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A dangerous bet: The challenges of formalizing artisanal mining in the Democratic Republic of Congo

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ABSTRACT

Among policy-makers and governments, there is a broad consensus that artisanal and small-scale mining (ASM) needs to be 'formalized' – embodied in a standardized legal framework that is registered in and governed by a central state system-, the basic condition being that artisanal miners are given formal property rights. This article aims to contribute to this discussion, drawing on a case study from the Eastern Democratic Republic of Congo (DRC), where it is estimated that up to 90 percent of mineral production and export is 'informal'. After having pointed out some of the theoretical assumptions behind the formalization canon, we study the challenges of formalizing the mining sector in the DRC. Next, we provide an in-depth analysis of one concrete policy measure of the Congolese government, the temporary ban on all artisanal activities. We argue that the mining ban was not only a radical example of a top-down formalization policy, but also an illustration of a bureaucratic and technical measure that compounds but does not address different problems associated with ASM: conflict, informality, poverty, illegality, state control. Looking at the empirical evidence from the DRC, we argue that these kinds of technical solutions can never address the broader socio-economic and political issues at stake.

Introduction

Despite the recognition of the potential of artisanal and small-scale mining (ASM) for economic development and poverty reduction, a consensus exists that ASM has so far generated few benefits for both governments and artisanal and small-scale miners. The key problem so it is argued, is the fact that these artisanal activities operate outside the regulatory framework of the state, in an 'illegal' or 'informal' sphere. Hence the sector needs to be 'formalized', or embodied in a standardized legal framework that is registered in and governed by a central state system. The basic condition for formalization, according to many, is 'property', or the fact that "artisanal miners are given full legal and transferable mining titles to their claims" (Barry, 1995: 2). This accounts for a broad consensus among policy-makers and researchers (Siegel and Veiga, 2009: 51). But on which assumptions is this consensus based? Why is it argued that a formalized sector will have a more positive impact on national development and local livelihoods? And if this is the case, how should policy makers proceed to implement formalization?

This article aims to contribute to this debate, drawing on a case study on the mining sector in Eastern Democratic Republic of Congo (DRC), where it is estimated that more than half of the cassiterite and coltan production and more than 90 percent of gold production and export is 'informal',[1] which means that it takes place beyond state control. In the second section we point out some of the theoretical assumptions behind the formalization canon and a number of critiques on this. In the third section we study the challenges of formalizing the mining sector in the DRC, a mineral-rich country that has faced a lasting conflict fueled by the scramble for mineral resources, and where a major part of the current mineral production is artisanal and 'informal'. In the fourth section we analyze a concrete policy measure of the Congolese government, namely the temporary ban on all artisanal activities, which was presented as an attempt to bring the entire sector under state control and formalize it.

In conclusion, we argue that the mining ban was not only a radical example of a top-down formalization policy, but also an illustration of a bureaucratic and technical measure that compounds but does not address different problems associated

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[1] Estimates in different research reports, see for example Tegera and Johnson, 2007: 5; Garrett and Mitchell, 2009: 23.

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with ASM: conflict, informality, poverty, illegality, state control. Looking at the empirical evidence from the DRC, we argue that these kinds of technical solutions can never address the broader socio-economic and political issues at stake.

Formalizing artisanal mining

The formalization canon

In this section we first point out some of the theoretical assumptions behind the formalization canon, according to which the basic condition for economic development is the establishment of formal property rights. The importance of property rights as exclusive, transferable and legal rights to use, exchange and change resources has been recognized by New Institutional Economists like Demsetz (1967), Alchian and Demsetz (1973) and North (1990). They distinguish between private property rights, assigned to an individual, and common property rights, assigned to the state. Analyzing the establishment of private property rights in the gold mines of the US and Australia in the mid-19th century, authors like Umbeck (1977), Libecap (1986, 2007) and La Croix (1992) argue that as the value of the resources and the number of miners increased, and technologies changed, it became more efficient to establish private property rights over the mines. Umbeck (1977: 215–216) described this as a natural process: as resources grew scarcer and their value rose, competition increased and miners began to feel the need to form explicit contacts for exclusive property rights.[2] These property rights needed to be protected and enforced, which first happened through miner's meetings and the establishment of mining codes, and later through the adoption of these codes in state law.

Property economists like Steiger (2006) and De Soto (2000, 2002) articulate the link between property and economic development more explicitly. The basic condition for economic growth, so it is argued, is to guarantee people full property rights, which are transferable and protected by state law. Full formal titles would create incentives for investments and development of a resource, they allow access to credit and can be transformed into standardized instruments of exchange and capital. This way individuals will be included in the market economy. Eventually, so the argument goes, formal titles will increase total wealth and economic growth. Yet these formal property rights will not emerge naturally. They must be created through legal reforms. In other words, the existing 'informal' titles must be transformed into full formal titles by a legal process of 'formalization'. This discourse has proved to be extremely prominent in policy circles (Gilbert, 2002: 1). In his influential work, Hernando De Soto identified a clash between what he calls the legal economy and the informal, extralegal economy, consisting of a bundle of customary rights and 'possessory relationships'. The poor, operating in the informal economy and lacking formal titles, cannot transform their assets into collateral and credit, hence their assets are tied up in 'dead capital' (Siegel and Veiga, 2009: 52). What the poor need, so the argument goes, are secure titles, safeguarded and enforced by the state's legislative framework. For De Soto, formalization is the key to development, a necessary and sufficient condition for fostering economic growth and productivity for the whole society (De Soto, 2002: 355).

Other authors put forward an argument based on 'order' and 'security', saying that when titles are formalized, owners will also respect other people's titles, and physical and human security in general will be enhanced. For example, artisanal miners are often victims of extortion and excessive bribes; or governments or mining companies threaten them with violent evictions. In this case, it is argued that formal titles are "the basis of a miner's access to legal redress when rights are violated" (Siegel and Veiga, 2009: 52) and give them 'voice' in decision-making processes (Hilson and Potter, 2005: 108). Apart from the security arguments, all theories we have discussed so far rely on the 'efficiency' argument to justify the need for, or to explain the natural evolution towards, formalization and privatization of property rights. But the efficiency argument itself has also been questioned in various ways.

Questioning the formalization canon

First of all, fundamental questions may be raised about the need for ASM to be efficient and profitable. Since the 1990s, the 'poverty-driven' character of ASM has been emphasized over and over again (Barry, 1995; Hilson, 2009: 2), arguing that people 'branch out' to mining activities in order to escape poverty. ASM may thus become one of the possible livelihood options, next to, for example, agriculture; but in some areas it has also become the principal livelihood and employment option. Taking this into account, it becomes obvious that issues like poverty, employment, livelihoods and economic survival may matter more than efficiency, or as Maconachie and Hilson (2011: 295) frame it:

> [...] formalization strategies [...] continue to be concerned with creating a legislative framework, licensing, and tracking artisanal mining in order to capture revenue for the government, rather than addressing the livelihood demands and welfare issues of those enduring poor working conditions, low pay and job insecurity.

Second, the formalization discourse assumes that everyone will eventually benefit from strong property rights. Yet it has been argued that artisanal miners do not necessarily want strong and formal property rights. They may not think of their 'illegal' status as a problem, as long as they have 'perceived' tenure security (Gilbert, 2002: 8). For example, despite their lack of formal titles they may have customary titles, which are just as strong in their eyes, and even more legitimate.[3] What kind of property rights are preferred, also depends on the context and the nature of the mining activities. The history of property rights in the Californian mines of the mid-19th century provides a good illustration. Clay and Wright (2005) show that by introducing the claim system, miners deliberately chose a system of restricted ('weak') property rights, with numerous restrictions on claims and protection of the interests of both claim-holders and claim-jumpers. McDowell (2002) attributes this among others to the specific nature of the gold mining activities, the fact that claim-holders never knew how much their claim would yield, and the resulting mobility of miners. Therefore, it was in everyone's interest to secure their claims, but at the same time facilitate the acquisition of a new claim.

Third, the standard formalization canon does not take into account a number of structural elements in 'informal' economic systems. As we have argued elsewhere (Geenen, 2011a, b) the system of artisanal gold exploitation and trade in the DRC is not

[2] This argument conforms the view of property rights theorists saying that as the scarcity of a resource increases, a point will be reached where the gains from its privatization exceed the costs, so privatization will be desirable on efficiency grounds (see North, 1990: 51 and Platteau, 2000). Platteau criticizes the 'evolutionary theory of land rights'.

[3] Artisanal miners often refer to their 'traditional' rights or 'customary' rights to work the land, and explicitly frame their activities in a discourse of legitimacy/illegitimacy instead of legality/illegality. *Source*: interviews in South-Kivu.

unregulated, on the contrary. The economic activity of mineral exploitation is closely interwoven with a whole web of social relations, and the mineral trade, including smuggling routes, is historically deeply rooted in local and regional dynamics (see also Maconachie and Hilson, 2011: 300). If such an informal system has to be 'replaced' by a formal system, existing dependencies, reciprocal relations and power balances are likely to come under serious pressure.

A fourth observation is related to this. Empirical studies in developing countries have demonstrated that formal titling risks to reinforce inequalities (Platteau, 2000: 170) and benefit the rich and middle class, rather than the poor (Gilbert, 2002: 16). In the case of mining titles, governments will open up their domestic markets to foreign investors and give preference to large-scale mining companies (preferences that are often made explicit in mining laws in the form of tax holidays or protracted titles), thereby putting ASM at a disadvantage (Hilson and Potter, 2005: 109; Clausen et al., 2011: 20). Or as Maconachie and Hilson (2011: 298) put it:

> [...] the prioritization of large-scale gold mine development has often prevented the latter objective of mining sector reform – namely, bringing small-scale operators into the legal domain – from being achieved.

A final question again relies on the question of efficiency: what if the costs of formalization outweigh the benefits for the people concerned? As we said, new institutional economists argued that private property rights would emerge automatically once the benefits would outweigh the costs. But many case-studies have demonstrated that in practice, the costs of such formalization policies in ASM have mostly outweighed the benefits (Banchirigah, 2006, 2008; Clausen et al., 2011; Hilson and Potter, 2005; Lahiri-Dutt, 2004; Siegel and Veiga, 2009). The constraints are numerous: ineffective policies and bureaucratic inefficiency, a lot of paperwork, long waiting periods for obtaining licenses, long distances to travel, high costs for obtaining official document, including payment of bribes, limited availability of land on which artisanal miners can legally work, concern about ensuing high investment costs in a formal exploitation project, and limited education of the miners, which renders bureaucratic and technical procedures not accessible to them.

Formalization as a context-sensitive process

Most authors just accept that formalization is desirable and needed. They tend to define formalization in a more procedural manner as a concrete intervention strategy, the process of registering and organizing unregulated mining activities.[4] There are a number of possible paths to formalization. A first possibility is to do a top-down, large-scale land titling programme. This would give all asset holders immediate formal title to their assets, but risks to be unequal in its outcomes, as richer or more powerful individuals will more likely have their titles officially recognized. It has been argued that massive titling programmes do not help the poor; on the contrary, the poor may be facing high unexpected costs, for example in the form of taxation or increased competition on the market (Gilbert, 2002: 7). According to Gilbert, massive titling programmes are popular among governments because they are cheap and even generate revenues for governments by levying new taxes. Other authors argue that the formalization process should start from the existing 'informal' rules, forming the building blocks of a new formal legal system (De Soto, 2002). As De Soto (2002: 355) explains, there are many "extralegal property arrangements"; these need to be "woven into a single system from which general principles of law can be drawn".

All too often, the official registration of mining activities and titles has been considered to be a sufficient condition for addressing the problems related to ASM. The problem with these measures is that they are extremely bureaucratic, inappropriate and incompatible with existing realities (Hilson, 2009: 3). They have thus ignored Siegel and Veiga's (2009: 53)[5] warning that

> formalization is a process, not a product, and even the most elaborate policies to formalize mining activities fail if a government lacks the will to implement these plans, if miners perceive licensing as a threat, or if miners cannot afford the costs of joining the legal economy.

Even worse, very little attention has been paid to broader political, socio-economic and cultural aspects, which are crucial when targeting the artisanal and small-scale mining sector. This was already recognized at the Roundtable on ASM organized by the World Bank in 1995. One of the conclusions of the Roundtable was that legal titles are a key and necessary first step to take, but it would not be sufficient. Other aspects such as access to finance, technical expertise, education and training also need to be addressed (Barry, 1995: 13). Yet ever since governments have neglected these aspects, and have focused too much on top-down formalization policies, "in the hope of channeling more revenue to a central government authority" (Maconachie and Hilson, 2011: 301), or they have focused their energies exclusively on the large-scale mining sector.

Challenges in the DRC

Cursed by resources

The DRC serves as a casebook example of the resource curse, in the sense that mineral exploitation has impeded long-term economic development (Ross, 2003). The revenues generated by the country's mining sector have not contributed to national development, nor have they improved the livelihoods of the Congolese population. Generally this 'curse' is attributed to bad governance (World Bank, 2008). According to World Bank estimates (2008: 27) the gap between officially recorded taxes (26.7 million dollars) and expected fiscal receipts (based on hypothetical growth scenarios in 2008: 185 million dollars for 2008–2012 and 619 dollars for 2013–2017) is due to non-declaration, smuggling and lack of capacity.

In the early 1970s, about 70 percent of state revenues came from copper (Gécamines) and mineral resources represented over 80 percent of national exports (Ndaywel è Nziem, 1998: 731–736). But industrial production rapidly declined as a result of bad economic policies (e.g., Mobutu's Zairianization in 1973), deteriorating infrastructure and price fluctuations at the world market. The financial and economic crisis in Zaire even intensified in the 1980s. In this period artisanal production, and attendant unofficial trade in minerals, gradually exceeded industrial production, with a resulting decline in state revenues. By the mid-1990s industrial production had fallen close to zero. The 1996–1997 and 1998–2003 conflicts caused another boom and intensification of artisanal mining and 'informal' trading activities, attracting thousands of people to the mining sites, while these

[4] Based on definition in Siegel and Veiga (2009: 52) and Maconachie and Hilson (2011: 294).

[5] See also Barry (1995), International Labor Office (ILO) (1999), Lahiri-Dutt (2004), Sinding (2005), Bosse Jonsson and Fold (2009).

local trade networks linked up with cross-border politico-military networks. Some authors even go as far as to say that the mineral wealth was a cause of the war, thus giving a second meaning to the concept of the 'resource curse'. A tremendous amount of research has been done on the so-called 'conflict minerals' and their role in Congo's wars by academic researchers and by advocacy groups, NGOs and the United Nations.[6]

Governing the mining sector

Over the years the UN and a number of NGOs have proposed policy measures aimed at stopping the involvement of armed groups in mineral exploitation and trade and breaking the direct link between minerals and conflict (see Geenen and Custers, 2010; Vlassenroot and Perks, 2010, Verbruggen et al., 2011). The first UN report (2001) proposed an embargo on mineral's trade, while later reports and statements advocated for targeted sanctions. These were never implemented because of a lack of political will and the recognition that the effects were to be limited and the 'bad guys' would most probably escape these sanctions (Geenen and Custers, 2010: 232–233). Around 2008 more and more calls for due diligence mounted, thus focusing on the responsibility of consumers and buyers. In July 2010, a law on financial reform passed in the American Congress, including a requirement for mineral buyers in the US to perform due diligence on their purchases, and thus make sure that they are not buying conflict minerals (Resource Consulting Services, 2011). The initiative, commonly called the 'Dodd-Frank Act', inspired some EU parliamentarians to introduce a proposal for a joint motion (EU, 2010). Obviously due diligence requires a certification mechanism, which is not yet in place in Eastern DRC.

All these proposed measures demonstrate that the international community considers Congo's 'resource curse' in the first place to be a technical matter, requiring a technical solution. Whereas broader socio-economic, institutional and political aspects have been characterized important,[7] the paramount solution is to be found in certification and formalization of the entire production and trade process. The primary concern for the international community is the direct link between mineral resources and conflict, and the external pressure is mainly focused on this aspect. For the Congolese government itself, the limited control over the (artisanal) mining sector is also a major concern. For them, it means in the first place that they miss out on a lot of tax revenues. Nevertheless, it can be questioned whether there is a real and generalized political will to formalize the mining sector and make it more transparent. First, individual politicians and some well-connected businessmen and army officers do derive a lot of benefits from the 'informal' chain. Second, although two special commissions (2005 and 2007) have evaluated a series of mining contracts with multinational companies and concluded that the majority were to be renegotiated because of the harmful effects on Congolese development, the terms of the current contracts still seem to be highly disadvantageous for the country, and only benefit some corrupt politicians.[8]

Although it is beyond the scope of this paper to evaluate these issues in-depth, we will come back to these questions. But first we will address some changes in the legal framework that have been introduced in order to formalize Congo's mining sector.

In the early 2000s, the Kabila government embarked on the path of legal reforms. A new Mining Law[9] (2002) was established under the guidance of the World Bank and the International Monetary Fund (IMF). Mazalto (2009) clearly reveals the influence of the International Finance Institutions in the new law, as it gives priority to private sector development and large-scale mining projects. The law also introduces a very liberal tax and customs regime, clearly designed to ''ensure the profitability of projects through transparency and efficiency in granting licenses and providing investment security'' (Mazalto, 2009: 197). Whereas the mining sector in the DRC was previously dominated by public enterprises, the aim now is to attract private investments in exploration and exploitation. In this context, the Congolese government should adopt the role of a regulator or facilitator – by granting mining titles – instead of an operator. Mazalto (2009: 191) argues that the International Finance Institutions hereby promoted a technical approach, aimed at stimulating good governance and imposing a legal framework that fosters liberalization and foreign investments, while neglecting political dimensions and socio-economic considerations.

The Law and the subsequent Mining Regulations[10] provide the legal framework and differentiate between three modes of production, subject to different tax regimes and permit systems: industrial mining, small-scale mining and artisanal mining. Every physical and moral person can apply for a research permit ('permis de recherches') which is valid for a period of four years, possibly being renewed up to eight years. The only condition to obtain this permit is an attestation of minimal financial capacity. This first condition de facto already excludes small-scale actors or artisanal miners. If the holder of a research permit finds promising deposits, he may apply for an industrial exploitation permit ('permis d'exploitation'), valid for a period of 30 years (renewable) and subjected to a quite liberal tax regime. Deposits that are judged not suited for industrial mining, may be covered by a small-scale mining permit ('permis d'exploitation des petites mines'). One of the requirements is that exploitation has to be semi-industrial or industrial and should not exceed 10 years.

But the law contains very few provisions for artisanal mining. It is stipulated that the Ministry of Mines may demarcate 'artisanal exploitation zones' (AEZ) in areas where ''the technological and economical factors are not suited for the site to be industrially exploited''.[11] The AEZ are to be determined and proclaimed by Ministerial Decree upon advice of the provincial mining administration. Sites covered by industrial mining titles cannot be transformed into AEZ. In turn, companies cannot acquire research permits inside the AEZ boundaries, except for demands by artisanal miner's cooperatives ('groupements'). The Law provides a possibility to close down the AEZ if ''the factors justifying its creation ceased to exist'', or if a ''new deposit necessitating large-scale exploitation has been discovered''.[12] Thus, in practice, large-scale actors can always have the upper hand. Miners who want to work in an AEZ also have to buy a 'carte d'exploitant artisanal', an official authorization to mine, which has to be renewed every year. A permit that is valid for only one year hardly provides tenure security. They may also

[6] A non-exhaustive list includes Enough Project (2009), Global Witness (2009, 2011), Human Rights Watch (2005), International Alert (2009), Kennes (2005), Pole Institute (2002, 2010), Pourtier (2004), Prendergast and Lezhnev (2009), Raeymaekers (2002), Spittaels and Hilgert (2008) and a number of UN Reports.

[7] These aspects are most of the time addressed in quite general terms. Garrett and Mitchell (2009: 8–9) for example propose a large spectrum of reforms in governance structures, fight against corruption, security sector reform, regional development, transparency and certification. In Garrett et al. (2010), they focus on transparency and certification as short-term solutions.

[8] An analysis of these processes is beyond the scope of this paper, but see Kennes (2005), Global Witness (2007), Mazalto (2009: 202–203) and more recently Joyce (2011).

[9] Loi no. 007/2002 du 11 juillet 2002 portant Code Minier (Mining Law).

[10] Décret no. 038/2003 du 26 mars 2003 portant Règlement Minier (Mining Regulations).

[11] Mining Law, T. 4, Ch. 1, Art. 109

[12] Mining Law, T. 4, Ch. 1, Art. 110.

organize in artisanal miner's cooperatives and apply for research permits in that capacity.

Gap between law and practices

As we have said before, most mineral production and trade from Eastern DRC is currently not registered, nor regulated by the state and its legal framework. This is mainly due to existing socio-economic conditions, to the maladjustment of the law to local realities, and to the weak implementation of the law, because of the state's limited capacities and control over its territory.

The boundaries of the AEZ for example have been drawn in offices in the capital Kinshasa, with very limited geographical knowledge (because data are not available) and with barely any comprehension of local conditions. As a consequence, these sites are often not suited for artisanal mining. Besides, very few AEZ have been proclaimed until now. In the province of South-Kivu for example, there are seven.[13] Yet these sites are not operational, since there are neither functioning state services nor any legally recognized cooperatives, and some of these sites are even still under control of armed groups. Second, the requirements for becoming officially recognized as a cooperative remain very unclear, so that in the entire province of South-Kivu only two cooperatives had been recognized early 2011.[14] Third, the technical service of the Ministry of Mines that is supposed to assist artisanal miners (Saesscam, 'Service d'Assistance et d'Encadrement du Small-scale Mining') lacks the necessary financial and human resources to successfully perform its functions. Finally, most artisanal miners have not officially registered, nor bought the required 'carte d'exploitant artisanal'. For them the costs of registering and formalizing their activities still by far outweigh the benefits.[15]

As we have argued in Section 2, formalization is a process that is not only driven by efficiency considerations. We argue that a complex web of socio-economic and political issues is at stake in the artisanal mining sector of Eastern DRC. Therefore, externally-imposed formalization processes will not work. In section three we have already pointed to some policy measures (embargo, sanctions, certification, law) that have been proposed to address the issues of conflict and underdevelopment associated with Congo's mining sector. In section four we will discuss a very specific policy measure: the six-month ban on all artisanal mining activities that was imposed by president Joseph Kabila in September 2010. The ban is analyzed here as a painful illustration of a radical top-down decision that was justified on the basis of the need to formalize artisanal mining, but that proved to be disastrous in its outcomes. The analysis is based on a number of documents and on first-hand empirical fieldwork from South-Kivu.[16]

The 'mining ban' in Eastern DRC

Complex problems, simple solutions

In a speech he gave in September 2010 during a visit to North-Kivu, president Kabila stressed his determination to pacify the province, more precisely Walikale territory, a mining area where the population is being "terrorized by unspecified armed groups, which finance themselves through mineral extraction" (Eyanga Sana, 2010). On 9 September 2010, during a dinner with special guests and local authorities in Goma, the president suspended all mineral activities in Walikale. A few days later the troops of the national army (FARDC) moved into Walikale to "rout the rebels who are occupying the mining sites" (Tshiambi, 2010). On 11 September the national Minister of Mines issued a statement stipulating that the President's decision had been extended to the three provinces of North-Kivu, South-Kivu and Maniema (Ministère des Mines, 2010a and Radio Okapi, 2010a).

As such, the objective of the mining ban seemed to clearly address the issue of 'conflict minerals'. As we have seen, this issue has for a long time been at the center of an international debate, and it is at least remarkable that the president only addressed it now. Yet it soon became clear that the issues at stake were broader and more complex, and that the measure particularly targeted the artisanal mining sector. A ministerial decree, specifying the parties concerned by the ban (artisanal miners, mining cooperatives, traders and export houses) followed on 20 September (Ministère des Mines, 2010b and Lutete, 2010). Only the industrial mining companies (in this case Banro in South-Kivu, Loncor and Somekivu in North-Kivu) were exempted from the ban (Radio Okapi, 2010b). A second decree conditioning a set of 'accompanying measures' was issued on the same day (Ministère des Mines, 2010c). In brief, the mining administration was instructed to make an inventory of all mineral stocks and attend to these not being exported, and to send their agents inland to identify all operational sites and actors. The miners for their part were required to stop exploiting, to sign up for registration and to organize in cooperatives.

The decree mentioned four official reasons for the ban: cutting the financing of non-state armed groups, reestablishing state control, fighting against fraud and fighting against the implication of 'non-authorized persons' in the sector. While the first one aims to address the issue of 'conflict minerals', the others point to the problem of 'informalization'. By looking at the 'accompanying measures', one can see what the government really wants to address: the fact that artisanal miners are working anywhere, including in industrial concessions; the fact that they have no official permits, are not organized and not officially registered; and the fact that minerals are being exported without an official export license. In what follows we will evaluate the effectiveness and the impact of the mining ban, which was in place from 11 September 2010 until 10 March 2011.[17]

Effectiveness of the ban

The decision to suspend all artisanal mining was quite radical and demonstrates the government's attempt to enforce itself upon its population by law (see Englebert, 2009: 62). Taking into account the weakness of Congo's state institutions though, we first want to assess the effectiveness of the ban. We will do this by referring to the two bundles of problems it attempted to address: the security situation in the East, and the informalization of artisanal mining.

The security situation in Eastern Congo remains precarious and complicated. Both rebel groups such as FDLR ('Forces Démocratiques pour la Libération du Rwanda', Hutu rebels) and state forces (national army, FARDC) maintain insecurity in a number of places. Mine sites are often targeted, but are certainly not the only

[13] Creation of seven 'Zones d'Exploitation Artisanale' by Ministerial Decrees nos. 0648, 0649, 0651, 0257, 0258, 0259, 0260.

[14] Personal communication at a meeting of the newly established umbrella organization of cooperatives in Bukavu, South-Kivu, 29 January 2011.

[15] Interviews in Bukavu, Kamituga, Lugushwa, 2008–2011.

[16] We have done ethnographic fieldwork in the provincial capital (Bukavu) and in three gold mining sites (Kamituga, Twangiza and Lugushwa) ever since 2008.

[17] Evaluation based on extensive fieldwork (about 100 individual interviews, a number of group interviews and numerous observations) in Bukavu, Kamituga, Lugushwa and Luhwindja in November 2010 and January and February 2011. An earlier assessment of the mining ban has been published in French: Geenen et al, 2011.

way of making money for militarized groups. During the mining ban, FDLR for the most part stayed at the – mostly very remote-areas they already had under their control, and continued mining or found other sources of income.[18] In the mining sites under government control, the FARDC and the police were able to establish a tighter control over production and trade. We observed this in the mines of Kamituga and Lugushwa. Here, instead of sanctioning non-compliance with the mining ban, individual soldiers and policemen would make agreements with miners.[19] The latter told us:

> It's a matter of agreement. We give them something, and they let us work. The ban is violated everywhere.[20]

Locally the word 'cooperation' was used for this, indicating that both parties consent to pay in exchange for protection. This way, miners pay amounts up to several hundreds of dollars a week to different authorities (FARDC soldiers, Mining Police, intelligence officers, people in the mining administration and magistrates). In exchange, they get access to a particular mining shaft (even if this shaft belongs to some other miner) and may sell their production. If this production turns out to be higher than expected, the compliant authority may claim a larger part, and so conflicts may arise. Miners also run the risk that authorities, individuals or services that have not been paid, catch them and demand additional bribes. Thus, miners do continue to work, but it has become a highly risky business, and the profits still earned from mining do not always outweigh the expenses in bribes. It is clear that the power balance has shifted in favor of the politico-military authorities, and there are some indications that these networks run up to the higher military authorities. This seems to confirm the risk that in a formalization process, when the state takes tighter control over the informal sector, more powerful actors are more likely to benefit. Another security issue is the increased incidence of thefts, robberies, armed attacks and murders during the ban, because of a generalized deterioration of the economy and rising levels of unemployment. To sum up, with respect to the security situation in the targeted provinces we may argue that the ban has rather reinforced than attenuated insecurity and militarization. Still, the ban did significantly reduce the total volumes of minerals produced. As we had said extraction continued in a semi-clandestine way and at a much lower level than before. Although the figures are almost impossible to verify, four of our informants have estimated the volume of gold produced during the mining ban at 20 percent of the initial production, a decline of 80 percent in comparison to what was produced before the ban – which was obviously also unregistered.

With respect to the formalization of the artisanal mining sector a number of 'accompanying measures' were put in place. Yet hardly any additional resources have been transferred to the services that were supposed to implement these measures (the mining administration and the technical service for assistance to artisanal miners, Saesscam). So far, in South-Kivu an inventory of 204 mining sites has been made and a number of artisanal miners have been identified in some of these, but these lists are very partial and according to some officials "fictitious".[21] The administration also identified eighteen future sites for 'trading centers', where all mineral purchases should be centered and put under the mining administration's control (Ministère des Mines, 2010d, e). So far one trading center has been built in Mugogo, 30 km from Bukavu, the provincial capital. The equipment is in place, but the center is not operational yet, and it is difficult to believe that traders will come here to sell their products, if there are no additional incentives. The gold traders have for example serious security concerns about traveling to some central place and 'exposing themselves' with their gold. Another measure stipulates that all miners should group themselves in cooperatives. A number of cooperatives existed already de facto, but not de jure, since there were no clear legal provisions. Now the Ministry of Mines has produced an exemplary statute, and early February 2011 about twenty organizations had introduced their file at the level of South-Kivu to be officially registered as a cooperative. Yet at the local level there are a lot of conflicts about which cooperative may legitimately represent the artisanal miners, and many of the legal requirements remain unclear for the people on the ground. If miners would currently make a cost/benefit analysis, they would have no incentives to join the formal system.

Summing up, we argue that the implementation has been really poor, and "a policy of formalization is only as effective as its implementation methodology", as Siegel and Veiga (2009: 54) say. Other authors have also pointed out that top-down and repressive policies are likely to be highly ineffective (Clausen et al., 2011: 19) as these repressive laws "are simply not obeyed, stripping governments of any control of the sector whatsoever. Poverty-driven as it is, the mining takes place despite the repressive legislation – it just remains in the informal sector" (idem). This is not the miner's fault, since rules should be conceived so that they stimulate compliance, and not discourage compliance (Clausen et al., 2011: 17).[22]

Impact of the ban

As we have mentioned, artisanal mining is a poverty-related activity. In Eastern Congo it provides employment opportunities for hundreds of thousands of people who have no other livelihood options. Therefore, the ban had an immediate effect on miners and their families, but also on petty traders and transporters, women selling vegetables on the market and school teachers in and around the mining sites. The impact was clearly reflected in the number of school drop-outs, because the parents and children (who sometimes went in the mines themselves to pay for their fees) could not afford the school fees anymore. In some mining sites malnourishment started to spread, and diseases occurred more frequently than before, while people were not able to afford the costs of going to the hospital. Part of the population in the mining sites, most of the time those who did not originate from the place, migrated back to their villages.

For that matter, the impact was not confined to the mining sites. The entire province of South-Kivu was severely touched. First of all, the surrounding agricultural regions could not sell their products – flower, meat, fruit and vegetables – anymore in the mining sites. Second, the impact was also felt in Bukavu, the largest trading hub in the province. Traders selling all kinds of products – food, clothing, electronic equipment, and so on – on the large market of Kadutu, complained that as a result of the mining ban, the buyers stayed away. This is also confirmed by the figures of Agrefreco, one of the two main transport companies in South-Kivu. On their inland flights, the planes normally take food and consumer goods, while returning with minerals. The director of Agefreco confirmed that before the ban his agency had seven connections a week to Shabunda, a remote territory in South-Kivu. During the ban this was reduced to four. To the mining areas in Maniema province, the number of flights was reduced from

[18] This was confirmed in different interviews in Kamituga, Lugushwa and Luhwindja, among others with local police officers.

[19] The same phenomena have been observed in other areas by Braeckman (2010), Tegera (2010) and Mulumba (2011).

[20] Interview with a miner in Lugushwa, 20 January 2011.

[21] Interview at the Provincial Mining Administration in Bukavu, 3 February 2011.

[22] What Posner (cited in Clausen et al., 2011: 17) calls 'procedurally efficient rules'.

three to one. According to the local branch of the FEC (Fédération d'Entreprises du Congo) the artisanal mining sector injects more than 5 million dollars a month in the provincial economy thanks to the flowing back of funds from the sales by the export offices. It is almost the only source of foreign exchange. As a result, the dollar rose from 880 FC/dollar at the declaration of the mining ban to 900 FC and 940 FC two weeks after (exchange rate on the black market in South-Kivu, and thus different from Central Bank).

A solution to the problem?

The main problems with a rushed formalization policy are (a) the fact that artisanal mining in this region is so interwoven with the local and regional economy, (b) the resilience of the informal system of gold exploitation and trade, and (c) the weakness of the Congolese state, which manifests itself in a limited control over its territory, weak institutions and limited implementation capacities, and which increases the risk of reinforcing the 'stronger' actors to the detriment of the poor. A long list of quotes by the population in the mining sites illustrates this.[23] They felt abandoned:

> The president has only thought about his own interests. The entire population is penalized; it's as if they are in prison.[24]

People were also indignant because they were never cautioned:

> If you rent a house, you are at least given a warning when you have to leave. But suddenly like this? That's the reason why we find it's like murdering somebody.[25]

The miners also rightly questioned the relevance of the mining ban. According to them it does not make sense to ban artisanal mining as long as there are no big companies that can hire sufficient labor, no alternative economic activities, and the state does not pay the salaries of its servants. They also found the measure not appropriate, since "there are no armed groups here, and we work in an organized way".[26] Indeed, the problem of armed group's control over mineral exploitation and trade routes cannot be generalized. As we have said, many mines were already under FARDC control and degrees of violence seriously differed among the sites, regardless of whether they were/are controlled by rebel groups such as FDLR or the 'legitimate' authorities being the national army and police.

Still, miners state they would be prepared to organize in cooperatives, work in artisanal exploitation zones and declare their production, if only they would be assisted and materially, technically and financially supported. The fact that the state is not providing any services, for them legitimizes the fact that they work in the mines and 'try to make a living', in an environment where there are virtually no formal jobs available. Moreover, they expressed a lot of anger vis-à-vis the government, for not taking up its functions and worse, punishing the miners.

Hidden motives?

In light of all these negative effects, the question about the real reasons and motives behind the mining ban needs to be addressed. Both at national and international forums, observers have been speculating about a number of 'hidden motives'. First, the ban would be a reaction against external pressures to stop the trade in 'conflict minerals', and more specifically the 'Dodd-Frank Act' (Braeckman, 2010, see Resource Consulting Services, 2011). This way, the president would want to demonstrate his goodwill and show that he maintains control over the sector. Second, the ban has been interpreted as an attempt by the president to replace disloyal army units with more loyal troops who would give him more direct access to and control over the mining sites (Stearns, 2010a and Kivu Kwetu, 2010). These maneuvers would among other things be linked to discussions between president Kabila and Rwandan president Kagame, who would fear a new anti-Kigali coalition to be formed in Eastern DRC (Stearns, 2010b, c).

According to a third hypothesis the ban is a tactic to facilitate the control by industrial companies over their concessions (Stearns, 2010a). This hypothesis is supported by the apparent preference for foreign industrial investments relative to artisanal mining, which is, according to Hönke (2010: 115) "an attempt to better control and (re)centralize the collection of mining revenues by government [since] larger industrial companies increase state income and are easier to control and tax." The decision to ban all artisanal activities was also remarkably well-timed, at the moment that the multinational gold mining company Banro was extending its activities and relocating artisanal miners and farmer's families in its concessions in South-Kivu. A number of observers we met during fieldwork confirmed that the mining ban had facilitated Banro to 'occupy' its concessions and possibly even extend its boundaries, since the whole area was cleared of artisanal miners. Hilson and Potter (2005: 109) observed a similar phenomenon in Ghana, where

> it appears that the legalization of small-scale gold mining has been an integral component of the government's strategy to promote foreign investment in large-scale mining and mineral exploration, since control over who can register as small-scale miners and where they can operate puts the authorities in a better position to demarcate concessions to gold exploration and mining companies.

According to us, this fact supports the view that formalization risks to confirm the 'strongest' actors in their rights. Unlike artisanal miners and other small-scale actors, whose property rights are generally grounded in customary law, more powerful and richer actors will find it easier to have their property rights, rooted in official law, confirmed.

At this point we would like to propose another hypothesis, suggesting that the way the problems are framed in the context of the mining ban (the main issue being the informalization of the artisanal sector) actually helps the Congolese government to avert the attention away from another major problem: the issue of the industrial contracts. The bad negotiation of some big industrial contracts, and worse, systematic underselling of mining assets to off-shore 'shell' companies incorporated almost exclusively in the British Virgin Islands, as exposed by Eric Joyce (2011), puts the Congolese government in an unfavorable light. By drawing the attention to the problems in the artisanal sector, they may escape more delicate questions on the role of important politicians and key figures in the negotiation of these industrial mining contracts.

To conclude, the mining ban was probably motivated by a combination of factors, both internally and externally driven, as mentioned above. In any case, the negative impact on local livelihoods and on the provincial economy were to be predicted, looking at the importance of artisanal mining in the local economy. The problems with its implementation were anticipated as well. Numerous observers questioned the capacity of the Congolese state and the army to enforce the decision beforehand (Tegera, 2010;

[23] All reactions come from people interviewed in South-Kivu (Luhwindja, Lugushwa, Kamituga and Bukavu) in November 2010 and January–February 2011.

[24] Interview with a miner in Kamituga, 22 January 2011.

[25] Interview with the vice-president of a cooperative in Kamituga, 19 January 2011.

[26] Interview with a group of miners in Mapale, Lugushwa, 25 January 2011.

Kivu Kwetu, 2010; Seay, 2010). Moreover, in November 2011 there were presidential elections in the DRC. Although Kabila was reelected as a president, in North- and South-Kivu, he lost a lot of votes compared to the 2006 elections. This can of course not be attributed to the mining ban, but this measure, which only targeted the Eastern provinces, has certainly not contributed to Kabila's popularity.[27] For the government, the whole policy has been a dangerous bet, and one with so far only negative outcomes.

Conclusion

In conclusion, we find that the mining ban is a radical example of a top-down decision aimed at formalizing artisanal and small-scale mining. The short-term effects of this decision have been disruptive: The ban was not effectively implemented, resulted in greater militarization and insecurity in a number of mining sites, did not yield any tangible results, and had a negative impact on socio-economic life in the mining sites and beyond. The long-term effects remain to be seen, but other formalization experiences have shown that top-down policies do not work, formalization is a process and miners need incentives to join this process (Barry, 1995: 8; Hilson, 2009). Hilson and Potter (2005: 116–118) argue that many artisanal miners are keen on acquiring a license, if only because they fear to be prosecuted. The problem is not the unwillingness of the miners, but rather the inappropriateness of the policy measures to their situations. The same is true in the DRC. Almost all the actors concerned have committed themselves to the project of formalization, both in the discourse they use and in a series of 'acts of commitment' they signed (Ministry of Mines, governors, civil society, mining cooperatives, public services, export offices).[28] But miners and traders rightly demand incentives to join the formalization project.

The policy measures that have been proposed in the DRC, both by the government and by international donors, seem to have been too technical and narrow, thereby neglecting broader socio-economic and political issues. In a context like the DRC, where the security situation is still volatile, the government does not control its territory and does not have capacity to perform other state functions, and where almost hundred percent of the population is employed in the informal sector, it is an illusion to think that a formalization policy can be implemented top-down and at short notice. As we have witnessed in other contexts, formalization risks to confirm and reinforce the rights of the stronger parties, such as large-scale mining companies, to the detriment of small-scale actors, who base their property rights in customary laws and conventions. These laws are either not acknowledged, or rejected on efficiency grounds, saying that only large-scale projects can contribute to economic growth and development.

At the risk of sounding idealistic and rather vague, we recommend a process-oriented and context-sensitive approach to ASM, starting from the bottom-up. In the first place, artisanal miners should be assisted in technical and financial terms and trained in artisanal mining techniques in order to improve their welfare and working conditions. Attention must also be paid to the other actors in the chain, like (small) traders and the people who are processing the gold. All of them are interdependent, and their livelihoods are at risk if the gold chain comes under pressure. In order to discourage smuggling, the government may intervene in price-setting to make sure that prices paid in the unofficial circuits do not exceed prices in the officially registered trading houses. The issue of the artisanal exploitation permits should also be reconsidered. But the formalization of the mining sector can only go hand in hand with state reconstruction, so that the Congolese state becomes accountable and is able to take up its core functions, such as public service delivery to its citizens. This will provide miners with incentives to formalize their activities, evacuate their production through official channels, pay taxes and thus contribute to national development. Moreover, the government should base its demarcation of artisanal mining zones on sound geological knowledge, and where possible negotiate with large-scale companies to accommodate ASM within their concessions. For sure this will be a long process. But most importantly, according to us, it will recognize the importance and strengthen the viability and sustainability of ASM, a livelihood that is so important in this region, but that is often considered as a burden and obstruction to economic growth and development.

[27] In South-Kivu Joseph Kabila obtained 45%, Vital Kamerhe 42% and Etienne Tshisekedi 42%. In North-Kivu Kabila had 39%, Kamerhe 23% and Tshisekedi 21%. In Maniema, the third province targeted by the ban, Kabila clearly won with 87%.

[28] Unpublished documents, obtained through personal communication, 24 March 2011. "Acte d'engagement solennel des Gouverneurs des Provinces du Maniema, du Nord-Kivu et du Sud-Kivu"; "Acte d'engagement solennel de la Société civile".

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