

Managing Land for Mining and Conservation in the Democratic Republic of Congo

By: Anne-Gaelle Javelle* and Peter G. Veit

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In March 2011, following an international outcry from the United Nations and conservation organizations, the government of the Democratic Republic of Congo (DRC) suspended [oil exploration in the Virunga National Park](#), a World Heritage site and home to a quarter of the world's mountain gorillas. The DRC government did not, however, cancel the petroleum exploration permits altogether. Instead, it required the British petroleum firm, Soco International, to [carry out aerial surveys](#) while awaiting the finalization of a [Strategic Environmental Assessment \(SEA\)](#) in the oil concession areas in and around the Virunga National Park. In addition, the government cleared the way for more exploration in the Virunga National Park by authorizing the French firm, Total, to take a 60% interest in another concession block¹.



Photo: African Observer

Oil is not the only natural resource that threatens biodiversity conservation in the DRC. Mining operations are also taking place in protected areas,

¹ With Total's participation comes a deal for a \$30 million exploration investment over 2012 in Block III.

including the Kahuzi-Biega National Park, another World Heritage site. While advocates argue that mining permits are often allocated without due process of law, broader problems of weak inter-ministerial coordination regarding the mining sector, contradictory regulations and inconsistent information have also contributed to the government granting mining rights in the protected estate.

There is an added urgency in addressing these problems: between 2008 and 2011, the number of mining permits granted by the DRC government increased by 35%, covering an additional 14 million hectares (ha). In April this year, the government announced that it plans to [triple the size of the protected estate](#) to reach 17% of the territory in protected areas. With the area under mining permits increasing rapidly, competition between mining and conservation interests can only intensify in the upcoming years.

THE RETURN OF INDUSTRIAL MINING IN DRC REVIVES COMPETITION WITH CONSERVATION INTERESTS

Much of DRC has yet to be thoroughly surveyed for minerals and biodiversity, but what is already known is significant. The [total mineral wealth of the DRC](#) is estimated to be \$24 trillion—50 percent *more* than the United States Gross Domestic Product in 2011. Most of mineral reserves are still untapped, but they could potentially make DRC the richest country in the world. DRC has the world's largest reserves of cobalt and columbite-tantalite (coltan), the world's second-largest reserves of cop-

*ANNE-GAELLE JAVELLE
Senior Research Associate,
World Resources Institute, 2012

PETER G. VEIT
Interim Director, Institutions and
Governance Program,
World Resources Institute

Find the full report of this
summary in the Climate Change
Adaptation section online at:
<http://www.abcg.org/>

Democratic Republic of Congo: Forestry, Mining and Conservation

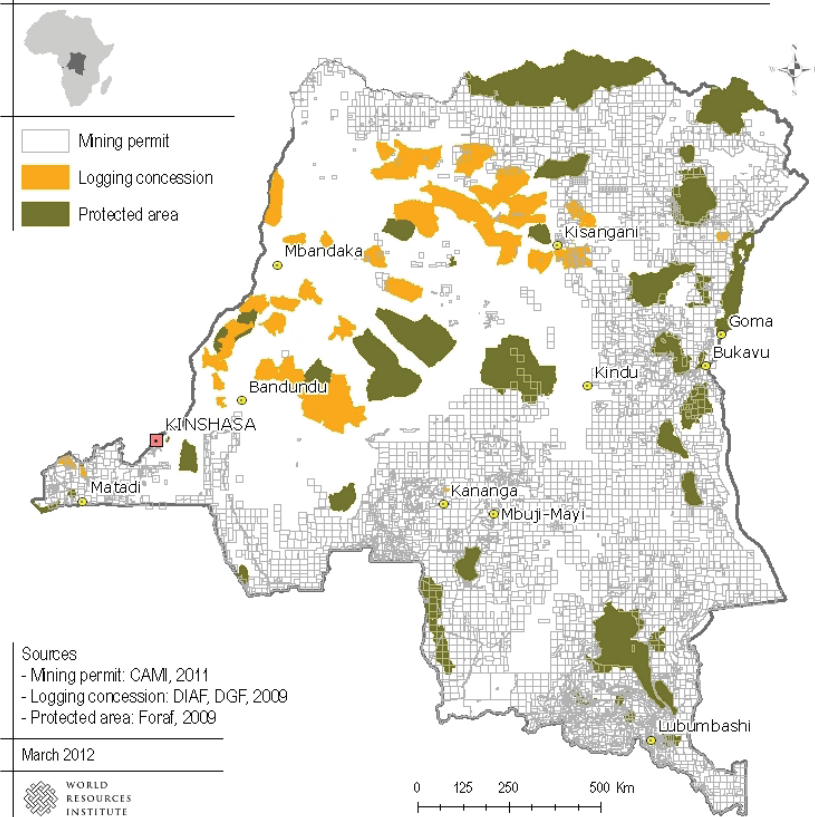


Figure 1: Mining, Conservation and Forestry in the Democratic Republic of Congo

overlapping land uses, highlighting the need to clarify the balance between mining and conservation. In contrast with the well-publicized case of petroleum exploration in the Virunga National Park, mining concessions in protected areas have received considerably less attention by the popular media and civil society.

APPROXIMATELY 3.5 MILLION HECTARES UNDER MINING PERMITS WITHIN PROTECTED AREAS

Maps of protected areas⁷ and mining permits⁸ show considerable overlap. Mining concessions were granted throughout the protected estate, including Maiko National Park, Sankuru Nature Reserve, Upemba National Park, the Lufira Biosphere Reserve and two World Heritage Sites—Kahuzi-Biega National Park and Okapi Reserve. Overlaps vary considerably in size and proportions of the protected areas. Figure 2 illustrates the case of Maiko National Park, where most encroachment is limited to the margins of the park. These mining permits infringing upon protected areas may be due to inconsistent delimitations of protected areas and mining permits. In other cases, such as the Okapi Reserve (Figure 2), permits were granted more than ten miles into the north, west and south sections of the protected area. The boundaries of this World Heritage site were however clearly established in the ministerial decision⁹ creating the Okapi reserve in 1992. Finally, other areas are completely covered with mining permits, such as the Mufufya and Basse-Kondo hunting domains in south

per (equivalent to 10% of the world's reserves), and significant reserves diamonds and gold².

As a result of a decade of war, civil unrest and instability, most mining operations are artisanal³. Since 2004, however, gradual improvements in security and state control over mining areas have allowed formal actors to re-enter the sector. In recent years, there has been an increase in the number of exploration and exploitation concessions granted by the DRC government⁴. In January 2011, the Ministry of Mining listed 7,732 mineral permits covering 112,731,739 hectares, which represents 48 percent of the DRC territory. Mining permits cover almost all of Bas-Congo and Katanga provinces, and significant portions of eastern and western Kasai, north and south Kivu, Maniema and Oriental provinces. While most permits were still exploration permits, 816 large- and small-scale⁵ exploitation permits were listed, covering a total area of 4.8 million hectares. Most of these exploitation permits were indicated as already active⁶ (662 in total).

The re-entry of industrial investments is encouraging in terms of economic development, but it has also resulted in

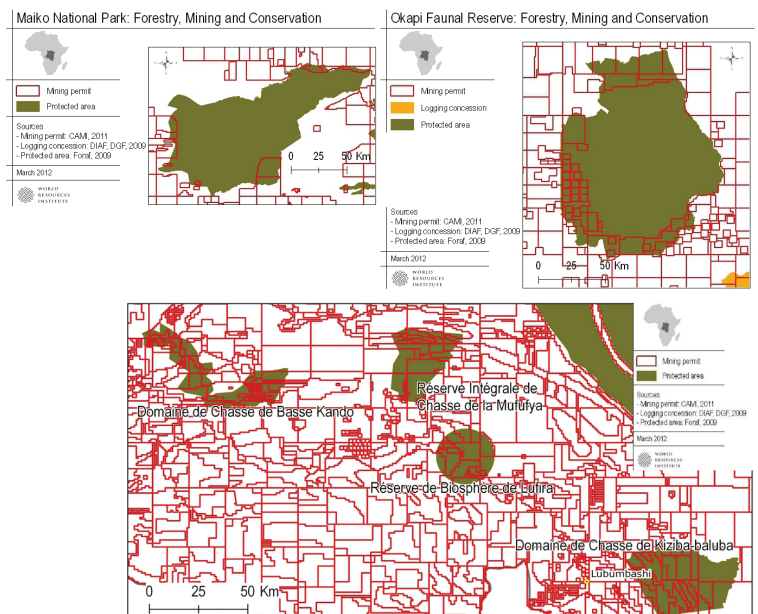


Figure 2: Illustrations of protected areas under mining permits (January 2011)
 Note: Mining permits covered 8 percent (87,700 hectares) of Maiko National park. Seventy-six mining permits, including 17 exploitation permits, overlapped with the Okapi Reserve in January 2011. The Basse-Kondo and Mufufya Hunting Domains and the Lufira Biosphere Reserve are completely covered with mining permits.

2 See <http://uk.reuters.com/article/2008/08/14/uk-oil-congo-democratic-factbox-idUKG0R44204820080814> or <http://www.vanguardngr.com/2011/10/africa%e2%80%99s-oil-scramble-heads-east-to-uncertain-waters/>. In addition to its mineral wealth, DRC may also hold significant reserves of oil and gas.

3 Artisanal exploitation is defined in Article 234 of the 2002 DRC Mining Code as "any activity by means of which a person of Congolese nationality carries out extraction and concentration of mineral substances using artisanal tools, methods and processes, within an artisanal exploitation area limited in terms of surface".

4 This figure includes all types of mining permits listed in the DRC Mining Code: large-scale, small scale, artisanal, exploitation and exploration, as well as geological research zones.

5 In January 2011, the mining cadastre listed 100 small-scale exploitation permits. As defined in the DRC mining code, small-scale exploitation can be carried out through industrial and semi-industrial techniques (as opposed to artisanal mining—see note 3 above for a definition of artisanal mining).

6 Other mining permit states include: "requested", "request approved", "renewal pending", "cancellation pending", "transformation from research to exploitation permit", etc.

7 The data presented throughout this paper for protected areas is based on the DRC Interactive Forest Atlas (http://pdf.wri.org/interactive_forest_atlas_drc_fr.pdf). Calculations of overlap use the GIS data for the 48 protected areas identified on p.35 of Interactive Forest Atlas.

8 The data presented throughout this paper for mining permits is based on the official mining cadastre provided by the DRC Ministry of Mines. The mining cadastre changes continuously, with new permits being granted, cancelled, extended and modified. The findings presented in this paper reflect the mining cadastre as of January 2011. An interactive map overlaying protected areas and mining permits as of January 2011 can be accessed at <http://www.wri.org/tools/atlas/map.php?maptheme=drforest>.

9 Arrêté ministériel 045/CM/ECN/92 du 2 mai 1992 portant création et délimitation d'une réserve naturelle dénommée "Réserve de Faune à Okapis".

Katanga (Figure 2). In total, there are approximately 3.5 million ha of overlap between mining concessions and protected areas¹⁰.

A review of the January 2011 mining cadastre identified 629 mining permits that overlap with protected areas¹¹. These permits were held by 196 parties, but only 10 of them were responsible for a disproportionate 53% of the total overlap area. These ten permit holders include public companies controlled by the DRC government, individuals, small Congolese ventures, and international mining groups (see Table 1)¹².

International, publicly-traded companies held 14% of the 629 mining permits that overlapped protected areas, including Banro Corporation, BHP Billiton, De Beers, Anvil Mining, and Freeport McMoran. The amount of land held by these companies in the protected areas varied greatly. For example, Freeport McMoran's Tenke Fungurume project (exploitation permits) in-

research purposes¹³. The Ordinance-law does not mention other types of protected areas, but the 2011 Law pertaining to the Fundamental Principles Related to the Protection of Environment¹⁴ takes the same position while extending it to all types of protected areas (Article 33 prohibits “any activity in protected areas that could potentially harm the environment”). Finally, the 2003 Mining Regulations¹⁵ provide that “no mining rights shall be granted in protected zones (*zones protégées*)” unless the president issues a decree to first de-gazette the area (Article 3).

The 2002 Mining Code and 2003 Mining Regulations however include provisions that may allow for mining in some protected areas. Articles 2, 3 and 5 of the 2003 Mining Regulations establish a distinction between “reserve zones” (*zones de réserve*) and “protected zones” (*zones protégées*)¹⁶. While Article 3 prohibits mining in protected zones, Article 5 allows for “encroachment on reserve zones” (*empiètement sur les zones de réserve*)¹⁷, provided that the permit holder includes in its environmental plan “adequate measures to mitigate negative impacts.” The Mining Regulations do not define “encroachment” or “adequate measures,” providing government officials with potentially unfettered discretion to interpret these terms and provisions. Reserve zones are defined in Article 2 of the 2003 Regulations as including UNESCO Biosphere Reserves (Lufira, Luki, Yangambi) as well as “integral natural reserves established according to the 1969 Ordinance-Law.” However, the Lufira and Luki Reserves are also listed in Article 3 as “protected zones.” More generally, the protected areas listed in Article 3 have been established according to the 1969 Ordinance-Law, creating confusion regarding the definition of a reserve zone.

Table 1 : Top 10 companies measure by total permit area overlapping with protected areas

Permit holders	Total area of overlap (ha)	Information on permit holders
Ressources Minières Du Congo	301,167	Fully owned by Affinor Resources Inc, a Canadian company listed on the Canadian Stock Exchange
Entreprise Minière De Kisenge	275,619	Public company controlled by the DRC government
Diamond Mines Australia	258,353	Subsidiary of Gravity Diamonds Ltd, a fully-owned subsidiary of Mwana Africa, a company listed in the UK (London Stock Exchange's Alternative Investment Market) and South Africa (http://www.mwanaafrica.com)
Banro Congo Mining	232,758	Fully-owned subsidiary of Banro Corporation, a Canadian gold company listed on the Toronto Stock Exchange and the New York Stock Exchange (http://www.banro.com)
Siméon Tshisangama	146,973	Natural person
De Beers DRC Exploration	139,667	Fully-owned subsidiary of the De Beers group, based in Luxemburg. De Beers announced in 2009 a halt in DRC operations but still holds a large number of exploration permits. Anglo American Plc owns 45% of De Beers, the Oppenheimer family owns 40%, and the government of Botswana the rest. (Source: http://www.miningreview.com/node/15316)
Loncor Resources Congo	110,843	Fully-owned subsidiary of Loncor Resources Inc., a Canadian gold exploration company. The US mining corporation Newmont holds a 17% interest in Loncor (www.loncor.com)
KGL-ERW	76,615	Joint-venture involving Kilo Goldmines Ltd, a Canadian gold exploration and development company listed on the Toronto and Frankfurt Stock Exchanges.
Gecamines	60,029	Public company controlled by the DRC government
SOCOMEX Congo	57,327	no information was found on this company

cluded approximately 7,000 hectares in the Basse-Kondo hunting domain in Katanga. This represents about 4% of Freeport McMoran's mining permit area in DRC. Banro Corporation controls 964,325 hectares in DRC through two wholly-owned subsidiaries, Banro Congo Mining and Twangiza Mining; 26% of these permits overlap with various protected areas (248,974 hectares).

DRC LAW RESTRICTS MINING OPERATIONS IN PROTECTED AREAS BUT PROVIDES LOOPHOLES

Mining in protected areas is prohibited under several laws. The 1969 Ordinance-Law on Nature Conservation prohibits any concession or lease of an area within integral nature reserves—a category that includes national parks (Article 3)—except for

In addition, Article 279 of the 2002 Mining Code, and Article 6 of the 2003 Mining Regulations, provide that a “competent authority” can authorize mining operations in another category created by the Mining Code, the “restricted zones” (*zones de restriction*). Restricted zones, per these articles, can include national parks (the Mining Code does not mention other categories of protected areas)¹⁸. Annex 1 of the 2003 Regulations refers to a 1998 Decree-Law¹⁹ to identify the competent authority (the

Ordonnance-Loi n° 69-041 relative à la Conservation de la Nature, Article 3: “no incompatible activity with nature conservation shall take place in national parks”. National parks are the only category of protected areas identified in the 1969 Ordonnance-loi. Article 7 of the same law allows the institution in charge of managing protected areas to grant special authorizations to conduct scientific research in national parks. This article was used by the government to authorize initial oil exploration activities within the Virunga National Park. The DRC government started in 2011 a revision of this law to ensure consistency with the 2011 Environment Law and the recently passed decentralization laws.

14 Loi n° 11/009 du 09 juillet 2011 Portant principes fondamentaux Relatifs à la Protection de l'Environnement.

15 Décret n°038/2003 du 26 mars 2003 portant Règlement Minier.

16 The Mining Code definition of zones protégées extends to national parks, natural reserves and hunting domains.

17 “Zones de réserve” are defined in Article 5 of the 2003 Règlement Minier as natural reserves, biosphere reserves, forest reserves.

18 “Zones de restriction” are defined in Article 2 of the 2003 Règlement Minier as including “land inside a national park”.

19 Décret-Loi n°081 du 2 juillet 1998 portant organisation territoriale et administrative de la Répub-

10 This figure was calculated using geographic information system (GIS) data from the DRC Interactive Forest Atlas (http://pdf.wri.org/interactive_forest_atlas_drc_fr.pdf) and the January 2011 mining cadastre. WRI added all occurrences of overlap in these two datasets, notwithstanding redundancies caused by overlapping mining titles.

11 This figure includes “Zones de Recherche Géologique” and “Zones d'Exploitation Artisanale”.

12 For more information on WRI's early findings on this research, see http://frameweb.org/adl/en-US/8209/file/1097/4_ABCG%20Presentation%20on%20Dodd-Frank_FINAL.pdf

province governor and the administrator of the territory (“administrateur de territoire”) of the area). This law was however replaced with the 2008 Constitutional Law on Decentralization²⁰, and did not, at any rate, enable decentralized governments to grant mining rights or interfere with the management of protected areas—both exclusive competence domains of the central government. Further, it is unclear if Article 279 of the Mining Code enables “competent authorities” to grant mining rights within national parks through the establishment of restricted zones (in contradiction with Article 3 of the Mining Regulations), or if it rather aims to further restrict mining activities in national parks (which should be unnecessary, as mining in national parks is already prohibited in Article 3).

It is unclear which of these three laws—Ordinance-Law on Nature Conservation (1969), Law pertaining to the Fundamental Principles Related to the Protection of Environment (2011) or Mining Code (2003)—supersedes the others when they are in conflict. In the absence of an explicit statement, however, convention provides that newer laws supersede older ones. In this case, the 2011 Law pertaining to the Fundamental Principles Related to the Protection of Environment which prohibits “any activity in protected areas that could potentially harm the environment” would prevail.

INCONSISTENT GOVERNMENT DATA

Inconsistent and outdated databases coupled with poor coordination between the Ministry of Mining and the Ministry of the Environment, Conservation of Nature, and Tourism further complicate the task of assessing the legality of mining in protected areas.

The mining cadastre remains flawed with contradictory information on permits. The government of DRC did make efforts to clean the mining cadastre in 2009, mainly to address permits dating from the [highly unstable period 1996-2006](#). This [partial review](#) resulted in the cancellation of 14 contracts, as well as the revision of 57 contracts and 6 conventions. The Ministry of Mines also improved access to information on mining permits through the recent launch of a new online portal with an interactive map-based tool, [Flexicadastre](#). Inconsistencies in the information however remain. For example, Flexicadastre shows multiple boundaries for many mining permits and also an incomplete and outdated dataset for protected areas.²¹ The January 2011 cadastre labeled 915 exploration and exploitation permits as “active” when, in fact, they had expired in 2010 or before.

There is also no consensus in DRC government on the boundaries of protected areas, the amount of land in the protected estate, or even on the official number of parks in the country. According to the Ministry of the Environment, Conservation of Nature, and Tourism, DRC has 48 protected areas covering 25,870,171 hectares of land (11 percent of the country). Legal

lique Démocratique du Congo.

²⁰ Loi organique n° 10/011 du 18 mai 2010 portant fixation des subdivisions territoriales à l’intérieur des provinces.

²¹ As an example, Flexicadastre does not show the Sankuru reserve, established in 2007 with the Ministerial Decree 045/CAB/MIN/ECN-EF/03/PDB/07 signed on November 6, 2007.

documents, however, exist for only 36 protected areas covering 22,644,629 hectares (9.7 percent of the land). Further, the exact location of the protected areas is not consistent across the various agencies charged with their management.

AN URGENT NEED TO ADDRESS OVERLAPPING MINING AND CONSERVATION AREAS

The problem of overlapping land uses is not restricted to mining (and oil) concessions and protected areas. Research shows that logging concessions overlap with protected areas and that mining permits overlap with logging concessions ([Interactive Forest Atlas](#)). DRC’s contradictory laws, inconsistent information and weak inter-governmental coordination create confusion, uncertainty, and misunderstandings for government agencies, rural populations, and companies. At a minimum, the government of DRC should: 1) harmonize the Mining Code and environmental laws regarding exploration and exploitation in high biodiversity areas, including protected areas; 2) develop national and local land-use policies and plans that recognize communities, conservation and concessions; and 3) build institutional capacity and provide sufficient funding to ensure effective implementation and enforcement of these laws. In the absence of these reforms, companies committed to meeting social and environmental standards should double-check their information on protected areas to ensure they are operating within the law and outside the protected estate.

AFRICA BIODIVERSITY COLLABORATIVE GROUP

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or contact Natalie Bailey, ABCG Coordinator at nbailey@abcg.org



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