanized activity that requires heavy investments compared to the number of jobs created.

As we have seen, since privatization the impact of mining companies on employment has tended to be negative, from both a qualitative and a quantitative point of view. Once again, Mopani is no exception to this rule.

Hence, the stabilization of employment promised by the EIB is far from being a reality. For example, in 2008 and 2009, the firm cut over a thousand workers in just a few months. The reason: the financial crisis which caused the copper price to drop. Yet the price is still in excess of US$2,000 per ton, which is higher than when Mopani bought the mine. In fact, after experiencing record prices of US$2,000 per ton, the miners explained to us, for example, that a permanent worker had access only for himself, his wife, and three of his children, whereas the temporary worker had free access to the mine hospital for himself, his wife and all his children. 

Mopani also contributes to the fact that mining jobs are increasingly temporary in Zambia. In 2006 over half of the company's workers were employed by sub-contractors on temporary contracts, with smaller wages than permanent workers and fewer fringe benefits. The miners explained to us, for example, that a permanent worker had free access to the mine hospital for himself, his wife and all his children, whereas the temporary worker had access only for himself, his wife, and three of his children.

Moreover, working conditions are difficult. In the mine they are described as “pathetic” due to the lack of ventilation and the heat. A worker explained: “They tell us to go ahead, where there is no ventilation, as long as they’re producing [...] When there is an inspection, they show other parts underground (than those that are not ventilated)” 33. Many miners complain of leg pain and respiratory problems.

In general, it is difficult to obtain precise data on the relationship between the workers’ diseases and working conditions in the mine, especially because the authorities only have information supplied by Mopani on the pollution levels and activities on their site. A study in 2008 revealed, however, that in the mines managed by the company (Nkana and Mufulira), the levels of silica in the air exceed rates authorized by US regulations 36. This means that emission controls are insufficient, and that the miners are exposed to greater risks of lung diseases, especially silicosis 37. Finally, serious security problems exist at Mopani. In 2005, the year in which its loan was approved by the EIB, at least 71 miners were killed in occupational accidents, of whom over 20 were Mopani employees. Tim Henderson, the CEO of Mopani, refused to answer the unions’ questions on security problems 38. Since then, the situation has not improved much and the national press regularly announces the death of miners employed by the company 39. In 2008, Dayford Muulwa, the district commissioner at Mufulira, described the number of occupational accidents at Mopani as “alarming” 40.

It is surprising that the EIB granted funds to a project with such a poor record in terms of workers’ security, and scandalous that it has not put pressure on the company to improve the situation immediately.

In 2005, the year in which its loan was approved by the EIB, at least 71 miners were killed in occupational accidents, of whom over 20 were Mopani employees. Tim Henderson, the CEO of Mopani, refused to answer the unions’ questions on security problems 38. Since then, the situation has not improved much and the national press regularly announces the death of miners employed by the company 39. In 2008, Dayford Muulwa, the district commissioner at Mufulira, described the number of occupational accidents at Mopani as “alarming” 40.

It is surprising that the EIB granted funds to a project with such a poor record in terms of workers’ security, and scandalous that it has not put pressure on the company to improve the situation immediately.

34 See: www.jctr.org.zm/bnbasket.html
35 Interview with Kankoyo miners in March 2009.
36 US Occupational Safety and Health Administration exposure limits.
39 See various articles: http://maravi.blogspot.com/2008/10/number-of-accidents-at-mopani-worries.html,
40 http://www.reuters.com/article/idUSTRE40L28120081222?pageNum=1&virtualBrandChannel=0
4. Disastrous environmental impacts

1. An essentially environmental project?

"Is it good for a bank to contribute to pollution? It should check the benefits for the local populations. What are the benefits for the people today? Nothing. The EIB should monitor this. It should look at the people in the area, and not only focus on the mining business."

Charles C. Mwandila, town clerk of Mufulira, August 2010.

The EIB considers that its loan to Mopani is “essentially an environmental project”; one that is supposed to substantially reduce dust and Sulphur Dioxide (SO2) emissions.

The rest of the bank’s presentation of the project is more nuanced: “In 2014 the Mufunila smelter’s SO2 emissions will be in line with Zambian environmental regulations and World Bank guidelines for copper smelters and reflect EU principles based upon best available technology.”

Moreover, the EIB argues that “as the project is located within an existing industrial area, negative nature conservation and biodiversity issues do not arise.”

Yet financing is situated in the overall framework of the project of which it is part. The EIB’s Statement on Environmental and Social Principles and Standards of 18 March 2008 is very clear in its Article 32: “The EA [Environmental Assessment] required by the EIB should relate to the entire project and its sphere of influence not just to the part that is being financed by the Bank.”

It is therefore regrettable that, in the case of Mopani, the bank chose to ignore the global, pre-existing impacts of the project.

The EIB moreover guarantees that “all mining projects with a significant impact on the environment financed by EIB require an EIA [Environmental Impact Assessment]”. But in the case of Mopani, the prior evaluation of the project was carried out by MCM employees and can under no circumstances be considered as objective.

Finally, the EIB considers that it is contributing real environmental added value to the project “by accelerating the planned investment and making it unconditional”. The reality of this added value is questionable, to say the least:

- The previous smelter was reaching the end of its life and had to be replaced; the construction of the new smelter was to take place in 2005;
- In its development agreement Mopani had undertaken to build a new smelter; it therefore had a legal obligation to do so;
- The new smelter reduced the company’s operational costs by increasing the capacity of the site and enabling the operator to produce its own sulphuric acid, through the acid factory linked to the building of the smelter.

Thus, the EIB, that claims to be particularly attentive to environmental impacts, agreed to invest millions of Euros on behalf of the European Union in a project that will not comply with Zambian legislation until nine years hence!

Charles C. Mwandila, town clerk of Mufulira, commented indignantly: “You can’t carry on poisoning people and saying that you’re going to stop... later! They talk of ‘emissions’ but it’s a question of poisoning”.

2. Mopani and air pollution

Around the Mufulira smelter there is enormous air pollution, with sulphur dioxide in the part of the town where the miners live."

Head of the Planning and Information Department, Zambian Ministry of the Environment, March 2009.

The announced objective of air pollution abatement owing to EIB funding is discredited as soon as one arrives near the Mufulira site where the pollution is obvious. The air is heavy and leaves a metallic taste in one’s mouth. The mine’s chimneys are constantly spewing out smoke, day and night.

The inhabitants confirm that the sulphur dioxide emissions have not ceased. Christopher, a miner on the site, explained: "The renovation project had two objectives: the expansion of the smelter’s capacities, and the harnessing of sulphur by the sulphuric acid factory. The expansion, that they did. But the sulphuric acid factory that they built is too small to treat all the sulfur, so they carry on discharging it.”

"The sulphur emissions haven’t changed. It’s still the same. You can see the devastating effects of the emissions here, at Kankoyo,” confirmed Mumba Michael Lubinda, coordinator of Caritas for Kankoyo and co-author of a damning report on pollution in the town, published in 2009, four years after the EIB loan.

The town clerk of Mufulira, Mr Charles C. Mwandila, showed us air pollution readings taken over several months. The results are scandalous: most of the pollutants measured largely exceed the emission thresholds (see Annex 2); sulfur emissions are up to 72 times higher than the legal limits; those of arsenic are sometimes more than 16 times higher than the limit; and those of lead are up to 90 times higher than legal limits!

No detail is given on the emissions at the smelter but its dust emissions are indicated twice, at respectively 13.6 and 47 times higher than the acceptable level determined by the WHO.

This pollution has impacts on the local communities’ health. While no exhaustive study has been carried out on the link between exposure to sulphur dioxide and health in the area, the Ronald Ross hospital indicates that classical symptoms include asthma attacks, lung infections and respiratory complications.

At Kankoyo the inhabitants complain of coughs and eye irritations, and worry about the effects of these emissions on babies.

Sulphur emissions are moreover responsible for acid rain which deteriorates the soil and the inhabitants’ houses. At Kankoyo the paint on houses is peeling off and their corrugated iron roofs are eroded by the acidity.

43 Latter by the EIB to Amis de la Terre, dated 6 March 2008.
44 EIB, “Summarized description of the project” (see Annex 1).
45 Mopani copper mine plc, Mufulira mine, “Environmental project brief for the smelter upgrade project”, July 2004. This is not a complete environmental impact study, which was not required in this case. The construction of the smelter was approved simply on the basis of an “environmental brief”.
46 Ibid Note 47.
47 Ibid Note 51.
48 Ibid Note 47.
49 Ibid Note 51.
50 Ibid Note 51.
Acid rain also contributes to the deterioration of the soil, which becomes unfit for farming. At Kankoyo all that grows is cactuses and avocado trees; nothing else survives. The town clerk explained that the town loses economic opportunities due to this situation: entrepreneurs ask to see soil analyses and then give up the idea of developing agricultural projects in the area. The acid rain has made the soil acidic. You have to apply lime to neutralize it. It’s expensive, and you’ve got to start all over again after the next acid rain. People don’t want to farm here1. In general, shops, schools, people don’t want to go west of the mine, because of the emissions. It’s a wasteland54.

3. Acid water pollution

“The main difference since privatization is that they use acid to extract copper in the mine. Before, they used other methods. More expensive, but safer” Pepino Musakalu, farmer and former miner, Kankoyo, August 2010.

In 2003 Mopani started to develop a new extraction method at Mufulira: in situ leaching (ISL). This technique consists in injecting a sulphuric acid solution into the ground to dissolve the copper directly in the deposit. The solution is then pumped to the surface and processed to separate the copper from the acid.

The value of this method for the firm is that it is cheap and requires little manpower. But the system is highly controversial. While theoretically the acid is controllable, in practice the migration of an acid solution under pressure in a deposit cannot be perfectly contained.

Moreover, hydro-geological impacts (i.e. impacts on movements of underground water) and impacts on the stability of land raise many questions. In the case of the Mopani site, the use of ISL is all the more open to criticism because the acid is injected into a deposit adjacent to the underground water that supplies the town of Mufulira.

The first accident occurred in 2005 during ISL testing. After the acid polluted the underground water, the domestic water supply was cut off. Some communities spent several weeks without running water.

In January 2008, acid contaminated Mufulira’s water network once again and close to 800 people had to be hospitalized after drinking contaminated water65. Lorraine Tembo at the Amnesty International office in Mufulira told us that polluted water also caused skin irritations that could last up to several months if the person used the water to wash. The water was again cut off for several days. “What happens to us, we can’t afford to buy bottled water daily”54.

MCM was sentenced to a few hundred dollars’ fine for this accident. It was accused of not having alerted the water utility and of thus having allowed contaminated water to be distributed in the networks. The company was also sentenced for not having met its commitments following the 2005 accident, by failing to install an adequate pumping system55.

Following this incident, the EIB took no sanction against Mopani.

The water utility’s Mulonga Report on this accident is alarming: “As long as Mopani carries on practising in situ leaching, there is no guarantee that acid contamination will not occur again”54. The only solution for the company is to draw water elsewhere, while Mopani carries on polluting the underground resources.

A worker at the mine confided to us that, while this leakage had been particularly serious, it was not the first, and that there were regular water cuts due to the mine’s activities. It is difficult to know exactly what levels the pollution attains, since the Environmental Council of Zambia (ECZ) admits that it does not have the equipment to check water contamination. It therefore has to rely solely on the data supplied by MCM.

Apart from underground water pollution, the large-scale use of sulphuric acid is an ever-present danger because it means that trucks transporting acid are constantly travelling on bad roads. In December 2009 one of these trucks overturned and its sulphuric acid spilled into the Tukula Mulima River, a tributary of the Kafue River, the Copperbelt’s main water source. The fish immediately died and the plant life was burned by the acidity59.

4. Contamination by mining waste

One of the most spectacular aspects of mining projects is probably the quantity of waste that they generate. On average, for one ton of copper, 110 tons of waste are produced, and 200 tons of material are moved60. Moreover, the extraction methods involve the use of toxic substances such as sulphuric acid and hydrocarbons.

Hence, like all mining companies, Mopani has to manage huge quantities of contaminated sludge and water daily. Our inquiries revealed several flaws in this management.

The most immediately visible materialization of this waste is the pipes that evacuate toxic tailings from the site of the mine. In the case of Mopani, these pipelines leave the mine and cross towns and countryside, totally unprotected. The only warnings are: “Do not walk on the pipeline, mining waste is very dangerous”. This injunction is obviously not respected and many children sit and play on these pipes carrying toxic matter, bordering streets and main roads.

Mopani’s copper mine, Zambia. How European development money has fed a mining scandal.

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The Mopani copper mine, Zambia. How European development money has fed a mining scandal.
One of the main problems of this installation is probably the risk of it collapsing. Mopani has tried to build a rockfill on the sides but it is already overflowing. If this dyke ruptures, tons of tailings would flood the surrounding land and block the water flowing behind it. The risks are higher during the rainy season.

In addition to these tailings, Mopani dumps various types of waste. In 2007 the NGO Citizens for a Better Environment (CBE) published a report denouncing the fact that Mopani discharges sludge into the Luanshima River. This sludge has seriously impacted on the turbidity of the water, to the point of killing off all signs of aquatic fauna. Water analyses reveal copper and cobalt levels exceeding authorized limits in certain spots. The vegetation also seems to be affected in so far as it has apparently turned an unusual yellowish colour. The tailings contaminate the dams that supply local populations with water, thus forcing them to find new sources for their own consumption and crops. Finally, mudslides on roads and bridges block the traffic 62.

Mopani defends itself by explaining that it obtained authorization from ECZ to discharge its sludge into the river.

During our visit to Kankoyo, we also noted that hydrocarbon effluents were discharged into open sewers. Mr Lubinda, of Caritas, confirmed to us that this is common.

In the seriously damaged environment around Mopani, it is difficult to believe that the EIB pays “particular attention to environmental sustainability, the mitigation of and adaptation to climate change, natural resource management, protection of biodiversity and safeguards to improvements of the general and urban environment” 63 as is claimed on the bank’s website. The present study shows that neither the Zambian state nor its population has benefited from the Mopani project, and that, on the contrary, it has had very serious social and environmental impacts. In view of the context of the mining sector in Zambia, it is evident that the current situation of the Mopani project was totally foreseeable.

In August 2010, for instance, the EIB published two articles on its website, praising the positive effects of the Lumwana mining project, also situated in Zambia, for which the bank has granted three loans amounting to a total of EUR 85 million. The jobs created and the infrastructures built are highlighted.

Yet a more in-depth analysis reveals that with a total investment of 925 million dollars, Lumwana planned to create 1,150 direct jobs 64, corresponding to an investment of over 800,000 dollars for the creation of one job. One wonders if, in Zambia, there are not other sectors in which an investment of this size would generate far more jobs. The EIB also forgot to point out that the construction of the mine involved the expulsion of over 600 farmers who were farming on the concession 65. This meant the disappearance not only of these jobs, but also of fertile land that would be destroyed permanently by the mining activity (pollution, movement of material, etc.). The infrastructure built revolves around the mine and its operation, and is moreover associated with the arrival of hundreds of migrant workers.

Thus, the impacts of these upheavals on the social fabric of the region could be extremely heavy. The project is located in a very rural and isolated area: “it’s like having a mining project in Alaska or the Australian desert” 66. In its communications on Lumwana, the EIB systematically fails to mention a crucial point: the companies will be mining not only copper but also uranium. Only very fragmented information has been disseminated among the local communities on the risks related to uranium, via brochures in English, in an area where illiteracy is particularly high and where many people do not understand English.

A recent study commissioned by the Zambian Council of Churches revealed that Zambia is totally unequipped for uranium mining. Currently it has no appropriate legal framework for this activity, be it for the management of risks, responsibilities and radioactive waste, or the sharing of the wealth created 67. Dr. M. Mpande sums up the situation: “They don’t pay taxes, they have expelled the farmers and closed off the land, they’re building the infrastructures that interest them; they’re not going to employ many people because everything’s highly mechanized, but they’re going to discharge huge quantities of polluting waste, including radioactive. From an economic point of view, with a simple cost/benefit analysis, it is clear that the Lumwana project is of no advantage to Zambia” 68.

This is very far from the success announced by the EIB.

5. Conclusion

One example among so many others...

These conclusions are particularly worrying in so far as the EIB has financed many other mining projects in similar contexts. While it has never supplied evaluations of these projects on the basis of precise development criteria and independent analyses on the ground, in recent years the EIB has developed an active communication strategy to boost the merits of the mining sector in Africa. Most of the articles published on the subject are content to affirm that the sector can alleviate poverty, without supporting these claims with empirical evidence. Yet many well-documented studies call into question the link between mining and development 69.

An economy based primarily on mining must be diversified to reduce its vulnerability to the variability of mineral prices. The needs in Zambia are huge: development of infrastructure, social services, manufacturing industries, and agriculture. It is estimated that close to ten million Zambians are threatened with malnutrition 70 — that is, a large majority of the population, whereas the country is rich in fertile land. It is incomprehensible that the EIB did not examine the relevance of these investments in mining projects in relation to the general economic situation of the country, and that it did not seek to direct its funding towards sectors that could have contributed more effectively to the country’s development.

Diversification rather than exhaustion

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65 See EIB, “Summarized description of the Lumwana project”. NB: In the article, the EIB announces the creation of 3,900 jobs because it also counts indirect employment.
66 Interview with Pierre Louie, Financial Director of Lumwana and Brenda Tambatamba, Sustainability Manager at Lumwana, March 2009.
67 See EIB, “Summarized description of the Lumwana project”. NB: In the article, the EIB announces the creation of 3,900 jobs because it also counts indirect employment.
68 Interview with Pierre Louie, Financial Director of Lumwana and Brenda Tambatamba, Sustainability Manager at Lumwana, March 2009.
It is also shocking that, having chosen to finance mines in Zambia despite an evidently unfavourable context and despite the country’s other urgent needs, the European Union’s bank did not ensure that the highest international standards in this respect were applied. The EIB should have imposed on Mopani a level of social and environmental responsibility in keeping with European standards. The EIB should maintain regular and serious monitoring of the project to evaluate the impacts in terms of environment and development. It should have ensured that it had the powers to take measures against the company in case of failure to meet its commitments.

The present study illustrates the consequences of the EIB’s shortcomings with regard to meeting standards and controlling the beneficiaries of its loans. We have not witnessed any improvement related to the EIB’s participation in this project. Its contribution has allowed an environmental disaster to be amplified and perpetuated.

A few kilometres from Mufulira there used to be the Kabwe zinc and lead deposits. They were the richest in Africa until they were mined to exhaustion by Anglo American. Since then, despite the clean up programme initiated by the World Bank, Kabwe is one of the ten most polluted industrial towns in the world. The soil and water is five to ten times higher than the limit set by the US Environmental Protection Agency. The soil and water also contain alarmingly high concentrations of metals.

One day, as at Kabwe, the mines financed by the EIB will be exhausted, and nothing will remain but pollution.

The EIB is the Bank of the European Union. As the European member states and institutions decide on its funding, they are responsible for ensuring that EIB funding is consistent with European commitments on development and environmental affairs.

In the short term, concerning the Mopani mining project, they must urge the EIB to:

- Make public all the documents concerning the project, including the EIB’s monitoring reports;
- Put pressure on Mopani Copper Mine to ensure that the consortium remedies the environmental and social problems described in this report, without delay;
- Demand that MCM make public its tax contribution to the Zambian state, including details on the various taxes paid and all exemptions;
- Publicly take a stand in favour of a reform of the Zambian tax system so that the country can benefit from the profits of the mining companies operating on its territory.

In the short term, concerning the mining sector, they must impose on the EIB:

- A moratorium on the financing of mining projects, extended until the bank adopts all the recommendations of the Extractive Industries Review and guarantees that the appropriate mechanisms have been set up to ensure their application.

In the medium term, they must demand from the EIB that it:

- Sets up a system of strict controls for the projects that it continues to finance, throughout their implementation and based on development indicators as well as environmental, human rights and social protection criteria consistent with European standards;
- Systematically evaluates the impacts of the proposed projects on the local communities and vulnerable groups (especially women, ethnic minorities and the poorest segments of the population), and only finances projects that benefit all the affected groups, including the most vulnerable;
- Ensures that the beneficiaries of these loans do not implement tax strategies that make use of legal loopholes and tax havens, and that developing countries benefit from an equitable share of the profits made on their territory;
- Systematically carry out independent ex post evaluations of its projects, on the basis of precise criteria, which show their impacts on poverty alleviation and sustainable development;
- Makes public all the studies and publications related to the monitoring and evaluation of such projects.

In the long term they must:

- Produce an evaluation of the effectiveness and added value of the EIB with regard to poverty alleviation and the promotion of sustainable development in countries of the global South. This evaluation should be undertaken with the participation of all relevant stakeholders, including civil society, in the global North and South;
- Take into account the conclusions of this evaluation in order to limit the EIB mandate outside the EU to those areas in which it is likely to have positive impacts on the local populations and the environment;
- Redirect EIB funds towards other institutions which are probably better suited to managing the funding of development in countries of the global South.

71 Study of the Blacksmith institute: http://www.worstpolluted.org/

72 The “Extractive Industries Review” (EIR) is an in-depth study of the extractive industry sector, commissioned by the World Bank. It has produced key recommendations to ensure that extraction projects have positive impacts. As an international reference (based on multi-sectoral consultations in several regions of the world), the EIR served as the basis for the final report “Striking a Better Balance”, published in December 2003, which analyses the situation, highlights the main problems, and makes recommendations.
Annex 1. PROJECT SUMMARY INFORMATION: MOPANI COPPER PROJECT (ZAMBIA)

1. Private sector Operation

2. The Project

The project concerns the first phase of the rebuildling and modernisation of the Mufulira copper smelter part of Mopani's operations. It is a new primary smelting furnace, a matte settling furnace, an oxygen plant, a sulphuric acid plant and upgrade of the related infrastructure and installations. It will replace outdated technology and equipment, increase smelting capacity and significantly reduce dust and SO2 emissions.

Financial proposal:

Borrower/Promoter: Mopani Copper Mines Plc, a company incorporated in the Republic of Zambia

Amount: EUR 48 m, up to the equivalent of USD 50 m, to be disbursed in euros or USD

Term: 12 years

Terms and Conditions: Senior loan on an Investment Facility resources

Interest: The Bank's reference rate for lending plus risk spread

Article 14/28 Member States' Committee opinion: The Investment Facility Committee gave a favourable opinion on the project at its meeting on 28th October 2004.

Financing plan:

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4. Value-added identification

Consistency with the priority objectives of the EU (Pillar 1)
The project is fully consistent with EU objectives as specified in the Cotonou Agreement and the mandate given to the Bank under the Investment Facility.

Zambia was the world's 4th largest copper producer in 1969, but in the 1970s and 1980s production under State ownership decreased substantially; restructuring and privatization of the mining sector was completed in 2002. With a private sector-driven mining industry, Zambia is now better placed to stimulate economic growth and reduce poverty. Investments in modern mining practices, like the Mopani Copper Project, reduce the environmental liabilities created by past mining practices and increase smelting capacity and significantly reduce dust and SO2 emissions.

Social issues

Mopani Copper Mines Plc (MCM) is an integrated copper and cobalt producer located in the Copperbelt of Zambia from which the company draws its name. MCM is a Zambian company, wholly-owned by the South African Standard Group Limited, a subsidiary of the Shanduka Group.

5. Key issues

5.1 Environmental issues

Promoters are committed to stationed investments in order to comply with Zambian environmental regulations by 2015. As a result of the Bank's project, MCM will bring these investments forward and the proposed project is the first stage of an investment programme at the end of which in 2016 the Mufulira smelter's SO2 emissions will be in line with Zambian environmental regulations and World Bank guidelines for copper smelters and reflect EU principles based upon best available technology (BPP Directive). The project complies with the Zambian EPB/EIA permitting process, which is in line with the principles of the Directive 97/11 on environmental impact assessment. If located within the EU, this project would fall under Annex II of the EU Directive 97/11 regarding environmental impact assessment requirements (point 13 for the smelter modernization and expansion, point 10 for the oxygen and sulphuric acid plant). As the project is located within an existing industrial area, negative nature conservation and biodiversity issues do not arise.

5.2 Financial analysis

The project is fully consistent with the Investment Facility's objectives to create economic growth and reduce poverty. Investments in modern mining practices, like the Mopani Copper Project, reduce the environmental liabilities created by past mining practices and increase smelting capacity and significantly reduce dust and SO2 emissions.

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5.3 Technical issues

The project has been planned carefully and all socio-economic and technical feasibility studies have been carried out. The project is consistent with the Investment Facility's objectives to create economic growth and reduce poverty. Investments in modern mining practices, like the Mopani Copper Project, reduce the environmental liabilities created by past mining practices and increase smelting capacity and significantly reduce dust and SO2 emissions.

The Investment Facility Committee gave a favourable opinion on the project on 28th October 2004.

Emission readings on the Mufulira site, June-September 2009

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