



# SameOldStory

A background study on natural resources in the  
*Democratic Republic of Congo*

## I Recommendations

**T**HIS REPORT marks the beginning of an extensive project that will examine natural resource governance in the Democratic Republic of Congo.

*Global Witness recommends that the international donor community and the United Nations should:*

- Mainstream natural resource governance issues as an area of critical concern during the transitional period and for the long-term peace and development of the Democratic Republic of Congo.

*The International donor community should:*

- Realign and refocus aid programmes to make issues of natural resource governance high priority during the transitional government period and beyond. The issue of natural resources cannot and must not be ignored in the rush to rebuild and develop the DRC.
- Develop and implement institutional and regulatory capacity within the DRC government's civil service to ensure new laws and codes are adhered to, and revenues are managed transparently and responsibly.
- Individual donor countries and bodies should coordinate activities and policies to strengthen activities aimed at improving natural resource governance. Support for anti-corruption initiatives should be continued and expanded.
- Provide financial and logistical support to local civil society movements in activities aimed at improving resource governance and transparency, and work with local groups to provide public education on resource issues at a grass-roots level.
- Develop and deepen regional approaches to aid and development policies to ensure uniformity of approach across the Great Lakes region. Plans for the DRC's economic, political and social development should not be made in a vacuum: the politics and economics of neighbouring countries are closely interrelated with the DRC.
- Developmental, political and economic analysis by countries looking to assist the DRC should incorporate regional characteristics of trade. For instance, regional and sub-regional organisations such as the African Union or COMESA have the potential to provide creative cross-border strategies for controlling trade, and smuggling.

*International Financial Institutions should:*

- Take on-the-ground realities into account when building and implementing policies to generate revenues through resource extraction. They must urgently reexamine reliance on a purely fiscal approach to "kick-starting" the DRC economy.
- Develop innovative immediate and long-term solutions to ensure the historical trajectory of misuse of resources in the DRC is ended. Given that the DRC's natural wealth has been identified as a key to rapid economic growth and post-war reconstruction, close attention needs to be paid challenges of reconciling the need for investment, reform and law enforcement with on-the-ground realities.

- Actively support and participate in the public dissemination of information about the new mining and forestry codes, and guarantee that meaningful consultations take place with local communities across the DRC on issues pertaining to resource and revenue management.

*The DRC Government of National Unity should:*

- Firmly commit to making anti-corruption, transparency and accountability priority areas, and, in the lead-up to national elections, all members of the new government should publicly declare their assets and business interests.
- Cooperate with the international community and international institutions to build institutional and regulatory capacity.
- Work to fully implement the Kimberley Process.

*The United Nation Security Council should:*

- In the review scheduled for 30 July 2004, the Security Council should amend the mandate of the United Nations Organization Mission in the Democratic Republic of the Congo (MONUC) to include authority to monitor and report on natural resource exploitation in the DRC. This is especially important in Eastern DRC, where the trafficking of arms is closely linked to natural resource exploitation.
- Amend MONUC's mandate further to intensify regional cooperation between African Union and UN Missions in the Great Lakes, including those already in place in Burundi, the Central African Republic, Sudan, Angola and Rwanda. All missions should mainstream and work closely to monitor links between natural resources and insecurity in the Great Lakes region.
- Continue to work to bring together the DRC's neighbours in dialogue to find cross-border solutions to resource governance. The Great Lakes conference is one of several African mechanisms and organisations that could provide opportunities for developing innovative solutions to highly complex problems.
- Strengthen enforcement of existing Security Council resolutions on DRC and international law. Stringent enforcement of targeted aviation, commodity and arms embargoes, certification regimes, conventions against money-laundering and bribery would significantly lessen opportunities for the illicit exploitation of natural resources in the DRC and beyond.
- Adopt a definition on conflict resources and a permanent body attached to the UN Security Council with standing capacity to investigate and sanction malfeasance. Global Witness recommends the following definition: "Natural resources that have been traded in a way that drives violent armed conflict or which threaten national or regional security."

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## Abbreviations

<b>ALC</b>	Armée de Libération du Congo
<b>ABIR</b>	Anglo-Belgian India-Rubber Company
<b>ADFL</b>	Alliance des Forces Democratiques pour la Liberation du Congo
<b>AIC</b>	Association Internationale du Congo
<b>AiR</b>	Armée de Libération du Rwanda
<b>BCK</b>	Compagnie du Chemin de Fer du Bas-Congo au Katanga
<b>CAR</b>	Central African Republic
<b>CEEC</b>	Centre for Evaluation, Expert Analysis and Certification of Precious Minerals
<b>CFC</b>	Compagnie du chemin de fer du Congo
<b>CFL</b>	Compagnie des Chemins de Fer du Congo Superieur aux Grands Lacs Africains
<b>Coltan</b>	Columbite-tantalite
<b>CSK</b>	Comité special du Katanga
<b>DRC</b>	Democratic Republic of the Congo
<b>FAC</b>	Forces Armées Congolaises
<b>FAPC</b>	People's Armed Forces of Congo
<b>FAR</b>	Rwandan Armed Forces
<b>FDD</b>	Forces de Defense pour la Démocratie
<b>FEC</b>	Fédération des Entreprises Congolaises
<b>Forminière</b>	Société Internationale Forestière et Minière du Congo
<b>Gécamines</b>	Générale des Carriers et des Mines
<b>IDI</b>	International Diamond Industries
<b>IMF</b>	International Monetary Fund
<b>IPIS</b>	International Peace Information Service
<b>IPR</b>	International Panorama Resources Corp
<b>KMC</b>	Kababankola Mining Company
<b>KP</b>	Kimberley Process
<b>MLC</b>	Mouvement pour la Libération du Congo
<b>MIBA</b>	La Société Minière de Bakwanga
<b>MONUC</b>	United Nations Observer Mission in the Congo
<b>NALU</b>	National Army for the Liberation of Uganda
<b>NCP</b>	National Contact Point
<b>NGO</b>	Non-Governmental Organisation
<b>OECD</b>	Organisation for Economic Co-operation and Development
<b>OKIMO</b>	Office des Mines d'Or de Kilo-Moto
<b>OSLEG</b>	Operation Sovereignty Legitimacy
<b>PUSIC</b>	Party for Unity and Safeguarding of the Integrity of Congo
<b>RCD</b>	Rassemblement Congolais pour la Démocratie
<b>RCD-Goma</b>	Rassemblement Congolais pour la Démocratie – Goma
<b>RCD-K-ML</b>	Rassemblement Congolais pour la Démocratie-Kisangani- Mouvement de Libération
<b>RCD-ML</b>	Rassemblement Congolais pour la Démocratie-Mouvement de Libération
<b>RCD-N</b>	Rassemblement Congolais pour la Démocratie-National
<b>RPA</b>	Rwandan Patriotic Army
<b>RPF</b>	Rwandan Patriotic Front
<b>SADC</b>	Southern African Development Community
<b>Sakima</b>	Société Aurifère du Kivu et du Maniema
<b>Sedico</b>	Société d'Evaluation de Diamants au Congo
<b>Sediza</b>	Société d'Evaluation de Diamants au Zaire
<b>Sicobois</b>	Societe Industrielle Commerciale des Bois Negoce de Bois
<b>SIDC</b>	Société Internationale de Diamants Congolais
<b>SIFORCO</b>	Société Industrielle et Forestière du Congo
<b>SMKK</b>	Société Minière de Kabolela et Kipese
<b>SOCEBO</b>	Société Congolaise d'Exploitation du Bois
<b>SOCIGAZ</b>	Société Internationale d'Exploitation, de Transport et de Commercialisation du Gaz Méthane du Lac Kivu
<b>SOCIR</b>	Société Congo-Italienne de Raffinage
<b>SOFORMA</b>	Société Forestière du Mayumbe
<b>SOZIR</b>	Société Zairo-Italienne de Raffinage
<b>SOMIGL</b>	Société Minière des Grands Lacs
<b>SOMINKI</b>	Société Minière et Industrielle du Kivu
<b>SPIAF</b>	Service Permanent d'Inventaire et d'Amenagement Forestiers
<b>STL</b>	Scories du Terril de Lubumbashi
<b>TSS</b>	Transitional Support Strategy
<b>UMHK</b>	Union Minière du Haut-Katanga
<b>UN</b>	United Nations
<b>UNITA</b>	União Nacional para a Independência Total de Angola
<b>UPC</b>	Union des Patriotes Congolais
<b>UPDF</b>	Uganda People's Defence Forces
<b>ZDF</b>	Zimbabwean Armed Forces

## 2 Executive Summary

**T**HIS REPORT outlines the historical development of natural resource extraction patterns in the Democratic Republic of the Congo. Sections 5 and 6 of the report highlight how the DRC's vast natural wealth was originally exploited for the commercial benefit of a small number of business and political elites at the expense of the vast majority of the Congolese people since the late 1800s. In the wake of rapid decolonisation in the early 1960s, Mobutu adopted ruinous policies leading to the corrupt mismanagement of the Congolese economy and natural resource sectors, depriving state coffers of the billions needed to effectively run governmental institutions in a country the size of Western Europe. Encouraging direct military control over resources and a "divide and rule" strategy, Mobutu's policies also drove ordinary Congolese to rely on smuggling and illicit trade to survive.

As sections 7 and 8 demonstrate, the patterns of natural resource extraction established under Mobutu are still in evidence today in the informal economy that operates in parallel to cross-border military networks that developed amidst the 1998 civil war. The DRC's current turbulent trajectory must therefore be set firmly in historical, economic and political context.

The DRC is incredibly rich in terms of natural resources – and it has long been cursed by this wealth. Sections 9 and 10 offer more details about the range of natural resources exploited in the DRC, as well as the predominant forms of resource extraction, the main centres of production, control of resources, export routes, and connections between resource wealth and political power. Where appropriate,

Global Witness has included analysis of the role and influence of neighbouring countries (particularly Uganda, Rwanda, Zimbabwe, CAR, Republic of Congo) and has provided details of known trade routes. Global Witness has also compiled publicly available statistical information on flows (volumes and values) about coltan, diamonds, copper, cobalt, timber, oil, gold and other key resources.

This report is predominantly based on desk-based research. Global Witness was assisted in preparation of this report by an accountable grant from the Department for International Development (DFID). Although the content of the report has been discussed with DFID, the views expressed in this report are those of Global Witness. The purpose of the accountable grant was to build understanding of the historical context of natural resource extraction governance in DRC for DFID, other donors, the transitional government and other stakeholders. Desk-based research on the DRC had inherent limitations, and Section 13 concludes with a list of recommended further research.

The current transitional government, and the international community looking to assist ending the devastating war in eastern Congo, face a daunting task. The DRC is fragmented, extremely fragile, and its natural resource wealth would seem to be an obvious way to "kick-start" a failed economy. However, given that the DRC natural resources have never been managed in a wholly accountable and sustainable manner, the DRC government, the private sector and the international community should proceed with extreme caution. The Congolese people deserve to reap benefits from their country's wealth – not to be held hostage to destructive exploitative patterns established decades ago.

### 3 Introduction

**T**HE WAR in the Democratic Republic of Congo (DRC) has resulted in the deaths of 3.5 million people since 1998. Ethnic conflict, foreign military interference and the lure of natural resource wealth have combined to result in one of the most devastating conflicts the world has ever seen. Despite numerous reports by UN Expert Panels, academics and non-governmental organisations, no firm national or international action has been taken to address the issue of resource exploitation in the DRC. As the country moves slowly towards peace during the transitional government period, the fate of the Congolese people hangs in the balance. Either the mistakes of the past will be repeated and the natural resource curse will continue to bring misery, or resources could, at long last, be used for the benefit of all Congolese peoples. The Congolese deserve and need the international community to work with them to stop militarised and corrupt control over the Congo's natural wealth.

The plunder of the DRC's natural resources that has been widely documented since 1998 is not a new phenomenon. Since the late 1800s the Congolese people have suffered at the hands of foreign and indigenous businessmen and political leaders intent on exploiting the DRC's rubber, ivory, diamonds, gold, copper and cobalt, timber and other resources. The DRC's current political volatility and greedy competition over natural resources must be put in this historical context. This report explains how the DRC's turbulent trajectory of militarised and corrupt control over resources is a continuation of historical patterns of exploitation established under Leopold II and Belgian colonial rule. Just as the exploitation of resources by Belgium brought virtually no economic or social benefits to the Congolese people, contemporary resource extraction similarly yields little benefit to the majority of the Congolese people. On the contrary, militant competition over Congo's natural wealth is a major reason why the devastating 1998 conflict continues to claim the lives of thousands of people living in northeastern DRC.

This report has been compiled to provide an overview of the resource governance issues facing the DRC today. The report begins by looking back to the late 1800s and tracing the development of resource extraction patterns and informal trade in resources through Leopold and Belgian colonial rule, to Mobutu, and to Laurent and Joseph Kabila. After illustrating the historical, political and economic context of resource exploitation, the report goes on to survey eighteen different natural resources found in the DRC today: coltan, cassiterite, copper, cobalt, zinc, uranium, silver, diamonds, gold, oil, gas, timber, coal, lead, iron and manganese are all covered.

To the extent possible, Global Witness has collected information on the main centres of extraction, production and processing, information on trade routes, statistics on recorded trade, and summaries of the main commercial and military organisations reported to be involved in the exploitation for each resource. The report goes on to outline how formal transport routes developed to facilitate resource extraction, and then provides a statistical summary of the DRC's main natural resource exports.

In this report, reference to *illegal* activities means activities or enterprises that are contrary to the laws of the country. *Illicit* activities are activities or enterprises that are illegal if not licensed by the government. *Official* activities are activities or entities that have the approval or authorization of the government of the country, in this case, the Kinshasa government.

Informal activities refer to economic activities that are not accurately recorded in government figures and accounting. The informal economy, which is generally untaxed, commonly includes goods and services including black market exchanges.<sup>1</sup>

A major purpose of the report was to determine what research should be pursued to better inform domestic and international policy on natural resource governance in the DRC. Clearly, there are daunting challenges faced by the DRC's new Government of National Unity and the international donor community looking to support the Congolese people. Despite numerous governmental, UN Expert Panel and NGO Reports documenting the tragedies of the Congo's war, and the fundamental role of natural resources in hostilities, little international action has been taken. Similarly, little has been done to prepare the country for a tremendously difficult transition to lasting peace. Indeed, it is unlikely that durable peace will be established at all unless the issue of natural resource governance is not firmly addressed within the next two years.

### Research methodology

As this is a predominantly desk-based research project, the information contained in this report came from academic journals, books, reports written by leading NGOs including Amnesty International, IPIS and Human Rights Watch, as well as news media reports, British and Belgian governmental reports, and the United Nations Panel of Experts reports on the DRC. Global Witness also went on a short research trip to the African Institute at the Royal Central African Museum in Brussels where several Congo experts were interviewed and archive research was conducted. The report has benefited from Global Witness' institutional knowledge on conflict diamonds and timber extracted from the DRC. Global Witness spent three weeks in the DRC in late 2002 to build on work previously done on Zimbabwe's involvement in the conflict in 2001. Global Witness was again in the DRC in mid-2003 investigating diamonds as part of work on the Kimberley Process.

The predominantly desk-based research conducted for this report uncovered significant quantities of information on a range of topics. However, there are large gaps in some areas of our knowledge. For instance, there are considerable variations in the amount of documentation available on specific natural resources. There has been much written about resources such as coltan and diamonds, yet very little information is available on resources such as bauxite/aluminium, coal, manganese, and zinc. Differences in the amount and quality of information available are reflected in the descriptions of the main centres of production, methods of extraction and trade routes in Section 10.

The quantity and quality of official statistics on trade in the DRC's natural resources also reflects the comparative importance of some resources over others for the DRC's formal economy. This report provides statistics demonstrating levels of cross-border trade and major trading partners for diamonds, gold, coltan, oil, timber, cobalt and coffee. Very little or no statistical data was found on cadmium, cassiterite (tin ore), coal, iron ore, silver, uranium or zinc from 1998 to date.

Outlining major trade routes is a key feature of this report. However, a constraint of desk-based research has been determining the extent to which contemporary trade routes are "historical" or "natural." Discussion of the patterns and locations of clandestine trade in natural resources in this report is based on research conducted by other organisations, including the UN Panel of Experts. This research has tended to focus on individual resources from specific regions, such as coltan. Other studies of the "informal economy" were conducted in the early 1990s. Field research will be required to present a more contemporary and accurate map of trade routes used for the transportation of natural resources by armed groups and criminal networks.

## 4 Historical context of natural resource extraction in the DRC

**T**HROUGHOUT the past century, irrespective of the governing system or political personalities in power, the human and natural resources of the Democratic Republic of the Congo have been systematically exploited for the economic benefit of a few at the expense of the vast majority of Congolese people. Political and military elites today repeat the patterns of the use of brutal force to plunder precious resources established by King Leopold II of Belgium in the nineteenth century. Deprived of any tangible benefits from legitimate natural resource exploitation, ordinary Congolese long ago established an “informal economy” to survive. A wide range of consumable commodities and natural resources have been smuggled in and out of the Congo for decades, and informal trade networks, frequently based on ethnic ties and routine bribery of local officials, were developed.

The DRC’s turbulent trajectory of militarised control over natural resources must therefore be seen as a continuation of historical patterns of exploitation established under Leopold II and Belgian colonial rule. Just as the exploitation of resources by Belgium brought virtually no economic or social benefits to the Congolese people, contemporary resource extraction similarly yields little benefit to the majority of the Congolese people. On the contrary, militant competition over Congo’s natural wealth has been a major contributing factor to the crippling war that has killed over three million people in the past six years. Even though formal peace agreements have been reached, violent conflict carries on in some areas.

### 4.1 Leopold II (1884 – 1907) & Belgian colonial rule (1908 – 1960)

In 1879 King Leopold II of Belgium commissioned Henry Morton Stanley to establish the King’s authority over the Congo basin in order to control strategic trade routes to the West and Central Africa along the Congo River. Although Leopold publicly used humanitarian and anti-slavery rhetoric to justify his involvement in the Congo, he was primarily motivated by a desire to open up a vast trading territory. Stanley did so by inducing over 400 local chiefs to sign “treaties” transferring land ownership to the King’s *Association Internationale du Congo (AIC)*. Stanley went on to establish trading centres along the Congo River from Boma to Kisangani.<sup>2</sup>

Leopold’s claim over the Congo was formally recognised at the Conference of Berlin (1884–85), and on 30 April 1885 Leopold signed an ordinance creating the “Congo Free State” – effectively establishing formal legal control over an enormous moneymaking venture.

The 1885 ordinance restricted indigenous peoples’ access to land, and since then local communities have had only a narrow band of property rights. Under Leopold and Belgium’s rule, the majority of the population could only enter short-term leases and were restricted in their ability to expand plots of land.

The purpose of repressive land laws was to ensure that only the ruling elite and their associates had access to the Congo’s vast natural resource reserves.

### 4.2 Methods of resource exploitation

Initially, the ruling elites of Leopold’s Congo Free State focused on the exploitation of Congo’s ivory, and subsequently rubber.<sup>3</sup> Later, when rubber from plantations worldwide reduced demand for Congolese rubber, palm oil became the main resource exported by Belgium from the Congo. Leopold used forced labour and a private mercenary army, the *Force publique* to control the Congo and to reap huge profits from the rubber trade. Later, Belgium retained the use of this army in controlling both the Congo and Rwanda.

From the late 1880s onwards, the Congo was run as a business enterprise rather than a state: political and community relations were built on the basis of colonial capitalism.<sup>4</sup> The Congo was divided up into provinces centrally controlled from Leopoldville (Kinshasa), and large concessions were given to foreign mining companies to mine gold, copper and other minerals in eastern Congo, and rubber, cotton and palm oil entrepreneurs were generally given concessions in the Kasais, Bandundu and northern Congo. The most well known private companies involved in the exploitation of Congo’s rubber were the Anglo-Belgian India-Rubber Company (ABIR) and the *Compagnie du Kasai*.<sup>5</sup> Concessions allocated to the ABIR and others gave them full rights to exploit all forest products as well the right to police and “bodily” detain people living within these concessions in exchange for sharing their profits with the state.<sup>6</sup>

Rubber was first extracted from vines, particularly from abundant supplies in the Kasais. Brutal force was used to ensure local communities satisfied high rubber quotas set by local *Force publique* commanders and their business associates. Rubber was transported by porters to the Congo and Ubangi Rivers and their tributaries on steam barges to Stanley Pool and Leopoldville (Kinshasa), and then by train to the river port of Matadi. From there the rubber was shipped to Europe and the United States from the early 1890s until the 1930s.<sup>7</sup>

Seeking alternative sources of revenue and exploitation after a steep fall in rubber production from the Congo between 1900 and 1905, several mining companies were established to exploit mineral resources located by geological surveys conducted in the late 1890s. These included the giant *Union Minière du Haut-Katanga (UMHK)* (established in 1906), and the *Compagnie du Katanga* (established in 1891), which became the *Comité spécial du Katanga (CSK)* in 1900. The CSK alone controlled a mining concession encompassing one-third of the Katanga province.<sup>8</sup> Palm oil also became an important source of revenue, and companies such as the Lever Brother’s run *Société des Huileries du Congo Belge* expropriated large amounts of oil palms from local communities.<sup>9</sup> These and other companies exported the majority of their commodities to Belgium and America.

### 4.3 Creation of an informal economy and societal changes

Leopold sold the Congo Free State to Belgium in 1907, but little changed on the ground: large parastatal and private concession companies continued to exercise trading monopolies over wide geographical areas. However, the continuation of patterns of brutal control over commercial production of palm oil, rubber, cotton and other resources led to the development of an extensive informal economy.

After 1907 local people continued to be compelled to work in plantations, mines and on the construction of economically vital roads and railways. To avoid forced labour and the payment of agricultural taxes, people frequently fled into neighbouring countries and began operating alternative (smuggling) routes for trade in consumable goods. It is likely that pre-colonial trade routes were used in these movements.<sup>10</sup> This is especially likely given that the pre-colonial Kongo kingdom (previously centred around Bas-Congo) and the Luba empire (previously based in the Kasai-Katanga region) once had prosperous economies built around agriculture and long-distance trade.<sup>11</sup> Further, there were well-established pre-colonial networks between Katanga province and Angola in the trade of commodities including ivory, cloth, copper, salt and beads.<sup>12</sup>

Aside from the development of a large informal “second” economy, another major consequence of the plunder of human and natural resources was the transformation of African societies. George Nzongola-Ntalaja explains:

Peasant production was progressively subordinated to the export requirements of monopoly capital for agricultural raw materials. The traditional ruling class... was incorporated into the authority structure of the colonial state to facilitate the extractive and repressive tasks... Artisanal or simple commodity production lost much of its indigenous character, becoming an appendage to the capitalist commodity market and service sector...<sup>13</sup>

During colonial rule Belgium manipulated the pre-existing political economy and social relationships to maximise productivity and profits. For example, traditional tribal leaders were maintained as the administrators of social welfare, law and order, as well as becoming the local economic agents of the colonial administration. Supported and rewarded for their loyalty by the Belgians, traditional leaders survived despite the infiltration of capitalist modes of production into rural communities. By influencing and controlling local leaders, Belgian administrators and concessionaires had access to a cheap and huge workforce to assist in the extraction of resources, and to build roads and railways.<sup>14</sup> Traditional societal structures have continued to be shaped by political elites over the past six decades. One important change was that illicit trade networks came to be controlled by specific ethnic communities.<sup>15</sup>

### 4.4 Development of transport infrastructure

Railway construction during the late 1800s and early 1900s was primarily driven by the incentive to export Congo’s rich agricultural and mineral resources.<sup>16</sup> The Lower Congo railway connecting Leopoldville (Kinshasa) with Matadi was completed by the *Compagnie du chemin de fer du Congo* (CFC) in 1898 – opening up an

economically crucial trade connection to the ocean for the export of goods to Europe and America.<sup>17</sup> The *Compagnie du chemin de fer du Bas-Congo au Katanga* (BCK) built further rail networks connecting the mineral-rich Katanga (or Shaba) region with ports in Matadi (Congo), to Benguela (Angola) via Dilolo, and through Portuguese and Rhodesian rail systems to Beira (Mozambique) from Sakania in the early 1900s. The BCK also developed transport and commercial networks along 1,820 kilometres of line from Ilebo to Sakania, and 520 kilometres from Tenke to Dilolo.<sup>18</sup>

The building of these railways complimented the existing historical trade network along the Congo River and its tributaries. By the 1920s there were three well-established trading capitals in the Congo: Boma/Leopoldville (Kinshasa), Elizabethville (Lubumbashi) and Stanleyville (Kisangani).<sup>19</sup> Other important trading towns included Buta, Bukavu, Goma, Isiro, Kalemie, Kindu, Likasi, Moba, and Uvira. Under Belgian administration, a road network connecting these and other towns in Haut-Congo (present-day Ituri), the Kivus and Maniema was constructed.<sup>20</sup> The aim was to open up access to resources, and to make the export of commodities including gold, coffee and sugar more efficient. Roads and railways also provided avenues for generating revenues from taxes and tariffs on commodities. This, in turn, sometimes made rail lines and mining equipment the targets of sabotage by people participating in rebellions in Katanga and Kasai in the 1940s.<sup>21</sup>

### 4.5 Independence

Years of intermittent rebellions, insurrection, political demonstrations and worker strikes against systems of forced labour, brutal oppression, and negative social and economic exploitation gained impetus with international anti-colonial fervour of the 1950s. A Congo-wide independence movement and nationalism reached full momentum, and after a rebellion on 4 January 1959 in Kinshasa, Belgium decided to grant the Congo independence. The Congo became independent on 30 June 1960, with militant nationalist Patrice Lumumba as Prime Minister. However, rapid Belgian departure from the Congo deprived Lumumba of any effective means of administration: there were virtually no suitably trained Congolese civil servants to lead in the administration of government departments. Just two weeks after independence, Lumumba was faced with a nationwide mutiny by the army and a Western-backed secessionist movements in mineral-rich Katanga and South Kasai.

The “Congo crisis” of 1960 – 1965 was characterised by war and political instability. Transport and other public services suffered as a result of administrative confusion, disorganisation and multiple decision-making centres, leading to degradation of infrastructure.<sup>22</sup> Opportunities to develop a unified state and stable national economy to equitably distribute the benefits of the Congo’s vast human and natural resource wealth were missed. Instead of assisting the newly independent state to stabilise and establish solid structures of governance, Belgium and the United States covertly interfered in embryonic political structures. Lumumba was dismissed by Congolese President Kasavubu in 1960 and later replaced by Moïse Tshombe (the leader of the Katangan secession movement) as Prime Minister. Lumumba was murdered in 1961.

## 5 Mobutu (1965 – 1997)

**M**OBUTU SESE SEKO came to power in a US and Belgium-backed military coup in 1965, ousting Kasavubu and Tshombe. Like Leopold and Belgium before him, Mobutu ruled the Congo (renamed “Zaire” in 1971) as a personal business enterprise. He extended absolute political control throughout the Congolese territory through repressive methods of suppressing political opposition, and the patrimonial distribution of access to Zaire’s natural wealth.<sup>23</sup> His rule was characterised by brutality, corruption, patrimony, gross economic mismanagement, and an appalling absence of investment into public services. Zaire’s natural resources were essentially exploited for the exclusive benefit of Mobutu and his cronies while the vast majority of Congolese languished in desperate poverty. There is no clearer example of the “paradox of plenty” than Zaire under Mobutu.

### 5.1 Natural resource exploitation

Mobutu squandered and embezzled billions of dollars earned through the exploitation of the state’s copper, cobalt, diamonds and coffee. As his government was backed by the United States and its allies throughout the Cold War, the West turned a blind eye to Mobutu’s mismanagement and brutality. Sheltered from outside scrutiny, Mobutu used personal connections and patrimony to exploit Zaire’s vast natural wealth and extend political control over the entire country. Local strongmen were brought into Mobutu’s network through commercial enterprises – a strategy similar to that used by Belgium in their control of traditional community leaders.<sup>24</sup>

Mobutu initially retained the “concessionaire” system created by the Belgians, but in 1966 changed the law so that the state owned all land and mineral rights in Zaire – effectively pulling the rug from under the foreign mining companies that had continued to operate after 1960. In 1967, Mobutu nationalised the Belgian private mining giant UMHK (mentioned above) and created a state-owned mining enterprise, the *Générale des carrières et des mines*, or Gécamines.<sup>25</sup> This was followed in 1973 by the “Zairianization” of all foreign-owned commercial, industrial and agricultural enterprises. This further augmented the economic power of the ruling class, as Mobutu redistributed management and control over these enterprises amongst his friends and their families – most of who had no business expertise and paid no taxes.<sup>26</sup> In the late 1970s, Mobutu invited foreigners to run state-owned mines as a means of more effectively utilising mineral wealth, but state funds continued to be squandered.<sup>27</sup>

Under Mobutu, the form of militarised control over natural resources and trade routes begun by the *Force publique* was perpetuated. Using a divide and rule strategy to prevent co-ordinated resistance, Mobutu encouraged competition between rival entrepreneurs and military units by allowing them to guard their own territory and develop their own commercial opportunities centred around diamonds, gold, coffee,

timber, cobalt and arms.<sup>28</sup> Control over natural resources also became more decentralised as military leaders were given autonomy to exploit and trade resources.

### 5.2 The growth of the informal economy

Over twenty-five years of corrupt financial mismanagement of government departments and parastatal companies led to economic collapse and state failure in the mid-to-late 1980s. Predation and diversion of huge sums from state coffers meant that there was virtually no productive investment into maintaining essential public services or transport infrastructure. To survive, many people excluded from the state moneymaking bonanza increasingly turned instead to the informal economy that had been established during Belgian colonial rule. Indeed, a major consequence of Mobutu’s failures was the entrenchment of extensive clandestine national and regional trade networks. In particular, the coffee growing and gold regions of North and South Kivu, Haut Congo (Orientale), Bas Congo, and in the diamond region of Kasai Oriental, saw the development of relatively sophisticated second economy enterprises.

Recognising the threat the informal economy posed to their own wealth, the government introduced measures to curb smuggling. In 1982 the prices of foodstuffs were liberalised, and gold and diamond businesses deregulated. But as the state had the monopoly over the sale and export of gold and diamonds, smuggling continued unabated – especially in remote regions where the unemployed work force in the mining and agricultural regions became frantically involved.<sup>29</sup> The problem was exacerbated by self-interested and corrupt bureaucrats who ignored laws requiring the imposition of penalties on anyone found smuggling commodities out of Zaire.<sup>30</sup> The deterioration of the national transport infrastructure further increased smuggling activities, as Mobutu insisted on the use of inefficient internal rail, road and river networks to transport minerals and other commodities to Zaire’s own port for export.<sup>31</sup>

Government policies at the time also reveal how out of touch policies to reign in smuggling were with reality. Coffee provides a good illustration: in 1985 the state-run *Office Zaïrois de Café* paid farmers 7 cents per kilogram of coffee, whereas smugglers paid 42 cents.<sup>32</sup>

### 5.3 Clandestine trade routes

A number of academic studies on the Zairian informal economy were conducted in the 1980s and 1990s.<sup>33</sup> Resources smuggled out of Zaire included sugar, cooking oil, maize, cloth, stolen cars and fuel. These studies show that smugglers in Zaire used roads, railways, the Lufira, Luvua and Lualaba Rivers, and Lake Tanganyika to transport their goods within and across national borders. For instance, in Katanga (southern Zaire) ivory was smuggled from the trading centre of Lubumbashi to Moba or Kalemie on the shores of Lake Tanganyika, across the lake and then on to Lusaka, Dar es Salaam or Johannesburg for sale

in Hong Kong. Copper and cobalt were taken from Kolwezi to Sakania and then across the Zambian border by trucks to the nearby Zambian city of Ndola before being transported down to South Africa by train.

The Kivus (now consisting of Maniema, North Kivu and South Kivu), rich in resources and close to the borders of Rwanda and Burundi, were ideally positioned for unrecorded cross-border commercial activities. The geographical position of the Kivus provided a degree of political and economic autonomy from Kinshasa, reinforced by the region's historic role as a transit-zone for regional trade.<sup>34</sup> One major trade route linked northeastern Zaire to Uganda via Beni and Butembo – two major commercial trade centres. From Beni and Butembo goods such as ivory, palm oil, gold and coffee were brought to the town of Kasindi near the Zaire/Ugandan border. Agricultural and manufactured commodities, as well as gold and ivory were brought along a second major route between Bukavu and Kampala via Goma and Rutshuru.<sup>35</sup> Another major trading route was between Uvira and Bujumbura (the capital city of Burundi) across Lake Tanganyika.<sup>36</sup>

In Haut Zaire (Province Orientale), the towns of Aba, Base and Liwara on the Zaire/Sudan border received gold, coffee and ivory from Isiro that were then sent across the border and on to Europe, India and Saudi Arabia.<sup>37</sup> In Equateur, Zongo is a traditional exit and entry point of trade with the Central African Republic's capital city, Bangui. Similarly, the close proximity of Kinshasa and Brazzaville makes their river ports obvious trading points for official and unrecorded trade.

Limits of this short desk-based study make it difficult to accurately determine the degree to which traditional or "historical" trade routes were relied on to move commodities through the informal economy during Mobutu's rule. The pervasiveness of corruption at all levels of government would suggest that official border control patrols at roads, ports and railways, where they existed, could have been bypassed with the payment of bribes or commission on the sale of illicit commodities. Section 11 discusses transport and trade in more detail.

#### 5.4 Decline of central control

From the small amount of data available on the informal economy that developed from the 1970s, the results are striking: during the late 1980s is estimated that 40% of coffee from Haut Congo (Province Orientale) was smuggled via roads through Uganda. In Katanga, cobalt and copper was stolen from Gécamines and smuggled by road to Zambia and South Africa. In 1988, gold and diamonds smuggled from Zaire accounted for almost 94% of Belgian imports from Burundi and 88% of imports from Congo Brazzaville.<sup>38</sup> More than half of locally produced papaya, tea and cinchona exported through Goma International Airport in the 1980s were reportedly sold through the informal economy.<sup>39</sup>

Table 1 illustrates recorded trade statistics of minerals and diamonds originating from Zaire in the six years from 1989. However, given the extensive informal economy operating at the same time, and the wholly corrupt nature of the Zairian government, it is likely that these figures illustrate only a small

Table 1: Recorded Trade Originating from Congo (Zaire), 1989-1995 (in US\$ millions)

	1989	1990	1991	1992	1993	1994	1995
Cobalt	\$404.0	\$418.0	\$218.0	\$125.0	\$54.0	\$120.0	\$160.0
Coffee	\$692.0	\$548.0	\$483.0	\$487.0	\$330.0	\$432.0	\$450.0
Copper	\$813.0	\$892.0	\$525.0	\$302.0	\$136.0	\$120.0	\$150.0
Diamonds	\$400.0	\$320.0	\$220.0	\$200.0	\$289.0	\$296.0	\$376.0
Oil	\$167.0	\$148.0	\$165.0	\$40.0	\$130.0	\$156.0	\$160.0
Tin	\$16.4	\$14.2	\$8.2	\$5.3	\$3.9	\$5.0	\$5.5
Zinc	\$82.0	\$79.0	\$59.0	\$28.0	\$0.0	\$0.0	\$12.0
Overseas development assistance	\$634.0	\$823.0	\$494.0	\$262.0	\$178.0	\$235.0	N/a
Total	\$3,208.4	\$3,242.2	\$2,172.2	\$1,449.3	\$1,121.9	\$1,364.0	\$1,323.5

Source: Reno, *Warlord Politics*, 156.

proportion of the total revenues raised through resource extraction during this period.

The end of the Cold War brought with it an end to overt US support of Mobutu, as well as impatient international creditors, hyperinflation and forced political opposition. In 1990 Mobutu was forced to announce that a multi-party system of government would be introduced. However, he continued to generate new commercial opportunities using state regulatory power, such as money laundering, passport sales, and drug trafficking. To control the privatisation process of parastatal companies encouraged by international financial institutions and to keep his network under his control, Mobutu intensified reliance on building political authority through market control. However, this exercise of control crossed previously independent local authorities, who used illicit trade to protect themselves against the collapse of the Zairian state. By 1992 Mobutu no longer exercised control over Zaire.<sup>40</sup>

#### 5.5 Mobutu's fall

Between 1990 and 1993 Zaire was characterised by inconsistent economic policies, social unrest and political chaos. Between 1990 and 1992 violent attacks forced several foreign companies, including Chevron Oil, to abandon the country. At the same time, the main revenue earners for the economy – copper and cobalt mines – were in radical decline as there was no maintenance or upgrading of machinery. Conducting business in Zaire was rendered virtually impossible when banking services collapsed. Economic collapse and decades of corruption by senior military officers left ordinary soldiers unpaid, and without adequate training or equipment.

On 18 June 1994, two weeks after Kendo wa Dondo became Mobutu's appointed Prime Minister of a transitional government, one million Rwandan Hutu refugees came to Goma. This influx heightened existing ethnic tensions in North and South Kivu as local politicians used the refugees to exploit rivalries between Congolese Tutsis (the Banyarwanda and the Banyamulenge) and other Congolese ethnic groups. The following year, the transitional parliament introduced a law denying Congolese of

Tutsi origin Congolese nationality. The Banyarwanda protected their lands with the help of Tutsi soldiers from Rwanda. In doing so, the new Tutsi-dominated Rwandan government sought to protect themselves against Hutu extremist *Interahamwe* and ex-FAR troops who had perpetrated the genocide and had taken refuge across the border where they were organising themselves again. In the meantime, Mobutu's transitional government continued to fight a losing battle against economic collapse. The Economist Intelligence Unit described the situation in early 1995 thus:

Zaire's current economic and political situation is the result of the collapse of the Zairian state. Several ethnic groups are at war with each other. The army is split into several factions, while private militias abound. There is no effective national government and no integrated economy. The formal economy has withered to nothing compared with the informal economy.<sup>41</sup>

The influx of this volatile mix of groups into the DRC, combined with the complete failure of the Zairian state, were the final catalysts for Mobutu's demise. Neighbouring states, threatened by the presence of rebels operating from Zaire now had firm reasons to intervene and precipitate Mobutu's fall. In

1996, the former guerrilla leader turned gold and ivory trader, Laurent-Désiré Kabila, (trained and financed by Rwanda and Uganda) seized Goma and eastern parts of Zaire. On 17 May 1997, the Alliance of Democratic Forces for the Liberation of Congo-Zaire (ADFL) entered Kinshasa with little resistance from government forces. Kabila proclaimed himself President of the renamed Democratic Republic of the Congo; Mobutu fled, and died later that year in Morocco.

Mobutu left behind a deeply divided and desperately poor country on the verge of economic and social collapse. As was the case at the end of Belgian colonial rule, ordinary Congolese had not reaped any benefits from the exploitation of Zaire's natural riches by Mobutu's predatory military and political elite network. He had also firmly set Zaire on a dangerous trajectory where militarised predatory control over natural resources had become entrenched and corruption at all levels of government endemic. Congolese society was more fragmented and stratified than it had ever been as a result of divide-and-rule policies, and the legitimisation of violence as means of economic, social and political control.<sup>42</sup>

## 6 Laurent-Désiré Kabila (1997 – 2001)

**R**WANDA AND UGANDA'S choice for leader of the ADFL was also initially enthusiastically welcomed by the United States and other states. Not the least of these was Angola whose rebel group, União Nacional para a Independência Total de Angola (UNITA), had for years been given support by Mobutu. As he took over the Presidency and renamed Zaire the Democratic Republic of the Congo, Laurent-Désiré Kabila promised to restore democracy and economic viability. However, despite his avowed opposition to Mobutu's regime, Kabila's rule was not dramatically different. Although he did manage to stabilise the DRC's currency and began a number of public works programmes, Kabila exercised Mobutu-style personalised control over State resources, and replicated his predecessor's reliance on patronage and corruption to consolidate power.

### 6.1 Natural resource exploitation

During his first year as President, Laurent Kabila generated revenues quickly by striking deals granting mining and timber concessions indiscriminately. Some of these concessions had already been allocated under Mobutu's government to different companies. Understandably, anger and confusion prevailed. Mismanagement of the country's natural resources continued as the government exercised virtually no control over public enterprises and parastatals such as Gécamines and *La Société Minière de Bakwanga* (MIBA).<sup>43</sup>

### 6.2 The second war: 1998 – 2003

In July 1998, distrustful of his former allies Uganda and Rwanda, Kabila formally requested Presidents Kagame and Museveni to withdraw their troops. They complied with the request, but weeks later the Rwandans returned as invaders and even managed to capture the Kitona military base at the mouth of the river Congo.

Kabila appealed for assistance from member countries of the Southern African Development Community (SADC). Zimbabwe and Namibia sent troops to secure Kinshasa airport, and Angola, having the strongest and most experienced army in central Africa, sent forces that stopped Rwandan and Ugandan incursions near Kinshasa. Angola, calculating Kabila would remain anti-UNITA persuaded Kabila that Rwanda had developed an alliance with Mobutu's former army – a one-time supporter of UNITA.

The war soon turned into one of the most complex international wars ever being both a civil war and an international one. It became known as Africa's first World War. By late 1998, troops from Zimbabwe, Angola, Chad and Namibia were fighting with their ADLF allies against the rebels in the east and soldiers from Rwanda, Uganda and Burundi. Rwanda and Uganda supported the rebel groups including the *Rassemblement Congolais pour la Démocratie* (RCD). By early 1999, Rwandan and Ugandan forces, and the Congolese rebels they supported and armed, controlled over one-third of the DRC. Foreign occupation was not welcomed in the east: Congolese in the occupied territories took up arms against the Rwandan and Ugandan presence, using the traditional term *Mai-Mai* (or *Mayi-Mayi*) to describe

their status as local defence units.

In late 1999 fractures began to emerge in the Uganda-Rwanda alliance. Their different approaches and agendas turned them to support different and competing Congolese rebel groups. This was when the MLC was formed and trained by the Ugandans. The MLC developed close ties with the Central African Republic and Congo-Brazzaville – relationships that were important for trade in diamonds and other resources. Both countries and their rebel groups began to compete for control over resources. These factors led direct confrontations between Rwandan and Ugandan military forces.

A great deal has been written elsewhere about the causes, major players and consequences of the 1998 war in the DRC, as well as the role natural resources have played in prolonging the conflict. The war has been characterised by highly fluid alliances: since 1998 rebel groups have frequently splintered, changed allegiances and attacked former allies. The landscape of the conflict has changed regularly, and accurately mapping a full cast of leaders of various armed groups, their supporters, ethnicity and sources of funding is difficult and time consuming. Nevertheless, some trends have been identified by reports of the UN Security Council Panel of Experts and others. As a first step to appreciating the intricacies of the conflict, the diagram on the following page illustrates some of the major armed groups and their allies.

### 6.3 Panel of Experts

In June 2000, the President of the UN Security Council requested the UN Secretary General to establish a Panel of Experts on the illegal exploitation of the natural resources and other forms of wealth of the Democratic Republic of the Congo. The Panel was asked to look into all illegal exploitation of natural resources and other forms of wealth, and to research the links between the exploitation of natural resources and the continuation of the conflict. Four Panel of Experts reports have been published, with the majority of final report being made public on 23 October 2003.<sup>44</sup> A further confidential section was later passed on to the UN Security Council. The Panel was disbanded soon after the release of the report, and some of the materials uncovered by the Panel over the past three years have now been archived for 25 years by the United Nations.

The first three Panel reports provided an invaluable insight into the natural resource-conflict nexus of the 1998 war, and some of their findings have been confirmed by numerous reports by independent research and human rights organisations. These reports documented how the strategies and patterns of resource exploitation differ between different groups and their allies. To clarify differences between rebel groups, Table 1 (below) provides an overview of the leadership and genesis of the MLC, the RCD-Goma, the RCD-K-ML and the RCD-N.

In the case of Uganda, for example, the pattern of exploitation of natural resources is characterised by a decentralized and loosely hierarchical network, at the centre of which is a core group of Ugandan army officers and businessmen. The key figures in this group are the former of the President: retired General and brother Deputy Prime Minister Salim Saleh, and Major-General James Kazini, former

head of the Ugandan army. Much of its activities are carried out through Congolese proxies, such Jean-Pierre Bemba, leader of the MLC, Adele Lotsove, the Hema governor of Ituri District (in Orientale Province) and Roger Lumbala, leader of the RCD-National (RCD-N).<sup>45</sup>

The Ugandan network was reported to generate income by exporting the DRC's coltan, diamonds, timber and gold as well as through monopolies over the import of consumables. It uses armed intimidation by both the Ugandan army and aligned militias: a façade of legitimacy provided by friendly rebel administrations and currency fraud facilitates its activities.

The Panel of Experts report published in October 2002 was controversial in illustrating the connections between rebel groups, their regional and international and political and commercial associates; and in the naming of 85 individuals and companies as contravening the OECD Guidelines for Multinational Enterprises.<sup>46</sup> The October 2002 report also named over 70 other companies and individuals that it alleged had violated international business ethical standards. Companies and individuals named were invited to send their reactions to the Panel, and their replies were published in an addendum to the October 2002 report on 20 June 2003.

The final report published in October 2003 was distinctly different from the first three reports. The Panel acknowledges in the report that exploitation of resources “remains one of the main sources of funding for groups involved in perpetuating conflict.”<sup>47</sup> However, rather than providing a detailed analysis of links between the illicit exploitation of natural resources and conflict, the Panel devoted most of its attention to reactions to the controversial October 2002 report. The Panel divided the companies named in the October 2002 report as contravening the OECD Guidelines into five categories: “resolved,” “resolved cases subject to National Contact Point (NCP) monitoring compliance,” “unresolved cases referred to NCP,” “pending cases with Governments,” and “Parties that did not react to the Panel's report.” Thus, the Panel effectively have shifted the onus for further investigation, verification and action to governments, principally through their OECD Guidelines National Contact Points (NCPs).

The Panel's invocation of the OECD Guidelines as a benchmark for ethical and acceptable business conduct in the DRC demonstrate that there is a tool, albeit a hitherto untested and voluntary one, for governments to hold individuals and companies accountable for their activities. However, despite clear links between some businesses and individuals involved in the exploitation of natural resources and the perpetuation of bloody conflict in the DRC, governments have been slow to investigate and verify the Panel's findings, and to end corporate misconduct in the DRC.

As is discussed elsewhere in this report, the international donor community is now beginning to provide the DRC with substantial foreign aid to assist in the rebuilding of the country. International financial institutions, donors and the DRC transitional government, have also identified the DRC's vast natural wealth as essential to “kick-starting” the DRC's economy. Sustained and committed international assistance to the DRC is to

be applauded and encouraged. However, it seems illogical for foreign governments to funnel vast amounts of aid into the very same war-torn country where businesses registered in their jurisdictions have been accused of being complicit in the perpetuation of the war. For foreign aid to have maximum impact, governments involved in the DRC's rehabilitation should ensure that their donations and programmes

are in-line with firm commitments to call into account companies and individuals linked with the continuation of illicit resource exploitation and the continuation of the DRC conflict. It is nonsensical to blindly focus on future investments, aid and development without first addressing the lessons of the past, and in particular the links between conflict, business and natural resource extraction in the DRC.

## Major Armed Rebel Groups

Name: **Movement for the Liberation of the Congo (MLC)**  
 Date founded: **October 1998**  
 Leader: **Jean-Pierre Bemba**  
 Allies: **Uganda, RCD-National**  
 Area controlled: **Equateur Province, some of Orientale Province**  
 Commodities controlled: **Gold, Diamonds, Timber**

The MLC first made itself known when it attacked and routed a large Chadian force near Aketi, in Equateur Province in November 1998. Led by the millionaire businessmen Jean-Pierre Bemba, a Mobutist and the son of Bemba Saolona, a prominent businessman who was close to Mobutu, the MLC was trained and funded by Uganda as an alternative to the Rwandan-dominated RCD. As it was not plagued by the same internal rivalries as the RCD, it was soon able to set itself up as the most organised and successful rebel group. The MLC signed a peace agreement at Sun City with the Kabila government in April 2002 – a deal accepted by all parties except the RCD.

Name: **Congolese Rally for Democracy (RCD).  
 Later known as Congolese Rally for Democracy – Goma (RCD-G)**  
 Date founded: **1 August 1998**  
 Leaders:  
*1 Aug 1998 – 19 May 1999:* **Professor Ernest Wamba dia Wamba**  
*19 May 1999 – 29 Oct 2000:* **General Emile Ilunga**  
*29 Oct 2000 – 16 June 2003:* **General Adolphe Onusumba**  
*16 June 2003 – present:* **General Azarias Ruberwa**  
 Allies: **Rwanda, Burundi, Union of Congolese Patriots (UPC)**  
 Area controlled: **Large parts of North and South Kivu, areas of Maniema, Orientale and Katanga**  
 Commodities controlled: **Diamonds, Gold, Timber, Coltan, Cassiterite**

The RCD was the rebel movement that launched the initial war against the Kabila regime in August 1998, backed by Rwanda and Uganda. It was an ad-hoc coalition of anti-Kabila forces that were brought together for the sole purpose of overthrowing the regime. It was comprised of three main forces: the supporters of Professor Ernest Wamba dia Wamba, a professor of History at Dar Es Salaam University and a critic of Mobutu; former members of the AFDL, the opposition group that Kabila used to get into power in the initial war against President Mobutu; and former Mobutists under the leadership of Lunda Bululu, a prime minister under the dictator.

With strong backing from the Rwandan Patriotic Army, the initial RCD thrust succeeded in gaining control of a huge swathe of country as they advanced across the border from Rwanda and Uganda. However, after the RPA had been thwarted in its attack on Kinshasa by Angolan troops, the advance began to stall, and the RCD began to splinter.

The RCD was put together in Kigali rather than in the Congo, and did not gain the support of the local population, being a coalition of self-interested individuals rather than a popular movement. In response to this, a short-lived group called the New-RCD emerged in Nov 1998, which challenged the movement over its inability to mobilise the people of the Congo.

A coup led to Professor Wamba dia Wamba being removed as leader, and being replaced by the head of the RCD army and a former general in the Zairian army; Emile Ilunga. Wamba retreated to Kisangani to form a splinter group: the RCD – Kisangani/Liberation Movement. This led to the original RCD being referred to as the RCD (Goma).

The RCD-Goma is a significant part of the transitional government, with one vice-president a quarter of the ministries.

Name: **Congolese Rally for Democracy – Kisangani / Congolese Rally for Democracy – Liberation Movement (RCD-K / RCD-K-ML)**  
 Date founded: **May 1999. Refounded September 1999 as RCD-ML**  
 Leaders:  
*19 May 1999 – 19 Nov 2001:* **Professor Ernest Wamba dia Wamba**  
*19 Nov 2001 – present:* **Mbusa Nyamwisi**  
 Allies: **Uganda, MLC, Kinshasa**  
 Area controlled: **Northern North Kivu, Ituri, parts of Orientale**  
 Commodities controlled: **Coltan, Gold**

Professor Wamba dia Wamba and his supporters retreated from Goma to Kisangani after his leadership of the RCD was disputed. There he founded the RCD – Kisangani. Wamba was supported by the Ugandans, who continued to believe in his desirability as a rebel leader. However, tension between Rwanda and Uganda, partly caused by Uganda's support for the RCD-K, led to the August 1999 battle for Kisangani between the two erstwhile allies. Wamba and his allies were expelled again, this time to the town of Bunia.

Wamba flew to Kampala and founded the RCD-ML, appointing as his deputies Mbusa Nyamwisi and Tibasima Ateenyi. They built up their own power bases: Nyamwisi in his hometown of Beni in North Kivu, and Tibasima amongst his fellow Hema in Bunia. As the two deputies began to develop their own administrative structures, so they began to try to remove Wamba as head of the movement. This came to a head in March 2000, when Wamba attempted to check the growing power of Nyamwisi and Tibasima.

The Nyamwisi/Tibasima faction was in almost continual rebellion against Wamba until the RCD-ML was absorbed into the Ugandan-backed Front de libération du Congo (FLC) which is supported by the Ugandan army in January 2001. By June 2001 clashes were reported between forces belonging to Bemba and Nyamwisi as a result of Nyamwisi's defection from the alliance. Talks in August to end the fighting were significant, as Wamba dia Wamba was deliberately excluded – Uganda had accepted that it was Nyamwisi who was the main force behind the RCD-ML.<sup>48</sup> Ugandan efforts at reconciliation were nevertheless unsuccessful, and soon after the MLC retreated from Ituri, the FLC having irrevocably broken up after Tibasima broke ranks with Bemba and joined with Nyamwisi to definitively overthrow Wamba and establish their own leadership of the RCD-ML.<sup>49</sup> However, fighting between the MLC and the RCD-ML continued.

After his triumph over Wamba, Nyamwisi began to foster greater ties with the Lendu, ethnic cousins of his own tribe, the Nande, partly to limit the power of Thomas Lubanga, his Minister of Defence and a Hema. In early 2002 he appointed Jean-Pierre Lompondo, an outsider, as governor of Ituri province and replaced the Hema Catholic Archbishop of Bunia to be replaced with a Nande, moves which further alienated his supporters amongst the Hema. The growing rift between Nyamwisi and Lubanga culminated in the assassination of Nyamwisi's bodyguard by Lubanga, and the ensuing skirmishes between the APC (Popular Congolese Army, the military wing of the RCD-ML) and the newly created UPC. This further strengthened the ties between the Lendu and the APC.<sup>50</sup>

Whilst Uganda initially continued to support Nyamwisi, even arresting Lubanga and sending him to Kinshasa, but they later changed sides and helped the UPC and MLC drive the RCD-ML out of Bunia to Beni in August 2002. This brought about a realignment of rebel groups, with the RCD-ML receiving support from the Kinshasa government.

This realignment turned all the rebel groups against the RCD-ML, with the RCD-N, the UPC, the MLC and the RCD-Goma all at one point or another attacking Nyamwisi's followers in an attempt to gain more territory before the finalising of the peace agreement and the institution of the transitional government. The RCD-ML was reduced to a rump group that controlled very little territory. Nevertheless, it was awarded two ministries in the new government: Nyamwisi became Minister for Regional Cooperation, and Tibasima Ateenyi Minister for Housing and Urban Development. It also received one of the ten newly created military regions.

Name:	<b>RCD-National</b>
Date founded:	<b>June 2000</b>
Leader:	<b>Roger Lumbala</b>
Allies:	<b>Uganda, MLC</b>
Area controlled:	<b>Around Bafwasende and Isiro, Orientale Province</b>
Commodities controlled:	<b>Gold, Diamonds</b>

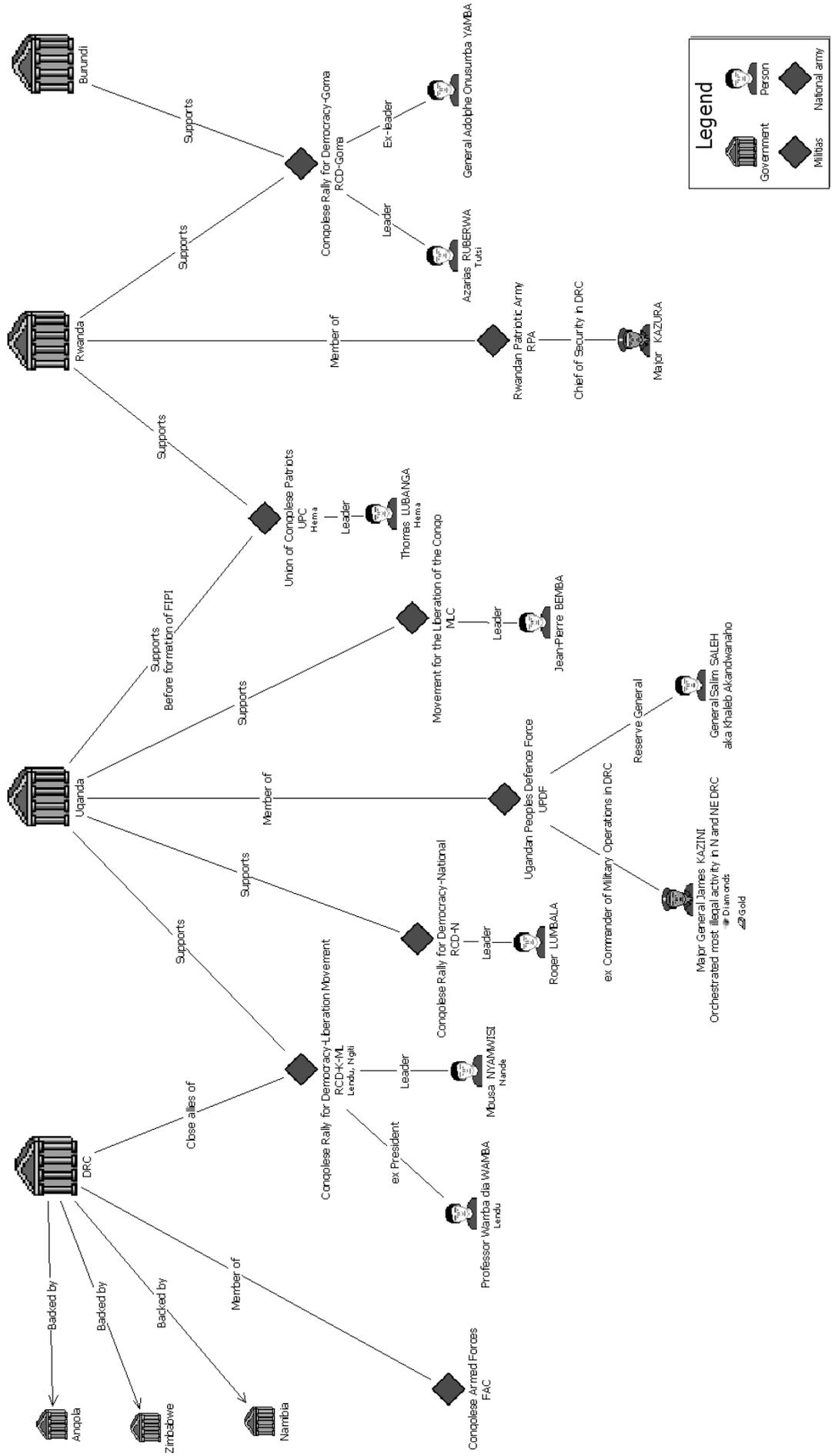
The RCD-National was founded by Roger Lumbala, a defector from the RCD-Goma to the RCD-ML, who having been posted as a mobilization officer in Bafwasende, proceeded to organise the militia there into his own rebel group.<sup>51</sup> This group remained loyal to Uganda, and there were no immediate clashes between the RCD-N and the RCD-ML.

In January 2001 the RCD-N was included with the RCD-ML and the MLC under the FLC, a Ugandan-devised umbrella group, and Lumbala was appointed national secretary for mobilization and propaganda. When the FLC broke down in June, the RCD-N allied with the MLC, and succeeded in capturing a significant number of towns from the RCD-ML, including Isiro and Bafwasende. This fighting continued until December 2002, when a peace deal was agreed between the three warring parties, as the RCD-N and MLC were advancing on Nyamwisi's base in Beni.<sup>52</sup> However, it is unclear whether this peace deal held. It is also debatable whether the RCD-National can be counted as a viable military force, or if it is merely a front for the forces of the MLC.<sup>53</sup> In the transitional government, the RCD-N received one ministerial post, that of external trade relations, but no military districts.

*In addition to these main groups, a further significant armed group is the Union of Congolese Patriots (UPC). The UPC began as a breakaway group from the RCD-ML. The UPC is led by Thomas Lubanga, a Gegere Hema, who was minister of defence under Mbusa Nyamwisi. He spoke out against Nyamwisi's growing reliance on his own Nande ethnic group, and their ethnic cousins, the Lendu, and as a result was removed from his post. He formed the UPC in June 2002, gaining much support from the Ugandan commander James Kazini. On 6 September 2002, Uganda signed the Luanda Agreement, in which it agreed to withdraw from the Congo. The agreement also proposed the establishment of an Ituri Pacification Commission, and the downgrading of the role of the UPC to that of any militia or civil society delegation. However, the UPC refused to sign a ceasefire agreement in December 2002 and instead became allied with the RCD-Goma and Rwanda.<sup>54</sup> In addition, in February 2003 former UPC member Chief Kahwa formed the Party for Unity and Safeguarding of the Integrity of Congo (PUSIC) with other Hema dissatisfied with the UPC. According to Human Rights watch, PUSIC appears to have close links with Ugandan authorities.<sup>55</sup>*

*The involvement of Rwanda, Uganda and Zimbabwe in support of numerous armed groups is illustrated in the chart on the following page.*

# A chart showing the major countries and armed groups involved in the conflict in DRC



## 7 Joseph Kabila, the Inter-Congolese Dialogue and the Transitional Government

**L**AURENT KABILA was assassinated in Kinshasa on 16 January 2001, and his son and Army Chief, Joseph Kabila, acceded as President. Joseph Kabila has appeared to work to end the conflict in the DRC, and has cooperated with international financial institutions in reforming laws governing mining and forestry. However, it remains to be seen whether these reforms will be sufficient to change entrenched methods of patrimonial and corrupt natural resource governance.

### 7.1 The Lusaka Agreement and the Inter-Congolese Dialogue

Movement towards peace negotiations began in 1999 after a stalemate between government forces, the Ugandan-backed MLC and Rwandan-backed RCD-Goma. In July 1999, an agreement was proposed in Lusaka, Zambia, which all parties had signed by the end of August. The Lusaka Accord called for a ceasefire, the deployment of a UN peacekeeping operation (MONUC), the withdrawal of foreign troops, and voluntary disarmament and repatriation of all foreign armed groups, and the launching of an “Inter-Congolese Dialogue” to form a transitional government leading to elections.<sup>56</sup> However, the Lusaka Accord failed to secure any lasting peace as warring factions did not implement the Accord’s provisions.

After the death of his father in 2001, Joseph Kabila re-opened the Inter-Congolese Dialogue. Slow progress was made until February 2002 when the dialogue reconvened in South Africa. These talks in Sun City included representatives from the government, rebel and armed groups, political opposition and civil society. In April 2002 the dialogue almost collapsed when Joseph Kabila and the MLC signed a power-sharing agreement that left the RCD-Goma without any executive power.<sup>57</sup> Separately, but still under the Lusaka Agreement, agreements were reached between the DRC and Rwanda, and the DRC and Uganda on the withdrawal of their forces from DRC.

A combination of regional and international pressure facilitated a return to the negotiating table and by September 2002 talks in South Africa with the main rebel groups began again.<sup>58</sup> From September 2002 to March 2003 talks between factions were fraught with difficulty. The RCD-N, a smaller rebel group associated with the MLC, withdrew from the talks in November. RCD-K-ML, another small group supported by the Kabila government, also pulled out, complaining that it had become marginalized.<sup>59</sup> These two smaller groups resumed fighting each other in North Kivu in December 2002.<sup>60</sup>

Nevertheless, in November 2002, the DRC government and rebel groups met in Pretoria to negotiate a multi-party transitional government that would share power until elections were held in two years time. Negotiators finally reached agreement in March 2003 and agreed to draft a constitution and discuss military matters, including the integration of

rebel militia into a national army. President Kabila signed the new constitution in April 2003, and further agreements on the control over the armed forces were reached in June 2003. This paved the way for the naming of representatives of a new transitional government.

### 7.2 Transitional government

The transitional government was sworn into power between July and September 2003. The government is made up of Kabila government officials, the political opposition, representatives from the RCD-Goma, MLC, civil society organisations and the government-backed Mayi-Mayi. Under the new constitution, Kabila will remain the head of government until 2005, when elections will be held. There are four Vice-Presidents: Yerodia Abdoulaye Ndombasi (government), Jean-Pierre Bemba (MLC), Arther Zahidi Ngoma (political opposition and civil society) and Azarias Ruberwa Manywa (RCD-Goma).

Thirty-six cabinet ministries are similarly divided into four groups, and are supported by 25 deputy ministers. The Kabila administration heads the ministries of the interior, decentralisation and security, finance, energy and industry. The RCD-Goma has the defence, demobilisation and war veterans, economy, parastatals and telecommunications ministries, and the MLC has foreign affairs and international cooperation, planning and budget. A 500-member National Assembly and 120-member Senate complete the new government.

The transitional constitution requires the installation of a High Council of Defence that includes the president as commander-in-chief of the armed forces and representatives from the various former belligerent parties. On 5 September 2003, the new heads of the newly unified national army were sworn in, with 30 new officers from the RCD-Goma, MLC, RCD-K/-ML and Mayi-Mayi pledging not to participate in any unsanctioned military or political activities and to defend the territorial integrity of the DRC. Lt-Gen Liwanga Mata Nyamunyobo, of the armed forces of the former Kinshasa government, was named chief of staff. He will be assisted by four deputies, two of whom are Brigadier General Bahuma Ambamba of the RCD-Goma, who will be head of operations, and Brigadier General Malik Kijege of the MLC, who will be head of logistics. Major General Sylvain Mbuki of the RCD-Goma is head of ground forces, MLC’s Major General Dieudonne Amuli Bahigwa head of the navy, and Major General John Numbi of the former Kinshasa government head of the air force.<sup>61</sup>

It remains to be seen how the establishment of a unified national army and the transitional government will be managed and what effect this will have on the DRC. In particular, it is as yet unclear where effective political control over the DRC’s mining and forestry sectors rests. Further detailed research into this issue is highly recommended.

### 7.3 International Financial Institutional (IFI) involvement

The World Bank reopened its office in Kinshasa in December 2001, following its suspension of financial assistance to the DRC in 1993. The World Bank has made it clear that greater donor involvement is essential to ensure that progress with the peace process is accompanied by improvements to day-to-day living conditions. The World Bank and the IMF are the most suitable agencies to bring the necessary reforms and reconstruction about, but experience elsewhere in the world illustrates the risks inherent in not heeding past lessons.

Since 2001 some of the Bank's main initiatives have been:

- A US\$214 million “emergency economic and social reunification support” comprising a grant of US\$164 million and a US\$50-million loan. The loan is repayable in 40 years but the payments do not commence until 2013.
- The provision of technical advice on the design of new mining, forestry, and investment codes, as well as debt management, public expenditures review, public enterprises reform, and the fight against corruption.
- The Transitional Support Strategy (TSS), which supports economic reforms, rehabilitation works and provides policy advice.
- On 28 July 2003 the Bank and the IMF announced that the DRC qualified for US\$10 billion in debt relief under the enhanced HPIC initiative, and that the IDA and the IMF would provide approximately US\$1.2 billion of this, the rest to be split amongst other creditors.
- A US\$450 million Economic Recovery Credit, approved on 13 June 2002, to support economic reforms.
- A US\$454 million Emergency Multi-Sector Rehabilitation and Reconstruction Project (EMRRP), approved by the Board in July 2002. The EMRRP is part of a broader US\$1.74 billion priority program, designed with Bank assistance and supported by a broad range of donors. It includes activities in the transport, energy, water, urban and rural development, agriculture, health, education, and social protection sectors.
- A US\$50 million grant from IDA, approved by the Board in July 2001, and now fully committed. The grant provided the resources needed to pave the way for further assistance, strengthening capacity in key areas, initiating urgent rehabilitation works, and helping to tackle the HIV/AIDS epidemics.

- IDA providing US\$120 million for a DRC Demobilization, Repatriation, Resettlement and Reintegration program supported by the UN and IDA.<sup>62</sup>
- Supporting severance pay for Gécamines workers to avoid conflict, included in the Mining Sector floating tranche.<sup>62</sup>
- Private Sector Development and Competitiveness Project (PSDC) scheduled to be submitted to board 31 July 2003 to support capacity building in government to enforce a mining code, and to assist in ongoing restructuring of Gécamines.<sup>62</sup>

The Bank has also been closely involved in the formulation and revision of the Mining and Forestry Codes. In the case of forestry the Bank has played a positive role in encouraging the government to increase various forest-related taxes in a bid to deter speculators, in favour of legitimate forest industries (see forest section). Much of the Bank's efforts in rebuilding the economy have focused on the parastatal mining company Gécamines and its operations in Katanga province.

The World Bank and IMF have a particularly important role to play in promoting revenue transparency because of their technical expertise and central role in macroeconomic restructuring. The World Bank not only disburses development assistance directly but it is also involved in direct investment in the extractives sector. An internal evaluation of the World Bank Group's performance in the extractives sector in January 2003, subsequently passed to Global Witness, highlights the failure of the Bank's current engagement with the sector. It states that due to the “links between poverty and poor governance ... increased EI [extractive industry] investment is likely to lead to bad development outcomes *for many if not most of the Bank's clients* [original emphasis]”.<sup>63</sup> The report calls for “a fundamental reorientation of the Bank's work ... away from prioritising the attraction of new investment and toward capacity building and technical assistance focused on strengthening the government's capacity to maximize the benefits and minimize the risks of existing EI investment”.<sup>64</sup>

Whilst World Bank and IMF engagement in the DRC is essential, it is vital that agreed targets and benchmarks are adhered to, and that the exploitation of natural resources is only carried out in conjunction with improvements in regulatory and enforcement capacity. It is recommended that further research be conducted into the challenges of reconciling the need for investment, reform and law enforcement with on-the-ground realities.

## 8 The DRC's natural resources

### 8.1 Overview

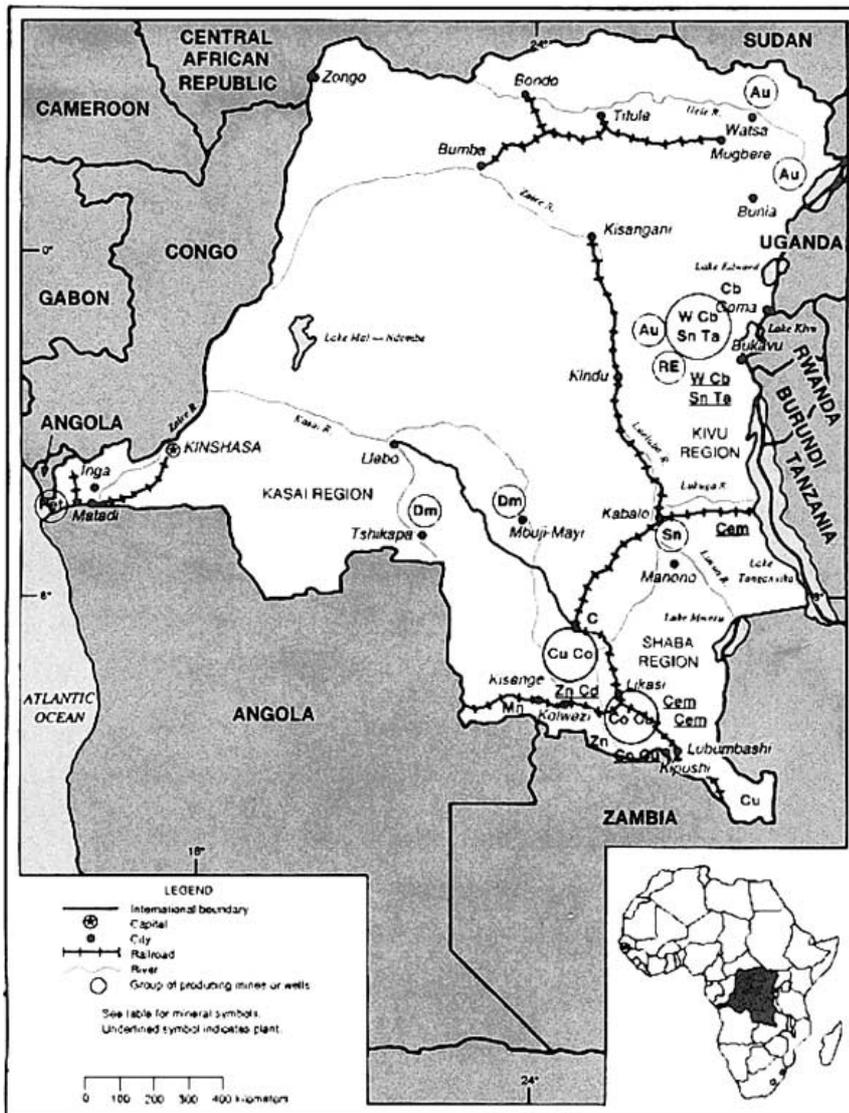
This study looks at the following natural resources in the DRC:

- Coltan and cassiterite
- Copper, cobalt, uranium, zinc and silver
- Diamonds
- Gold
- Oil and gas
- Manganese
- Lead
- Coal
- Timber

### 8.2 Natural resources and conflict in the DRC

**M**ANY COMMENTATORS have remarked that conflict in the DRC has been partly driven by the trade in natural resources. The UN Expert Panel reports on the illegal exploitation of natural resources in the DRC in April and November 2001, and in May and October 2002, all came to the clear conclusion that greed over the DRC's natural resources has played a significant role in prolonging the conflict. The first Panel report stated:

## CONGO KINSHASA



This map illustrates the location of larger deposits of copper and cobalt (Co and Cu), zinc (Zn), gold (Au), and diamonds (Dm). Cassiterite (tin) deposits are indicated by (Sn). Individual resources and more precise discussion of their location follow in sections devoted specifically to each resource.

The conflict in the Democratic Republic of the Congo has become mainly about access, control and trade of five key mineral resources: coltan, diamonds, copper, cobalt and gold. The wealth of the country is appealing and hard to resist in the context of the lawlessness and the weakness of the central authority.<sup>65</sup>

While this is true, it is important to place the plunder of the DRC's natural resources in historical, economic, political and social context. Particularly in northeast DRC, the economics of conflict are intertwined with tribal and ethnic hatred, disputes over access to land, profound social disintegration, high unemployment and poverty, as well as the involvement of different foreign rebel groups and armies from Burundi, Rwanda and Uganda. As such, it is more accurate to describe the violence in eastern DRC as being motivated by a mixture of security and economic anxiety.<sup>66</sup>

The informal economy that developed in the 1970s and 1980s, particularly in eastern DRC, became crucial to the survival of local communities after the commencement of conflict in 1998. Trade networks linking communities and towns in the east with the rest of Africa also served as highly convenient conduits for finance by local armed groups and their foreign supporters.<sup>67</sup>

Belligerents in the DRC conflict have used different economic strategies to generate revenue from the various accessible natural resources. For instance, the DRC government has raised money for its war effort through the sale of mining and forestry concessions, usually in the form of joint venture agreements between parastatal and foreign companies. The MLC, on the other hand, has raised revenues through establishing monopolies over the production and trade in commodities from its territory, including diamonds, gold and coffee.

Foreign and local armed groups have particularly targeted alluvial diamonds, gold and coltan to raise money. All three are easily exploited by artisanal methods, have high weight-to-value ratios, can be easily concealed and smuggled, and are quickly absorbed into international markets – buoyed by high consumer demand in Europe, America and South East Asia.<sup>68</sup> The lack of effective border controls and an absence of internationally effective commodity tracking regimes and enforcement mechanisms for gold, coltan and timber also make these resources easy targets.

Natural resources provide revenues both from the sale and trade of the commodities to buyers within and outside the DRC. Resources are traded for money, arms, equipment or other supplies. Control over resources also presents opportunities for raising revenues through customs and tax revenues. A direct consequence of this is that fighting has tended to focus around economically strategic trading points. In May 2002 the UN Panel of Experts reported that:

Battles have been fought over control of Buta, Isiro, Watsa, Bafwasende and Bunia, all endowed in varying degrees with deposits of gold, diamonds, coltan or cassiterite as well as stands of timber. Butembo, a major import and distribution centre where the country's second largest customs post is located, was also attacked repeatedly... Over the course of the conflict, various military groups clashed over these economically strategic areas, trading control back and forth among them.<sup>69</sup>

### 8.3 The mining sector

It is widely acknowledged that the DRC possesses Africa's richest mineral deposits of copper and cobalt, as well as abundant reserves of gold, diamonds, and coltan. However, decades of patrimony, endemic corruption, war, underinvestment in national transport and other infrastructure have fundamentally undermined the potential of the DRC's formal mining sector.

In addition to state-run (parastatal) and private mining company operations, considerable artisanal mining activities take place throughout the country. Gold, diamond, coltan and other minerals extracted by small-scale and artisanal operators are traded and exported through informal circuits. As such, the trade and production statistics provided are not wholly representative of real levels of production and trade in the DRC mining sector. In particular, post-1998 conflict-driven trade in minerals and timber has skewed official trade records.

The DRC's mining sector underwent significant changes under pressure from the World Bank and IMF in the early to mid-1990s. During 1996 and 1997 several foreign mining and exploration companies signed joint venture agreements with the state-owned mining company Gécamines to rehabilitate 20 copper-cobalt and zinc mines and processing facilities. Other parastatals targeted for joint ventures and privatisation were the gold-tin producer *Société Minière et Industrielle du Kivu* (SOMINKI), the diamond producer *Société Minière de Bakavanga* (MIBA), and gold producer *Office des Mines d'Or de Kilo-Moto* (Okimo). According to the United States Geological Service, by the end of 1997, over 100 preliminary joint venture and privatisation mining agreements were signed and 200 were pending.<sup>70</sup>

Many of the preliminary agreements were negotiated with the Mobutu government. After the accession of Laurent Kabila as President, several of these contracts were reviewed. Some of the foreign companies which were affected included Ashanti Goldfields Company Limited (over an agreement with Okimo), Banro Resource Corporation (over gold and diamond concessions in South Kivu and Maniema), American Mineral Fields (over a copper-cobalt tailings project in Katanga), and De Beers Centenary AG (relating to a contract signed for the exclusive sale of diamonds with MIBA).

The primary reason for the review of agreements in 1998 was to quickly boost revenues by selling off mining concessions in the wake of the second rebellion in August that year. Additional research into how and why these contracts were reviewed, who benefited from the subsequent re-allocation of concessions and other mining rights is recommended. Further research should also be conducted to determine the effect the new World Bank-sponsored Mining Code and Regulations has on past and future allocation of mining concessions and exploratory rights.

Section 9 provides more specific details of the main centres of production and control over the DRC's natural resources.

## 9 Production, control and trade in natural resources

**T**HIS SECTION provides information about the main centres of production, processing, trade routes, and control over the following natural resources: coltan, cobalt/copper, diamonds, gold, oil and timber. Statistical data from official trade records from the DRC and its main trading partners and neighbours are also provided for each resource.

The section also provides brief summaries of information found on other natural resources that have received little or no attention from the UN Panel of Experts, academics, NGOs, industry and media sources. Their lack of trade statistics on these resources suggests very low volumes of trade in these resources, perhaps an indication of low volumes of extraction, export or value in comparison to other resources. These resources are: bauxite, cadmium, cassiterite, coal, coffee, lead, iron ore, manganese, silver, zinc, and uranium. Summaries about cadmium, zinc, silver and uranium are contained in delineated boxes in section 10.2 (copper and cobalt), and cassiterite is outlined in section 10.1 (coltan) as these resources tend to be found in the same areas. Details of all the other “minor” resources follow in section 10.7.

### 9.1 Columbite-tantalite (Coltan)

Coltan is a mineral from which the precious metals tantalum (Ta) and columbium (Cb) – also known as niobium (Nb) – are extracted.

*Uses of coltan (see chart right)*

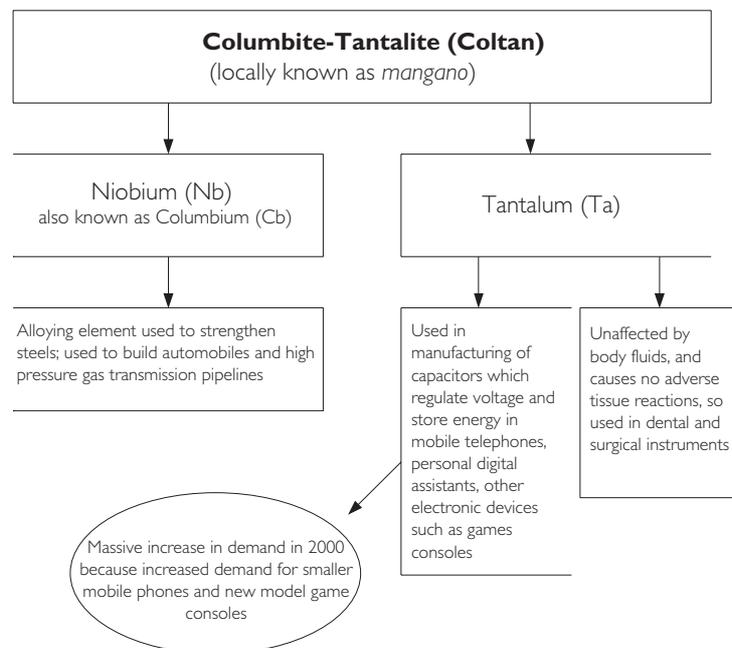
#### *Market demand for coltan*

Global consumption surged dramatically in 2000 to approximately 5,000,000 lb, a 38% increase on the previous year, principally driven by the growth in the electronics sector, such as the rise in sales of mobile phones and laptops. Prices reached their peak in November 2000 at US\$365 per pound of tantalum and the population of Kivu, in eastern DRC, was suddenly dragged into an unprecedented “gold rush for coltan”<sup>71</sup>. However, the coltan boom was short-lived and it soon became evident that the pace of growth witnessed in 2000 could not be sustained as the global economy started to slow down. Despite this, future growth expectations remain between 10 and 20% per annum and additional raw material production capacity will be required to meet such demand.

#### *Discovery of coltan*

Coltan was first discovered in the Kivu region of the DRC in 1910 by *Compagnie des Chemins de Fer du Congo Supérieur aux Grands Lacs Africains* (CFL) whilst they were building the Kindu-Kongolo railway line. However, coltan, which is often found alongside cassiterite deposits, was extracted and traded as a relatively insignificant by-product of cassiterite until the 1990s, when technological advances helped increase global demand for the mineral.<sup>72</sup>

Although Australia is currently the largest producer of tantalum, it is thought that the DRC holds the world’s largest reserves. An estimated 80% of the world’s known coltan supply is in Africa, and 80% of this is believed to be located in the DRC. Many people in the industry believe that the DRC will become the world’s leading supplier of coltan once improvements have been made to the security situation.



### Main areas of extraction

Coltan is found in abundance in the highlands near rivers and riverbeds, or in a hidden form throughout the two Kivu and Maniema provinces, in Eastern DRC. The “coltan belt” extends from Bunia to Goma, Bukavu and Kindu, with Bukavu serving as the main trading centre for the mineral. In South Kivu province, coltan is mostly exploited in forests that constitute critical habitats for biodiversity conservation and communities’ welfare, whereas in the North Kivu a larger number of deposits have been recorded on unprotected land.<sup>73</sup> Coltan has been mined for a number of years in Bunia, Kalima and Lugushwa and more recently deposits have been discovered in Masisi (North Kivu).

Under Mobutu’s rule, coltan was being mined in North Kivu and South Kivu but production waned with Mobutu’s loss of control over the eastern territories. By the time of the Rwandan genocide in 1994 and the influx of over one million refugees, mining production had virtually ceased.<sup>74</sup>

Although there have been reported sightings over the past few years of English-speaking white people with sophisticated instruments of measurement in the Kivu provinces, so far no big company has yet ventured into these areas with its own people and instruments for extensive industrial exploitation. This however may change with the current peace process.

### Extraction and processing

Coltan is generally surface mined, mostly in abandoned tin mines where the coltan can be found amidst tin slag. Kivu coltan is believed to be of high quality and easily accessible, while not requiring specialised instruments for its extraction. Since the outbreak of war in 1998, existing industrial mining concessions have been turned over to informal or artisanal mining.

Coltan is mined in eastern DRC through a fairly primitive process similar to that used to mine gold in California during the 1800s. Dozens of men work together, digging large craters in streambeds, scraping away dirt from the surface in order to get to the coltan underground. The workers then slosh water and mud around in large washtubs, allowing the coltan to settle in the bottom due to its heavy weight. A worker can produce up to one kilogram of coltan a day.<sup>75</sup>

The average Congolese worker earns US\$10 a month, while a coltan miner can make anywhere from US\$10 to US\$50 a week.<sup>76</sup> As a result of this, the past five years have seen an exodus of people towards the coltan mining areas. Many Congolese have abandoned agricultural and pastoral activities in favour of artisanal mining and children have been dropping out of school to become coltan miners. Large areas that used to grow food crops, such as Ituri and the Kivus, are now uncultivated.

### Trade routes

From 1998 to 2003, coltan was transported mainly by air, using Russian Antonovs that can carry up to 20 tons. Kavumu airport in South Kivu was occupied by small planes, which flew several times a day to the coltan-rich districts of Walikale and Mwenga in the interior, inaccessible by road.<sup>77</sup>

Prices of Congolese coltan are fixed in Kigali and Kampala. The materials are then flown to industrialised countries through Belgium and Dubai.

The Belgium airline Sabena suspended the transportation of coltan shortly after the release of the first UN report on the plunder of the DRC’s resources but a Dutch company, Martinair, subsequently replaced Sabena and was last reported to be operating twice a week between Kigali and Amsterdam<sup>78</sup>.

### Trade statistics

Raw tantalum ores and concentrates originating from the DRC, and sold by Rwandans, Ugandans and their affiliated rebel groups have been shipped to Malaysia, Germany, Switzerland, the Netherlands, Belgium, the United Kingdom, India, Pakistan, the United States and Russia.<sup>79</sup> Throughout the 1990s the United States government and US companies imported a significant amount of tantalum from Central Africa and until 2002, the US was the principal destination for the DRC’s coltan exports. However, in 2002 China became the main buyer of Congolese coltan (see below).

As Congolese coltan production has been monopolized by Rwanda, there is a strong possibility that tantalum listed in the US and Western Europe as imports from Rwanda is in fact Congolese tantalum.

Table 2: DR Congo – share in exports of coltan from Central Africa

Importing Country	1998	1999	2000	2001	2002
	Value (US\$ million, c.i.f, nominal)				
Rwanda	4	4	8	13	6
DR Congo	0.8	0	5	0.7	2
Zimbabwe	0.1	0.2	0.3	0.4	3
Congo	3	2	0.0	2	0
Burundi	2	0	3	0.0	0
Zambia	0	0	0	0.0	0.6
Others	0.4	0.8	0.5	0.0	0.8
	Weight (tonnes)				
Rwanda	256	162	261	378	349
DR Congo	131	0	173	13	63
Zimbabwe	10	28	5	14	95
Congo	175	81	1	53	0
Burundi	62	13	23	0	0
Zambia	0	0	0	0	38
Others	18	33	26	0	34

Source: World Trade Atlas, Eurostat, UN Statistical Division, national yearbooks of import statistics

Note 1: HS commodity codes – 261590\* and 26209020

Note 2: statistics given to one decimal place (value) or the nearest whole number (weight)

This table demonstrates a substantial increase, both in terms of weight and value, in coltan exports from the DRC in 2000 – during the “coltan boom” – which then decreased dramatically in 2001. However, in 2001 and 2002 Rwanda experienced a sharp increase in exports of coltan. Given the RPA’s control over coltan exploitation in eastern DRC over this period, further research is needed to ascertain whether any of the coltan listed in Rwanda’s export figures originated from the DRC.

Table 3: DRC – coltan exports

Importing Country	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
	<i>Value (US\$ million, c.i.f, nomina)</i>											
USA	1.0	3.6	0.9	0.2	0.7	0.3	0.5	0.2	0.0	4.7	0.5	0.0
China	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	2.2
Germany	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.6	0.0	0.0	0.0	0.0
	<i>Weight (tonnes)</i>											
USA	70	208	48	10	32	13	36	10	0	166	4	0
China	0	0	60	0	0	0	0	0	0	7	9	63
Germany	0	0	0	0	440	0	0	121	0	0	0	0

Source: World Trade Atlas, Eurostat, UN Statistical Division, national yearbooks of import statistics

Note 1: HS commodity codes – 261590\* and 26209020

Note 2: importing country declarations assumed to match 1:1 corresponding exports by the given supplying country

Note 3: statistics given to one decimal place (value) or the nearest whole number (weight)

From this table, it can be seen that the USA was the key importer of Congolese coltan up until 2001, when their imports dropped dramatically and in 2002, China was the only recorded importer of coltan originating from eastern DRC.

#### *Businesses involved in coltan extraction*

In the coltan exploitation cycle, some critics have suggested that multinational companies are involved in illicit access to coltan in the DRC provide instruments at Stages 1, 2 and 5 of the exploitation cycle illustrated below.<sup>80</sup>

Stage 1: **Exploration**

Stage 2: **Detection**

Stage 3: **Extraction**

Stage 4: **Transportation**

Stage 5: **Treatment** (transformation-commercialisation)

In recent years, many international corporations have imported coltan from the DRC via Rwanda for use in Europe, Asia and the United States. Once the coltan is sold onto international markets it is impossible to trace it from the end product back to the mines.

From 1976, mining activities in eastern DRC were dominated by the state-owned Societe Miniere et Industrielle de Kivu (Sominki), but the crisis of the Zairian economy in the 1980s induced Sominki to close many of its industrial operations and allow individuals to engage in artisanal mining in its concessions. This move is the origin of artisanal mining that characterises coltan exploitation in the DRC today.<sup>81</sup>

Until 1995, the artisanal miners operated in a controlled environment, but this changed with the withdrawal of Belgian capital from Sominki and the collapse of the state in eastern Zaire<sup>82</sup>. Sominki was then sold to the US firm Cluff Mining and Canadian company Banro Corporation. In 1996, Banro bought out Cluff Mining's shares and then created the Congolese subsidiary, Sakima<sup>83</sup>.

In 1998, though, Laurent Kabila annulled Banro's contract, on the grounds that it had been created during Mobutu's rule, and created a new mining company called Société Minière du Congo (Somico). Sakima's assets, including its office in Kinshasa, were then seized by Kabila's government on behalf of Somico on 31 July<sup>84</sup>.

However, on the 2 August 1998, an RCD rebellion was launched and the rebel group, with the support of the Sakima directors, took control of Sominki's concessions and requisitioned a stock of 312 tons of coltan and 190 tons of cassiterite<sup>85</sup>. Three months later, Rwandan forces and their RCD allies organised the removal and transport of Sominki's stocks to Kigali. Depending on the sources, between 2000 and 3000 tons of cassiterite were removed between November 1998 and April 1999.<sup>86</sup>

A number of Ugandan and Rwandan companies have been created to facilitate the exploitation of minerals in the DRC. On the Rwandan side, most companies dealing with Congolese coltan (such as Rwandan Metals) are owned either by the government, or by individuals very close to the government.<sup>87</sup>

#### *Political control*

Since late 1998, South Kivu and part of North Kivu have been under the control of the RCD and the Rwandan army. The Ugandan army has controlled the rest of North Kivu. Both Rwanda and Uganda have been backing various factions of the RCD and MLC throughout the period.<sup>88</sup>

Over the past five years, the system has worked in a way that the only role assigned to Congolese people is extraction and handing over to Rwandese (and sometimes Ugandan) brokers. Rwandese do not usually allow any direct dealings between Congolese and foreign buyers. The exploitation and taxation is organised centrally from an administrative entity known as the Congo Desk, located in a cell of Rwanda's Ministry of Defence.<sup>89</sup> Throughout the war, Rwanda has been benefiting directly from coltan exploitation in eastern DRC and it has been suggested that between late 1999 and late 2000 the Rwandan army alone reaped revenues of at least US\$20 million a month.<sup>90</sup>

When the RCD seized power in Kivu in August 1998, the mining sector was a complete shambles. However, instead of restructuring the infrastructure and looking for new viable management for the mines in their territory, the RCD leadership quickly started looting the remaining stocks of coltan and cassiterite with their Rwandan partners. Shortly after, the newly instated rebel government decided to collect its own taxes on mineral exports, using the institutions inherited from the Mobutu era.<sup>91</sup>

From 1998 to 2000, the RCD obliged every

trading post or *comptoir* operating in its territory to pay US\$15,000 for a license that was valid for a 12-month period. In addition, the licensed *comptoirs* had to pay a tax estimated at 8% of the total value of exports. SONEX was founded in March 1999 in Kigali by RCD-Goma and headed by Emmanuel Kamanzi, to serve as the financial arm of the organisation and to establish a pattern for the transfer of resources – primarily coltan and cassiterite – from the RCD to Kigali.<sup>92</sup> Despite these developments, the RCD still remained highly dependent on its Rwandan backers to finance its military deployment in the region.

This changed on 20 November 2000 with the establishment of the company SOMIGL, to which RCD-Goma granted a monopoly on all coltan exports from rebel held territories. The monopoly was set up to finance the war effort of the RCD-Goma and was a direct reaction to the steep rise in coltan prices.

Erik Kennes describes how the boom in coltan prices at the end of 2000, caused by a bottleneck on the world market, led foreign companies to do deals with the rebel groups in the DRC:

A temporary shortage of colombo-tantalite had to be filled by any means, including buying coltan from the network of artisanal diggers controlled by armed forces. Whenever the companies had the opportunity for a regular and steady flow of production elsewhere, they turned away from the Congo.<sup>93</sup>

SOMIGL allowed the RCD to finance its own military for the first time. Under the control of Nestor Kiyimbi, the RCD mining minister, coltan money was used to maintain a

40,000-strong RCD army. However, prices fell drastically at the end of March 2001 (bottoming out in October 2001, at less than a third of their peak) and the RCD-leadership decided to abandon the Somigl monopoly, once again liberalising the market.<sup>94</sup>

In addition to this control of coltan exploitation by the Rwandan army and the RCD, there have also been reports of Mai-Mai groups collecting taxes from coltan diggers in areas such as Ntoto in Masisi zone, North Kivu.<sup>95</sup>

### *Cassiterite (tin)*

Tin is an important commodity in international trade, but can only be mined as tin ore, not as the metal. By far the most important tin mineral is cassiterite, a naturally occurring oxide of tin.<sup>96</sup> Although most tin is obtained from mining tin ores, cassiterite is also found in association with ores of tungsten, tantalum and lead, and minimal quantities of tin are recovered as by-products of mining these metals. Compared with commercially viable deposits of copper, lead, zinc, nickel and bauxite, tin deposits are generally small. In the DRC, cassiterite is most frequently associated with coltan ore.

Tin is used to coat other metals to prevent corrosion (for example, tin cans are made from tin coated steel) and its major uses are in food packaging, culinary equipment, joining electronic components, plumbing, dental fillings and fire retardants.

Most of the world's supply of tin comes from Malaysia, Indonesia, Thailand, Brazil and Bolivia, but a significant quantity has come from the DRC in the past. Cassiterite is a long-time Kivutian product

and has been mined in eastern DRC since colonial times. Cassiterite, like coltan, was first discovered in the Kivu region of the DRC in 1910 by *Compagnie des Chemins de Fer du Congo Supérieur aux Grands Lacs Africains* (CFL) whilst they were building the Kindu-Kongolo railway line. Cassiterite, alongside coltan, is found in many parts of eastern DRC, in North Kivu, South Kivu, Katanga and Maniema provinces. Numerous tin-rich pegmatites have been identified in the Kivu and Maniema regions, although not all of them have seen industrial exploitation to date.<sup>97</sup>

In the mid-1940s, the DRC was the world's second largest producer of tin after Bolivia and the main focus of mining operations in post-colonial DRC until the mid-1990s was on cassiterite mining in the east of the country.<sup>98</sup> However, since 1989 the production of cassiterite in the DRC has been in clear decline, largely due to the collapse in world tin prices and expensive and time-consuming transport from the remote locations where it is mined.<sup>99</sup>

Traditionally, most of the extensive mining concessions in Eastern Congo were owned by Sominki, which was formed in 1976 as a result of a merger between several Belgian mining firms. Sominki's activities consisted of 80% gold mining and 20% cassiterite and coltan. When Sominki shut down many of its industrial mining operations during the crisis of the Zairian economy in the 1980s, cassiterite, as with coltan, began to be mined through artisanal means. However, during this period the Zaire Tin Company (*Compagnie Zairetain*) remained responsible for carrying out open-pit operations in the Shaba Region.

Since the outbreak of war in August 1998, most of the cassiterite concessions have reportedly sold on by RCD-Goma to Rwandese interests and a similar, but less well organised, relationship has developed in North Kivu between RCD-ML and Ugandan interests. The vast majority of cassiterite appears to have been exported, alongside coltan, via Uganda and Burundi and most commonly, via Rwanda. A highly efficient network has been set up by RCD-Goma and the Rwandan army to transport the resources by planes and trucks from eastern DRC to Kigali. As Rwanda is also a producer of cassiterite, once there it is easily "lost" amongst the country's own supplies. The 2001 Expert Panel report identified Belgian, German, Malaysian, Canadian, Tanzanian, Dutch, Russian and Indian companies as the key importers of cassiterite from the DRC via Rwanda.<sup>100</sup>

Pierre Baracystse, a mining civil engineer, alleges that up until the mid-1980s, when the price of tin on the world market fell, cassiterite was smuggled by Burundian, Congolese and Uganda smugglers, via Kampala and Bujumbura.<sup>101</sup> However, in 1985 these smugglers moved away from cassiterite and turned their attention towards more profitable gold mining activities.

In April 2001 the UN Panel of Experts estimated that between 1998 and 2000, about 1,800 trucks carrying cassiterite, timber and coffee, amongst other things, transited through Uganda.<sup>102</sup> The cassiterite is often then shipped from Mombasa and Dar es-Salaam to Europe.

Since the mid 1990s, cassiterite has become a less significant resource and with the value of coltan increasing dramatically with developments in the electronics sector, it has been treated very much as a less valuable by-product of coltan.<sup>103</sup>

## 9.2 Copper and cobalt

The DRC has vast reserves of copper (Cu) and cobalt (Co) found in sedimentary copper deposits along the Central African copperbelt which stretches along the DRC/Zambia and DRC/Angola borders in southern Katanga. The copperbelt contains 34% of the world's cobalt reserves and 10% of the world's copper reserves.<sup>104</sup> The Katanga copperbelt also has deposits of minerals associated with copper, including zinc, silver, uranium, lead and germanium. Copper and cobalt and associated minerals are generally extracted from large opencast industrial mines or quarries, or from industrial tailings dams containing copper and cobalt residues that have been accumulated over years of mining.

Cobalt is identified as a major potential source of revenue for the DRC. Cobalt is a metal used in a range of diverse industrial and military applications. The most significant use is in superalloys, which are used to make gas turbine engines.<sup>105</sup> Cobalt is extracted from copper by a process of roasting copper ores, followed by the application of an acidic solution and then electrolysis.

### *Historical development of copper/cobalt mining*

Copper was first produced in 1911 in Katanga by the UMHK, which by 1923 was the third largest producer of copper in the world.<sup>106</sup> From the 1920s onwards, copper was one of the chief export earners for both the Belgian colonial government and Mobutu. In 1967, after the introduction of the “nationalisation” programme, Gécamines was created. Gécamines took over the mines previously run by the UMHK under Mobutu's nationalisation policy. Thereafter, Gécamines contributed significantly to the state budget.<sup>107</sup>

From the 1970s onwards, Gécamines has operated in the three main areas of mineral deposits in Katanga (South, Central and West). Aside from Gécamines, the only other major copper producer during Mobutu's rule was Sodemco. However, in the early 1990s Sodemco experienced a major drop in production.<sup>108</sup>

Prior to 1978, the world's supply of cobalt was almost exclusively provided by Zaire and Zambia as a by-product of copper.<sup>109</sup> However, a sharp rise in cobalt prices in 1978 (driven by fears of supply disruptions) led to buyers finding substitutes and a subsequent drop in demand. Demand recovered in the early 1990s when cobalt started to be used in specialist applications.<sup>110</sup> However, by this stage the proportion of cobalt supplied by Zaire and Zambia had declined as more state suppliers became established. Nevertheless, the DRC remains in the top five producers of cobalt worldwide, behind Zambia, Australia, Canada and Russia.

Other minerals including cadmium, zinc and silver were extracted from Katanga from the late 1950s onwards.

### *Centres of production and processing*

The following are the main centres of production of copper and cobalt. The majority of the following mines and deposits remain under the part or whole ownership of Gécamines:

- The Big Hill (or *Scories du Terril de Lubumbashi* (STL)) copper-cobalt tailings and smelter project near Lubumbashi is run as a joint venture between US mining giant OMG, Groupe George Forrest (GGF) and Gécamines. Copper-cobalt is shipped to OMG's cobalt processing plant in Finland. This mine is also the source of the mineral germanium, a rare metal used in optical fibres, infrared lenses and telecommunication satellites.
- Congo Stars' copper-cobalt artisanal mine at Etoile near Lubumbashi and Kansuki copper-cobalt deposit east of Kolwezi, where artisanal miners have been recruited to select high-grade oxides (heterogenite) for direct shipping to processing plants in South Africa.
- The Kbolela copper-cobalt mine and Kipese cobalt-gold mines near Likasi, are owned by La *Société Minière de Kbolela et Kipese* (SMKK, a joint venture between Gécamines (40%) and Melkior Resources Inc. (60%)). Kbolela was mined by Gécamines' predecessor, UMHK, between 1939 and 1945.<sup>111</sup> However, because of limited capital resources, the project has been suspended since 2000.
- The Kakanda and Kambove copper-cobalt tailings reprocessing project was operated by a joint venture between International Panorama Resources Corp (IPR) of Canada and Gécamines. Operations were downscaled due to security concerns in 2000.
- The Kamfundwa copper-cobalt deposit was due to be developed by a joint venture between Gécamines, the Harambee Mining Corp and Swiss Sogemin, but operations have been suspended since 1999 because of security concerns.
- The underground Kamoto copper-cobalt mine and on-site processing plants near Kolwezi have been the subject of recent controversy. In 2003 a joint venture agreement was signed between Gécamines and Kinross-Forrest to refurbish the mine, despite a pre-existing agreement being in place between Kumba Natural Resources Ltd and the DRC government.<sup>112</sup> At the time of writing, the dispute between Kumba, the DRC government and Kinross-Forrest has not been resolved.
- The Kipushi copper-zinc mine near Lubumbashi was previously operated profitably from 1925 to 1993 (by Gécamines), but was placed on care-and-maintenance because of a shortage of foreign currency needed to maintain operations.<sup>113</sup> A joint venture between American Mineral Fields International and Zinc Corp. of South Africa are negotiating with Gécamines, and a feasibility study for an initial small-scale development project is being conducted.<sup>114</sup>
- The Kolwezi copper-cobalt tailings deposit is one of the world's most significant cobalt-copper tailings resources and has been the focus of several joint venture developments with Gécamines. In July 2003 American Mineral Fields negotiated the a joint venture agreement with Gécamines, and contract was ratified by the DRC cabinet in November 2003.<sup>115</sup> It is expected that once final feasibility studies have been carried out, the treatment and reclamation of the tailings will commence in 2005.<sup>116</sup>

- The Big Hill (or *Scories du Terril de Lubumbashi* (STL)) copper-cobalt tailings and smelter project near Lubumbashi is run as a joint venture between US

- The Kov copper mine remains wholly owned by Gécamines. High-grade ores from this mine was processed at Kolwezi from 1952 onwards.
- The Lonshi copper mine is owned by First Quantum Minerals Ltd.
- The Kindsenda and Musoshi copper-cobalt mines are owned by Sodimco.
- The Luiswishi cobalt mine is owned by Gécamines and L'Enterprise Generale Malta Forrest, a subsidiary of privately held George Forrest International. The mine has operated at full production since May 2003, and has an exclusive supply agreement with OMG who processes the mine's cobalt in Finland.
- The Shinkolobwe copper-cobalt mine in Katanga is also rich in uranium and germanium. See section 10.2.10 for further discussion of uranium.
- The Tenke and Fungurume copper-cobalt deposit is one of Katanga's largest potential mine sites. In May 2001, Phelps Dodge Corp. joined BHP World Exploration Inc. in an option agreement with Tenke Mining Corp and Gécamines to develop the deposits.<sup>117</sup>

There are a small number of copper-cobalt processing centres in the country. These include:

- The Kabwe copper and cobalt processing plant which was operated by Orion Mining and Exploration Ltd until 2002, when falls in copper and cobalt prices led to the plant's closure.
- The EXACO cobalt carbonate processing plant at Lubumbashi. EXACO also holds a 55% interest in the Kalumbwe-Myunga copper ore deposit in Kolwezi.<sup>118</sup>
- The Shituri copper-cobalt concentrates refinery at Likasi is owned by Gécamines but is leased to

KMC, a joint venture company created by Gécamines and Tremalt Ltd.

*Trade routes*

Most mines are situated around Lubumbashi, Likasi and Kolwezi.<sup>119</sup> Copper and other minerals extracted from these mines are mainly transported on the Katanga-based train lines outlined in section 11.4. Alternatively, minerals are also transported from mines via trucks to Zambia and beyond through the town of Sakania near the DRC/Zambian border. Studies into the informal economy conducted during the late 1990 also revealed that cobalt and other commodities were smuggled out of Zaire into Zambia through Sakania.<sup>120</sup>

The DRC exports the majority of its unprocessed copper and cobalt. Most copper and cobalt has historically been transported along one of the following three routes:

- The *Voie Nationale*, the road-rail-water route from the copperbelt to Matadi.
- The eastern route through Zambia on the Tazara railroad to Dar es Salaam in Tanzania.
- The southern route through Zambia on train lines leading to South African ports.<sup>121</sup>

*Trade statistics*

Statistics show that production of copper and cobalt has consistently outstripped other minerals found in the copperbelt since the 1960s. However, there was a dramatic fall in levels of production of copper, cobalt and zinc since the early 1990s – a consequence of the political and economic crisis experienced during Mobutu's final years as President and the mismanagement of state copper and cobalt mining operations. Graph 1 (below) illustrates the dramatic fall in copper, cobalt and zinc production that took place after a boom in production in the mid-1980s.

Graph 1: Evolution of mine production in Katanga in tonnes (t)

Source: Groupe d'intellectuels de Kolwezi (1996) *La Gécamines: Quel Avenir? Reflexions sur la privatisation*, p. 43

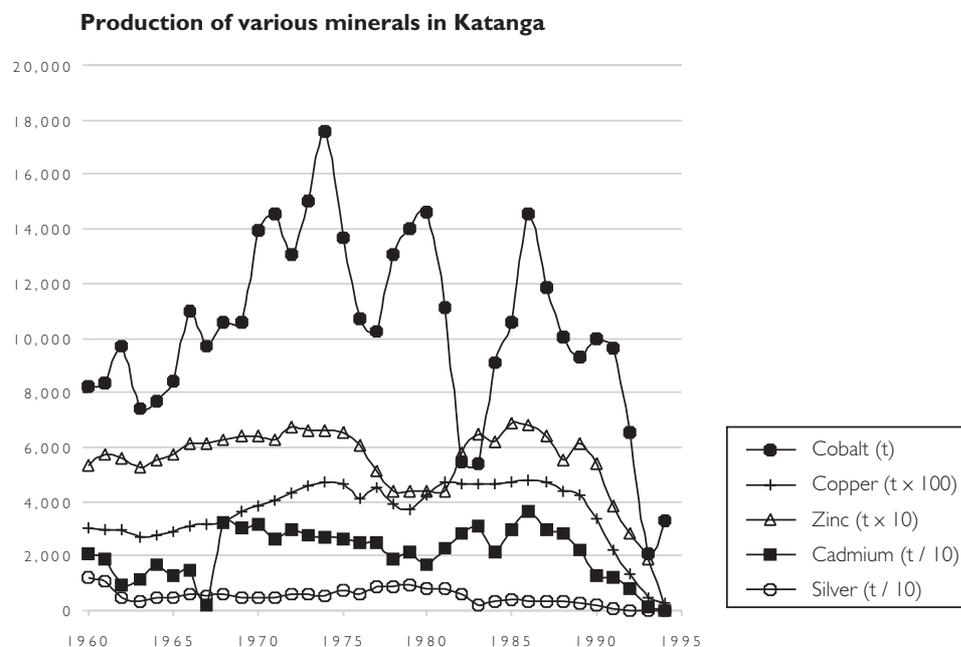


Table 4 shows that after 1995 cobalt production recovered slightly, with noticeable rises occurring in 1997 and 1998 – coinciding with Laurent Kabila's accession as President.

Table 4: DRC Cobalt mine production

Year	Cobalt produced (metric tons, estimate)
1994	2,000
1995	1,650
1996	2,000
1997	3,500
1998	5,000
1999	6,000
2000	7,000
2001	4,700
2002	4,000

Source: Shedd, K. (2002) "Cobalt – 2002." *United States Geological Service*, p. 20.17, Table 8.

In 2001 the DRC had the capacity to refine 17,000 metric tons of cobalt per annum – the largest capacity of any country. (Compare: Finland (10,000 metric tons), Zambia (9,000 metric tons), Russia (8,000 metric tons).)<sup>122</sup> However, as Table 5 demonstrates, the DRC's level of refined cobalt production is well below capacity.

Table 5: DRC Cobalt refinery production

Year	Refined cobalt metals (metric tons; excludes production of cobalt in white alloy, matte, and slag that would require further refining)
1997	2,808
1998	4,490
1999	5,180
2000	4,320
2001	4,071
2002	n/a
2003	N/a

Source: Shedd, K. (2002) "Cobalt – 2001." *United States Geological Service*, p.20.18, Table 9.

From the end of 2001 through most of 2002 cobalt prices were stuck at a general level of US\$6-7/lb – one of the worst ever years for cobalt. Prices have recovered slightly in 2003, and are currently at the US\$8 – 9/lb range.

The DRC's output of cobalt in terms of volume has remained steady over the four years since 1999. However, the unit price of cobalt has fallen since 2000, and with it the level of revenue earned by the DRC has declined. However, as at June 2003, the DRC's copper and cobalt output was stagnant at just 1,095 tons and 400 tons per month.<sup>123</sup>

Table 6: Cobalt– exports from Central Africa in 2002 (value and weight, by supplying country)

Exporting Country	1999	2000	2001	2002
	Value (US\$ million, c.i.f, nominal)			
Zambia	125	96	79	70
<b>DRC</b>	84	87	56	35
Congo (Bz)	33	90	30	10
Tanzania	4	6	6	9
Others	1	7	6	7
	Weight (thousand tonnes)			
Zambia	3.9	3.5	4.1	4.5
<b>DRC</b>	3.1	3.8	3.2	3.3
Congo (Bz)	1.2	3.6	1.8	0.7
Tanzania	0.1	0.2	0.3	0.6
Others	0.0	0.3	0.3	0.5
	Unit price (US\$/kg, c.i.f, nominal)			
Zambia	32	28	19	16
<b>DRC</b>	27	23	17	11
Congo (Bz)	28	25	16	14
Tanzania	28	26	20	15
Others	31	26	21	15

Source: World Trade Atlas, Eurostat, UN Statistical Division, national yearbook of import statistics

Note 1: HS commodity code – 8105

Note 2: statistics given to the nearest whole number

Despite comparatively low levels of production of refined copper, the DRC remains the second largest supplier of copper from Africa after Zambia.

Table 7: Copper (refined) – exports from Central Africa in 2002

Exporting Country	1999	2000	2001	2002
	Value (US\$ million, c.i.f, nominal)			
Zambia	192	200	222	189
<b>DRC</b>	4	5	17	10
Congo (Bz)	8	7	3	5
Tanzania	7	12	4	2
Zimbabwe	12	4	4	1
	Weight (thousand tonnes)			
Zambia	121	108	128	115
<b>DRC</b>	10	3	10	7
Congo (Bz)	8	4	2	4
Tanzania	5	6	2	1
Zimbabwe	8	2	2	1

Source: World Trade Atlas

Note 1: HS commodity code – 7403

Note 2: statistics given to the nearest whole number

Table 8: DR Congo – refined copper exports

Importing Country	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
	Value (US\$ million, c.i.f, nominal)											
Belgium	328	244	51	7	2	0	0	0	2	1	0	1
Italy	37	20	3	3	6	1	7	2	1	3	9	4
USA	2	5	30	0	0	0	0	0	1	0	4	0
Germany	87	16	5	0	2	0	0	0	1	0	0	0
Others	24	16	11	16	16	15	7	4	1	1	5	7
	Weight (thousand tonnes)											
Belgium	142	108	27	4	1	0	0	0	1	0	0	1
Italy	14	9	11	1	2	0	3	1	0	2	5	2
USA	1	2	15	0	0	0	0	0	7	0	2	0
Germany	37	7	3	0	1	0	0	0	0	0	0	0
Others	10	8	5	7	5	6	3	3	1	1	3	6

Source: World Trade Atlas, Eurostat, UN Statistical Division, national yearbooks of import statistics

Note 1: HS commodity code – 7403

Note 2: importing country declarations assumed to match 1:1 corresponding exports by the given supplying country

Note 3: statistics given to the nearest whole number

Belgium and Italy are currently the main importers of the DRC's refined copper, as Table 8 illustrates. The table also shows clearly the dramatic fall in volumes of copper exported after 1992. In 1991 Belgium imported 142,000 tonnes of refined copper. By 1993 the volume dropped to 27,000 tonnes, and in 1994 a mere 4,000 tonnes were imported. Between 1996 and 1998, and 2000 and 2001 Belgium imported no DRC copper.

Since 1996, the total average c.i.f value of imports of DRC refined copper has been approximately US\$8.5 million per year. This is a small fraction of the total value in 1991 of US\$478 million.

These statistics indicate that, with appropriate investment and fiscal controls, and if there are international market developments, the DRC's copper/cobalt sector has the potential to be a large export money-earner for the DRC government.

#### Political control

The Katanga copperbelt has remained under government control throughout the current conflict. However, according to the Expert Panel reports, Zimbabwe has benefited from preferential treatment in the allocation of mining concessions and other business opportunities in Katanga as payment for the military assistance Zimbabwe provided the government from 1998.<sup>124</sup> From 1998 until 2001, the majority of Zimbabwean troops were located in the Katanga and Kasai regions.<sup>125</sup>

Zimbabwean influence has also been prominent in the management of Gécamines. For instance, the Zimbabwean businessman Billy Rautenbach was appointed Managing Director of Gécamines in 1998 at the request of President Laurent Kabila.<sup>126</sup> The UN Panel reported that during Mr Rautenbach's tenure Gécamines paid bonuses to Zimbabwean military forces.<sup>127</sup> In response, however, Mr Rautenbach has denied any involvement in the payment of Zimbabwean soldiers.<sup>128</sup>

Mr Rautenbach was replaced by Belgian businessman George Forrest as Managing Director of Gécamines in November 1999 (until August 2001). Mr

Rautenbach has continued to play a role in the DRC's mining sector since leaving Gécamines. In 2001 Mr Rautenbach's company, Ridgpointe International, was granted mining rights to Gécamines concessions at Shinkolobwe.<sup>129</sup>

The first UN Expert Panel reported that Mr Rautenbach was linked to Mr John Bredenkamp.<sup>130</sup> The Panel stated that in 2001 Mr Rautenbach, Mr Bredenkamp and the Speaker of the House of Zimbabwe and chairman of Zanu-PF, Mr Munangwana, met with President Laurent Kabila to negotiate a contract over the Kambove-Kakanda copper-cobalt Gécamines concession in Katanga two weeks before the President was assassinated.<sup>131</sup> However, Mr Rautenbach has stated that the Government of Zimbabwe has never had any interest or benefit from the activities of Ridgpointe in DRC.<sup>132</sup>

Mr Bredenkamp controls Tremalt Ltd, which owns 80% of the joint venture company Kababankola Mining Company (KMC) with Gécamines. KMC operates the Kababankola copper-cobalt mine – one of Gécamines richest holdings. According to the UN Panel of Experts, KMC profits are split between the DRC Government (34%), Zimbabwe (34%) and Tremalt (32%).<sup>133</sup> The Panel also claimed that Tremalt Ltd procured equipment for ZDF and the Congolese Armed Forces (FAC), the cost of which it deducts from their share of KMC profits.<sup>134</sup> In response to the Panel reports, Tremalt Ltd., Mr John Bredenkamp and KMC have stated that “the role of the Zimbabwean and DRC Governments in the conclusion of the KMC joint venture was consistent with the provisions of the 1998 Inter Governmental Accord between those two parties.”<sup>135</sup>

#### Copper/cobalt mining outlook

The country's vast copper and cobalt deposits could be significant sources of future revenue for the DRC government. Gécamines continues to be a major source of income for the government, but this does not stem from the production of copper, cobalt and associated minerals as it had done during the 1960s.

Rather, since the late 1990s, revenue has mainly been derived from the payments given by foreign mining companies for prospective joint venture concession agreements with Gécamines. In 2001 the UN Panel of Experts reported:

The amount of the payment is one of the primary considerations for the cash-strapped Government in granting concessions. As a result, unsustainable and environmentally hazardous mining operations currently characterize Gécamines' copper and cobalt mining activities. The future of what was once the giant of the country's economy appears bleak.<sup>136</sup>

Foreign investment in the DRC, and the involvement of reputable foreign companies, is essential for the development of the DRC economy. Foreign mining companies becoming involved in the DRC's copperbelt face several major challenges. First, low global cobalt and copper prices do not bode well for the development of extractive industries based around these minerals in the DRC. Cobalt in particular has experienced a steady increase in world production since 1993. Between 1993 and 2000, world demand for cobalt increased, particularly as a result for high demand for rechargeable batteries and growth in cobalt consumption in Asia. Despite this growth, however, the overall trend in prices has been downward since 1995 because supply is growing at a faster rate than demand. It is expected that if supply continues to increase at a faster rate than demand, downward pressure on prices will continue.<sup>137</sup>

Wary of its reputation for instability and corruption, foreign mining companies have been reluctant to invest in the DRC. Those who do look to invest in the country often experience difficulties in raising sufficient capital to proceed with operations. Others are wary of the "shifting of goalposts" experienced in the late 1990s when several mining concessions were cancelled by Laurent Kabila's government.<sup>138</sup> The war also forced the suspension of many mining and mineral exploration projects.

Global Witness recommends that further research be conducted into the joint-venture mining deals that have been struck since 1998, with particular focus on how agreements have been reached under the new mining code and its regulations. Future research should also examine the relationship between the new transitional government ministries and the allocation of mining concessions; governmental capacity to enforce code and regulations at regional and local levels; understanding of degrees of "leakage" and corruption activities in the mining sector and an investigation of Zimbabwe's current influence in copper/cobalt sector.

### *Cadmium*

Cadmium is produced mainly as a by-product from mining, smelting, and refining ores of zinc, and to a lesser degree, lead and copper. About three-fourths of cadmium is used in NiCd batteries; the remaining one-fourth is used for pigments, coatings and plating, and as stabilisers for plastics. The DRC has never been a major exporter of cadmium, and no DRC-specific information about this mineral was found during research.

### *Silver*

Silver has been used for thousands of years as ornaments and utensils, for trade, and as the basis for

many monetary systems. Silver has many industrial applications, such as in mirrors, electrical and electronic products, and photography, which is the largest single end use of silver. Silver is mined in approximately 56 countries, with the largest silver reserves being found in the US, Canada, Mexico, Peru, and China. Silver is usually associated with lead, copper, zinc or gold.

In the DRC, silver is found alongside copper in Dikulushi mine, in Katanga near the DRC/Zambian border. Dikulushi has been described as one of the world's highest grade unexploited copper silver ore bodies and is owned by the Australian mining company, Anvil Mining NL.<sup>139</sup> The deteriorating security situation led Anvil to halt work in 1998, but following talks with Joseph Kabila's government in 2001, Anvil carried out a feasibility study and secured funding from RMB Resources Ltd, part of South Africa's Rand Merchant Bank Group, for the development of this mine. Drilled resources at Dikulushi are estimated to contain 266 g/t silver and 1.9 m/t grading 8.6% copper. Output steadily increased in 2002 and latest figures show that from January to March 2003, Dikulushi copper-silver mine produced 185 g/t silver and 8.33% copper.<sup>140</sup>

### *Zinc*

Approximately 75% of zinc is used as metal, mainly as a coating to protect iron and steel from corrosion and as an alloying metal to make bronze and brass. The remaining 25% is used as zinc compounds, mainly by the rubber, chemical, paint and agricultural industries.<sup>141</sup>

Zinc is produced in 40 countries, the leading producers being China, Australia, Peru, Canada and the US. The mineral usually occurs in association with copper or lead or both.

In the DRC, zinc is found in the copperbelt, stretching from Kolwezi to Lubumbashi, in Katanga Province. There are two zinc mines in the area – the Kipushi underground zinc-copper mine, located 30 km southwest of Lubumbashi, adjacent to the Zambian border and the Kolwezi zinc mine, also located in south Katanga.

The Kipushi mine operated profitably from 1925 until 1993, when it was placed on "care and maintenance" because of insufficient foreign exchange to maintain operations.<sup>142</sup> Both mines are jointly owned by Gécamines and American Mineral Fields, who are currently working on the redevelopment of the Kipushi mine. Although zinc is produced as a by-product of copper, zinc reserves in Kipushi are substantial and the mine is expected to produce primarily zinc in the near future.

### *Uranium*

Uranium deposits are found in the Shinkolobwe copper mine (also known as the Kasolo mine) near Lakasi in Katanga. This mine was operated by UMHK from 1915 until 1960. In 1939, the Congo supplied uranium from the Shinkolobwe mine to the United States. It is reported that this uranium was used in the Hiroshima and Nagasaki bombs.<sup>142a</sup> The uranium was also supplied to a "research" nuclear reactor built by the Belgians in Kinshasa in 1958 as part of US President Eisenhower's Atoms for Peace Programme.

The mine was officially closed in the early 1960s after the mine flooded. There have been, however,

reports that uranium from the mine has been extracted and sold since 1965. In 2002 the Guardian newspaper reported that Libya was supplied uranium from the mine by Mobutu.<sup>143</sup> In 1998 there were reports that the Laurent Kabila Government granted a mining concession near Shinkolobwe to the Democratic People's Republic of Korea in exchange for the training of DRC troops. The DRC government later denied any such deal was made.<sup>144</sup>

Like other copperbelt mines, the Shinkolobwe mine is located in an area that has remained under government control since 1998. In 2002 the Panel reported that tight security around the mine, currently owned by Gécamines and Billy Rautenbach's company Ridgepointe International,

was controlled by Zimbabwean troops.<sup>145</sup> In his response to the UN Panel, Mr Rautenbach stated that the Government of Zimbabwe has never had any interest or benefit from the activities of Ridgepointe in DRC.<sup>146</sup>

Since 2002, the DRC government has been negotiating with the United States for experts to remove uranium from the reactor in Kinshasa and the Shinkolobwe mine. However, in March 2004, continued artisanal mining in Shinkolobwe was reported.<sup>146a</sup> Compounds mined from Shinkolobwe are passed to Indian, Pakistani, Chinese, and South Korean smelter operators for smelting in Likasi or for direct export.<sup>147</sup>

### 9.3 Diamonds

The existence of a long-standing informal economy and well-established diamond smuggling networks mean that official government statistics do not give an accurate picture of the revenue raised by diamonds in the DRC as a whole. The problem was compounded by the control various rebel and armed groups held over large diamond producing areas since 1998. All through central Africa, diamonds are one of the most easily obtainable sources of revenue for armed belligerents and criminal networks. Their small size makes them easy to smuggle; they have a relatively constant and an internationally recognised price; and have a higher value-to-weight ratio than almost any other natural resource in the DRC.

The DRC is a member of the Kimberley Process (KP), having been involved since the negotiation stage. However, it remains to be seen whether the provisions of the KP will be implemented, monitored and enforced. Aside from the difficulties in controlling the trade in diamonds from rebel-held areas in eastern DRC, the government itself faces enormous challenges in ending endemic corruption.

#### *Historical development of DRC's diamond industry*

The first Congolese diamond was discovered in 1907 in Kasai province.<sup>148</sup> In the same year, *Société Internationale Forestière et Minière du Congo* (Forminière) started mining diamonds in the Congo.<sup>149</sup> Soon after, geological surveys revealed that other deposits of diamonds were also located further east in Mbuji-Mayi and within ten years, Mbuji-Mayi had become the diamond capital of the Congo. By 1929, the Belgian Congo was the world's second largest diamonds producer after South Africa.<sup>150</sup>

In the 1960s Mobutu set up MIBA, a state diamond mining company intended to run the major mining concessions in Mbuji-Mayi. MIBA provided the bulk of diamonds for export from the DRC until 1982, when the diamond trade was liberalised.

Prior to 1982 artisanal miners could only sell diamonds within official mining zones where De Beers had held a diamond purchasing and exporting monopoly. This led to smuggling of diamonds out of these zones for sale on the informal economy. Liberalisation allowed individual Congolese miners to apply for diamond mining and export licenses. Thus from 1982, all Congolese were permitted to possess and transport diamonds, but the law required that

diamonds to be sold to licensed exporting companies located in the DRC's main cities.<sup>151</sup> Mobutu's aim was to restrict smuggling and redirect trade through official government-controlled channels.

The impact of liberalisation was two-fold. First, the policy encouraged an influx of artisanal miners and middlemen to the diamond fields. Second, the new regulations created a hierarchy of entrepreneurs who profited from prospecting and from the movement of diamonds from mining zones to markets. To avoid this new tier of bureaucracy, people continued to smuggle diamonds out of the country through pre-established informal networks.

Rather than preventing smuggling, within one year artisanal mining outstripped MIBA's output and the informal diamond economy was strengthened to the detriment of the formal economy. Mobutu's mismanagement of the national economy, the predation by his elite network of corrupt officials on MIBA, and his failure to re-invest profits into the formal mining sector meant that by 1985 diamonds accounted for only 11% of export earnings in Zaire. By the early 1990s, diamond production in the DRC had dropped to 6.5 million carats per annum from an output of 8 million in 1980 and 12 million in the 1970s.<sup>152</sup>

During the ADFL advance on Kinshasa in 1996, Laurent Kabila allocated diamond concessions and export contracts as a way of raising revenues and building political support. In February 1998, in an attempt to raise diamond revenues, Kabila changed the law so that all *comptoirs* would have to pay a bond of US\$25,000 and all taxes in advance.<sup>153</sup> Then in January 1999, the Ministry of Mines cancelled all diamond purchasing permits, banned all foreigners from mining areas, and attempted to move the diamond trade to Kinshasa for tighter control. Only Congolese were allowed to re-apply for permits.<sup>153</sup> At the same time, there was a ban on foreign currency and diamond sales were no longer allowed to be made in the preferred currency of US dollars.

Despite these measures, the government was unable to halt the decline in revenues from diamond sales and exports. The revocation of *comptoir* licences may have led to the diamond trade being driven even further into the informal economy. Diamond purchases more than halved: from June 1997-December 1998 they stood at US\$599 million and

between January 1999–July 2000 they were only US\$291.1 million. Trade in artisanal diamonds also decreased by 20%, and the average value per carat decreased by 32%, in the same period.<sup>154</sup>

#### *Diamond deposits*

Diamonds are either found in volcanic rock known as kimberlite, which requires mining and is an expensive, capital-intensive operation, or in alluvial deposits when kimberlite disintegrates and the diamonds are carried by river systems and deposited over wide areas including sea-beds. About 74 percent of diamonds are mined from kimberlite formations. The remaining 26 percent of global production comes from alluvial deposits.<sup>155</sup> Consequently, alluvial diamonds can be extracted from riverbeds and alluvial plains, typically at minimal cost. They can also be easily mined in war zones, requiring little or no equipment, but are scarcer; making it difficult to calculate reserves.

The DRC has long been recognised as the leading source of industrial diamonds of alluvial origin, principally from the Western Kasai Province. Areas of kimberlite diamonds in the DRC follow a broad, but disjointed band from southwestern, to northern and northeastern parts of the country. Certain areas of the country are particularly diamond-rich, and house the principal mines. These areas are: Mbuji-Mayi (Kasai Oriental), Tshikapa (Kasai Occidental), and Kisangani (Orientale province, since 1987).<sup>156</sup>

The map below illustrates the location of major diamond deposits. Large deposits are also found in Orientale province (Bafwasende and Watsa), Equateur province (in Gbadolite), Kasai Oriental province (Lodja), Bandundu (Tembo), Maniema (in Punia and Lubutu) and Tshela and Luozi in Lower Congo Bas. Diamonds have also recently been found in Orientale province, which shares a border with Uganda.<sup>157</sup>

#### *Artisanal diamond mining*

Artisanal diamond mining typically involves the extraction of gems by small operators in thousands of small mines across the DRC. Diamonds mined in this

sector generally accumulate in local catchments. *Negociants* (middlemen) buy the diamonds from artisanal miners, amass them into larger parcels and then resell them. Small negociants sell to larger negociants, who then possibly sell again to yet larger negociants. Foreign *comptoirs* generally wait for the negociants to accumulate these larger parcels of diamonds before purchasing. As a result, the diamonds move with negociants from the local mines to larger trading centres such as Tshikapa, where foreign *comptoirs* operate. However, if these *comptoirs* offer low prices, the negociants may take their diamonds to Kinshasa, or choose to sell to foreigners in Angola or Congo-Brazzaville. Negociants usually operate in a dollar economy.

Once the diamonds are sold to a *comptoir* they are exported to Antwerp or elsewhere.<sup>158</sup> Once the diamonds are on the international diamond market, they are then sold on to different dealers to be cut and polished around the globe.

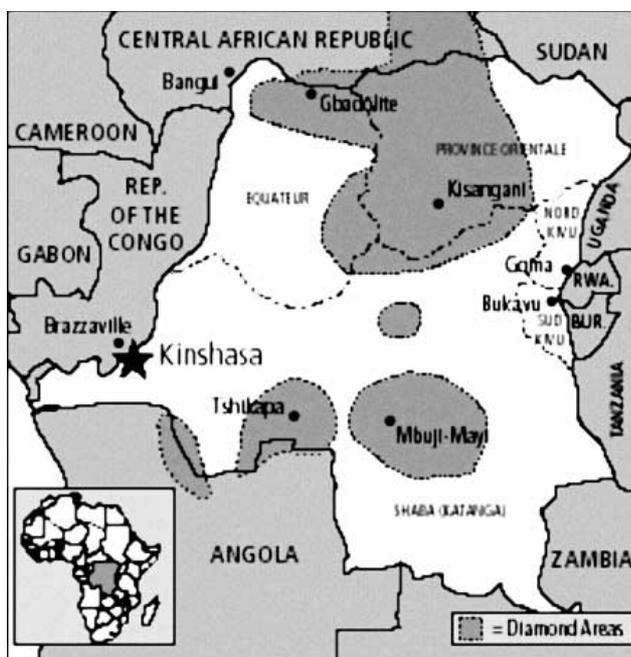
#### *Commercial diamond production and trade*

The colonial mining company *Forminière* mined diamonds in Tshikapa from 1913, and around the same time BCK discovered richer diamond fields at Bécéke.<sup>159</sup> From the 1930s onwards the Congo provided more than half of the world's industrial diamonds.<sup>160</sup>

Today, DRC diamonds are mined on a commercial level by the state-owned mining companies MIBA (*La Société Minière de Bakwanga*) and Sengamines. The only official centre of production for commercial diamond mining is at Mbuji-Mayi in Kasai Oriental. In addition to commercial level mining, tens of thousands of artisanal miners operate throughout diamond-rich areas in DRC.

The DRC's rough diamonds are officially authorised for export by the new CEEC (Centre for Evaluation, Expert Analysis and Certification of Precious Minerals), set up to stem systemic smuggling and corruption.<sup>161</sup> Diamonds are valued by the *Société Internationale de Diamants Congolais* (SIDC), which was awarded the Government Diamond Valuer contract in June 2003.<sup>162</sup>

Source: Hard Currency, Dietrich, C.



Major commercial players in diamond mining in DRC today include MIBA, Sengamines and De Beers.

MIBA is one of the world largest producers of industrial diamonds, with an output of 9 million carats per year.<sup>163</sup> 97% of their production is industrial diamonds, while only 3% is gems.<sup>164</sup> Since 1999 however, official production of gem (or near-gem) quality stones has been progressively decreasing; by 2001, they represented only 1.8% of total production.<sup>165</sup>

MIBA has other problems to grapple with, including illegal artisanal digging in its concession areas. The UN Expert Panel in 2001 reported that much of MIBA's production was being embezzled by its own officials, perhaps even state officials.<sup>166</sup> The Panel also reported that MIBA had made several payments in favour of companies selling ammunition and weapons to provide arms for the ADFL.<sup>167</sup> More recently, a report prepared by private company Overseas Security Services (OSS) alleges "systematic undervaluation and theft of diamonds" costing MIBA tens of millions annually.<sup>168</sup> In August 2003 there were also reports of over US\$10 million going "missing" from MIBA. In response, MIBA officials stated that the diamonds had not disappeared, but had been exported to Antwerp.<sup>169</sup>

De Beers has been engaged in DRC. Under Mobutu, except for a brief period in the early 1980s De Beers held an exclusive three to five year marketing contract with MIBA to purchase all of the state owned company's official output. This continued until Mobutu was ousted and Laurent Kabila put an end to the De Beers monopoly in 1997.

Currently, De Beers retains a 20% stake in the diamond trading company Sibeka, with the other 80% of the shares held by Belgian giant Umicore. Sibeka, in turn, owns 20% of MIBA.

Sengamines was granted the commercial rights to operate a diamond concession at Mbuji-Mayi in the Kasai Oriental that were previously operated by MIBA.<sup>170</sup> The concessions granted to Sengamines are two of the richest diamond deposits in the DRC. The company recently invested US\$110 million in its concession 25 miles southwest of Mbuji-Mayi, which is estimated to have one of the world's largest kimberlite deposits, worth around US\$2 billion.<sup>171</sup>

#### *DRC illicit and conflict diamonds*

Battles between rebel groups have been a common occurrence in areas rich in diamond deposits and consequently control over these areas has been very fluid.

Uganda and Rwanda, and the rebel groups they support, were active in diamond rich areas since 1998. Uganda had particularly had a noticeable presence around Kisangani and other mining areas in Orientale, whereas the RPA and associated rebel groups have had control over Maniema and a significant part of Kasai.<sup>172</sup> Shifting alliances and on-going conflict makes accurately mapping the current state of control over diamond producing areas is difficult in the absence of field research.

Since 1998 diamonds have been routinely smuggled through the North Ubangi area (Equateur Province), which forms the base of the Ugandan-backed MLC rebel group, and through the town of Kisangani (Orientale Province), effectively under RPA control. To avoid RCD-Goma and RPA taxes,

diamonds from MLC/Uganda-held areas were flown directly to Entebbe and Kampala. Data from Ugandan diamond exports confirm this trend: no diamond exports were reported between 1987 and 1996, however between 1997 and 2000, diamond exports were valued at up to US\$1.7 million per annum.<sup>173</sup> According to official figures, both Rwanda and Uganda, countries with no diamonds of their own, exported US\$3.7 million in Belgian diamond imports in 2001.<sup>174</sup>

According to some sources, in 2000 alone nearly 85% of the DRC's diamond production (US\$854 million, out of a total US\$1.02 billion) was illegally smuggled out of the country.<sup>175</sup>

#### *International trade routes*

The main diamond trading centres are Antwerp, London, New York, Lucerne, Johannesburg, Dubai, Tel Aviv and Bombay. By far the largest is Antwerp with 80% of the world's diamonds passing through the city. Over 88% of CEEC certified DRC diamonds are sent to Antwerp. The remainder went to Tel-Aviv and Dubai.<sup>176</sup> The US is the largest retailer in the world of cut and polished diamonds (followed by Asia-Pacific), and India, Thailand and China are the world's largest diamond cutting and polishing centres.<sup>177</sup>

Neighbouring countries have had a natural, long-standing relationship with the flows of trade in illicit and legitimate diamonds. In particular, Congo-Brazzaville has been revealed to be an important conduit for DRC diamonds.

Brazzaville and Kinshasa have had a historically close relationship in terms of the flow of diamonds. Their close proximity across the Congo River makes them natural trading centres. Diamond counters were established in the 1930s in Brazzaville and later these counters exported Congo-Kinshasa diamonds to European gem-cutters and jewellers. Despite having minimal diamond deposits, Congo Brazzaville then became a major world-scale exporter. Following the liberalisation of the diamond sector in 1982, diamond taxes were gradually reduced in Congo-Kinshasa. However, taxes were even lower across the river in Brazzaville – which increased diamond smuggling to Brazzaville.

Today, diamonds continue to move easily between Kinshasa and Brazzaville.<sup>178</sup> Brazzaville is now one of many transit countries that Congolese conflict and illicit diamonds use en route to Antwerp and elsewhere; Statistics compiled during the 1990s show the Republic of Congo exporting diamonds far beyond its production capacity, mainly to Antwerp. The discrepancy between the figures shows that the low export duties and loose regulations in Republic of Congo has siphoned off gems from its diamond producing neighbours who attempt to exert stricter controls over their trade.<sup>179</sup>

The MLC routinely used Bangui in the CAR as the *arrière-base* for their diamond, coffee and arms deals until the overthrow of President Patasse in 2003.<sup>180</sup>

Diamonds are also transported to South Africa by air, from where they are sent to Belgium, the Netherlands, Israel and the UK.<sup>181</sup> Bujumbura, Lusaka, Harare, Kampala, Kigali and Dar es Salaam also provide licences and onward permits for DRC diamonds,<sup>182</sup> and small diamond centres in Mauritius and India receive DRC diamonds.<sup>183</sup>

*Trade statistics*

The UN Expert Panel reported that an estimated one third of the total rough diamond production of the DRC (around US\$300 million) is smuggled to the Central African Republic, and to Congo-Brazzaville, due to the lower export duties there.<sup>184</sup> Table 9 illustrates Partnership Africa Canada's estimates of the value of exports of illicit diamonds since 1995. In 2000 alone an estimated US\$288 million of illicit diamonds were exported from the DRC.

The Republic of Congo does not produce any of its own diamonds and is a major hub for the trafficking of diamonds from other African countries. As such, it is difficult to determine with precision the value and weight of illicit DRC diamonds that have been exported from Brazzaville and passed off as Republic of Congo diamonds.

Table 9: Diamond Exports in relation to Total DRC Exports (millions of US\$)

Year	1995	1996	1997	1998	1999	2000
Total Official Exports (all commodities)	1562	1546	1448	1442	807	792
Official Diamond Exports	331	347	385	451	290	240
Estimated Illicit Diamond Exports	400	417	462	541	348	288
Official Diamond Exports (% of Exports)	21%	22%	27%	31%	36%	30%
Official Imports	870	1089	769	1102	568	596
Balance (exports minus imports)	692	457	679	320	239	196

Source: Partnership Africa Canada<sup>185</sup>

Table 10: Belgian Rough Diamond Imports from the DRC and Republic of Congo Diamond Exports 1995-2001 by Carats and US\$

Year	DRC		Republic of the Congo	
	Carats	US\$	Carats	US\$
1995	18,644,000	646,190,000	4,469,000	407,890,000
1996	15,184,000	667,090,000	7,572,000	612,560,000
1997	15,845,000	553,230,000	Unknown	Unknown
1998	20,887,000	614,529,000	526,000	41,212,000
1999	23,403,000	758,751,000	71,000	14,639,000
2000	17,044,000	629,857,000	2,845,000	116,585,000
2001	19,636,953	495,308,805	5,409,820	223,848,014

Source: Partnership Africa Canada<sup>186</sup>

Table 11: DRC – diamond exports (value and weight, by importing country)

Importing Country	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
	Value (US\$ million, c.i.f, nominal)											
Belgium	408	300	384	625	658	653	540	606	758	722	751	981
USA	80	90	50	40	9	93	94	76	77	11	11	25
South Africa	0	1	72	86	79	102	96	0	0	0	0	0
Others	2	2	1	1	1	8	2	1	0	0	0	0
Weight (million carats)												
Belgium	14	10	10	13	19	15	16	21	23	20	25	31
USA	2.8	1.4	1.3	0.6	1.0	0.7	0.3	0.2	0.1	0.0	0.0	0.1
South Africa	0.0	0.0	0.0	0.0	0.0	0.6	0.3	0.0	0.0	0.0	0.0	0.0
Others	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0

Source: World Trade Atlas, Eurostat, UN Statistical Division, national yearbooks of import statistics

Note 1: HS commodity code – 7102

Note 2: importing country declarations assumed to match 1:1 corresponding exports by the given supplying country

Note 3: statistics are given to the nearest whole number (value and weights above three million carats) otherwise one decimal place

Note 4: 5 carats = 1 gram

## 9.4 Gold

Gold was first discovered in the DRC in Namoya in 1931. From 1931 until 1947, alluvial gold mining took place here. In 1951 the method of extraction changed to open pit mining, but nine years later the Namoya mine was closed when Belgian expatriates left the Congo after Independence. Since Independence, only a few other gold exploration and mining projects have begun, and the majority of these have been confined to the east and northeast of the country.<sup>187</sup> Nevertheless, gold has been identified as one of the more promising natural resources that could provide the country with revenues.

The following are the main official gold mining concessions:

- The Kamituga-Mobale mine in South Kivu. This underground gold mine was flooded in 1997 and has been inoperative ever since.
- The Kilo and Moto mining concessions near Bunia in Ituri (Orientale) are considered highly prospective, but hostilities have prevented any official exploration or mining. There are 10 old gold mines in the concession area, the largest of which are the Agbarabo and Gorumbwa underground mines. The Agbarabo mine was closed in 1982 due to flooding. Gorumbwa has been open since 1955 and is still in operation today. Barrick has acquired exploration titles from the state-owned *Office des Mines d'or de Kilomoto* (OKIMO).
- The Kipushi copper/zinc mine in Katanga also has gold deposits. This is operated by American Mineral Fields and Gécamines.

Exploratory work is being conducted by the South African mining junior Gold Fields in Kinsenge in Katanga.<sup>188</sup> Other gold exploration is being conducted by Banro Resource Corporation in South Kivu and Maniema at Lugushwa, Kamituga, Twangiza and Namoya.<sup>189</sup> The mining company Sominki extracted small amounts of gold from Kamituga, Lugusha and Namoya until 1998.<sup>190</sup> AngloGold and Barrick Gold have embarked on a large exploratory survey and feasibility study of the northeast of the DRC along the Sudanese and Ugandan borders. Progress has been severely hampered by armed conflict in this part of the country.<sup>191</sup>

In 1997 Banro Resource Corporation acquired 93% of *Société Aurifère du Kivu et du Maniema* (Sakima), the DRC government holding the remaining 7%. Sakima is the new name for Sominki, a company created in 1976 bringing together nine other companies. Sakima has 47 mining concessions in South Kivu and Maniema mainly in the 180-km long Namoya-Twangiza gold belt. Banro's concessions were expropriated on 31 July 1998 by the Kabila government. Banro subsequently commenced proceedings and sought compensation from the DRC Government at the International Centre for the Settlement of Investment Disputes. The government of Joseph Kabila handed back the concessions to Banro in 2003.<sup>192</sup>

The majority of gold production in the DRC comes from the northeast of the country – an area currently partly controlled by rebel groups not party to the transitional government. In the last days of

Mobutu there were attempts at privatising gold mines through joint venture agreements similar to those negotiated for cobalt and copper. However, in the wake of the 1996 war, industrial mining came to a virtual standstill.<sup>193</sup> Artisanal gold mining has always been more widespread than industrial exploitation in the DRC.<sup>194</sup> In northeast Congo most gold is extracted by artisanal and small-scale mining operations, often under the control of armed belligerents or their business associates. Consequently, official gold production and export statistics do not present an accurate picture of the levels of extraction and value of gold originating from the DRC.

In the Kivus, the gold (and diamond) mining areas of Kandole, Bengamisa and Lakutu have all been the centre of prolonged confrontation between the Rwandan-backed RCD-Goma and its supporting Mai-Mai groups against the RCD-ML, allied in turn with the Ugandan-backed MLC.<sup>195</sup> There are also gold deposits in northeast Katanga and Maniema, providing further impetus for the establishment of military control over these regions. In these areas both RCD-Goma and RPA have a long-established presence and appear to be expanding their control of territory, assets, tax revenues and mineral wealth. Frequently battles have occurred between the RCD-Goma and RPA against government-supported Mai-Mai groups near gold and coltan mining areas in Shabunda and Kitutu near Kamituga. The UN Panel reported in May 2002 that “various Mayi-Mayi groups have adopted a strategy of attacking the locations of mining activities controlled by RCD-Goma or RPA, in an effort to either wrest control of them or disrupt them and make them less profitable.”<sup>196</sup>

While artisanal gold mining has taken place throughout gold-rich areas of the Kivus, Maniema and Ituri for decades, the 1996 and 1998 wars brought new levels of military authority and disruption to the lives of many local small-scale miners. The Panel of Experts documented that some communities have been forcibly displaced in order for militia and military forces to take control over resource-rich areas. Local artisanal miners have been evicted from small-scale mine sites by armed belligerents in order to establish monopolies over gold (and coltan) production.<sup>197</sup> In Equateur province, local artisanal miners have been recruited by MLC and used as “convincible labour” to mine gold and diamonds.<sup>198</sup> Young men have also been recruited for Uganda-backed MLC's “army of development” to mine gold in the Bondo region of Equateur.<sup>199</sup>

Ugandan soldiers have also been directly involved in mining Congolese gold. The first Panel of Experts documented examples of Ugandan soldiers mining for gold near Watsa in Orientale.<sup>200</sup> In 2001 in the Kilo-Moto district, Ugandan commanders and some of the soldiers who guarded the different entry points of the mining areas allowed and encouraged the local population to mine. The Expert Panel reported that an average 2,000 people mined for gold in the concession six days a week, delivering an average of 2 kg of gold daily to the person heading the network in the district.<sup>201</sup> The Expert Panel also reported that Ugandan generals and colonels manipulated conflict between Hema and Lendu militia in Orientale in order to maintain control over the gold-rich area of

Nyaleki.<sup>202</sup> In October 2002, the Panel further reported that before the UPDF officially withdrew from the Congo in February 2002, Ugandan forces attacked villagers in Geti with the financial backing of Hema businessmen in Bunia. The motivation for the attack was to establish control over nearby gold deposits.<sup>203</sup>

The Panel supported allegations of Uganda's involvement in the exploitation of the DRC's gold by documenting dramatic increases in the amount of gold exported from Uganda since 1998 (see Table 12 below). The Government of Uganda argued that increases were due to the liberalisation of gold sales in 1993. However, it is likely that the increase in exports (in excess of statistics of national gold production) are evidence that gold mined by artisanal miners in northeast DRC is smuggled into Kampala by UPDF elements or their associates, and then sold on international markets.<sup>204</sup>

#### *Official trade statistics*

It is difficult to estimate accurately the weight and value of gold that is being traded by rebel groups in eastern DRC. In April 2001 UN Expert Panel analysed the RCD-Goma's mining statistics and came to the conclusion that in 1999 on average 60 kg of gold per month was extracted from the area controlled by RCD. In 2000, levels of extraction were up to 100 kilograms per month.<sup>205</sup>

This table shows that the DRC's gold exports increased dramatically in both weight and value in 2000 and continued to increase in 2001, though dropped in 2002. The statistics also support the Panel report's view that Uganda has been involved in the exploitation of Congolese gold in the past several years as the value of their exports increased from zero in 2001 to US\$4 in 2002, at the same time as the DRC's exports were falling.

Table 12: Uganda's mineral exports and production, 1994–2000

Year	Gold exports (tonnes)	Gold Production (tonnes)
1994	0.22	0.0016
1995	3.09	0.0015
1996	5.07	0.003
1997	6.82	0.0064
1998	5.03	0.0084
1999	11.45	0.0047
2000 (January to October)	10.83	0.0044

Source: S/2001/357, page 20 (taken from Ugandan Ministry of Energy and Mineral Development statistics)

Table 13: DRC – share in exports of gold from Central Africa

Exporting Country	1998	1999	2000	2001	2002
	Value (US\$ million, c.i.f, nominal)				
DRC	7	2	7	8	5
Burundi	0	10	1	1	1
Congo	1	4	2	0	1
Tanzania	0	0	0	0	96
Uganda	0	4	1	0	4
Zimbabwe	64	51	35	16	2
Others	0	0	2	0	0
	Weight (tonnes)				
DRC	1.0	0.3	0.8	0.9	0.6
Burundi	0.0	1.2	0.2	0.1	0.1
Congo	0.1	0.4	0.2	0.0	0.1
Tanzania	0.0	0.0	0.0	0.0	18.0
Uganda	0.0	0.5	0.1	0.0	0.6
Zimbabwe	6.5	5.4	3.8	1.9	0.2
Others	0.0	0.0	0.2	0.0	0.0

Source: World Trade Atlas

Note 1: HS commodity codes – 7108

Note 2: the charts below exclude Tanzania's exports (to the UK) of a large quantity of gold in 2002

Note 3: statistics given to the nearest whole number (value) and one decimal place (weight)

Table 14: DRC – gold exports (value and weight, by importing country)

Importing Country	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
	Value (US\$ million, c.i.f, nominal)											
Belgium	1.4	3	1.2	2	5	0.4	9	7	1.9	0.6	0.1	0.7
UK	0	0.7	13	9	0.6	0	0	0	0.3	0	0	1.2
USA	0	0	0	0	0	0	0	0	0	7	8	3
Others	0	0	0	0	0	0.4	0	0	0	0	0	0
	Weight (tonnes)											
Belgium	0.1	0.1	0.1	0.2	0.4	0.0	1.0	1.0	0.2	0.1	0.0	0.1
UK	0.0	0.1	1.3	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.9	0.4
Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: World Trade Atlas, Eurostat, UN Statistical Division

Note 1: HS commodity codes – 7108

Note 2: importing country declarations assumed to match 1:1 corresponding exports by the given supplying country

Note 3: statistics given to one decimal place (weight, and value less than US\$1.5 million but greater than zero, otherwise to the nearest whole number)

### Trade routes

Gold from RCD-Goma-held territory is sold on international markets through Dar es Salaam via RCD-Goma's financial and logistical network. The Expert Panel reported that the RCD-Goma covered shipments of gold and diamonds with official-looking DRC government documents indicating approval had been issued in Kinshasa and Lubumbashi. Gold sold by the RCD-Goma in exchange for cash or armaments was reported to be shipped through Dar es Salaam international airport to buyers in Sri Lanka. It appeared that this resource-trading network operated without the direct intervention of Rwandan officials.<sup>206</sup>

Gold is also taken from the Kivus to Bujumbura in Burundi through Bukavu, Fizi and Uvira either via

airplane or by boat across Lake Tanganyika.<sup>207</sup> As was discussed earlier, these trade routes were historically used by Arab slave traders during the 19<sup>th</sup> Century, as well as by the informal economy networks that developed during Mobutu's rule. The Panel has reported that in Bujumbura, "gold dealers from countries such as Senegal, Pakistan and Greece buy this smuggled gold, which they subsequently transport personally to Europe and other destinations."<sup>208</sup> However, it has been observed that while Burundi was by far the most important point of transit for gold exports from the DRC in the early 1990s, this role has recently been taken over by Uganda, the turning point being the imposition of a regional trade embargo against Burundi in 1997.<sup>209</sup>

## 9.5 Oil and gas

Exploration for oil and gas in the DRC began shortly after independence along the 22 kilometres of coastline at the estuary of the Congo River. The DRC first produced oil in 1976 when its offshore fields (near the port of Matadi and Angola's oil enclave of Cabinda) came on stream. The oil industry has consistently been an important contributor to the national economy.

However, the disruption caused by the current conflict, state collapse under Mobutu as well as years of corruption and political instability have resulted in a difficult operating environment for foreign companies working in the DRC. For instance, in the early 1990s Chevron Texaco was forced to abandon its on-shore facilities due to social unrest and military instability.

The DRC has one oil refinery in Muanda that currently operates at 50% of its capacity. The refinery is operated by *Société Congo-Italienne de Raffinage* (SOCIR) (formerly the *Société Zairo-Italienne de Raffinage* (SOZIR)). Oil is transported to the refinery via barge from the Ango-Ango depot at Matadi. Petroleum products destined for use within the DRC are pumped via a pipeline from Matadi to Kinshasa, and then transported by river barges to Mbandaka, Bumba and Kisangani and further distributed from these points by road or rail. In the eastern part of Congo there is a scarcity of tanker trucks since many have been trapped or abandoned in Rwanda and Burundi as a result of the continuing political turmoil.<sup>210</sup>

Chevron Texaco produces 70% of the DRC's crude oil.<sup>211</sup> Given that Chevron Texaco's average production in 2001 was 8,900 barrels per day, the quantity of crude oil that the DRC exports is in the same order as the country's crude oil production.<sup>212</sup>

### Relationship between conflict and oil

As the DRC's crude oil is produced mainly from offshore rigs in government-held Bas Congo, the 1996 and 1998 conflicts have not had a direct impact on oil installations. However, in the initial stages of the 1998 conflict, Angola established a joint venture for distribution and retail sales of DRC fuel and petroleum products. Sonangol-Congo is the most prominent feature of Angola's commercial activities in the DRC following its military intervention in aid of President Laurent-Désiré Kabila.<sup>213</sup> The first UN Panel Report stated that the DRC and Angolan governments have also signed a letter of intent to

jointly exploit the oil of their coasts "when peace returns to the region".<sup>214</sup>

The discovery of oil in Lake Albert and the commencement of exploratory activities by Heritage Oil of Canada have potentially exacerbated tensions in Ituri. While it is not clear whether oil will be able to be extracted from the region, it has been reported that contracts have been signed between Ugandan officers and Congolese politicians in the region. Fighting has also spread to areas where the discovery of oil is expected.<sup>215</sup> The Pole Institute has described the situation thus:

The possibility that the world's most capital-intensive extractive industries may enter one of the world's most complex conflict areas radically changes prospects of economic reconstruction. Business and investment opportunities in the region may be transformed – however, by enhancing the economic value of disputed territories and by straining already tense political situations, political and military rivalries may be exacerbated. The intensification of war in Ituri... in which at least one of the parties concerned has linked directly to oil interests, appears as a warning signal.<sup>216</sup>

### Trade statistics

Table 15 (see over) illustrates that the United States is the DRC's main trading partner in oil. The table also shows that there was a considerable drop in the value of oil exported in 1998 – perhaps a consequence of the re-commencement of hostilities between Laurent Kabila and Ugandan and Rwandan-backed rebels in 1998.

### Gas

There are reserves of natural gas in the Kivu region in the DRC that have yet to be exploited. Prior to the commencement of hostilities in 1998, there had been regional energy co-operation agreements signed between Congo and Rwanda. The DRC signed a joint venture agreement with Rwanda for the exploitation and marketing of methane gas found in Lake Kivu forming the *Société Internationale d'Exploitation, de Transport et de Commercialisation du Gaz Méthane du Lac Kivu* (SOCIGAZ). However, current political instability in the region has placed these co-operation agreements in abeyance.<sup>217</sup> The impact of the existence of gas reserves on the current conflict is unknown.

Table 15: DRC – crude oil exports (value and weight by importing country)

Importing Country	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
	Value (US\$ million, c.i.f, nominal)											
USA	167	111	128	107	127	124	159	70	102	168	114	110
France	0	0	0	0	0	0	0	0	1	12	0	32
Spain	0	6	0	6	11	0	0	0	0	0	0	23
Others	15	13	6	4	5	33	6	0	0	0	0	27
Weight (million tonne)												
USA	1.2	0.9	1.1	1.0	1.1	0.9	1.2	0.8	0.9	0.9	0.7	0.6
France	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2
Spain	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Others	0.1	0.1	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.1

Source: World Trade Atlas, Eurostat, UN Statistical Division, national yearbooks of import statistics

Note 1: HS commodity code – 2709

Note 2: importing country declarations assumed to match 1:1 corresponding exports by the given supplying country

Note 3: statistics are given to the nearest whole number (value) or one decimal place (weight)

Note 4: 7.2 barrels = 1 tonne; 1 barrel = 157 litres

## 9.6 Timber

Forests covers 135,110,000 ha of the DRC's land area<sup>218</sup> making these not only the largest forest reserves in Africa, but second only to the Amazon. Forest types include evergreen, swamp and montane, all of which contain valuable timber species.

Approximately 40% of DRC's forests are under government control, with the remaining 60% in rebel-held territory.<sup>219</sup> As with other resources, timber exploitation during the war largely followed geo-political divisions: rebel-held territory in the northeast and northwest, and government held territory south of a line running roughly from Pweto to Mbandaka.

Although commercial logging has been known in some areas for the past century, export-oriented industrial logging began around 1970.<sup>220</sup>

### Concession System

Concessions maps supplied by the Ministry of Environment's forest inventory and mapping service SPIAF (*Service Permanent d'Inventaire et d'Amenagement Forestiers*), whilst a valuable source of information, have been hand drawn (there is no computerised system) and it is likely that they are inaccurate and incomplete. Predominant companies include SIFORCO, SOFORMA, SCIBOIS, SICOBOIS, AGRIPRO and BBC, which together comprise over 5.2 million ha, around half the total active concessions.<sup>220</sup>

During the recent period of conflict and instability 44 million ha of concessions were allocated, only 6 million ha of which were in the hands of companies deemed as reputable (by the World Bank), leaving 38 million ha in the hands of speculators (presumably companies the World Bank deemed unlikely to engage in sustainable forest management).<sup>221</sup>

In late 2002 Global Witness was informed that the government, under World Bank pressure, embarked on a strategy to reduce the concession area held by speculators. The government imposed a moratorium on those concessions in transition between filing for a concession, and being granted a temporary license,

which brought 22 million ha back under government control, but still left 16 million ha that had already been allocated as 25-year concessions to speculators.<sup>221</sup>

In order to encourage speculators to relinquish inactive concession areas, the government proposed an increase in the surface tax from US\$0.14 per 100 ha to US\$0.50 per 100 ha which would, for example, increase the annual cost of a 200,000 ha concession from US\$280 to US\$100,000. This resulted in an immediate inundation of complaints from the private sector, prompting the World Bank to suggest a graded introduction of the new tax: US\$0.25 in 2003, rising to US\$0.50 in 2004. The World Bank hopes this will result in bringing back the remaining 16 million ha, releasing a total area of 54 million ha for reallocation under the new Forest Code.<sup>221</sup>

Other than domestic consumption, the bulk of harvested timber is exported as logs as the DRC's processing capacity is far outstripped by potential supply; there is only one plywood mill.

### The effect of war on the timber industry

The civil war virtually closed down commercial logging industry as various rebel groups not only controlled the best forests, but looted or destroyed the remaining infrastructure of the timber industry. The main transport artery, the Congo river, was also controlled by rebel groups (although the port of Matadi remained in government hands). Elsewhere the country's dilapidated road system hindered or prevented any large-scale movements. Those concessions that remained in government areas continued to operate, but at a reduced level, not least due to significantly reduced demand in the domestic timber market. In eastern DRC large amounts of timber were exported from areas under Rwandan and Ugandan control, and this continues at a reduced level. Much of this timber is destined for the Ugandan and Kenyan markets, with some making it onto the international market, reaching Germany and Italy in particular.

### *Post-conflict risks*

A recent report by ARD, commissioned by US AID, stated that peace may signal the start of an assault on Africa's last great timber reserves.<sup>222</sup>

The recommencement of Siforco's operations in Equateur in 2002, a rebel-held area, with endorsement from the World Bank amongst others, is an example of prematurely kick-starting the economy in an area that has no regulatory or fiscal controls. Industrial scale logging in such an area under current conditions would almost certainly be the precursor to unsustainable and uncontrolled logging.

Similar logging activity is gaining momentum elsewhere, although the government still has a very limited capacity to regulate forestry practices. The scale of the regulatory challenge faced in the DRC is tremendous, especially considering that other countries in the region, like Cameroon, continue to have significant forest management and enforcement problems despite many years of peace and millions of dollars of international development assistance for their forest sectors.

### *The Northeast*

There is a strong perception amongst the diplomatic community in Kinshasa, that logging in the northeast is small-scale artisanal production and of little significance.<sup>223</sup> This is far from the truth; timber exploitation in the region has taken three main forms.

1. There are two companies which have seemingly sufficient infrastructure and capitalisation to harvest, process and transport significant amounts of timber: ENRA, which has operated legitimately in the region since 1969, and Dara Forest, who operate without permission from Kinshasa but cooperate closely with the RCD-ML rebel group in Beni.<sup>224</sup>
2. The *permis de coupes* system, whereby individuals obtain cutting permits, from the local authorities.<sup>225</sup> Permit holders sell timber directly to buyers, often the UPDF, to transport directly into Uganda, and also to middlemen who sell it on to the UPDF and to local processing facilities.
3. Anarchic exploitation, whereby a range of actors including rebel and UPDF soldiers, and civilians, cut timber wherever they can, including in ENRA's designated concession and from national parks including Virunga.

In all of these cases exploitation has been controlled by the rebel groups, notably RCD-ML and RCD-N, who raise taxes on it. The General Manager of ENRA noted that the company has paid its taxes regularly, virtually without interruption, starting in the Mobutu era and to every subsequent faction that has controlled the area. This system survives primarily because the tax collectors remain the same; it is just the administration that changes.<sup>224</sup>

The first report of the UN Panel of Experts, issued in 2001, stated that on "the basis of eyewitness accounts, satellite images, key actors' acknowledgements" it was clear that timber extraction in Orientale Province was directly related to the presence of the Ugandan military.<sup>226</sup> During the period of Ugandan occupation, the UPDF controlled all imports and exports, with senior officers personally profiting from the exploitation of resources, primarily timber, coltan and ivory.

The usual *modus operandi* was that the UPDF officer in charge of a particular area, for example Beni or Butembo, would control the resource trafficking and transport from that area. Although the occupying forces have withdrawn, it is likely that the business networks developed during the occupation remain largely intact. Beni and Butembo are supplied from Uganda with general goods that arrive by road in containers.<sup>224</sup> The majority of these containers leave full of timber (and other goods and contraband including ivory), on which the UPDF levied a tax of around US\$10 per m<sup>3</sup>. Air transport was used as a conduit for conflict timber in Kisangani when the Ugandans controlled that area. Many of the incoming supply planes, owned by senior Ugandan political and business figures, returned to Uganda loaded with afrormosia, iroko and possibly sapele timber that was destined for the prestige flooring markets in Germany and Italy. This seemingly improbable trade was made possible by both the high prices of high-grade timber, and the relatively low freight costs charged for the return flight. One commentator in Kampala noted that Entebbe military airport was colloquially known as the largest forest in Uganda because so much timber came out of it.<sup>227</sup>

In northeastern DRC itself there are no statistics documenting the scale of the trade, but without exception people interviewed by Global Witness in late 2002 described forest destruction through exploitation as widespread and "devastating". ENRA estimate that two-thirds of their concession has been seriously degraded. In addition, movements of IDPs have also destroyed large forest areas. Reports suggest that during peak exploitation timber prices halved in Uganda, indicating an extremely significant trade.<sup>224</sup>

### *Equateur Province and the Northwest*

The war closed down the legitimate timber industry in the northwest of the DRC, resulting in a complete halt in industrial-level exploitation. MLC rebels and others seized timber stockpiles belonging to companies including Siforco and Saffois, and smuggled them to the Central African Republic via river systems.<sup>228</sup> Logging was curtailed because rebels destroyed or looted logging equipment, fuel shortages prevented the operation of machinery, and the Congo River, the main route for exporting timber, was closed to all traffic and in any event ran through government-held territory before reaching the sea.

In the lead-up to the establishment of a transitional government there has been pressure to restart logging in order to revive economic activity in the northwest. Siforco has begun to operate again near Bumba and is paying taxes both to the Kinshasa government and the MLC.<sup>229</sup>

### *National parks: Virunga case study*

Virunga National Park straddles the Uganda-DRC border, and has suffered due to settlement, forest exploitation, poaching and the impact of refugees.<sup>230</sup> The UPDF organized and facilitated the exploitation of timber within the park. In July 2001, for example, 1250 m<sup>3</sup> of timber exports were recorded at Kasindi border point, on the fringes of the park. Despite the fact that the official origins of the timber varied, park officials have stated that much of this timber was cut within the park.<sup>231</sup> Moreover, according to numerous sources, officially recorded exports at Customs points

are under-declared by as much as 100%. The park guards are powerless to intervene, as they were disarmed in 1996 on the outbreak of war.

Two senior UPDF officers ordered a number of Ugandan nationals from their own respective ethnic groups, the Konzo and the Hema, to settle on the Congolese side of Virunga-Nord. The Konzo still live in Uganda but have commenced cultivation in the park, commuting across the border. The Hema represent a more serious problem. The estimated 500 families and their 2,800 cows, pose a very severe risk to the integrity of the park. There are between 1,000 and 2,000 Ugandan rebels belonging to the ADF (Allied Democratic Front) and NALU (National Army for the Liberation of Uganda) groups. Facing these problems, management of the park is nearly impossible, and much of the park has been severely impacted.<sup>231</sup>

#### *Government-held territory*

Limited research suggests that the timber industry in government-held territory has continued, although its circumstances have changed. In many areas, small-scale operators, both legal and illicit (some are presumably in possession of annual cutting permits), have been provided with funds and equipment by large concession holders and other timber industry operators to continue to provide raw materials for the processing industry in and around Kinshasa.<sup>232</sup>

Legitimate timber companies with concessions in government-held territory have been affected by the war, but not too seriously.<sup>233</sup> There are two notable effects. Firstly, some companies have had to alter sources of supply as rebels overtook existing sources. Secondly, the domestic timber market has sharply declined because potential customers do not have the

money to buy timber from legal sources. This has rendered much of the industry dependent on the export market. This probably means that domestic supply largely uses illegal, and therefore cheaper, sources of timber.<sup>232</sup>

#### *Conflict timber in government-held areas – the Zimbabwe connection*

Global Witness and the UN's Expert Panels have previously reported that since 1998 companies linked to the Zimbabwean army have entered into potentially enormous logging deals with the Kinshasa government and with non-state actors. The largest of these deals saw Socebo (the corporate vehicle created through a ZDF/Congolese joint venture) receive four concessions in the Katanga region totalling around one million ha, with a potential to increase its coverage to a staggering 33 million ha.<sup>234</sup> Socebo is a subsidiary of Cosleg, itself a joint venture between Sengamines and Operation Sovereign Legitimacy (OSLEG), which is largely controlled by the Zimbabwean military and Comiex-Congo.

However, apart from the Katanga concessions, it doesn't appear that the Socebo deal has resulted in many logging operations. According to SPIAF, Socebo is at a virtual standstill, as it seems many of the concession areas were devoid of commercially viable timber stocks. Moreover, SPIAF have no record of an official Socebo concession, indicating that this deal was done outside official state structures.<sup>219</sup> In mid-late 2002 it was reported that Socebo was trying to sell off small stockpiles, just before the withdrawal of Zimbabwean troops.<sup>235</sup> This contrasts with the fact that in 2002 Socebo claimed to be producing 11,000 m<sup>3</sup> of timber per month from Katanga; Global Witness has been unable to verify these figures.

Table 16: DRC – timber exports (value and RWE volume, by importing country)

Importing Country	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
	Value (US\$ million, c.i.f, nominal)											
Portugal	16	19	18	26	37	30	22	25	10	10	11	11
Italy	22	16	11	14	16	13	7	6	5	3	3	3
UK	5	5	8	12	11	11	5	2	1	0	0	
Germany	12	10	7	10	12	7	5	4	2	2	1	2
France	3	5	5	10	8	6	9	8	3	4	2	3
Belgium	2	3	4	6	5	8	7	6	2	2	4	7
Others	5	8	5	7	10	10	7	3	2	1	1	1
	Roundwood equivalent volume (million m <sup>3</sup> )											
Portugal	52	59	57	78	105	93	90	77	34	44	43	43
Italy	53	36	27	31	32	28	17	11	10	6	5	6
UK	12	11	19	26	22	31	13	4	2	0	0	0
Germany	27	19	17	23	24	17	14	9	5	8	2	5
France	8	13	14	25	20	18	27	24	10	16	7	10
Belgium	5	6	9	15	10	19	19	15	7	5	12	18
Others	14	21	23	17	28	24	21	11	4	5	2	2

Source: World Trade Atlas, Eurostat, UN Statistical Division, national yearbooks of import statistics

Note 1: HS commodity code – 44

Note 2: importing country declarations assumed to match 1:1 corresponding exports by the given supplying country

Note 3: roundwood equivalent volume is determined by multiplying wood volume by a standard conversion factor e.g. 1.8 (sawn wood)

Note 4: the density of the timber exported from the DRC is assumed to be 1.5 m<sup>3</sup> per tonne

Note 5: estimates based on weight or value have been made where volume data appears to be anomalous

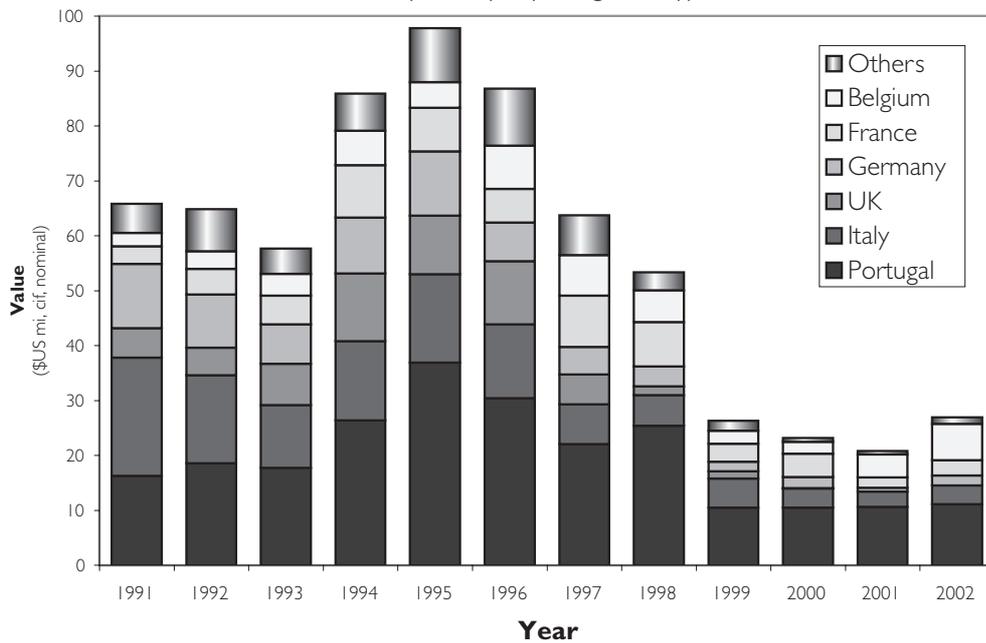
Note 6: statistics given to the nearest whole number

Logging in Katanga province has previously been carried out by the Zimbabwean military in cooperation with SAB Congo (a Socebo joint venture). In August 2002, the *Timber Trades Journal* wrote that several containers of hardwood were being exported per month to Europe from the SAB Congo operations in Katanga.<sup>236</sup>

*Trade statistics*

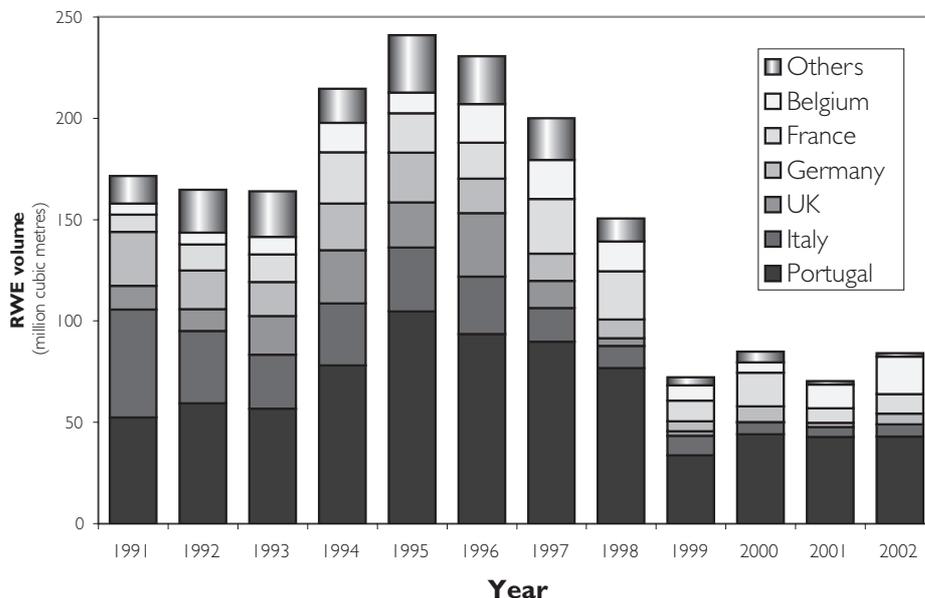
The recorded export volumes confirm that the recent conflict suppressed timber exploitation and exports, primarily because much of the forest was in contested and/or rebel-occupied territory, and the main transport artery, the Congo river, was closed to export traffic. Although some timber exports from eastern DRC are recorded at some Ugandan border points, all available evidence suggests that significant exports from this region go unrecorded.

**DR Congo – timber exports**  
(value, by importing country)



Note: based 1:1 on declared import statistics  
Source: World Trade Atlas, UN Statistical Division, national yearbooks of import statistics

**DR Congo – timber exports**  
(roundwood equivalent volume, by importing country)



Note: based 1:1 on declared import statistics and converted to estimate roundwood equivalent volume  
Source: World Trade Atlas, UN Statistical Division, national yearbooks of import statistics

## 9.7 “Minor” Resources

### *Coal*

Very little information on coal was found during our desk-based research, despite coal frequently being mentioned in lists of the DRC’s main natural resources.

Geological surveys show that there are coal deposits in Katanga. In 1995, the US Geological Service reported that there was a coal mine in operation at Luena, southeast of Kamina. However, coal production from the Luena Mine was significantly reduced as a result of ethnic conflicts in Shaba and the reduced demand from Gécamines’ plants.

It is likely that coal, like copper and cobalt extracted in Katanga, would be exported via truck and train south into Zambia. However, we were unable to establish whether coal is still being extracted from Luena, or where any coal would be processed. Similarly, coal is not featured in recent trade statistics gathered from the DRC.

### *Lead*

Although lead appears on several geological maps of the DRC, and a number of documents list lead among the many minerals found in the east of the country, we found no further information available on this resource.

The maps suggest that lead may be located alongside zinc in mines in southern Katanga, in particular in Kipushi mine near Lubumbashi. However, the owners of the mine, American Mineral Fields, only refer to zinc and copper and AME Research<sup>237</sup> do not have any lead mines listed in the DRC.

### *Iron Ore*

No information on the extraction, processing or trade in iron ore has been found during this study. Geological surveys show that there are deposits of iron ore in Equateur and in Katanga. However, Global Witness did not find any information to suggest that the DRC produces or exports iron ore from these deposits. Similarly, trade statistics did not reveal any data showing exports in iron ore.

### *Manganese*

Manganese (Mn) is essential to iron and steel production because of its deoxidising and alloying properties, and steel-making accounts for between 85% and 90% of the total manganese demand.

Most manganese today is obtained from ores found in Russia, Australia, Brazil, South Africa, Gabon and India, although it is produced, in small quantities, in the DRC.

Manganese is found at two locations in Katanga province, southeastern DRC, but so far only one site, near Kisenge, has been exploited. Manganese exploitation in this region is alleged to stem back to World War II, when it was transported along the Kisenge-Manono-Rwinkwavu corridor via Bujumbura and then flown to Belgium for the manufacturing of iron sheets for tanks.<sup>238</sup>

The Kisenge mine was formerly owned by the Belgian company, BCK Manganese, but was nationalised in 1974. The manganese was transported, in the form of manganese concentrates, via the railway connecting the copper belt to the Angolan port of Benguela. However, the outbreak of the Angolan civil war meant that the railway line became inoperable in the late 1970s, severely disrupting the production of manganese in Kisenge. Sporadic sales occurred between 1975 and 1994 from huge stockpiles of the mineral, which had been accrued before the Angolan civil war. In the early 1990s, some manganese was shipped internally to supply a dry cell battery plant and in 1995, the Kisenge Manganese Company (based in Lubumbashi) signed a deal with the South African company, Benatar group, to ship some of this ore via the Tazara Railroad to the port at Dar es Salaam<sup>239</sup>.

However, since the mid-1990s, the mine has been completely dormant<sup>240</sup>. In 2000, Cluff Mining (South Africa) signed a joint venture with the Kisenge Manganese Company to revive the Kisenge mine at a production rate of 40,000 t/yr and this is expected to come into effect with the recent installment of a transitional government in the DRC.

## 10 Transport

**SECTION 6.2** OUTLINES the development of the informal economy and trade in commodities such as gold during Mobutu's rule. As was discussed, the development of informal trade networks pre-dates the current conflict. The following sections provide an overview of the main official air, rail, river, and road transport routes within the DRC.

### 10.1 Roads

Long distance road transport is limited, and in some areas, dangerous. Decades of under-investment in road maintenance during Mobutu's rule left the DRC's ground transport infrastructure chronically underdeveloped and decrepit. By 1980, the extent of the all-season road network had shrunk to 20% of its 1960 total.<sup>241</sup>

Rail and air transport have long surpassed roads as the most efficient and reliable means of transport. Air travel in particular has become vital in areas where roads are impassable and river or rail transport is not available.

Moreover, particularly in northeastern and eastern DRC, road transport has been made lethal as armed groups have targeted roads as a means of extorting "taxes" from passing traffic. Control over road networks is also a key component of military and security strategies of militia and rebel groups. Roads provide avenues of attack and retreat, and by exerting control the flow of road traffic in and out of an area, an armed group can exert power over people living in that area.

### 10.2 Rivers and lakes

The Congo River was re-opened under UN supervision in August 2003 after being closed to civilian barges for five years. The re-opening of the river has restored a vital route for humanitarian aid and consumable goods for towns and communities living along the river – as well as providing another potential avenue for the export of resources such as gold, timber and diamonds. The resumption of trade activity along the Congo river should lead to lower commodity prices. Further research is needed to determine whether these resources are now being shipped down the river and its tributaries to Kinshasa and elsewhere.

The Congo and Ubangi rivers are the most important river trade routes. Trading centres along the DRC's river system include:

- Congo River: Kinshasa, Mbandaka, Makanza, Lisala (connected by road to the northern city of Gemena), Bumba (connecting with the Bumba – Isiro – Mungbere railway), Burumbu, Yangambi, Kisangani (a major trading centre), and Ubundu;
- Ubangi River: Dongo, Libenge and Zongo (across the river from Bagui, the capital city of the Central African Republic); and
- Kasayi River: Bandundu and Ilebo (joining up with the Ilebo – Lubumbashi train line).

Shipping trade routes across Lake Tanganyika to Tanzania and Burundi, Lake Kivu to Rwanda, and Lake Albert into Uganda are also important. Historically, cross-border trade from southeast Congo flowed across Lake Tanganyika to Tanzania using traditional slave and ivory trading routes established by Swahili-Arab traders from Zanzibar.<sup>242</sup> On Lake Tanganyika, the major ports are Moba, Kalemie (joining up with the Kabolo – Kalemie train line), and Uvira (opposite Bujumbura, the capital city of Burundi). Fizi, a strategically important customs check-point currently controlled by RCD-Goma, is also close to Lake Tanganyika along a road connecting Uvira with Kalemie. Bukavu (South Kivu) and Goma (North Kivu) are situated on Lake Kivu, and are both close to the Rwandan border. Further north, Bunia is connected to Lake Albert via a road to Kasenye on the Lake's western shore. There is another shipping centre at the northern end of the lake at Mahagi-Port.

Although the Zimbabwean army in the Democratic Republic of the Congo is predominantly linked to Zimbabwe by air, Zambia has granted land access to the Zimbabwean army to transport heavy equipment through its railway network and the Kasumbalesa-Chirundu Highway, despite official denials. It is unclear what the Zimbabwean army is transporting when it uses this route.

### 10.3 Air transport

The appalling condition of the DRC's road network has meant that air transport has become a vital means of moving a range of commodities around the country. While roads connecting the DRC with Uganda, Rwanda and Zambia are still used for the transportation of people and goods, air transport has become the mode of choice for the export and smuggling of natural resources and arms. Diamonds, timber, gold, coltan and agricultural products are flown from eastern DRC into Rwanda (Kigali or Kanembe) and Uganda (Entebbe and Kampala), and these same flight paths are used for the inward flow of troops, equipment, supplies and arms into the DRC. The UN Panel has reported that there are little or no customs inspections conducted at Entebbe military airport.<sup>243</sup>

This reliance on air transport signifies a shift away from pre-1998 reliance on roads and Lakes Kivu and Tanganyika for the smuggling of goods to and from the DRC.<sup>244</sup> The UN Panel of Experts has also identified a shift in the companies involved in cross-border transportation. In particular, after 1998 new air transport companies controlled or owned by military and political leaders and their families and friends were established.<sup>245</sup> For instance, President Museveni's sister-in-law (wife of General Salim Saleh) ran Air Alexander, a company that operated flights between Entebbe and Kisangani.<sup>246</sup>

Since the publication of the UN Expert Panel Reports, however, European airlines have been wary of operating cargo planes in the DRC. In response to reports of coltan being transported directly from the DRC to Belgium, the airlines Sabena and Swiss Air announced a ban on their aircraft being used to

transport coltan in late 2001.

Appendix 1 contains a list of known airports and aerodromes in the DRC.

It is clear that rebel groups controlling resource-rich areas have vested commercial interests in ensuring air transport is possible. The Goma airport, which was damaged after the volcanic eruption in January 2002, is a case in point. In February 2003 a 12 month project to rehabilitate the airport was launched, and is being financed by the Fondation Katebe, headed by Raphael Soriano Katebe Katoto, a Congolese millionaire businessman, and political opposition leader is a member of the Rwandan-backed RCD-Goma.

#### 10.4 Train lines

Previous sections on the history of resource extraction in the DRC have details about when the country's main railways were constructed. The DRC has the following railways, although it should be pointed out that years of under investment in rail infrastructure have meant that few of these work:

- Kinshasa – Matadi (via Kasangulu, Madimba and Songolobo in Bas-Congo);
- Bondo – Bumba (via Likati and Aketi) crossing Province Orientale into Equateur and joining the Congo River at Bumba;
- Mungbere – Aketi (via Isiro, Bengé, Rubi and Buta) crossing north-eastern Province Orientale down to join the Bondo – Bumba line;

- Titusi – Rubi – Buta in Province Orientale;
- Kisangani – Ubundu (via Bairo, Maliabo and Kabeta) in Province Orientale;
- Kindu – Kabalo (via Kibombo and Kongolo) crossing Maniema down into northern Katanga;
- Kabalo – Kalemie in Katanga, connecting northern Katanga with a port at Lake Tanganyika;
- Kabalo – Kamina in Katanga;
- Ilebo – Kamina – Lubumbashi (via Kananga, Tshimbulu and Tenke Fungurume) linking the Kasayi River at Ilebo in Kasai Occidental, major mining sites in Kasai Orientale and Katanga; and
- Dilolo – Lubumbashi – Kipushi/Sakania (via Kolwezi, Tenke Fungurume and Likasi) in Katanga, again linking major mines and linking into the Angolan and Zambian rail networks.

Railways in Katanga are particularly vital for the export of minerals such as copper and cobalt. Minerals are generally transported by rail through Zambia to South Africa, or via Lake Tanganyika to the Tanzanian port of Dar es Salaam, or further northeast to the Kenyan port of Mombassa. Commodities are no longer transported via Angola, as the railway between Dilolo and Angola's Benguela port was virtually destroyed during the Angolan civil war.<sup>247</sup>

## 11 DRC International Trade Summary

### 11.1 Note on statistics methodology

The DRC does not disseminate statistics of its exports by commodity and by country. In the absence of these statistics, Global Witness has compiled data published by importing countries to estimate the quantity of DRC exports in each given resource. Relying on this data requires assuming that the quantity that the importing country declares is the same as the amount that would have been declared by the supplier country. Global Witness searched through the statistics of all countries whose statistics the World Trade Atlas and the United Nations Statistical Division publishes, and abstracted the value and quantity (weight or volume) of any imports from the DRC that those countries declare. In other words, trade data presented here are based directly on the direct imports recorded by importing countries. The sources used for this data are World Trade Atlas, Eurostat, United Nations Statistical Division, and Global Trade Atlas. The data is based on the trade of most major importing countries may therefore underestimate the total.

In this report, the word value means import value (c.i.f.). Export value (f.o.b.) is unlikely to be greater than import value (c.i.f.). The relationship between c.i.f. and f.o.b. value may vary between countries and commodities, and so the tables set out to provide, as a first iteration, an indication of the relative export value of a number of commodities. For example, Table 17 indicates that the export value of the DRC's diamond exports is far higher than that of its gold exports – the difference in their import values is so great that this is unlikely to be accounted for by the difference in their respective c.i.f. : f.o.b ratios.

The statistics provided are, generally, no more than what a given country declares that it has directly imported. Customs documentation tends to be interested in the country from which the commodity imported was exported rather than the place of manufacture/assembly/origin of the commodity (or its component parts). It may be that customs documents treat a commodity that has been re-exported (i.e. the commodity has been imported by a third country and then exported from that country without having been transformed or used there in any way) as having been exported from that third country. The rules governing country of origin/shipment adopted by the customs services of importing countries may differ.

For the purposes of this report, it is assumed that the supplying country given in trade statistics is the country of origin of the particular commodity (and probably, but not necessarily (unless they are the same), also its raw materials) being imported. Thus, diamonds mined in DRC that are shipped through Congo Brazzaville or CAR will be declared by importing countries (say Belgium) as from Congo Brazzaville or CAR. Likewise, diamonds mined in Angola but imported from DRC will be declared as originating from DRC. If one knew the quantity (and quality) of diamonds which are imported (officially and unofficially) into the DRC, the quantity (and quality) exported (officially and unofficially) from the DRC and the quantity (and quality) consumed locally, then one could refine one's view about the country of origin of the diamonds imported from the DRC by, say Belgium.

### 11.2 DRC Exports

Table 17 (over page) indicates that diamonds accounted for some three-quarters of the DRC's exports (by value). Consequently, proper control of the diamond trade (within the DRC) should be a primary aim of those seeking to maximise the DRC's national income. The export of crude oil and cobalt each accounts for a further 10% of the DRC's exports. However, it needs to be noted that the impact of the petroleum extraction sector on national economies in Central Africa is minimal despite the very substantial quantity (value) of petroleum exported – the sector's conduct is directly related to poor governance in those countries.

This table does not consider trends in the quantity (weight/volume) of each commodity exported by the DRC. The table does not take account of changes in unit value over the period covered.

In terms of diamonds, the average ratio between c.i.f. and f.o.b. unit values of the DRC's diamonds between 1996 and 2000 averaged 2.4. Exports for the five years 1996 to 2000. The ratio between c.i.f. and fob during that period averaged 2.4. However, if the quality of diamonds that Belgium imported from DRC differed much from the quality that the DRC exports, then the ratios calculated might be misleading. However, given that Angola is said to both produce rather higher quality (unit value) diamonds than the DRC does and to export these through DRC, then this would tend to make the apparent c.i.f. : f.o.b. ratio greater than the actual one. Thus the average of 2.1 may be on the high side.

If the actual c.i.f. : f.o.b. ratio for the DRC's diamond exports is assumed to be 2, then even if the c.i.f. : f.o.b. ratio for all the other products were 1, diamonds would still be much the biggest export when measured by export value.

The actual c.i.f. : fob ratio may be irrelevant. Given the very high unit value of diamonds, the c.i.f. : fob ratio for diamonds is likely to be lower for diamonds than for the other commodities that the DRC exports. Even if the cost of insurance rises in direct proportion to unit value, it is unlikely that the cost of freight will do so too. Further, diamonds that are exported unofficially are unlikely to be insured to the same extent as their official counterparts – but this may be irrelevant if the proportion of such unofficial diamonds in a country's imports is low. Thus, it may be that the c.i.f. : f.o.b. ratio for diamonds were lower than for most of the other commodities which DRC exports. If so, diamonds may account for an even higher proportion of export value of the DRC's exports than the table indicates.

The spreadsheet also indicates that – if the value of illicit diamonds is taken into account as well as production from MIBA and official purchases from artisanal mines – the quantity of diamonds exported from DRC greatly exceeds the quantity which importing countries declare that they import from DRC. Imports from third countries (notably Congo Brazzaville and, to a lesser extent, Central African Republic) account for a substantial proportion of the excess. Misreporting (of exports from DRC) may account for much of the remaining difference. This again tends to confirm that the DRC's national income is much more dependent on the diamond sector than any other sector.

Table 17: DRC – exports 1991 – 2002 (value, by commodity)

Commodity	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
	Value (US\$ million, c.i.f, nominal)											
Diamonds	490	393	506	753	747	854	732	683	835	732	762	1,007
Petroleum	183	130	133	117	143	156	165	70	103	180	114	192
Cobalt	146	138	114	109	205	196	157	127	134	167	140	105
Timber	55	53	47	73	86	75	56	48	25	24	25	27
Copper	478	302	103	27	35	17	14	6	5	5	17	12
Coffee	92	62	68	104	200	102	50	52	40	29	12	5
Gold	1	3	15	12	6	1	9	7	2	7	8	5
Coltan	1	4	1	0	1	0	0	1	0	5	1	2
Plant extracts	14	12	12	13	21	15	9	9	6	24	5	6
Rubber	4	3	3	4	4	8	6	3	2	0	0	0
Tin	3	3	2	4	5	0	0	2	1	2	2	1
Zinc	3	5	2	0	0	0	1	3	1	0	0	0
Cadmium	8	9	0	3	11	0	2	5	5	0	0	0
Cocoa beans	3	4	3	3	4	3	2	3	2	1	1	1
Tobacco	1	4	3	5	2	3	1	0	0	0	0	0
Others	132	161	74	33	52	22	27	7	9	7	16	10

Source: World Trade Atlas, Eurostat, UN Statistical Division, national yearbooks of import statistics

Note 1: based on the direct imports recorded by importing countries

Note 2: importing country declarations assumed to match 1:1 corresponding exports by the given supplying country

Note 3: data entered against "Others" is predominantly of unspecified commodities imported by Belgium

Table 18 indicates that Belgium accounts for some three quarters of the DRC's exports and that the USA and Finland – importers of most of the DRC's crude oil and cobalt exports respectively – much of the remainder.

The concentration of the DRC's trade on such a small number of countries and products is of course advantageous to those who seek, through trade, to influence governance and maximise national revenue. Production of crude oil and, to a lesser extent, cobalt is capital intensive. The sites from which these resources are produced and stored prior to export are conspicuous. In contrast, diamonds (in the DRC) are not only produced largely in the informal sector with little capital investment (other than in protecting supplies against competitors), but also are readily susceptible to smuggling (having a very high unit value per unit of weight/volume).

Table 18: DRC – exports 1991 – 2002 (value, by importing country)

Importing Country	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
	Value (US\$ million, c.i.f, nominal)											
Belgium	827	679	467	652	694	659	556	617	796	758	776	1,003
USA	334	272	275	195	200	248	289	171	217	211	153	147
Finland	8	7	23	1	15	47	52	54	50	83	91	80
France	53	31	19	33	50	29	16	12	7	19	6	36
Japan	77	80	60	57	81	82	53	38	16	19	10	31
Italy	100	75	60	93	156	78	52	46	38	28	22	12
Germany	139	70	34	30	58	66	20	22	5	3	2	3
Netherlands	20	9	4	11	20	19	8	7	6	35	7	2
UK	16	15	23	25	20	22	8	7	5	1	1	2
South Africa	0	4	78	93	99	104	98	3	1	1	2	1
Others	39	43	44	71	130	98	79	48	28	29	33	56

Source: World Trade Atlas, Eurostat, UN Statistical Division, national yearbooks of import statistics

Note 1: based on the direct imports recorded by importing countries

Note 2: importing country declarations assumed to match 1:1 corresponding exports by the given supplying country

Table 19 illustrates the flows of the DRC's principal exports. Declared trade from the DRC to its neighbours is not substantial.

Table 19: DRC – principal exports in 2002 (value, by commodity and importing country)

Commodity	Cobalt (matte)	Cobalt (ore)	Cocoa beans*	Coffee	Coltan	Copper (refined)	Crude Oil	Diamonds	Gold	Plant extracts	Rubber*	Tin*	Timber	Tobacco*	Zinc*
HS code	8105	2605	1801	90111	261590	7403	2709	7102	7108	various	4001	2609	44	2401	7901
Importing country	Value (US\$ million, c.i.f., 2002)														
Belgium	6			0.3		1		981		5			0.7		
China	2	8			2	1							0.5		
Finland	18	62													
France	0.9			0.1			32								
Italy			0.8	4		4									
Japan	2					2	27								
Malaysia												0.7			
Netherlands	1													0.3	
Portugal															
South Africa	0.7														0.3
Spain				0.1			23			0.1					
Taiwan						3									
UK									1				1		
USA	4						110	25	3	0.7			3		

Source: World Trade Atlas

Note 1: importing country declarations assumed to match 1:1 corresponding exports by the given supplying country

Note 2: the entry for commodities marked with an asterisk relates to the country which most consistently imports the given item (in the greatest quantity)

Note 3: data given to nearest whole number of over one or to one decimal place

Table 20 shows trends in the composition and value of the DRC's exports over the last dozen years. The sharp reduction in copper exports in the early 1990s is particularly prominent. Overall, the value of the DRC's annual exports appears to have been fairly steady.

Table 20: DRC – exports (value, by commodity)

Commodity	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
	Value (US\$ million, c.i.f., nominal)											
Diamonds	490	393	506	753	747	854	732	683	835	732	762	1,007
Petroleum	183	130	133	117	143	156	165	70	103	180	114	192
Cobalt	146	138	114	109	205	196	157	127	134	167	140	105
Timber	55	53	47	73	86	75	56	48	25	24	25	27
Copper	478	302	103	27	35	17	14	6	5	5	17	12
Coffee	92	62	68	104	200	102	50	52	40	29	12	5
Others	170	208	115	77	105	52	58	40	27	48	34	26

Source: World Trade Atlas, Eurostat, UN Statistical Division, national yearbooks of import statistics

Note 1: based on the direct imports recorded by importing countries

Note 2: importing country declarations assumed to match 1:1 corresponding exports by the given supplying country

## 12 Conclusion

This report illustrates that the recent plunder of the DRC's natural resources during the conflict that has resulted in the deaths of millions of Congolese since 1998 is not a new phenomenon. Global Witness has placed the issue of resource governance in the DRC in its historical context to illustrate that past patterns are in operation today. Indeed, it is only by looking back as far as King Leopold's rule that the roots of militarised control over natural resources can be found. Patterns established in Leopold's era, and continued under Belgian colonialism and Mobutu, have formed the basis of activities such as corruption, plunder and smuggling so rife in the DRC today.

This report marks the beginning of an extensive project that will examine natural resource governance in the Democratic Republic of Congo. This is the first of a series of reports Global Witness will release during the transitional period to highlight specific challenges and opportunities for change in the DRC.

This report is also a wake-up call to the international diplomatic, donor and business community: natural resources have never been extracted for the benefit of the Congolese people and unless patterns of governance are changed now, then resources will continue to be a curse rather than a cure for the DRC's ills. Issues of natural resource governance in the DRC cannot and must not be ignored if durable peace and development is to be achieved.

Global Witness identifies a critical window of opportunity to break patterns of poverty, corruption, violence and militarised control over resource exploitation in the DRC. This is also a unique opportunity for the international community to work together to, for once, get things right for the Congolese. Natural resources are among the prime motivations for the conflict; governance over these resources will thus be key to the success of any measures to bring about peace.

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 CENADEP  
 Human Rights Watch  
 IPIS  
 RAND  
 University of Ghent  
 United States Geological Service (George Coakley)  
 World Bank

The conclusions in this report are based on results from Global Witness' use of i2 Limited's award-winning software, which is used as standard by enforcement and intelligence agencies worldwide. The software allows organisations to undertake complex investigations involving huge and varied datasets, providing visualisation and analysis tools which are used by 1500 organisations in 90 countries. i2 Limited has very generously supplied this software to Global Witness, along with intensive support and consultancy.

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## Appendix I: Airports and Aerodromes

Province	Airport/aerodrome	Province	Airport/aerodrome
<b>Kinshasa</b>	*Kinshasa Kimpoko	<b>Kasai Oriental</b>	Ditu Gandajika †Kabinda Kole †Lodja Lomela Luputa †Lusambo *Mbuji-Mayi
<b>Bandundu</b>	Bagata Bandunda Fatundu †Inongo *Kahemba Kajiji †Kenge *Kikwit †Kiri Masi-Manimba †Mushie Ngi *Tembo	<b>Katanga</b>	Dilolo Kabola †Kalemie †Kamina Kaniama Kapanga Kasaji Kasenga *Kolwezi Likasi †Lubudi *Lubumbashi †Manono Mitwaba Mutshasha Pweto Sandoa
<b>Bas Congo</b>	*Boma Kintata Luozi †Matadi †Muanda Tshela	<b>Maniema</b>	Kalima †Kasongo *Kindu †Punia
<b>Equateur</b>	†Basankusu Bikoro Bindja Binga †Boende Bokungu †Bumba Businga Dondo *Gbadolite *Gemena †Ikela Inongo Kiri Lisala Lombo *Mbandaka Nioki Tandala	<b>Orientale</b>	Aba *Bunia *Buta Doruma Dungu Faradje *Isiro *Kisangani Mahagi Shari Watsa Yangambi
<b>Kasai Occidental</b>	Basongo Dekese †Ilebo Kananga Luebo Luiza *Kananga Mboi Mweka Musese *Tshikapa	<b>Kivu (North and South)</b>	Beni *Bukavu *Goma Lubero Kamituga Katanda †Rutshuru †Shabunda

\* Denotes larger "1st class" airport

† Denotes "2nd class" airport/aerodrome

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