

Notes on Sources and Method of Collection of Figures Presented in the Report 'The Timber Trade and Poverty Alleviation in the Upper Great Lakes Region' (by Forests Monitor, July 2007)

1. Methodology

- Collection of national statistics using the web as the source for COMESA and FAO, and using documentation issued by the Central Bank of the Congo¹.
- Field data collection in the administrative services:
 - In the DRC²: ECNEF³, OFIDA⁴, OCC⁵, FRCF⁶;
 - In Uganda: URA⁷ field stations, and District Forestry Offices;
 - In Rwanda: RRA⁸, Magerwa Kisenyi.
- Interviews in the field:
 - With personnel in the above-mentioned administrative services;
 - In the DRC, with the main joint forest logging and timber export organisations (APENB⁹ in Mambasa-Beni, COODES¹⁰ and AEFOSKI¹¹ in Bukavu);
 - In the DRC, with the managing director of ENRA (the only company to be granted a concession in eastern DRC);
 - In Uganda, with the main timber companies and merchants;
- Interviews with the private sector – traders and buyers of imported timber.

The various sources of national statistics suggest that figures on production and export levels from eastern DRC to the countries neighbouring its eastern borders, namely Uganda, Kenya and Tanzania, are less reliable. National data in fact better reflects timber movement to the west of the country to the port of Matadi, using the waterways as means of transport. Data on the DRC's macro- and micro-economy is provided by the Central Bank of the Congo (DRC).

The national DRC database shows a range of general trends, for example, the change in the volumes of timber exported from the DRC to COMESA countries since 1989, or an estimate of eastern DRC's timber volume compared to the rest of the DRC. However, more specific data concerning our area of study (eastern DRC and its neighbouring timber-importing countries Uganda, Rwanda, Kenya, Burundi and Sudan) clarifies the timber trade in the Great Lakes region.

¹ The ITTO (International Tropical Timber Organization) website has no data related to the DRC.

² Democratic Republic of Congo.

³ ECNF: Environnement, Conservation de la Nature, Eaux et Forêts / Conservation of Nature, Water, Forests and the Environment (DRC).

⁴ Office des Douanes et Accises / DRC Customs and Excise.

⁵ Office Congolais de Contrôle / Congo Office of Law Enforcement.

⁶ [Service] Fonds de reconstitution du capital forestier / Fund for the Reconstitution of Forestry Capital (DRG).

⁷ Uganda Revenue Authority.

⁸ Rwanda Revenue Authority.

⁹ Association Professionnelle des Exploitants et Négociants de Bois / Professional Association of Timber Operators and Traders (DRC).

¹⁰ Coopérative pour le Développement Economique et Social / Economic and Social Development Cooperative (DRC).

¹¹ Association des Exploitants et Etudes Forestières au Sud-Kivu / South Kivu Association of Forestry Research and Logging Companies (DRC).

2. Main Data Sources

2.1. In the DRC

Various data were collected from the provincial administrations of North Kivu (Goma) and South Kivu (Bukavu), the regional administrations of Mambasa, LunaEtat and Lwemba in the Orientale province, and Beni, Kasindi, Bunagana and Rutshuru in the North Kivu province, as well as South Kivu. The provincial data is incomplete as reports do not always appear to have been compiled using field data. All the administrative structures having a link with the timber trade were visited (ECNEF and FRCF, OCC, OFIDA and external trade), as were the main joint forest logging and timber export organisations. Finally, representatives of both ENRA and Daraforest were interviewed.

Table 1 Main Data Sources used in DRC. Where nothing is stipulated, the data is annual data.

Source	Data available	Data format	Period
NORTH KIVU Province			
ECNEF Coordination Provinciale de Goma	<ul style="list-style-type: none"> Felling permits (logging companies, cutting area, surface area, requested volume) Walikale, Masisi, Rutshuru and Lubero territories/Beni, Walikale, Masisi and Rutshuru Territories/Walikale, Rutshuru and Masisi territories Fuel wood (stere) and charcoal (tonne) production Beni, Masisi, Rutshuru and Lubero territories Volume (Linzo and Libuyu) exported per exporter, from Beni Volume (Libuyu, Musave, Punga) exported per exporter and destination, from Goma 	Copy document sent to Ministry Paper manuscript drafted by coordinator <i>Idem</i> <i>Idem</i> <i>Idem</i>	2005 / 2006 2004 2004, 2005 and 1 st half of 2006 2004 2005 and 1 st half of 2006
Provincial Division of Ministry of Planning	Volume and surface area granted per logging company (m ³), fuel wood (m ³), charcoal (t) per tree species class	Annual Report 2000 data	1993 to 1998 (incomplete)
OCC Goma	Volume (Muvula, Musave, Libuyu) exported from Goma (<i>Grande Barrière</i>)	Field research	May to Aug 2006
OFIDA Goma	Volume of Musave (kg) and waste (kg) exported from Goma (<i>Grande Barrière</i>)	Field research	Dec 2006 to 05/01/2007
Goma External Trade	Volume exported from Goma (<i>Petite Barrière</i>) per species	Field research	July 2006 to Feb 2007
ECNEF Bunagana	Volume exported from Bunagana	Field research	Jul and Aug 2006
ECNEF Rutshuru	<ul style="list-style-type: none"> Volume (Libuyu) exported from Kitoboko (origin, exporter, volume, destination) Number of bags, origin and destination of charcoal (Rutshuru territory) 	Computerised hard copy data	Jun to Dec 2006 Jun to Dec 2006
OFIDA Kasindi	Volume exported (Number of vehicles)	Field research	Jan to Jun 2006
OCC Kasindi	Volume exported (Number of vehicles)	Field research	2006 to 15/01/2007
ECNEF Kasindi	Volume exported (Exporter, Volume, destination/Illicit cases)	Field research	Jul – Oct 2005, Jan - Jul 2006
ECNEF Beni	Number of logging companies, deforested area Volume cut, consumed locally and exported	Field research	2002 to 2005 Jun to Sep 2006
FRCF Beni	<ul style="list-style-type: none"> Volume and amount/monthly export figures for licit and illicit cases Timber exported illicitly and value (exporter, volume, amount) Timber exported monthly and value (volume and amount of rough and dressed timber) Licit and illicit cases, per exporter 	Field research	2004 Mar + Jul to Oct 2005 2006
OFIDA Beni	Timber and sawn wood (kg) and amount exported monthly	Field research	2006
ENRA	Surface area, production and export (volume per destination and type of product) Production, sawn and dressed volumes exported	Field research	2005 and 2006 1984 to 2005
APENB/COVEB	Volume exported	Field research	Apr to Nov 2006
ECNEF Mambasa	<ul style="list-style-type: none"> Number of logging companies and surface area granted (Babila Balombe and Balila Babem chieftainships) Number of logging companies, volume and class of tree Loading permit (origin, logging company, volume, species, destination) Renewed cutting permit list (logging company, cutting area, surface area granted, amount) 	Field research	2005 2005 2006 2007
CENEM	Volume loaded monthly at Lwemba	Field research	2006
SOUTH KIVU Province			
ECNEF Bukavu	Two production figures, 2005 and 2006	Oral	
COODES and AEFOSKI	<ul style="list-style-type: none"> Volume of boards produced Volume (t) of charcoal produced 	Field research	2005 and 2006 2006

2.2. In Uganda

2.2.1. URA Manifest Sheets

The Uganda Revenue Authority has not computerised their data storage yet. The only record of the volumes and values of timber imported, whether destined for the Ugandan market or in transit for other countries, is the copy of the Manifest that is kept at the point of entry. Thus the only way to compile the data on timber imports was to visit each border crossing point and laboriously go through the very many Manifests and transcribe key data from the paper copies to notebooks. Due to concerns about privacy of individual traders, and URA's Oath of Confidentiality, we were not allowed to photograph or photocopy individual sheets, and were sometimes monitored to ensure that only non-personal data was collected from Manifest sheets. Details are recorded in the interview Transcripts.

2.2.2. NFA Database

The National Forest Authority keeps various databases into which field data is incorporated periodically. Data entered includes:

- Timber Harvesting Licenses.
- Forest Produce Declaration Forms – obtained by those who are licensed to harvest prior to transporting timber. Data is substantially incomplete because District Forest Officers are unable to visit the sites prior to transport, so the first point of contact is typically at the DFO's office, and only a Forest Produce Movement Permit is issued.
- Forest Produce Movement Permits

The only data accessed for this study was the records of Forest Produce Movement Permits for the past 3 years since the database was re-launched under the National Forestry Authority. Data from the Forest Produce Declaration forms have not been entered in the databases or analysed for the past 3 years.

Table 2 Main Data Sources used in Uganda.

Source	Where	Data available	Data format	Data issues	Period
National Forest Authority	In NFA headquarters. Data entered soon after copies of movement permits are received	All timber movements within Uganda reported by District Forest Officers to Headquarters. Detailed data on species and sizes	Access database	No value/tax data recorded/available. Many data entry errors evident in data (partially cleaned during this exercise). Many DFOs are not sending records to HQ so not in database. Many mixed consignments complicate analysis to species level.	2004- present
Uganda Revenue Authority	At points of entry (Paidha, Zeu, Mpondwe, Lia)	Volume (estimated or declared) Value declared. Tax collected. Little or no species info.	Hard copy of manifest sheet.	Data has to be copied by hand.	Mpondwe: Samples of months from 2004. Other posts only a few months were available as previous months have been archived.
District Forest Officers	In District Headquarters	All timber movements	Hard copy of Forest Produce Movement Permits.	Data has to be copied by hand	Samples of forms were seen, but not used for analysis.

2.3. In Rwanda

The national statistics obtained from the RRA's ASCUDA database appeared to be very incomplete: the system was set up gradually over 2006, and so far only the main border posts have been completed. Moreover the only data that is currently available covers the period from January to November 2006 and the first quarter of 2007. The raw data collected was the number of kilograms of the imports (registered under the custom categorization). To calculate the volumes in cubic metres, the wood density needed to be factored in, which of course varies according to the timber's water content. Density normally varies between 450 and 600 kg/m³ as an average for most timber imported to Rwanda.

At the *Grande Barrière* and *Petite Barrière* Customs posts at Kisenyi, the Magerwa Manuscripts were copied. They covered the period from November 2006 to April 2007. The raw data collected was the number of kilograms of Libuyu, Musave and other species (most often categorised under 'wood'). To calculate the volumes in cubic metres, the wood density also needed to be factored in, which of course varies according to the timber's water content. Density normally varies between 450 and 500 kg/m³ in the case of Musave, 500 and 650 kg/m³ for Libuyu and between 400 and 550 kg/m³ for other timber).

2.4. In Burundi

The only detailed data (describing the various categories of timber) on timber imports were obtained from the computerised database held by Burundi's Customs and Excise Department. Given the low level of computerisation nationally, the data collected relate only to goods clearing customs at Bujumbura port and airport from June 2005 to the end of March 2006, i.e. on the one hand all imports arriving directly at airport or port, and on the other, all imports exceeding a value of US\$ 500 and which cannot be given customs clearance directly at the other border posts. The raw data was supplied in kg, so the same procedure as described above was used to calculate cubic metre volumes of timber, factoring in the timber density.

Summary of the Main Results

3.1. Proportion of Timber produced by DRC for Export and Timber Value

There is no coherence between the three national sources for statistics, namely the FAO, COMESA and the Central Bank of the Congo (BCC) (2005):

- the export volumes do not tally (in the case of plywood, it varies between 1 and 7);
- proportions per product type vary (the FAO states timber production was 96% whereas it equalled just 74% according to the BCC); both come close to agreement however regarding the Beni region data (OFIDA) where rough timber made up 64.20% of the total¹²;
- the amounts exported per the FAO are just 13% of the amounts reported by COMESA.

However, it is felt that the figures provided by the FAO are the most reliable.

In addition, the ratio between the export amounts and the volumes exported enable the timber values to be calculated. According to the FAO, rough timber was valued at US\$ 142/m³ (versus US\$ 64.60 per estimates using Government statistics for the North Kivu region), in the case of sawn timber it was US\$ 407.60/m³ (versus US\$ 203.90 estimated using Government statistics for the North Kivu region) and for plywood and veneers, US\$ 774.60/m³. Rough timber makes up 96% of exports (74% according to the BCC) and in value terms represents 90% of the amounts exported (FAO).

¹² According to the Central Bank of the Congo, the annual change in DRC timber exports between 1989 and 2005 shows that rough timber accounted for between 65 and 75% of total exported wood.

Table 3 Ratio between timber produced and timber exported by DRC in value terms.

DRC 2005	FAO production (m ³)	BCC export (m ³)	FAO export (m ³)	FAO value (\$k)
Rough wood	78,372,400	108,461	472,016	67,026
Sawn wood	185,000	30,062	15,250	6,216
Veneers and plywood	4,000	7,764	1,096	849
TOTAL	78,561,400	146,287	488,362	74,091

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DRC 2005	FAO production (%)	BCC export (%)	FAO export (%)	FAO value (\$k)
Rough wood	99.7	74.14	96.65	90.46%
Sawn wood	0.24	20.55	3.12	8.39%
Veneers and plywood	0.00	5.31	0.22	1.15%

FAOSTAT | © FAO Statistics Division 2007 | 10 May 2007

Table 4 Volume of timber exported from Beni and associated values, 2006.

EXPORT Beni 2006 to Uganda	FRCF export	OFIDA export	OFIDA value (US\$)
Rough wood (m ³)	2,721	3,905	251,950
Sawn wood (m ³)	959	1,964	400,403
TOTAL	3,680	5,869	652,353

Source: OFIDA and FRCF Beni

In terms of the national, regional and local statistics, there are large monthly variations in export values, with no apparent signs of any trends. This fact is confirmed by various sources met during the field research: DRC timber is exploited according to usually sporadic demand from traders working on behalf of Ugandan or Kenyan nationals. The rainy season slows down the removal of timber from the forests, though it appears to have no strong influence on the road haulage of timber destined for the border posts for export.

3.2. Changes in DRC Timber Exports to Neighbouring Countries since 2001

Preamble: As all these countries lie to the east of the Congo, it would be reasonable to assume that the timber comes exclusively from eastern DRC, and therefore extrapolate the figures for the purposes of this research study.

Table 5 Changes in the total value of timber exported from the DRC to neighbouring countries since 2001.

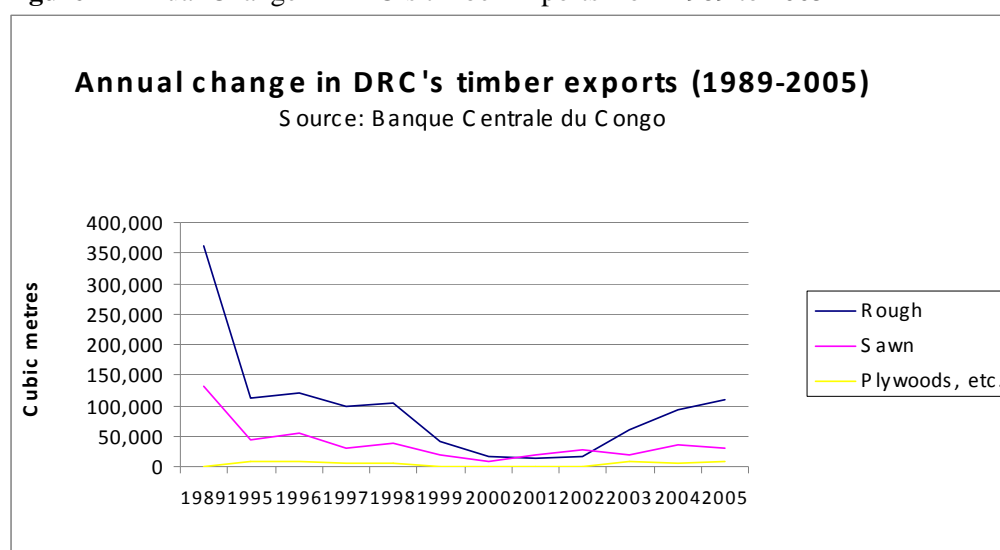
Year	Value (US\$) of sawn timber imports from DRC to:					
	Kenya	Uganda	Rwanda	Burundi	Sudan	Total
2001	54,639	3,639	0	0	0	58,278
2002	93,554	0	0	0	0	93,554
2003	200,971	0	0	0	0	200,971
2004	472,030	4,800	5,679	0	0	482,509
2005	531,645	7,003	945	0	0	539,593
2006	543,391	NSP	7,455	2,601	0	553,447

Source: COMSTAT; Database: COMESA

According to COMESA, timber exports from the DRC multiplied tenfold between 2001 and 2006, with Kenya obtaining virtual exclusivity as an importer of its timber (taking 94% of all exports in 2001 and never anything less than 98% the following years). In addition, DRC timber represents 65% of all timber imported into Kenya (in Tanzania it represents just 18%, and in Uganda, 3%). It is thought that while the figures in table 32 probably reflect the relative efficiencies of the data collecting agencies rather than the actual trade situation.

Data from the BCC shows that volumes currently exported by the DRC could be 4 times less than in 1989. The volume for export should therefore continue to increase; indeed, the relative stability this part of the country enjoys, the over-logging in the west versus the relative plethora of forest resources in the east and the paucity of road infrastructures at national level, together suggest that the eastern forests will soon be opened up to more intensive logging either formal or informal and perhaps through the granting of concessions.

Figure 1 Annual Change in DRC's timber Exports from 1989 to 2005



In 2006, Rwanda imported somewhere between 4,200 m³ (per RRA) and 13,560 m³ (per OCC Goma) of DRC timber with an export value of US\$ 581,605, against more than 22,000 m³ for Uganda and 18,000 m³ for Kenya.

Field research carried out in Uganda shows that both Uganda and Kenya play important roles as consumers and transit countries for timber coming out of eastern DRC. Timber exports to Uganda from the DRC (23,673 m³ or 6.5% of the total between 2001 and 2006) and from Kenya (67,945 m³ or 18.6% of the total between 2001 and 2006).

3.3. Timber Export from Eastern DRC

Table 6 Timber exports from eastern DRC during 2006 (volumes and associated values).

Exports by Destination	Border point	Volume (m ³)*	Source
Uganda	Bunia/Fort Portal	540	URA
	Mahagi/Paidha/Zeu	6,650	Id
	Vurra/Lia/Arua	9,640	Id
	Koboko	540	Id
	Kasindi/ Mpondwe	1,440	Id, * OFIDA, Mpondwe (6,071m ³ , 720,641 US\$)
	Kitoboko/Bunagana	3,994	ECNEF Kitoboko
Total Uganda		22,804	
Rwanda		9,040	OCC Goma, May-Dec 2006
Kenya		15,755	COMSTAT database, COMESA
		18,660	URA, 7 border points from Mpondwe North)
Total		50,504	

* = Official statistics are recovered from various sources within the government and the adjusted to reflect estimated what seems to be the real quantity of trade.

According to Government data, no timber was ever exported to Sudan or Burundi. However, our field research shows that supply chains do exist between the DRC and Sudan (via Uganda) through the Oraba area. It is estimated that 1,200m³ of DRC timber passed through Uganda to reach Sudan in 2006. It has also been observed that timber passes from Uvira and Fizi to Burundi (and potentially on to Tanzania).

4. Conclusion

According to data gathered on the Ugandan side of the border around 51,000 m³ of timber are currently being recorded as being imported to Uganda, Kenya, Rwanda and Burundi from DRC each year. While there is little evidence of systematic large scale timber smuggling into Uganda, based on interviews with a number of traders it is apparent that there is a frequent under declaration of the volumes carried by each truck. It is thought that this might add 30% to the volume actually crossing into Uganda. Therefore the estimated total volume of timber imports on the Ugandan side of the border is 75,000m³

On the DRC side of the border, the majority of exporters themselves readily admit to undervaluing their export declarations by more than 50%. Furthermore, altogether it is said that 4 times the volume of timber that leaves DRC outside of any customs or official processes than through official channels. It is interesting to note that the under declarations

If the problem of under declaration alone were tackled in DRC it would double the revenue recovered at the border by the DRC government. This of course would only affect the timber that was actually passing through the official border posts during their operating hours.

From a forest management perspective, up to 250,000 m³ of standing volume must be being harvested each year in eastern DRC forests to supply the official exports alone. This figure does not take into consideration the domestic production and consumption and excludes fuel wood. This compares with at least 260,000 m³ RWE of timber exported through west DRC¹³.

¹³ More than ninety per cent of these imports were of logs and sawn timber, and most of these were received by countries within the European Union – principally France, Belgium, Portugal & Italy. FAO states that the DRC

Note:

This document is part of a larger study undertaken by Forests Monitor and partners, within the context of the UK Department for International Development's (DFID) programme on the trade in natural resources from the DRC. This study uses a multidisciplinary approach - comprising socio-economics and politics - to analyse the timber trade in the Upper Great Lakes Region in central Africa, and recommends a set of integrated policies to increase the contribution of the timber trade to regional sustainable development. For the full report see 'The Timber Trade and Poverty Alleviation in the Upper Great Lakes Region', www.forestsmonitor.org

exported 235,970 m³ of logs and 15,250 m³ of sawn wood in 2005. The total value of EU timber imports from the DRC amounted to 67 million Euros in 2005 (per the Eurostat website epp.ec.europa.eu, as at March 2007).