THE RWANDAN PATRIOTIC ARMY AND MILITARY COMMERCIALISM
IN EASTERN CONGO

From the outset, there have been significant power struggles within the military wing of the RPF, the Rwandan Patriotic Army (RPA). Only very few days after the RPA on 1 October 1990 launched its first attack on Rwanda from Southern Uganda, its commander, Major-General Fred Rwigyema, formerly the Chief-of-Staff of the Ugandan army, was assassinated under mysterious circumstances in Northern Rwanda. Shortly after, two high-ranking RPA officers were killed as well. When the news of Rwigyema’s death reached the then acting head of military security of the Ugandan army, Major Paul Kagame, he rushed back from a military course in the United States and assumed command of the RPA.¹

The issue of the Rwandan monarchy, which was abolished in 1959, caused great tension within the RPA. Some RPA officers had been in favour of reinstalling the exiled king as the monarch of Rwanda, or had at least wanted a national referendum to be held on whether the king should be allowed back in his country, should the RPF ever fight its way to power. Kagame’s faction, however, opposed this idea, which led to mutual distrust within the RPF. Political murders within the army were frequent, according to defected RPA officers, and unwanted soldiers or officers were secretly killed, usually with small hoes in order to avoid attracting the attention of enemy forces as well as to avoid a negative effect on the morale of other soldiers.²

Defected RPA soldiers also say that ethnic discrimination took place on a large scale. But it was not only Hutus that were purged or discriminated against: Tutsis from other parts of Central Africa than Uganda, in particular French speaking Tutsis who appear to have been sarcastically referred to as ‘intellectuals’, were also suppressed or even murdered. Also, well-educated ‘Ugandan’ Tutsis were persecuted and killed during the guerrilla war, since Kagame and his backers considered them as rivals, according to former RPA soldiers. These killings - combined

¹ The new leadership under Paul Kagame asserted that Rwigyema had been killed in an ambush set up by Habyarimana’s troops, while defected RPA officers claim that the murders of both Rwigyema and the two other high-ranking RPA officers had been organized by officers associated with Kagame’s faction of the RPA. Kagame had been at odds with Rwigyema, the latter being enormously popular both within the RPA as well as among the many Banyarwanda living in Uganda. Otunnu, Ogenga, ‘An Historical Analysis of the Invasion by the Rwanda Patriotic Army’, in Adelman, Howard, and Suhrke, Astri, The Rwanda Crisis from Uganda to Zaire: The Path of a Genocide (London: Transaction Publishers, 1999), pp. 34-35; Confidential interview with ex-Rwandan Patriotic Army officer, n.p., 1999, and Prunier, Gérard, The Rwanda Crisis..., first edition, p. 93-93.
with an extremely tight discipline and harsh training programmes – caused many soldiers to desert the RPA.³

**RPA Order of Battle**

When the RPF took power, it transferred its troops into a new national army, which was given the same name as the RPF’s armed wing, the *Rwandan Patriotic Army* (RPA). Though several thousand soldiers from Habyarimana’s army and new recruits have been integrated into the new RPA, the current army remains completely dominated by the original soldiers from Uganda.⁴

In mid-1999, the London-based International Institute for Strategic Studies estimated the Rwandan military forces to compose of between 30,000 and 40,000 troops.⁵ In October 2000, the International Institute for Strategic Studies made an upward adjustment of this figure to between 49,000 and 64,000 troops, besides 7,000 paramilitary forces (so-called *Local Defense Units*) and 6,000 Gendarmerie officers.⁶

The RPA has unofficially admitted to having 4,000 to 8,000 troops deployed in the Congo, according to the Economist Intelligence Unit, but this is believed to be a substantial understatement.⁷ The International Crisis Group estimates that the RPA has between 17,000 and 25,000 troops deployed in the Congo, while a UN report on the exploitation of the Congo, says the RPA has a minimum of 25,000 troops in the Congo, an estimate the report attributes to “military specialists with a great deal of experience in the region”.⁸ In comparison, the

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⁴ Many other ex-FAR soldiers fled the country and have - as already described – been incorporated into ALIR, the heir of the Rwandan militias responsible for the Genocide
⁶ The Gendarmerie was controlled by the Ministry of Defence up until 2000, but was then disbanded and replaced with a police force under the control of the Ministry of the Interior. Economist Intelligence Unit, *EIU Country Profile 2001: Rwanda Burundi* (London: Economist Intelligence Unit, 2001), p. 15
⁷ Economist Intelligence Unit, *EIU Country Profile 2000…*, unpaginated version
International Crisis Group estimates the much less disciplined RCD-Goma troops to number between 17,000 and 20,000.\(^9\)

Rwanda acquires its military hardware from a variety of countries, most of it via Uganda, according to the Economist Intelligence Unit.\(^10\) During 1999, it also bought arms in South Africa. The RPA seeks to develop air power for the Second Congo War, and in 1999 acquired helicopters from a Ugandan intermediary, although the helicopters later turned out to be defective. Rwanda has reportedly also sought to purchase old Russian Mig fighter jets, but so far in vein.\(^11\) For transport, the RPA relies on chartering private aircraft, typically Antonov airplanes, for instance from the international arms dealer Victor Bout.\(^12\) The RPA owns 1 BN-2A Islander, 2 Mi-24, and 4 Mi-17 MD helicopters, according to estimates by the International Institute for Strategic Studies. The United States has acknowledged that it has provided military training in the past, and the United States and the United Kingdom and are both believed to be providing military or police training at present as well. US military assistance to Rwanda amounted to more US$ 0.5 million in 2000, according to estimates of the International Institute for Strategic Studies.\(^13\)

**Systematic Exploitation of Congolese Resources**

Eastern Congo is rich in a number of minerals, of which the most important are gold, diamonds, columbite-tantalite (a.k.a. coltan or col-tan), cobalt, cassiterite, manganese, uranium, copper, zinc, germanium, wolfram (a.k.a. tungsten), silver, lead, and iron. With the possible exception of uranium, all these minerals are being mined at the time of writing, despite the fact that most of the industrialized mining industry in the area under the control of the rebels and their foreign backers has come to a standstill years ago. Using simply equipment, lay people currently carry out the actual mining at dangerous, non-maintained mining sites.

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\(^10\) Economist Intelligence Unit, *EIU Country Profile 2000…*, unpaginated version
\(^12\) *Sunday Telegraph*, ‘New address but business as usual for Africa’s “merchant of death”, 22 July 2001
Map 1 – Mineral Occurrences in the Democratic Republic of Congo

CONGO KINSHASA

Mineral legend:

Cb = niobium  W = wolfram (a.k.a. tungsten)  Co = cobalt  Au = gold  Ta = tantalum  Dm = diamond
Sn = tin  Zn = zinc  Cu = copper  Mn = Manganese  Cem = cement  RE = rare earths  Pet = petroleum

The lack of proper equipment and industrialized mining processes does not mean, however, that mining activities are not well organized. Much mining is carried out under the protection or by the order of the RPA and RCD-Goma. Although a lot of smuggling goes unnoticed, RCD-Goma and the RPA extract a variety of taxes from the trade in minerals, while at the same time they themselves engage in this trade. RCD-Goma has designed a fiscal system based mainly on the mining sector. About six different forms of tax exist, and they are applied on approximately eight different types of minerals, including the most important: coltan, gold, and diamonds. Minerals are being sold by RCD-Goma in exchange for cash or bartered for armaments and medicines to support the continuation of the war.\(^\text{14}\)

But the trade in diamonds and other minerals originating in the Congo is first and foremost controlled by RCD-Goma’s ally, the RPA. The exploitation and taxation is in fact organized centrally from a certain administrative entity known as the Congo Desk, which is located in a cell of Rwanda’s Ministry of Defence named the Department of External Relations. Since 1998, this desk – until recently under the leadership of an RPA Major called Dan Munyuneza - has been licensing buying offices, known locally as comptoirs, in the area of Congo occupied by the RPA, according to a UN report on the exploitation of Congo.\(^\text{15}\)

Numerous journalists have also detailed how cargo flights operate between Kigali and various airports or even airstrips in Eastern Congo, flying in goods such as fuel or weapons, while bringing back minerals or other easily exportable items to Rwanda. Once in Rwanda, these goods are nearly always re-exported. For instance, in 1999 a security official at Kigali’s Kanombe airport confirmed the illicit traffic from Congo to Europe via Rwanda to the *Christian Science Monitor*;

> There are seven to 10 flights coming in every day from Congo […] Most of the stuff they carry, diamonds, gold, and palm oil, doesn't even leave the airport. It gets loaded on planes for Europe and shipped right out.\(^\text{16}\)

The planes operate in and out of the mineral-rich areas, most of which are extremely cumbersome to access by road, such as Kindu, Pinda, Punia, Walikale, Masisi, but cargo flights


\(^{15}\) Ibid., pp. 29-30

also commute between larger towns such as Kisangani, Goma, and Bukavu. As I shall demonstrate, RPA officers, members of the RPF, or people closely affiliated with either, own nearly all of the companies involved in this trade.

Since it is not the specific task of this dissertation to detail in full the commercial networks behind the exploitation of the Congo, I will limit myself to explore the trade in three of the most profitable mineral exploitations that the RPA is involved in, namely the trade in coltan, gold and diamonds. The trade in these three valuable minerals will show the importance of the trade in precious Congolese commodities to the Government of Rwanda, notably the RPA. Before I will turn to exploring the trade in the three above-mentioned minerals, I will briefly analyze official Rwandan trade records and show how the volume of mineral exports does not match the domestic production.

The lack of infrastructure as well as the general lack of security in the Congo complicates the task of gathering relevant data. Only very poor statistics are available and most of the actors involved in the trade have a clear interest in manipulating publicly available data. A short discussion of sources is therefore necessary.

On 16 April 2001, a panel of experts appointed by the UN Security Council published its so-called Report of the Panel of Experts on the Illegal Exploitation of Natural Resources and Other Forms of Wealth of DR Congo (henceforth referred to as the ‘UN Exploitation Panel Report’). In this report, a final version of which is scheduled to be published in late October 2001, the panel members estimated the value of goods exploited by foreign armies involved in the Congo war, notably Rwanda and Uganda. The governments of these two countries then accused the Government of France of having pressured the panel into publishing a biased report. But while it is true that the report fails to properly footnote many of its allegations, the ‘French connection’ has not been substantiated. Furthermore, panel members were drawn from a variety of countries, including the United States, whose government is very sympathetic to both the governments of Rwanda and Uganda, so French bias is not a given. Since there are thus no reasons why the panel as a whole should have a particular interest in wrongly blackening the Rwandan and Ugandan side of the conflict, I regard the report as fairly credible.

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The Government of Rwanda does, quite on the contrary, have a clear interest in suppressing any information on its exploitation in the Congo; i.e. understating the export of precious goods from the Congo to Rwanda. Hence documents or statements by that government should not be accepted at face value. The same applies to documents and reports published by the World Bank and the IMF, since these institutions largely base their reports on material supplied by the Government of Rwanda.

Likewise, the Congolese government has a clear interest in inflating the figures of exploitation by Rwanda and Uganda, and can thus not be considered as a reliable source of information either.

RCD-Goma’s interest in manipulating statistical figures is more ambiguous: On the one hand, the movement wants to present itself as an economically and politically autonomous movement, and therefore has an interest in showing proof of revenue - most of which comes as taxes on the mineral trade. On the other hand, it is clear that nearly any minerals or other precious goods being traded within its territory are exported to Rwanda, and hence statistics of taxes on minerals reveal the trade from Congo to Rwanda that the Government of Rwanda is interested in hiding. Compared to, for instance, the UN Exploitation Panel Report, RCD-Goma might not be a credible source of information, but because of this dilemma it is in many respects nevertheless a much better source of information than the Government of Rwanda.

Other available sources include international institutions, such as the British Geological Survey and the US Geological Survey. These two institutions are ultimately both under the control of two governments that are extremely sympathetic to the governments of Rwanda and Uganda, and political influence can therefore not be excluded. A (purely fictive) example would be if these institutions overestimated the domestic Rwandan production of, for instance, coltan in order to minimize the gap between domestic production and export, thereby hiding the re-export of Congolese coltan. I shall nevertheless consider these reputable institutions as fairly reliable, since I have no proof of such meddling with numbers, and since it would not be politically risk free for the governments of neither the United Kingdom nor the United States to order skilled professionals to ‘distort’ their figures. Much the same can be said about the statistical offices of western countries that were consulted, such as those of the United Kingdom, Germany, Belgium, or the United States.

Businessmen generally have an interest in understating the value of the trade, since they are usually taxed by RCD-Goma according to the volume traded.
Although journalists are obviously subject to the same constraints as anybody else in the field of data collection on mineral activities in the Great Lakes Region, I shall also consider the international press as a fairly reliable source of information, since journalists have no obvious interest in exaggerating or hiding the ongoing exploitation.

**Official Rwandan National Accounts and Export Statistics**

I shall in this section outline the discrepancy between the official domestic production of coltan, gold, and diamonds, as well as the official export statistics for these minerals. It shall be demonstrated that even the official records disclose re-exports of minerals originating from outside Rwanda. When converting between US Dollars (US$) and Rwanda Francs (Rwfr) I shall throughout this dissertation use the exchange rates listed in Table 1 below.

**Table 1 – Exchange Rates (Rwfr:US$)**

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<td>(a)</td>
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<td>(b)</td>
<td></td>
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Average annual exchange rates (Rwfr:US$) | 306.8 | 301.5 | 312.3 | 333.9 | 389.7 |

(a) Estimates based on IMF, World Bank and national data.
(b) Economist Intelligence Unit estimate


As can be seen in Table 2, which is based exclusively on data provided by the Government of Rwanda, there is a huge discrepancy between the production and export of coltan. In a letter to the author, the National Bank of Rwanda stated that 603 tons of coltan were exported during 2000. Even if we assume that coltan had been stockpiled for several years in the hope of a price hike, this cannot explain the discrepancy between a coltan export of 603 tons for 2000 and a meagre domestic production figure - provided by the Rwandan Ministry of Finance - of 83 tons.
As can be seen from the calculations in the table below, the combined discrepancy for the last five years amounts to 706.7 tons, or nearly half of the total volume exported during this period.\(^{19}\)

### Table 2 – Official Rwandan Coltan Production and Export

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<tr>
<td>Rwandan Ministry of Finance (a)</td>
<td>Total domestic production volume – in tons</td>
<td>97.0</td>
<td>224.0</td>
<td>224.0</td>
<td>122.0</td>
<td>83.0</td>
</tr>
<tr>
<td>National Bank of Rwanda (b)</td>
<td>Total export volume – in tons</td>
<td>97.0</td>
<td>228.0</td>
<td>199.0</td>
<td>329.7</td>
<td>603.0</td>
</tr>
<tr>
<td>National Bank of Rwanda (b)</td>
<td>Total export value – in million US$</td>
<td>1.3</td>
<td>2.7</td>
<td>2.5</td>
<td>4.6</td>
<td>11.4</td>
</tr>
</tbody>
</table>

Discrepancy between domestic production and export volume (domestic production minus export)  
0.0 -4.0 25.0 -207.7 -520.0

Discrepancy between domestic production and export volume for last 5 years combined  
(last 5 years' domestic production minus last 5 years' export)  
-706.7

Sources:  

But Luc Tack of the geological research group at the Belgian Africa Museum suggests that Rwandan mines may not even have produced as much as the approximately 100 to 200 tons of coltan per year, which the Rwandan Ministry of Finance claims, but rather about 25 tons per year on average since 1994.\(^{20}\) A careful analysis of the data provided by the Government of Rwanda itself indicates that the domestic production figures might indeed have been inflated in order to

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\(^{19}\) Even if we add the production for both 1994 and 1995 (for which years export figures are not available), a total of 111.1 tons, this still cannot explain the difference
disguise the re-export of Congolese coltan.\textsuperscript{21} As can be seen in Table 3 and Table 5, this owes to the fact that there is a huge discrepancy between the volumes reportedly produced and the total output value of the mining sector. 308 tons of cassiterite, 84 tons of wolfram, 122 tons of coltan, and 10 kilograms of gold were mined during 1999, according to the Government of Rwanda. But the 1999 market value of 122 tons of coltan in itself by far exceeded US$ 0.60 million, the figure given for the total mining output 1999. With an average per kilogram price of US$ 102 on the world market, 122 tons of coltan would be worth US$ 12.4 million or more than 20 times the total mining output for 1999.

\textbf{Table 3 – Total Official Mining Production in Rwanda – by Value}

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<tr>
<td>Total mining output - Rwfr billion (estimates)</td>
<td>0.2</td>
<td>0.3</td>
<td>0.3</td>
<td>0.2</td>
</tr>
<tr>
<td>Total mining output – in US$ million</td>
<td>0.65</td>
<td>1.00</td>
<td>0.96</td>
<td>0.60</td>
</tr>
</tbody>
</table>

Source: 
International Monetary Fund and Rwandan Ministry of Finance quoted in Economist Intelligence Unit, \textit{EIU Country Profile 2001: Rwanda Burundi} (London: Economist Intelligence Unit, 2001), p. 34

When it comes to gold, there is an even more substantial discrepancy; at least if one takes into consideration trade information provided by the Belgian Institut des Comptes Nationaux, a subsidiary of the Belgian National Bank. During 1997, Rwandan gold exports to Belgium

\textsuperscript{20} Tack, Luc, private correspondence to the author, 8 May 2001
\textsuperscript{21} There is an interesting underestimation of the value of the minerals, perhaps because of tax evasion. According to the US Geological Survey, 51 tons of coltan was exported from Rwanda to the US in 1997 in exchange for US$ 984,000, which suggests an average per kilogram price of US$ 19.3. The exports listed by the Government of Rwanda shows an average of only US$ 11.8 per kilogram for 1997. Similarly, the US Geological Survey reports an export of 71 tons of coltan to the United States in 1998 in exchange for US$ 1.61 million, which suggests an average per kilogram price of 22.7 US$, while the Government of Rwanda statistics shows an average 12.6 US$ per kilo. Rwanda, National Bank of Rwanda, private correspondence to the author, 19 June 2001, available at \url{http://www.willum.com/documents/nationalbankofrwanda19jun01/index.htm} and United States, Geological Survey, \textit{Columbium (Niobium) and Tantalum}, 1998, at \url{http://minerals.usgs.gov/minerals/pubs/commodity/myb}, p. 11. In comparison, the average world market price for coltan was about US$ 102 per kilogram in 1999 and US$ 196 per kilogram in 2000, according to \textit{Ryan’s Notes}. Confer discussion on coltan in following chapter
amouted to roughly US$ 35.5 million, according to these records shown in Table 4. For 1998, Rwandan gold exports amounted to US$ 29.8 million. In 1999 and 2000, the gold exports from Rwanda to Belgium suddenly fell drastically to 2.6 US$ and US$ 0.7 million, respectively. These figures have to be compared to domestic production figures of only 10 kilograms annually for each of the years 1997, 1999, 2000, and 17 kilograms for the year 1998. With a market price for gold at roughly US$ 12,000 per kilogram in 1997 and at about US$ 10,000 per kilogram since then, the market value of the Rwandan domestic production – about US$ 120,000 for 1997, about US$ 100,000 for both 1999 and 2000, and about US$ 170,000 for 1998 - compares as a drop in the ocean to the total export of gold.  

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<tr>
<td>National Bank of Belgium</td>
<td>Euro</td>
<td>31,425,000</td>
<td>26,625,000</td>
<td>2,428,000</td>
<td>716,000</td>
</tr>
<tr>
<td>National Bank of Belgium (*)</td>
<td>US$</td>
<td>35,501,655</td>
<td>29,848,320</td>
<td>2,585,261</td>
<td>659,908</td>
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</table>

Source:
Belgium, National Bank of, Institut des Comptes Nationaux, selected import statistics made available to the author by Tom De Herdt, University of Antwerp

(*) The following exchange rates were used for converting the gold imports into US$
Source:

\[
\text{Euro:US$} \quad 0.88517 \quad 0.89201 \quad 0.93917 \quad 1.085
\]

Table 5 – Official Rwandan Production of Minerals – by Volume

All units in tons, except gold in kilograms

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<tbody>
<tr>
<td>Cassiterite</td>
<td>358.1</td>
<td>247.0</td>
<td>330.0</td>
<td>327.0</td>
<td>330.0</td>
<td>308.0</td>
<td>437.0</td>
</tr>
<tr>
<td>Wolfram</td>
<td>n.a.</td>
<td>19.2</td>
<td>62.3</td>
<td>42.0</td>
<td>188.0</td>
<td>84.0</td>
<td>n.a.</td>
</tr>
<tr>
<td>Coltan</td>
<td>56.2</td>
<td>53.9</td>
<td>97.0</td>
<td>224.0</td>
<td>224.0</td>
<td>122.0</td>
<td>83.0</td>
</tr>
<tr>
<td>Gold (*)</td>
<td>…</td>
<td>…</td>
<td>…</td>
<td>10.0</td>
<td>17.0</td>
<td>10.0</td>
<td>10.0</td>
</tr>
</tbody>
</table>

Sources:

(*) In the Country Report quoted above, the International Monetary Fund leaves three dots (…) in the slots designated for gold production before 1997 but fails to explain whether this means that Rwanda did not have any gold production during these years or whether there was merely no data available

(**) The figures for 2000 appear to be estimates

Finally, it is interesting to note that although Rwanda has no diamond production, it still exported diamonds worth US$ 1,888,035 to Antwerp in 2000, according to the Antwerp-based branch organization, the *Diamond High Council*.

There appears thus to be little doubt that the major part of Rwandan mineral exports are indeed re-exports of goods having only transferred through Rwanda on its way to a final destination, something which is, as I shall detail below, confirmed by officials of RCD-Goma.

Diamond Exploitation

The total value of the annual Congolese diamond production is estimated at about US$ 750 million, most of which is mined by small operators and artisans. In comparison, the total global supply of rough diamonds is estimated at about US$ 8 billion for 2000. The most profitable diamond mines in the Congo have throughout the Second Congo War been under the control of the Congolese government. The Rwandan forces and, to a minor extent, the Ugandan forces, nevertheless control lucrative diamond areas as well, in particular around the towns Kisangani and Banalia in North-Eastern Congo.

The control of diamond mines and trade centers for diamonds in the Ugandan and Rwandan zones have nevertheless been at the root of continued internal fighting between the two armies that have joined forces against the Congolese government. Before June 2000, the Ugandan and Rwandan armies jointly controlled the diamond offices in Kisangani, which is the most importing diamond trading town under their control, although they backed and protected different diamond dealers. However, frequent skirmishes erupted over time, and finally the two forces battled for the control of the town during a six-day-long war in June 2000. In the end, the Rwandan forces seized control of the town, while the Ugandan forces were forced to retreat about 100 km north to Banalia, a smaller trading center for diamonds. In July 2000, the RPA sold awarded two comptoirs the only licences to export diamonds from Kisangani.

But the fighting over Kisangani did not settle tensions between the UPDF and the RPA. On 18 November 2000, the RPA and RCD-Goma launched an attack on Banalia, then held by UPDF and MLC troops, in an attempt to seize this diamond-stronghold as well. The fighting over Banalia continued into the New Year, despite assurances by both RCD-Goma and MLC spokesmen that the skirmishes were only minor incidents caused by misunderstandings between local commanders. In late December 2000, RCD-Goma and the RPA moreover launched attacks on several other diamond-rich areas controlled by the UPDF and the RCD-ML.

24 “Supply of rough diamonds to the market was however almost US$ 9 billion, as De Beers sold an additional US$ 1.1 billion worth of diamonds from its stockpile.” Rombouts, Luc, Diamond Annual Review – 2000, n.d., at http://www.terraconsult.be/overview.htm
25 Interviews with diamond traders, Kisangani, November 2000
26 United Nations, Security Council, Report of the Panel of Experts…, at http://www.un.org/News/dh/latest/drcongo.htm, p. 29. But the split between the two former allies had a negative impact on the diamond trade in Kisangani, since some of the trade was diverted to the Ugandan zone. Interviews with diamond traders, Kisangani, November 2000
How large is the diamond trade in the area controlled by Rwanda? There are unfortunately only four very poorly-sourced estimates of the trade in the Rwandan zone. First, there are the official statistics provided by RCD-Goma that show an export of US$ 7.7 million. Second, the UN Exploitation Panel Report estimates the annual turnover to be about US$ 80 million, though the source of this figure is not provided. Third, the Kinshasa-based analysis group Observatoire Gouvernance-Transparance suggests that the provinces of Orientale, Maniema, and Equateur - all more or less occupied by Ugandan and Rwandan troops and their allies - represent a total annual turnover of between US$ 60 and 75 million. If we assume that the Rwandan forces - following their victory at Kisangani - have more than half of this trade in their territory, the estimate of the Observatoire Gouvernance-Transparance is significantly lower than the UN Exploitation Panel Report figure, perhaps only some US$ 40 million. Fourth, another Kinshasa-based analysis group, the Centre National d’Expertise (CNE), estimates the production of the ‘Kisangani’ area, apparently understood as the diamond territories currently under the control of Uganda and Rwanda, to make up 14.5% of the total Congolese diamond production. CNE estimates the total Congolese diamond production for 1999 at US$ 521 million, including both official and unofficial production, which would make the production in the Ugandan-Rwandan areas approximately US$ 76 million. If, as above, we assume that the majority of this trade takes place in the Rwandan zone, the CNE’s figure implies an annual turnover of at least US$ 40-50 million. However, the CNE cooperates with the Congolese government, and hence its figures could well be deliberately biased in order to overestimate the value of the foreign plunder. Of all the four available estimates on the annual turnover in the Rwandan zone, I therefore find the second and the third estimates of about US$ 40 million and US$ 80 million, respectively, as the most reliable.

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30 United Nations, Security Council, Report of the Panel of Experts…, at http://www.un.org/News/dh/latest/drcongo.htm, p. 29. The figure of US$ 40 million is inferred from the information that the two monopoly diamond dealers in the Rwandan zone paid US$ 4 million in total, which represented 5% of their annual turnover. (5% of US$ 80 million is US$ 4 million)
33 It is worth noting that the Congolese institutions here provide the highest estimate. It is possible that this is incidental, but might also be because they are be under political pressure to inflate the value of foreign plunder
How large is the revenue earned by the RPA? This is difficult to say, since both the RPA and diamond traders involved keep their cards close to the chest. According to the UN Exploitation Panel Report, a comptoir pays on average 5% of the diamond value to the Congo Desk. However, according to an article in the Washington Post, RCD-Goma charges diamond dealers 10% of the cash they carry into the territory. According to Hugues Leclerq, a trader from the area interviewed by Catherine André and Stefaan Marysse of the University of Antwerp, the RPA could earn between 20% and 50% of the value of the diamonds traded. How Leclerq arrives at this conclusion is not clear.

Part of the difference between the figures provided by Leclerq and those provided by the other sources, might be explained by the (comparatively minor) revenue earned from the taxation of small diamond dealers. For instance, approximately 70 small diamond dealers are registered with RCD-Goma in Kisangani, and they also have to pay licence fees to operate. These small dealers can purchase diamonds from miners who make their way into Kisangani, but they are not allowed to export the diamonds, and are thus forced to resell any purchases to the two comptoirs holding the joint export monopoly within the Rwandan zone. For such a license each of the small dealers pays an annual fee plus a percentage of the turnover: one percent, according to some diamond dealers interviewed by the author in Kisangani in November 2000. It is nevertheless unclear how much RCD-Goma and the RPA earned from taxing this group, since for obvious reasons traders are not always interested in declaring the full amounts to RCD-Goma officials.

Given the badly sourced data material, it is only possible to make inaccurate estimates of the RPA’s revenue. If we use the lowest available profit rate and the lowest available annual turnover, i.e. a tax of 5% and a turnover of US$ 40 million, the RPA would earn only some US$ 2 million annually (5% of US$ 40 million). However, if we believe that a 10% tax is charged and the annual turnover is US$ 80 million, the total revenue would instead become US$ 8 million (10% of US$ 80 million) – presuming that the tax ‘law’ is being strictly enforced. In March 2001, the President of RCD-Goma, Adolphe Onusumba, stated that RCD-Goma’s part of the revenue from the diamond trade amounted to “more or less $200,000 per month”, which is almost US$ 2½

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35 It is nor entirely clear from the article who the source is for this figure, but since Onsusumba it quoted in the same paragraph, it gives the impression that this figure should be attributed to him
36 André and Marysse, ‘Guerre et Pillage Economique…’
37 Interviews with diamond traders, Kisangani, November 2000
38 Interviews with diamond traders, Kisangani, November 2000
million per year. Onusumba did not elaborate on the diamond revenue earned by the RPA, but since July 2000 the RPA and RCD-Goma have split the diamond revenue equally between them, according to the *UN Expert Panel Report*, which suggests a total revenue of almost US$ 5 million per year. Finally, if we choose instead to believe the figures of the trader Leclercq, the annual profit would be much higher: between US$ 8 million (20% of US$ 40 million) and US$ 40 million (50% of US$ 80 million).

Another source of diamond-related income is the export of Angolan diamonds from Rwandan territory in breach of a UN embargo on buying or selling Angolan diamonds. High-ranking representatives from the Angolan rebel movement, the *União Nacional para a Independência Total de Angola* (UNITA), have been allowed to ‘market’ their goods in Kigali with international diamond traders, undoubtedly providing kick-backs to the Congo Desk. This (obviously unofficial) permission goes back to August 1998, when out of mutual interest UNITA and the RPA formed an alliance against Kabila’s government. Allegations that some of the diamonds exported from Rwanda may originally have come from UNITA have been further substantiated by the fact that the average quality of diamonds exported from Rwanda is higher than that generally found in the Congo. In order to circumvent the UN’s monitoring mechanisms, attempts are being made to set up a diamond-cutting factory in Kigali by individuals that have arms and diamond-smuggling links with UNITA, according to a UN report on the state of the embargo on Angolan diamonds. The *Sunday Telegraph* suggested in an article from 22 July 2001, that the international arms dealer Victor Bout already owns such a diamond-cutting factory in Kigali; an important facility,

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since it is virtually impossible to trace the geographical origin of diamonds once they have been cut.\textsuperscript{43} There are however no estimates available for neither the volume nor the value of UNITA diamonds being exported through Kigali.

\textbf{Coltan Exploitation}

During 2000, the multiplication of the price of the high-tech ore coltan turned the trade in that mineral into the RPA's single most profitable source of revenue. Coltan consists of columbium (Cb) and tantalum (Ta), two elements that are usually found together in oxidized form, hence the full name for coltan is columbite-tantalite. In 2000, about 6.6 million pounds, or 3,000 tons, of pure tantalum, the most expensive of the two sub-components, was consumed globally, according to the \textit{Industry Standard Magazine}.\textsuperscript{44} Coltan is extremely resistant to both very high and very low temperatures, and has therefore become a vital component in most advanced mobile phones, pagers, jet engines, air bags, night vision goggles, fiber optics, and, perhaps most importantly, capacitors for computer chips.

The eastern parts of the mineral-rich Congo have large coltan deposits. However, US Geological Survey specialists caution that no proper reserve estimate has been carried out for nearly ten years.\textsuperscript{45}

The Congolese coltan reserves under RPA control are located in the provinces of South Kivu, North Kivu and Maniema, but some coltan pockets in these provinces are controlled by the Mai-Mai and the ALIR.

\textbf{Structure of the Trade}

Back when the Congo was still Zaire, coltan was being mined in North Kivu and South Kivu by a Belgian-Zairian company named \textit{Société Minière et Industrielle du Kivu} (Sominki). However, the Congo’s coltan production waned with then Zairian President Mobutu Sese Seko’s control of the


\textsuperscript{45}“By definition "reserves" are those portions of mineral deposits that can be mined economically under prevailing legal, political and market conditions. Ore ‘resources’ contain both currently economic material and associated material that could become economic in the future if market prices change, or technology innovations make it more economic to mine. ‘Resources’ can be as much as 2 to 4 times larger than the ‘reserves’ and could be more.” Coakley, George, private correspondence to the author, 28 September 2001 and United States, Geological Survey, \textit{The Mineral Industry of Congo (Kinshasa) - 2000}, Mineral Industry Survey, at http://minerals.usgs.gov/minerals/pubs/country/afir.html#rw
eastern territories. By the time of the Rwanda Genocide in 1994, mining production virtually ceased, when more than one million refugees, militias, and ex-FAR soldiers retreated to the Kivu provinces. The company nevertheless survived and guarded a decent stock at its facilities in the jungle, which was for unknown reasons not exported. During the following years, Sominki was cast into turmoil. The Belgian stockholders in 1995 decided to sell their 72% of the company to a Canadian mining consortium, Banro, while the remaining 28% of the company stayed with the Zairian government. In January 1997, Sominki’s assets were transferred into a new company named Sakima SARL, apparently owned by both Banro as well as a local Zairian corporation named RMA.46

But when Mobutu lost power in 1997, the new President, Laurent-Desiré Kabila, annulled the contract. When the RPA and the UPDF then re-entered Eastern Congo in August 1998 to oust Kabila, they quickly seized the mines and stocks of the old Sominki. According to the UN Exploitation Panel Report, Sominki had seven years’ worth of coltan in stock in various areas. From late November 1998 to April 1999, the RPA and RCD-Goma organized the removal and transport to Kigali of between 1,000 and 1,500 tons of coltan and between 2,000 and 3,000 tons of cassiterite, unnamed sources told UN panel members. In August 2000, the RCD went a step further and expropriated Sakima and RMA – the heirs of Sominki, according to one version. The official explanation was that a new provisional management had been appointed by RCD-Goma in order to take care of what was somewhat euphemistically referred to as ‘abandoned goods’. The original owners were encouraged by the chief of RCD-Goma’s mining department, Nestor Kiyimbi, to “come and re-negotiate their purchasing contract”.47 At the time of writing, the state of the company remains in limbo.

Currently, coltan is therefore being mined by local people, mostly in abandoned tin mines, where the coltan can be found amidst abandoned tin slag.48 Miners usually work using only simple equipment such as shovels - if any at all - and the work is dangerous, since the mining constructions are not properly buttressed nor regularly maintained, and the labour is unskilled. It is little surprise that casualties among miners are frequent.

47 Authors translation into English, Tageszeitung, ‘Erzfeinde im Coltan-Rausch’, 22 December 2001, also available at http://www.taz.de/tpl/2000/12/22/a0078.nf/stext.Name.askfcfEmH.idx.0
48 When the price of coltan was still low, it was regarded as less worth than the tin ore with which it is often found, and was often not extracted
The deprivation of the economy due to the war and plunder – later combined with the rising coltan prices – has nevertheless made local people dig for coltan. In certain areas in the Kivu provinces, it was last year said that mining coltan was what most young men spent their time doing.\textsuperscript{49}

The excavated ore is sold to middlemen, who either sell it on to other middlemen or themselves take the ore to the larger coltan comptoirs that are usually based in the towns of Goma and Bukavu right on the Rwandan border. RPA officers, RCD-Goma officials, and Rwandan traders own most of these comptoirs or have shares in them.\textsuperscript{50} A notable exception to this Rwandan dominance was Aziza Kulsum (a.k.a. Madame Gulamali or Aziza Gulamali), a gunrunner and smuggler with an extensive business portfolio and many trading partners, including the Rwandan Hutu militias in exile. For a limited period during 2000 and 2001, she teamed up with the RPA and RCD-Goma to create a company that was awarded the export monopoly on coltan in the Rwandan zone.\textsuperscript{51}

In areas the RPA cannot or does not want to control, it still keeps an eye on what is going on. According to the \textit{UN Exploitation Panel Report}, there have been several examples of the RPA tracking the coltan exploitation through informers. When large amounts of coltan had been mined and packed in bags by the Maï-Maï or the Interahamwe, the RPA mounted attacks and seized control of the mining areas in question for a few days, just enough for small aircraft to fly in and evacuate the coltan.\textsuperscript{52} According to the \textit{UN Exploitation Panel Report}, there are strong indications that most of the fighting between the RPA and the Maï-Maï has taken place over coltan-rich areas.\textsuperscript{53}

In other areas, where the ALIR and the Maï-Maï are too strong, the RPA has come to a profitable modus vivendi with their ostensible enemies. Through middlemen, the RPA simply buys the coltan, which - given the geographical circumstances and the collapsed Congolese infrastructure - is virtually impossible for the Maï-Maï or the ALIR to export by themselves.

\textsuperscript{49} Jackson, Stephen, "Our Riches are being Looted!"…
\textsuperscript{51} See for instance \textit{Tageszeitung}, 'Erzfeinde im Coltan-Rausch', 22 December 2001, also available at \texttt{http://www.taz.de/tp/2000/12/22/a0078.nf/stext.Name.askcfEmH.idx}; and
\textsuperscript{53} ibid., at \texttt{http://www.un.org/News/dh/latest/drcongo.htm}, p. 37
According to the UN Exploitation Panel Report, the Maï-Maï chief, General Padiri, even once informed ‘people in Kigali’ that he was selling 60 tons of coltan.54

According to several reports, the RPA has also flown in prisoners from Rwanda who are offered a reduced sentence and/or some small pay to labour as coltan miners. It still remains unclear when this practice was initiated, but five mining sites with Rwandan prisoners have been reported. From these mining fields, the RPA exports the excavated coltan directly to Rwanda by plane or Army helicopters.55

Although the President of RCD-Goma, Adolphe Onusumba, has not confirmed the use of Rwandan prisoners as miners, he indirectly acknowledged the RPA’s direct coltan exports to Rwanda in an interview with the Washington Post: "There is cooperation, but Rwanda is not charging us the fees like Zimbabwe charges Kabila," Onusumba said with reference to the diamond mines offered by the Congolese government to the President of Zimbabwe, Robert Mugabe, in exchange for the lending of between 11,000 and 12,000 troops to support the badly trained Congolese government army. "It is a brotherhood […] If the Rwandans come and they get col-tan from Punia or Walikale [in North Kivu], it’s up to them," Onusumba said.56

Exports via Rwanda

As discussed above, the RPA does not have an interest in revealing the real extent of its plunder of Congolese mineral resources. However, RCD-Goma has on several occasions acknowledged that coltan exported by comptoirs to Rwanda amount to at least 100 tons per month.57 In an article in the Tageszeitung on 22 December 2000, Nestor Kiyimbi is quoted as having said: "Die Ankäufer deklarierten zusammen eine Ankaufsmenge von 40 Tonnen im Monat, aber wir wissen,

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54 Ibid.
dass sie bis zu 140 Tonnen im Monat ausführten.\textsuperscript{58} In late November 2000, RCD-Goma estimated that territory under its control was producing between 100 and 200 tons of coltan per month, according to an article in the \textit{Washington Post}.\textsuperscript{59} On 8 April 2001, the \textit{Associated Press} wrote that the “rebels say they are sending about 100 tons of Congo Coltan to Rwanda a month.”\textsuperscript{60} In Butembo, traders told the \textit{Corriera della Serra} that they exported ‘about 50’ tons of coltan per month from Butembo only, thus implying a much higher export rate from the entire Rwandan zone.\textsuperscript{61}

In Rwanda, the Congolese coltan is “generally stored in facilities owned by the Government,” according to the \textit{UN Exploitation Panel Report}. From there, most of it is exported to international markets by the companies \textit{Rwanda Metals} and \textit{Grands Lacs Metals}, both believed to belong to the RPA, although this is officially denied by the Government of Rwanda. According to the \textit{UN Exploitation Panel Report}:

In mid-January 2001, some very reliable sources met with the senior management of Rwanda Metals in Kigali. During these discussions, the Director told them that Rwanda Metals was a private company with no relation to the army. He further explained that he was expecting key partners that very morning for discussions. As discussions continued, the so-called partners arrived as planned; unfortunately they were in Rwandan army uniforms and were top officers. This incident confirms accounts from various sources indicating that Rwanda Metals is controlled by RPF.\textsuperscript{62}

The stockholders of Grands Lacs Metals include Majors Gatete, Dan and Kazura, according to the \textit{UN Exploitation Panel Report}. Major Kazura is the Chief-of-Security of the Rwandan Army in the Congo, while Major Dan Munyuneza, as his full name reads, is the former head of the Congo Desk. Clients are either contacted directly or through the Congo Desk, and Major Dan Munyuneza has personally signed some of the letters sent to potential clients in Europe and the US, according to the \textit{UN Exploitation Panel Report}.\textsuperscript{63}

\textsuperscript{58} Tageszeitung, ‘Erzfeinde im Coltan-Rausch’, 22 December 2001, also available at http://www.taz.de/tpl/2000/12/22/a0078.nf/stext.Name,askfcfEmH.idx,0
\textsuperscript{60} \textit{Associated Press}, ‘Search for high-tech ore fuels Congo’s war’, 8 April 2001
\textsuperscript{61} \textit{Corriera della Serra}, ‘La guerra del minerale misterioso Migliaia di morti in Congo per il Coltan, la sabbia nera “più preziosa dell’oro”’, 26 April 2001
Profits

In order to estimate the RPA’s profit from the trade in coltan, I shall first try to estimate the market value of one kilo Congolese coltan ore at western markets. For this purpose, I shall use a comprehensive price index kindly made available by the industry journal Ryan’s Notes. I shall then look at the costs associated with ‘producing’ and ‘exporting’ one kilo of coltan to western markets. The difference between these two estimates is the net profit earned on the export of one kilo of Congolese coltan.

Since the price of columbium is significantly lower than the price of tantalum, the tantalum content in coltan is of paramount importance. The branch custom is to denote the quality of tantalum ore as contained tantalum oxide (Ta$_2$O$_5$); the higher the content of Ta$_2$O$_5$, the higher the price. Tracking the market price of coltan is therefore quite tricky, since the price depends not only on the volume of ore traded, but mostly on the contained volume of Ta$_2$O$_5$.

Media reports nevertheless frequently cite very different price quotes specifying neither the source nor the pertaining Ta$_2$O$_5$ content.\textsuperscript{64}

Ryan’s Notes quotes tantalum prices as “US$ per pound of contained Ta$_2$O$_5$, c.i.f. US port, based on 60% combined Ta$_2$O$_5$ and Cb$_2$O$_5$.\textsuperscript{65} In order to obtain this price quoted by Ryan’s Notes, the seller must in other words pay for shipment to a US port. Also, it must be noted that the quotations do not specify how much is columbium and how much is tantalum, which makes a great difference since tantalum is much more expensive.

I am therefore obliged to make some estimates and assumptions in order to try to calculate the revenue earned by the RPA on coltan exports. First, I will therefore assume that ‘60% combined Ta$_2$O$_5$ and Cb$_2$O$_5$: means that there is an equal amount of columbium oxide and tantalum oxide in the ore, i.e. the ore quoted refers to 30% contained Ta$_2$O$_5$.

Broadly speaking, the price quotes for coltan ore with a 30% tantalum oxide content corresponds fairly well with the coltan mined in Rwanda and Congo, since ore from both these

\textsuperscript{63} Ibid., p. 29

\textsuperscript{64} For instance, the Associated Press cited a coltan price of US$ 350 per pound for December 2000, while the La Libre Belgique mentioned the December 2000 price ‘reaching 200 dollars’. The Tageszeitung quoted a January 2001 price of ‘almost 400 dollars’ per pound. However, none of these media specified the quality of the ore with respect to Ta$_2$O$_5$ content. Associated Press, ‘Search for high-tech ore fuels Congo’s war’, 8 April 2001; La Libre Belgique, ‘Des sociétés belges impliquées dans le trafic de coltan’, 12 April 2001; and Tageszeitung, ‘Deutsches Geld für Kongos Krieg’, 4 April 2001, also available at http://www.taz.de/tpl/2001/04/04/a0090.nf/stext.Name,askhxapTj.idx,0

\textsuperscript{65} Ryan’s Notes, untitled, private correspondence to the author, 10 August 2001 and 10 September 2001

From *Ryan's Notes*’ electronic archive, I retrieved a complete list of all the twice-weekly tantalum price estimates published from 1 January 2000 to mid-August 2001. The estimates – depicted in Figure 1 - showed that the average price per pound fluctuated from US$ 46.5 in the period from January throughout May 2000, then rose to US$ 75 in June where the price stayed for some months, until it hiked somewhat in both September and October. Finally, the price exploded to US$ 215 within a few days in mid-November, before peaking at US$ 275 in the period from mid-December 2000 to mid-January 2001, after which the price slowly fell again and reached US$ 41.5 in August 2001.

Given the fact that the tantalum price was quite low until May 2000, the average price for tantalum in 2000 was ‘only’ US$ 88.95 per pound, or US$ 195.94 per kilogram. For the first half of 2001, the average price was US$ 149.36 per pound, or US$ 329.00 per kilogram.\footnote{Authors calculation based on Ryan’s Notes, all issues from 3 January 1995 to 17 August 2001, also available at http://www.ryansnotes.com}
**Figure 1 - Coltan Price Development**

Average price, US$ per pound of Ta$_2$O$_5$, c.i.f. US port, based on 60% combined Ta$_2$O$_5$ and Cb$_2$O$_5$, according to Ryans Notes. Data extracted from http://www.ryansnotes.com and reprinted with the kind permission of Ryan’s Notes.

Sources:

*Ryan’s Notes*, all issues from 3 January 1995 to 17 August 2001, also available at http://www.ryansnotes.com

Ryan’s Notes, untitled, private correspondence to the author, 10 August 2001 and 10 September 2001
What are the costs associated with purchasing one kilogram of coltan? The coltan mined by prisoners is obviously virtually free of charge, except for a few expenses related to the prisoners’ food and the transport of coltan and prisoners back and forth from Rwanda.

However, the majority of the coltan is probably bought from small dealers who obtain the ore directly from local Congolese diggers. The price of such ore obviously varies according to quality (i.e. tantalum content), fluctuations of the world market price, and probably other circumstances as well. Generally, however, the price range is US$ 10-30 per kilo. For instance, a digger around Masisi told the *Associated Press* that he received US$ 5 for each pound separated ore, or roughly US$ 11 per kilo. In a place called Mumba, another digger told the *Washington Post* that he earned US$ 10 per pound, or roughly US$ 22 per kilo. According to the *UN Exploitation Panel Report*, intermediaries can buy from the small dealers at about US$ 10 per kilogram. Stephen Jackson of the University College, Cork, interviewed a Congolese lady who bought coltan at the market in Walikale, North Kivu, at about US$ 25 a kilogram and resold it to the commercial comptoirs in Bukavu at about US$ 30 per kilogram. The *Corriera della Serra* interviewed diggers in Butembo, who sold the ore for US$ 10 to 30 dollars per kilo.

The cost of transport to Rwanda, and from there to international markets outside Africa, must be added to the cost price. According to the lady interviewed by Stephen Jackson, she paid US$ 1.50 per kilogram air transport between Walikale and Bukavu. Since most of the other mining sites are closer to Bukavu and Goma, where the comptoirs are situated, than Walikale, I assume that air freight charges from other sites are not more expensive than that.

From both Goma and Bukavu, the coltan can be taken by lorry to Kigali, which is very inexpensive compared to air transport.

Finally, there is the transport out of Africa to the US. For instance, Sabena Cargo, which is operated by SwissCargo, flies regularly between Kigali and Brussels, charges US$ 2.20 per kilogram freight from Kigali to Brussels for a minimum of 500 kilogram ‘non-volume restricted

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68 *Associated Press*, ‘Search for high-tech ore fuels Congo’s war’, 8 April 2001
71 Jackson, Stephen, “Our Riches are being Looted”…
72 *Corriera della Serra*, ‘La guerra del minerale misterioso Migliaia di morti in Congo per il Coltan, la sabbia nera “più preziosa dell’oro”’, 26 April 2001
73 Jackson, Stephen, “Our Riches are being Looted”…
cargo’, the category within which coltan falls. Shipping air cargo to the United States is likely to be slightly more expensive.

Thus, even if the RPA’s companies pay a maximum of US$ 30 dollars per kilogram of coltan ore, plus US$ 1.50 per kilogram for air transport from the mining districts to the Rwandan-Congolese border, plus, say US$ 0.50 per kilogram, for lorry transport to Kigali and, finally, say US$ 5 per kilogram for air cargo to the United States, the expenses only add up to some US$ 37 per kilogram.

How much has the RPA earned from the trade in coltan?
During 2000, the average US market price for tantalum was - as mentioned above - roughly US$ 196 per kilogram. If we assume that 100 tons of an average grade of 30% contained tantalum was exported per month, this would generate a gross revenue of US$ 235 million. Minus costs of US$ 37 per kilogram, the net profit for 2000 would end at US$ 191 million.

During the first half of 2001, the average US market price for tantalum was – as mentioned above - US$ 329.00 per kilogram. If we assume that 100 tons of an average grade of 30% contained tantalum was exported per month, this would generate a net profit of US$ 175 million for these 6 months.

In connection with these calculations, it is important to note that the RPA does not have a complete coltan monopoly. However, since the RPA, the RPF, and its members are involved in all levels of the trade though ownership of companies and mining land, taxation of competitors’ companies, large-scale export to Europe and the US and so on, it is very likely that this group of people reaps the majority of the estimated profit.

Moreover, it is important to note that I have based the calculations above on the assumption that the coltan in question was mined and exported in a steady stream throughout the year; but in

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74 Telephone interview with SwissCargo official, 3 May 2001
75 Following the publication of the UN Exploitation Panel Report on 16 April 2001 as well as subsequent pressure from Belgian NGOs, Sabena Cargo has stopped transporting coltan from Rwanda. However, I do consider it unlikely that transport charges are significantly higher with other airlines. For instance, a UN investigator (not associated with the UN Exploitation Panel Report) told the BBC radio programme File on Four that following the Sabena decision, cargo planes operated directly between Goma and the Belgian airport of Oostende. File on Four, BBC Radio 4, 10 July 2001, transcript available at http://www.bbc.co.uk/radio4/progs/genre/transcripts/fileonfourmobilephones.pdf
76 As discussed above, RCD-Goma acknowledged that at least 100 tons were being exported per month. The UN Exploitation Panel Report further states that “according to the estimates of professionals, the Rwandan army through Rwanda Metals was exporting at least 100 tons per month.” United Nations, Security Council, Report of the Panel of Experts..., at http://www.un.org/News/dh/latest/drcongo.htm, p. 29
77 However, the profit is probably higher than that since coltan mined by Rwandan prisoners or captured from the Interahamwe and the Mai-Mai does not have to be paid for
fact it is almost certain that the export was most intensive when the price peaked at US$ 606 per kilogram – more than 3 times the yearly average for 2000. The revenue might thus have been even higher than suggested.

In addition, the RPA benefited from the reported one-off export of between 1,000 and 1,500 tons of coltan from the Sominki stocks seized in late 1998, which were flown to Rwanda by the RPA between November 1998 and April 1999. In this period, Ryan’s Notes quoted the average market value at US$ 33.5 per pound, but beginning 1 May 1999, the price rose to US$ 41.5 per pound. Depending on when this coltan was actually sold, the RPA would have made a gross profit of either between US$ 33.5 and 50.3 million or between US$ 41.5 and 62.3 million on this particular ‘export’ – minus expenses, which in this case are largely negligible since the coltan was not paid for.

**Gold Exploitation**

Compared to the trade in coltan and diamonds, there is even less accurate data available on the extraction and trade in gold in Eastern Congo. According to official RCD-Goma statistics quoted in the *UN Exploitation Panel Report*, an average of 60 kilograms of gold were extracted every month during 1999 from the area controlled by RCD-Goma, or 720 kilograms for the whole year. In 2000, the extraction was higher, 100 kilograms per month, or 1,200 kilograms for the whole year. Strangely, when the Brussels-based NGO International Peace Information Service contacted RCD-Goma, the latter provided a total extraction figure for 2000 of 1,400 kilograms.⁷⁸

According to the most recent *Mineral Commodity Survey* by the US Geological Survey, the average price for gold in both 1999 and 2000 was US$ 9.877 per kilogram.⁷⁹ The estimated extraction for 1999, 720 kilograms, thus had a market value of US$ 7.1 million. The extraction for 2000, 1,200 kilograms by one account and 1,400 by another, was worth respectively US$ 11.9 million and US$ 13.8 million.

As noted earlier, the Belgian *Institut des Comptes Nationaux*, a subsidiary of the Belgian National Bank, registered gold imports from Rwanda worth US$ 35.5 million during 1997 and US$ 29.8 million for 1998.⁸⁰

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⁸⁰ Belgium, National Bank of, *Institut des Comptes Nationaux*, selected import statistics made available to the author by Tom De Herdt, University of Antwerp
According to the *UN Exploitation Panel Report*, each miner in the Kilo-Moto mines in the Ugandan zone pay Ugandan soldiers 1 gram of gold per day for permission to access the mine.\(^{81}\) Whether miners in the Rwandan zone are charged according to a similar system is not clear, but the trader Leclerq estimates that foreign forces earn roughly 50% of the world market value.\(^{82}\) If we believe him, the RPA earned at the very least about US$ 16.0 million in 1997 and about US$ 14.5 million in 1998 on the gold that ended up in Belgium only.\(^{83}\) It is very likely that gold was also exported to other countries, for which figures are unfortunately not available. For instance, the *UN Exploitation Panel Report* states that gold from Eastern Congo has also been exported to Sri Lanka via the capital Tanzania, Dar es Salaam.\(^{84}\) In 1999, the Belgian gold imports from Rwanda decreased significantly, but it remains unclear whether this was caused by a shift in export routes or by a real change in the volume of gold traded.

**Rwandan Military Expenditures**

Following the occupation of the Congo, the economy of the RPA has become strained, apparently made even worse by massive corruption and embezzlement within the RPA. The RPA has attempted to save money by cutting certain expenses related to the war. In the autumn 2000, for instance, about 1,000 RPA soldiers were made to walk home to Rwanda from Ubundu near Kisangani - a distance of more than 400 km through the jungle - thereby saving an estimated US$ 113,000 in the calculations of the *East African*.\(^{85}\) Besides this, neither the RPA nor RCD-Goma appear to waste their money paying the hotel bills of high-ranking officers or politicians in the Congo.\(^{86}\)

As can be seen in Table 6, army and police expenditures nevertheless weigh heavily on the Government of Rwanda’s budget. According to the IMF, Rwandan military expenditures were


\(^{82}\) André and Marysse, ‘*Guerre et Pillage Economique…’*

\(^{83}\) Confer ‘*Table 4 – Official Belgium Imports of Gold from Rwanda’*


\(^{85}\) *East African*, ‘*RPA Soldiers Walk Home from Congo’*, 14 August 2000

\(^{86}\) *La Libre Belgique*, ‘Les Rwandais pillent-ils le Congo?’, 25 October 1999 and *La Libre Belgique*, “On est injuste avec le Rwanda”, 26 October 1999. Let alone the paychecks of civil servants in areas under their control, although a Congolese NGO claims that when RCD-Goma in December 2000 had an economic boost from taxes levied on coltan, certain civil servants were paid a salary of 300 Congolese Francs – or roughly US$ 4 – for the whole of 2000. [sic!]

Rwfr 27.2 billion in 1998, Rwfr 27.0 billion in 1999, Rwfr 25.8 billion in 2000 (provisional estimate), and 23.9 billion is forecast in the budget for 2001. These figures include police expenditures, according to a background document from the Rwandan Ministry of Finance obtained by Catherine André of the University of Antwerp.87

Table 6 – Official Rwandan Military Expenditures

<table>
<thead>
<tr>
<th>Year</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Military Expenditures in Rwfr billion</td>
<td>27.2</td>
<td>27.0</td>
<td>25.8</td>
<td>23.9</td>
<td>23.5</td>
<td>23.4</td>
<td>22.5</td>
</tr>
<tr>
<td>Military Expenditures - in US$ billion (*)</td>
<td>87.1</td>
<td>80.9</td>
<td>66.2</td>
<td>55.6</td>
<td>54.0</td>
<td>53.0</td>
<td>52.0</td>
</tr>
<tr>
<td>Current Expenditures - in Rwfr billion</td>
<td>75.3</td>
<td>87.1</td>
<td>86.7</td>
<td>96.4</td>
<td>101.1</td>
<td>109.7</td>
<td>120.3</td>
</tr>
<tr>
<td>Total Expenditures - in Rwfr billion</td>
<td>117.4</td>
<td>127.5</td>
<td>134.4</td>
<td>153.3</td>
<td>166.8</td>
<td>183.5</td>
<td>201.2</td>
</tr>
</tbody>
</table>

Military Expenditures as part of
Total Expenditures
23% 21% 19% 16% 14% 13% 11%

Military Expenditures as part of
Current Expenditures
36% 31% 30% 25% 23% 21% 19%

Military Expenditures as part of GDP
4.3 4.1 3.8 3.2 2.9

Source:
International Monetary Fund, African Department, Rwanda-Staff Report for the 2000 Article IV Consultation and Requests for the Third Annual Arrangement Under the Poverty Reduction and Growth Facility And for Extension of Commitment Period, 11 December 2000, p. 17 and p. 37

(*) A projected exchange rate of Rwfr:US$ 430.0 was used for 2001

Source: Economist Intelligence Unit, Country Report Rwanda, 1 February 2001

It is however widely believed that the Rwandan military expenditures are kept artificially low in the official budget. As I shall demonstrate below, there are two good reasons to question the veracity

87 Telephone interview with Catherine André, Antwerpen University, June 2001
of the official figures: first, the expense accounts of the RPA are unlikely to be met by the official military budget and, second, the RPA appears to have significant sources of extra-budgetary income.

Calculations of RPA Expenditure

The Rwandan military expenditures include the following main expenses: Air transport in the Congo, soldiers’ pay, ammunition, weapons, spare parts, and vehicles.

The following calculation of the costs of Rwandan air transport needs in relation to the war in the Congo only is made in the *UN Exploitation Panel Report*:

An aircraft owner operating in the region has indicated that he charges on average $2,000 per hour. Based on his experience of three rotations per day in a smaller area, the Panel estimates five rotations for Rwanda at an average of six hours each. A simple calculation gives a figure of $1.8 million per month and $21.6 million per year.\(^{88}\)

These figures seem in accordance with the estimates of other aircraft owners interviewed by the *East African*.\(^{89}\)

Concerning the pay of soldiers, the *UN Exploitation Panel Report* estimates that:

based on the minimum number of 25,000 soldiers in the Democratic Republic of the Congo and an average $100 for pay and bonuses, the Panel has calculated a total of $2.5 million per month and $30 million per year. Transportation and pay of troops alone in the Democratic Republic of the Congo amount to $51.6 million per year, which is about three quarters of the total Rwandan official defence budget. By taking into consideration the remaining 20,000 soldiers stationed in Rwanda and their average pay of $50 per month, almost the total defence budget ($63 million) is used on two items [i.e. aircraft leasing and soldiers’ pay].\(^{90}\)

There is, however, one possible weak link in this calculation: press reports have questioned whether ordinary soldiers in the Congo are actually paid in full, if at all. Some soldiers chose to go on strike after they returned to Rwanda and discovered that their promised salaries had not

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\(^{89}\) *East African*, ‘RPA Soldiers Walk Home from Congo’, 14 August 2000

It is nevertheless arguable whether the calculations should stop here: since the RPA has created – and continues to control – RCD-Goma, one could argue that the latter’s military expenditures should be added to the expenditures of the RPA in order to find the real costs of the Rwandan war effort in the Congo. Though it is doubtful that RCD-Goma soldiers – estimated to number between 12,000 and 15,000 – are well paid, they still need equipment, transport, ammunition, and weapons. Although I do not have any statistics or estimates on the costs related to RCD-Goma, this would no doubt substantially drive up the total estimate.

**Bogus Loans Conceal Extra-Budgetary Financing**

On the income side, there is no evidence that the vast surplus gathered from the trade in Congolese commodities actually ends up in state coffers or the national budget as such. It rather lines the pockets of officers or is used directly for the war effort. In fact, the *UN Exploitation Panel Report* quotes President Paul Kagame as having said that the war is ‘self-financing’, which might be partly true in the sense that the plunder facilitates extra-budgetary army expenditures.\(^9^4\)

The RPA has nevertheless used a variety of methods to conceal the real size of the army budget and in particular its financing by mineral commodities from the Congo.

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\(^9^1\) Interview with former journalist at *Rwanda Newsline* Ignatius Mugabo, Copenhagen, June 2001


\(^9^3\) See also *Confer ‘Table 6 – Official Rwandan Military Expenditures’*
One of the methods mentioned in the *UN Exploitation Panel Report* has been the use of bogus loans to pay for military expenditures. An example in point involved a short-lived company called SONEX, which was created and owned by RCD-Goma, according to the *UN Exploitation Panel Report*. In 1999, the Kigali-based *Banque de Commerce, du Développement et d’Industrie* (BCDI), which through a web of other companies is owned in part by the RPF, approved a loan of US$ 5 million to SONEX. This loan was never actually paid out to SONEX but was instead used to pay RPA suppliers for services related to the RPA war effort, such as aircraft leasing. RCD-Goma then repaid this loan using taxes levied on the mineral trade in, for instance, coltan. In this way, the RPA’s budget received – through this particular transaction only – a covert influx of US$ 5 million.95

‘Voluntary’ War Taxes

The Rwandan Government has repeatedly called on its citizens to make so-called ‘voluntary contributions’ to the war effort. In November 1999, the Rwandan Parliament proposed that security be maintained by ‘voluntary contributions’ from Rwandans according to their means. To set an example, members of the Parliament pledged to contribute three months salary.96

The IMF’s position on this matter is somewhat ambiguous. In a confidential report of 11 December 2000 to the members of the IMF’s Executive Board, the IMF’s African Department indirectly suggested that all such contributions had indeed been declared:

> Regarding extrabudgetary operations potentially related to defense, the authorities have reported on the accounts with the voluntary contributions of citizens toward security and defense of the country. They produced evidence showing that there had not been any withdrawals from these accounts. 97

But the fact that the Government of Rwanda has produced such evidence does not exclude extra-budgetary financing by voluntary contributions. For instance, the Government could have

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95 Ibid., p. 30
97 International Monetary Fund, African Department, *Rwanda-Staff Report for the 2000 Article IV Consultation and Requests for the Third Annual Arrangement Under the Poverty Reduction and Growth Facility and for Extension of Commitment Period*, 11 December 2000, p. 17; and confidential telephone interview with International Monetary Fund officials, 2001
refrained from depositing all funds into those bank accounts known to the IMF – or it could simply have kept some of the funds in cash.

According to one IMF official, the IMF had no evidence of forced contribution. However, according to an investigation by Human Rights Watch:

Superiors in government bureaucracies dictated the sums to be provided by their subordinates. In the Ministry of Justice, employees were informed of a scale of expected contributions according to annual salary. But in most government services, as well as in certain other private sectors, salaried employees were told to provide the equivalent of one month’s salary.  

Another example is schoolteachers, who were allegedly forced to contribute a part of their salary. Bearing in mind that teachers form the bulk of the public-sector workforce, and wages for teachers in 1999 made up Rwfr 11.3 billion, or US$ 35.6 million, the extra-budgetary input from teachers could very well boost the army budget by several million US$.  

Peasants, who account for approximately 90% of Rwanda’s 8.3 million population, have also been made to pay, according to Human Rights Watch; usually the equivalent of US$ 1 for each member of the household above the age of 16 years. If applied strictly, this income from farmers would suggest an extra-budgetary income of several million US$ from peasants.  

It would also have been interesting to look into the circumstances of the parliament members’ decision to voluntarily sign away their salary. Bearing in mind the predominance of the RPA in political life, which will be discussed below, it is doubtful whether the parliament members actually had any choice but to give in to RPA pressure.

**Estimates of the Unofficial RPA Budget**

Given the above examples, it is widely believed that the official figures are being polished to please donor demands of minimized defence costs. For instance, the International Institute for Strategic Studies has estimated Rwandan military expenditures for 1999 at US$ 135 million. 

The International Crisis Group suggests that "estimates that account for the revenues of semi-
public companies and illegal diamond trading put the real figure closer to 8 per cent [of the GDP for 1998]."\textsuperscript{102} Since Rwanda’s GDP was Rwfr 631.7 billion for 1998, this would set the military expenditures at Rwfr 50.6 billion or US$ 161.8 million.\textsuperscript{103} Even the Bretton Woods institutions seem to doubt the official figures that they themselves approve. According to Catherine André,

\begin{quote}
Le FMI a ainsi signalé en septembre 1998 que certaines dépenses civiles, des salaires d’enseignants, auraient été réallouées au poste des dépenses militaires - avant de préciser, en novembre 98, que les réaffectations concernaient l’ensemble des postes budgétaires. Les ressources extrabudgétaires proviennent de transferts de la part d’entreprises semi-publiques et de ressources minières en provenance du Congo-Kinshasa et d’Angola - dont le montant est difficilement évaluable.\textsuperscript{104}
\end{quote}

Likewise, according to the Stockholm International Peace Research Institute (SIPRI), the IMF contested the official tallies of 4.3% of GDP for defence spending in 1998.\textsuperscript{105} Nearly three years later, the African Department of the IMF indirectly suggested that the Army might be funded with sources outside the regular budget. In an internal report of 12 December 2000, the African Department stated:

\begin{quote}
The government has committed under the 2001 program to identify all extrabudgetary funds, projects, and transactions – including any relating to defence – and to incorporate them the 2002 budget.\textsuperscript{106}
\end{quote}

On 27 March 2001, the Directors of the IMF acknowledged that there was still a problem of extra-budgetary funding of the Rwandan military:

\begin{quote}
[IMF] Directors encouraged the [Rwandan] authorities to bring about greater transparency in government operations […] In this regard, Directors expressed concern over the extra-budgetary expenditures, especially those
\end{quote}

\textsuperscript{102} International Crisis Group, Scramble for the Congo…, at http://www.crisisweb.org/projects/showreport.cfm?reportid=130, p. 35
\textsuperscript{103} Confer ‘Table 7 – Rwanda: Selected Economic Indicators’
\textsuperscript{104} Catherine André quoted in \textit{La Libre Belgique}, ‘Trop de dépenses militaires’, 2 November 1999
relating to military spending, and welcomed the authorities' intention to bring them into the 2002 budget.\footnote{International Monetary Fund, \textit{IMF Concludes Article IV Consultation}…, at \url{http://www.imf.org/external/np/sec/pn/2001/pn0131.htm}}

These hesitations have nevertheless not spurred the IMF to seriously challenge the RPA’s budget as laid out by the Government of Rwanda. Quite to the contrary, the IMF and the World Bank have in their continuous reports by and large backed the figures put forward by the Rwandan government – with no comments about extra-budgetary funding of the RPA.

**Provisional Conclusion**

The RPA is completely dominated by Tutsis from the RPF’s original army. Nevertheless, a great number of Hutus have been more or less forced into participating in the Second Congo War, but they are thought to have little choice. In the Congo, the RPA has created a token rebel movement, RCD-Goma, which is permeated by members of the Congolese Banyamulenge group, who are trusted by the RPA. Together, RCD-Goma and the RPA have brutally suppressed the local populations, which has led to the creation of numerous militias, referred to as the Maï-Maï, some of whom cooperate with the remnants of the Rwandan Hutu militias.

Officially, the Government of Rwanda maintains that it does not plunder the natural resources of the Congo. Nevertheless, the President of Rwanda, Paul Kagame has been quoted as saying that the war is self-financing, and RCD-Goma has openly acknowledged that substantial quantities of minerals are being mined in the areas under its control. Even the official Rwandan mineral production and trade figures show a significant re-export of precious minerals, such as coltan and gold.

The exploitation of Congolese resources is organized centrally at the Rwandan Ministry of Defence: the RPA and RCD-Goma tax the trade in precious minerals, and RPA officers and the RPF own companies that export the minerals to Rwanda and from there to international markets.

From coltan, I estimated that earnings were US$ 191 million in 2000 and US$ 175 million during the first 6 months of 2001, plus a one-off profit of about US$ 34 million to 62 million around late 1998 and early 1999. It is most likely that profits were also made from the trade in coltan during the remainder of 1999 but I have no estimates for neither the size nor the value of this trade. Earnings on gold were more uncertain, but probably at least around US$ 15 million per
year since at least 1997. The revenue from the trade in diamonds was the most difficult to evaluate with profit estimates ranging from US$ 2 million to US$ 40 million. But the RPA and its partners also earn significant sums from the exploitation and trade in other significant minerals, such as cobalt, cassiterite, and pyrochlore, as well as from the occasional seizure of goods, such as cattle. It is therefore quite possible that the RPA earns US$ ¼ billion per year; in fact, this is rather a conservative estimate. In this connection, it must however be noted that coltan world market prices fell significantly over the summer of 2000 to US$ 41.5 per pound at the time of writing, which has had a great impact on the volume of coltan traded in Eastern Congo and hence also on the profits earned by the RPA and its associates.

These earnings should be seen in the light of the official military expenditures for 1999, US$ 81 million, and the total government expenditures for 1999, approximately Rwfr 127.5 billion, or US$ 382 million.\(^{108}\)

In other words, the earnings from the Congo are extremely important and plenty enough not only to sustain the war effort, but also to provide powerful army officers with access to wealth. By virtue of the Second Congo War, it is clear that the RPA, its officers, and RPA-related businessmen earn much more than they can possibly make at home in Rwanda, where the export value of the two most valuable commodities, namely tea and coffee, made up only US$ 26 million and US$ 23 million, respectively, in 2000.\(^{109}\)

IMF sources acknowledge that the IMF is not able to monitor to what extent the Rwandan participation in the war is being financed by the plunder, but it is implausible that the Rwandan military expenditures can be met by the official military budget alone. The army appears also to be financed to a lesser degree through the forced collection of contributions from civil servants and the Rwandan population at large.

The plunder from the Congo has thus not only become a means to finance the war, but also in itself a motivation for the continuation of it. The importance of the economic aspect of the war has also become clear by the fact that the RPA has fought pitched battles against its ally Uganda over several mining areas or mineral trading centers, while it has indirectly traded coltan with one of its enemies, the Maï-Maï. This point is also underscored by a study carried out by the UK House of Commons’ All Party Parliamentary Group on Rwanda, the Great Lakes Region and the

\(^{108}\) Confer ‘Table 6 – Official Rwandan Military Expenditures’ and ‘Table 1 – Exchange Rates (Rwfr:US$)’

\(^{109}\) Economist Intelligence Unit, *EIU Country Profile 2001…*, p. 19 and p. 26. That year, tea and coffee accounted for as much as 80% of total export earnings.
Prevention of Genocide, which stresses that RPA and RCD-Goma troops are concentrated in the mineral-rich areas deep inside Congolese territory, while only a few troops guard the actual border to Rwanda.¹¹⁰

¹¹⁰ United Kingdom, House of Commons, All Party Parliamentary Group on Rwanda, the Great Lakes Region and the Prevention of Genocide, Visit to Democratic Republic of Congo 2nd - 6th August 2001, forthcoming