Final report

SPGS Timber Market Study

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SPGS
SAWLOG PRODUCTION GRANT SCHEME

UNIQUE
The Forestry Consultants.

SPGS Timber Market Study 2010

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Abbreviations

AG	Aktiengesellschaft - German for stock-based company
AS	Aksjeselskap - Norwegian for stock-based company
CFR	Central Forest Reserve
CIF	Cost Insurance Freight
CSI	Construction Sector Index
DRC	Democratic Republic of Congo
EU	European Union
FAO	Food and Agriculture Organization
FOB	Free on Board
GDP	Gross Domestic Product
GR	Green Resources
HS	Harmonised Trade System
Ltd.	Limited Company
NCT	Natal Cooperative Timber
NFA	National Forestry Authority
NFC	New Forests Company
NHCC	National Housing and Construction Corporation
SPGS	Sawlog Production Grant Scheme
SUB	Sustainable Use of Biomass
UGX	Uganda Shilling
UIA	Uganda Investment Authority
UNRA	Uganda National Roads Authority
URA	Uganda Revenue Authority
USD	United States Dollar

List of species names

Table 1: Species names

Name as in report	Trade name(s)	Scientific name(s)
Cypress	Cypress	*Cupressus lusitanica*
Eucalyptus	Eucalyptus	*Eucalyptus grandis*
Kirundu	-	*Antiaris toxicaria*
Mahogany	African Mahogany	*Khaya senegalensis, K. nyasica*
Musizi	Musizi	*Maesopsis eminii*
Mvule	Iroko, Mvule	*Milicia excelsa*
Nkalati	Mululu, White Star Apple	*Chrysophyllum albidum*
Pine	Pine	*Pinus spp.: P. caribaea, P. oocarpa, P. patula*

Executive Summary

The timber available in Uganda's markets at the moment is supplied to a large extend from natural forests. This is increasingly supplemented from often illegal imports from natural forests in neighbouring countries in particular the Democratic Republic of Congo and legal imports from e.g. South African plantations. Plantation species like pine and eucalypts are harvested in the few remaining mature plantations on Central Forest Reserves (CFR) established more than 30 years ago.

The establishment of commercial timber plantations encouraged by the Sawlog Production Grant Scheme started in 2004. At the same time the National Forestry Authority resumed planting in CFR's. Today approximately 40,000 hectares of plantations exist. These plantations are spread throughout the country. More than 60 percent of the plantations are privately owned, having an average size of less than 500 hectares. This fragmentation complicates planting and marketing efforts. This is further exaggerated by the fact that reliable market information is restricted and hard to come by limiting investments within the sector.

Based on today's plantation area of approximately 40,000 hectares, planting plans of investors under the SPGS grant scheme and applying Alders (2003) model for pine assuming medium site qualities approximately 900,000 cubic meters of round wood can be expected annually between 2025 and 2032.

Statistics from the Food and Agriculture Organisation and the Uganda Revenue Authority report that Uganda imported approximately 13,000 cubic meter of round wood and 1,000 cubic meter of sawn timber in 2008[1]. Timber is mainly sourced from Kenya, Tanzania and South Africa for plantation species and DRC for native hardwoods. Due to the financial crisis imports dropped significantly between 2008 and 2009. Imports of other wood products such as veneer, plywood, fibre and particle board are steadily increasing, signalling shortages in solid timber and the resulting substitution. Exports of Ugandan made wood products to neighbouring countries are at the moment insignificant with the exception of poles. However, in the future, with better and a wider variety of processing technologies markets in neighbouring countries have a lot of potential especially for reconstituted and value added products.

Species traded foremost are cheaper timbers mainly used in construction: pine, eucalypt and Kirundu; the much more expensive native hardwoods such as Mahogany, Mvule and Nkalati are used for furniture and interior construction.

The overall price trend for these timbers has remained stable. However a large drop occurred at the end of 2008, coinciding with the financial crisis. It is likely that prices will eventually reach their former high level with the economy once more picking up speed.

Timber is sourced through retailers, saw millers and in a few cases directly from company owned forests. Vertical integration, combining the different stages, is common because it improves procurement security and increases profit margins.

[1] Assuming an average wood density of 0,75 g/cm³.

The most important criteria when buying timber are:

- Availability,
- Customer preferences,
- Durability and
- Workability.

Due to difficulties in timber procurement, quality is still not an important criteria. Quality is largely determined by absence of fungi, cracks and insect attack. However, quality sawn timber gets a better price when purchased by large processing companies. At small retail level no price differences were apparent.

Today the vast majority of the timber produced in Uganda is processed and consumed in Uganda. Export quantities for all timber and timber products are low. This shows the high demand of wood based products which cannot be satisfied from local sources only.

Additionally recovery rates (when converting round wood to sawn timber) are rather low with 20 percent only, owing to the employment of rather outdated technology. This has a huge impact on the volume of round wood consumed and subsequently plantation area needed.

Assuming a conservative growth rate of the timber demand of three percent and a recovery rate of 20%; the demand is expected to be approximately 2.5 million cubic meter of round wood in 2030. Despite the fact that plantation timber supply peaks in 2030 it will not be able to meet this demand, leaving a deficit of approximately 800,000 cubic meter round wood. However, provided that recovery rates can be improved a lot within the next 20 years going up to 40% a surplus of approx. 400,000 cubic meters could be achieved assuming the same plantation area. To cover the timber needs sustainably by 2030 under a business as usual scenario 14,000 ha must be established annually.

It is apparent that many of the findings of the previous timber market study (UNIQUE, 2005) still hold true.

- The timber value chain is characterised as a seller's market and still dominated by price.
- Due to the timber shortage even poor quality timber sells quickly.
- Vertical integration as a counter strategy is common and
- Because of the growing timber shortage there is an increasing trend for substitution.

Improvement can be seen in the successful implementation of commercial timber plantations that will relieve the timber shortage partially in the far future.

Recommendations

The findings in the report clearly indicate the need:

- For continued plantation establishment and
- To encourage local and foreign investment into processing plants with better technologies that will increase recovery rates and use otherwise wasted wood.

1. Further support for planters and the wood processing industry should be provided in order to create a sustainable and viable forest sector.
2. The SPGS cluster approach should be refined and the data base for yield prediction improved in order to be able to make more accurate predictions about where and when as

well as how much timber will be available. Well founded predictions like that will help to encourage investment into the processing sector.

3. Market transparency should be improved, for example with regular reports as envisioned by SPGS (Timber Market section in the quarterly published SPGS newsletter). This will provide investors with the necessary information for sound business planning.

1 Introduction

Early 2005 the Sawlog Production Grant Scheme (SPGS) commissioned a study (UNIQUE 2005) to assess the value chain for timber and timber products in Uganda. One of the main findings of this study was that there is a lack of data on market structure, prices and volumes traded along the value chain which are necessary to make informed investment decisions in the forestry and timber sector. To justify investments in both forestry and the following processing industry including new technologies it is important to improve market transparency. This study also indicates that there is a growing understanding for timber quality, especially among timber dealers and upper price segment furniture producers.

SPGS perceived a need to update the previous findings and to develop a timber market monitoring system to:

- Provide the private sector with up-to-date market information on a quarterly basis.
- Help to attract foreign investment in the forestry and wood processing sector.

To that end UNIQUE:

- Analysed the timber supply in Uganda (chapter 2),
- Identified investors information needs (chapter 3)
- Analysed timber trade within the region (chapter 4),
- Conducted an end user market analysis (chapter 5) and
- Developed a regional timber demand and supply scenario (chapter 6).

Additionally

- Guidelines for the market survey were developed,
- SPGS staff trained in investigation and evaluation of relevant data and
- A template for the quarterly market report was designed.

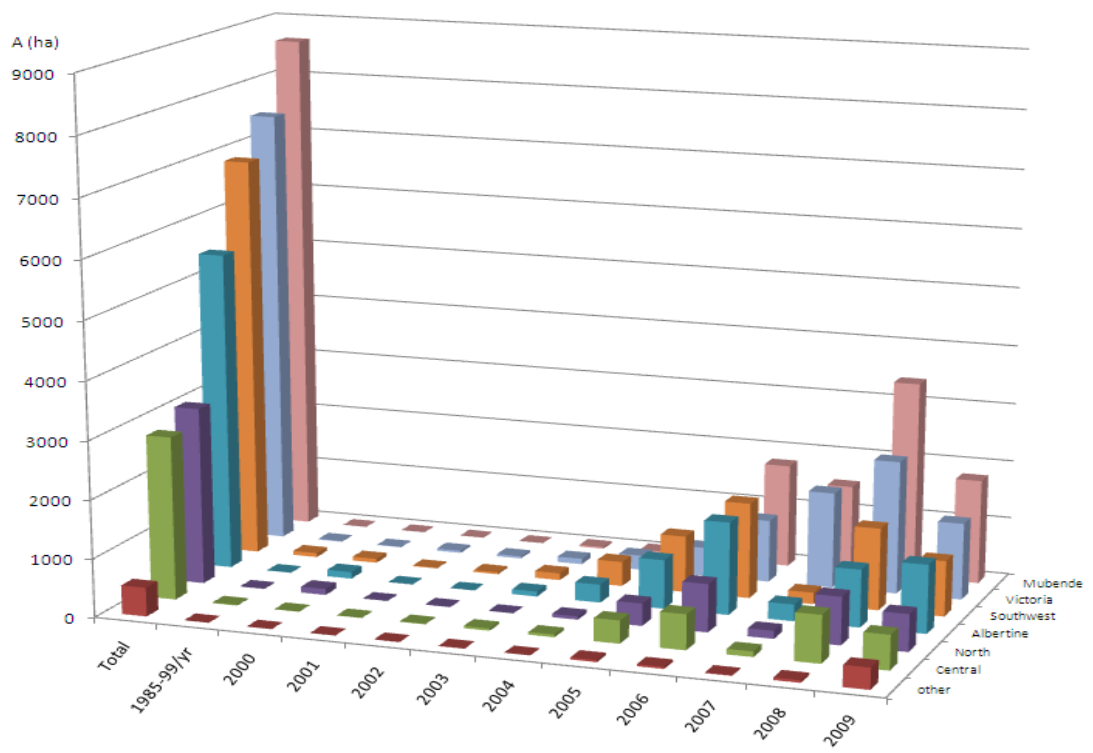
2 Supply

2.1 Plantation estate

The Sawlog Production Grant Scheme (SPGS) has identified six plantation clusters (see Annex) which represent focus areas and are based on number of planters and area under plantation. For the purpose of this study we have kept this approach and will reflect our findings as much as possible on cluster level.

Approximately 40,000ha of commercial plantations have been established since 2000 in Uganda. Figure 1 shows the area planted annually for clusters. Planting has increased steadily since 2004, with a recent peak in 2008.

Figure 1: Plantation area for clusters and years



Plantations are established mainly by private planters (approx. 24,000ha) and by the National Forestry Authority (NFA) (approx. 16,000ha)[2]. Many of the private planters are aggregated under the SPGS. Additionally many very small to small plantations exist throughout the country. The extent of these woodlots is unknown.

The main species planted are Pine and Eucalyptus. At the moment of the study the contribution of each species to the entire area under plantation was unknown.

[2] The number for area under plantation provided by the NFA may include plantations established by private planters on Central Forest Reserves. Subsequently the estimate of the total forest plantation area could be too high.

Private planters can be roughly divided into three categories by the area planted. Small ones own plantations of less than 100ha, medium sized planters manage up to 500ha and larger planters are above that. Large planters manage most of the land under plantation (41%), closely followed by medium sized planters (37%) (see Figure 2). Small planters contribute with only 22%. Figure 3 illustrates how these planters are distributed within the country. No single region with especially many small or only big planters can be identified. The cluster with most of the bigger planters is Mubende, which coincides with it also being the cluster with the largest plantation area (see Figure 1).

Figure 2: Proportion of different plantation sizes on area under commercial plantation

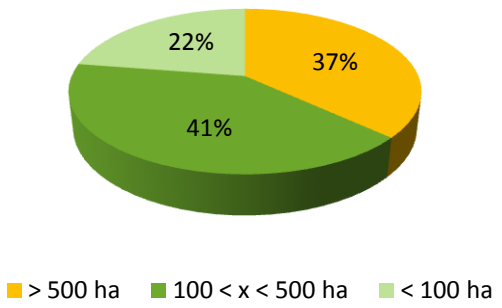
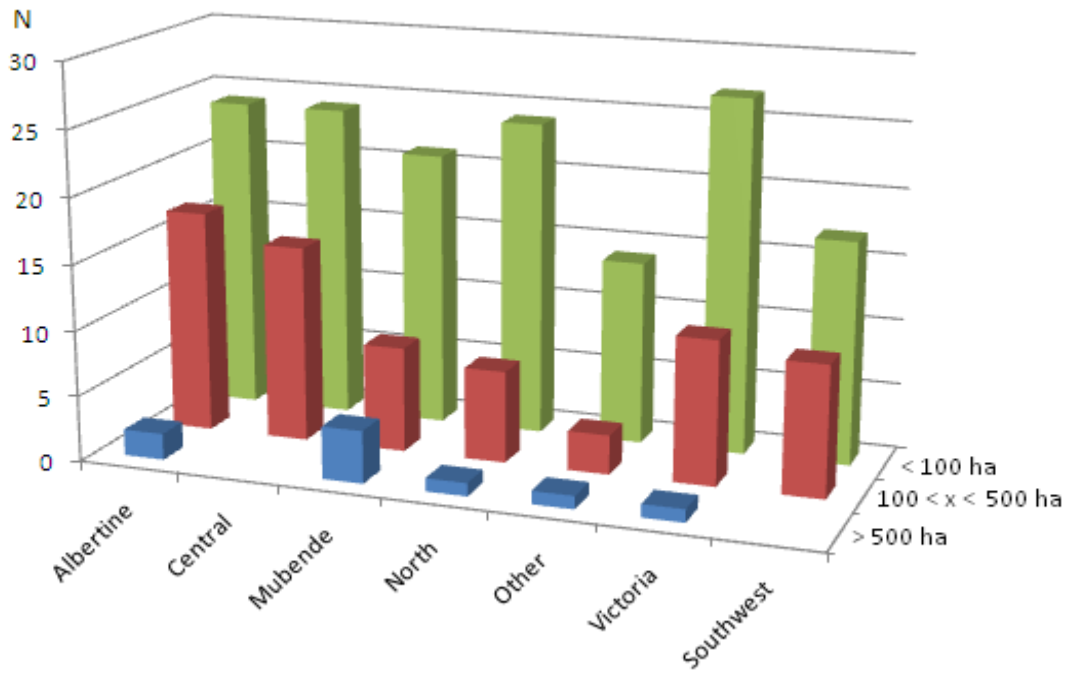


Figure 3: Distribution of planters of different size over clusters



Major investors in Uganda's plantation industry are:

- **Global Woods/Sustainable Use of Biomass**: GW AG with its subsidiary Sustainable Use of Biomass (SUB) Ltd. is counted among the big five plantation companies in Uganda because of its potential area of 8,000 ha in one CFR. Located in Kikonda CFR it encountered a similar situation as its competitors in having small remnants of old pine stands on its area, which by now are almost completely harvested.
- **Green Resources**: GR AS, a Norwegian/British company, has various subsidiaries in Uganda, namely Busoga Forest Company Ltd. and a recent takeover of the operations of Deutsche Forst Consult Ltd. expanded its plantation area in Bukaleba CFR. Another interest is the Norwegian Afforestation Group AS within Kachung CFR in Dokolo District, Northern Uganda.
  The company has a mix of green field pine afforestation and reforestation on Central Forest Reserves amounting to a potential area of 12,000 ha. The expansion of their plantation area coincides like all post-2004 plantings in Uganda with a plantation subsidy from the SPGS.
- **National Forestry Authority**: The NFA's plantation activities are highly dependent on donor inputs. Mainly Norwegian and World Bank money is financing the institution at the moment. The planting figure in 2005 was quite high as NFA was inundated with EU donor funding which phased out in 2007 (planting areas Rwoho and Katuugo Central Forest Reserves (CFR)). Since then NFA had to find alternative sources of income and as a plantation owner took charge of the last existing timber supply possibilities to raise revenue. Low volumes of pine timber will come online again 2012-2015 from plantations that were planted in the 1990s. Unfortunately the quality is extremely poor due to substandard seed and weeding.
- **New Forest Company**: NFC Ltd., a British owned plantation company came into the plantation market in 2006 after lengthy land negotiations. They concentrate on pine but plant Eucalypts on very good sites for poles and timber. Their team has established sizeable plantations within the last three years mainly in Central Uganda (Namwasa and Luwunga CFR's). NFC is trying actively to acquire more land for plantation establishment. At the moment they have a potential area of 20,000 ha in Uganda.
  NFC is not supplying any timber into the market at the moment, but their plantations are expected to contribute to the market with poles and larger thinnings in 2016.
  NFC established a pole treatment plant which started working in 2010.
- **Nileply**: Nileply is in the unique situation of having already a secondary processing plant in Uganda. At the moment Nileply is sourcing Eucalyptus peeler logs from as far as Lendu CFR in Northern Uganda close to the DRC border and plywood raw material from any possible source within Uganda to feed its Jinja plant. Nileply wants to be self-sufficient by 2020 sourcing from its own plantations. The company has had numerous problems with political interference in its plantations on CFR, mainly encroachment issues and arson. Nileply sourced over 25,000 ha of land part of which are / will be afforested.

2.2 Supply projections

Due to the fact that plantation establishment has restarted only in 2004 after a long period of neglect the supply of cheap timber will come to an end within a few years. Mature pine plantations in Uganda are limited, with the last ones being harvested at the moment. The NFA plans

to establish 2,500ha each year distributed over core CFR's (Lendu, Abera, Opit, South Busoga, Mafuga, Rwoho, Muhangi and Bugamba). However in recent years this target could not be met due to monetary constraints (personal communication NFA, 2010). Private planters with the SPGS grant scheme plan to establish approx. 15,000 ha more until 2012 (as of SPGS database May 2010). However, actual plantation establishment can differ substantially from the predicted figures; numbers need to be updated annually.

Figure 4 provides an overview of the merchantable timber volume that can be expected in the future. For this the following assumptions have been made:

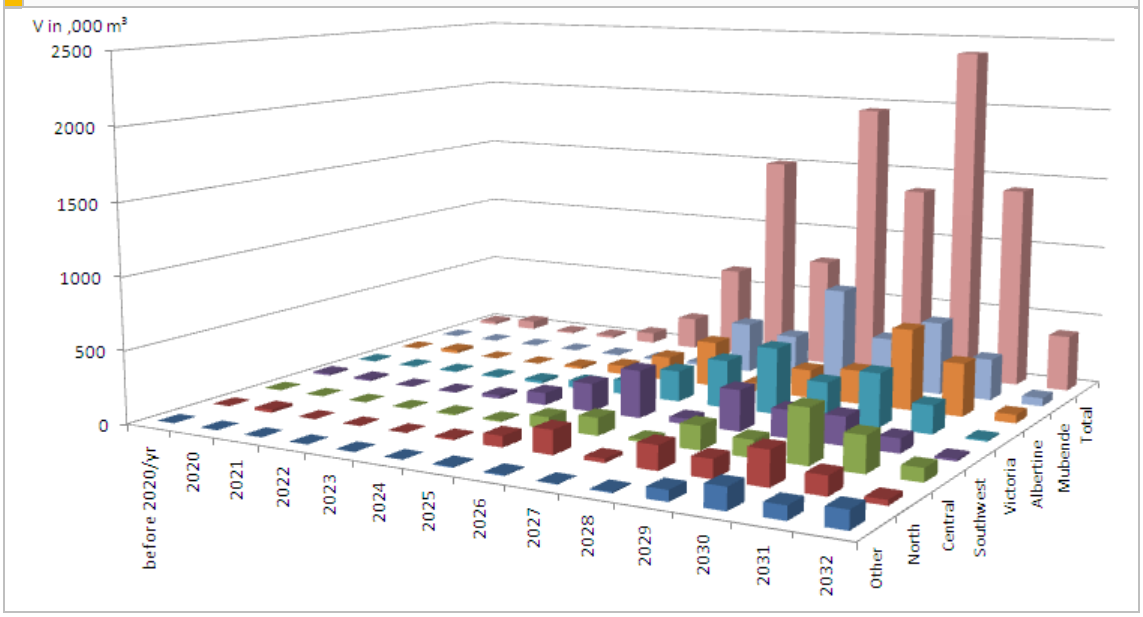
Rotation period: Assuming that the majority will be Pine plantations (rotation period 20-25 years) with comparatively few Eucalyptus timber plantations (rotation period 12-15 years) the average rotation period for timber plantations is assumed to be 20 years.

Thinning regime: It is assumed that stands will be thinned according to SPGS recommendations (three thinnings of each approximately 35% until year 12).

Harvesting volume: Based on available growth tables (Alder et al., 2003) for pine and some risk adjustments the harvestable volume at the end of the rotation period is estimated to be an average of 200 m³ per hectare assuming a medium site index of 14. Potential on-site harvesting losses e.g. from poor felling practices are not considered.

The figure below is based on the already existing plantations and predictions for future planting of SPGS clients until 2012. NFA figures are incorporated only until the first planting season of 2010. The downward trend from 2031 onwards is thus explained and will likely (with continued plantation establishment) not take place in reality. As emphasized by the "Total" volume bars the wood supply will not be steady but shows large fluctuations of up to one million cubic meters between following years. These fluctuations in supply will either lead to price signals indicating market saturation or else plantation owners in a given region can coordinate their respective harvests by harvesting earlier or postponing harvests accordingly.

Figure 4: Expected harvestable volume per cluster based on planted areas



The predicted supply from plantations will peak at around 2.4 million cubic meters in 2030. The average harvestable volume is 1.3 million cubic meters between 2025 and 2032[3]. Assuming average harvesting (damage, inefficient harvesting techniques) and transport losses (damage, theft) of around 30% this results in around 0.9 million cubic meters on average and 1.7 million cubic meters at peak of saw logs available for sawmilling.

[3] Plantation establishment became substantial only in 2005.

3 Investor information needs

Plantations in Uganda are dominated by small and medium sized growers who comprise almost 60% of the land under commercial plantation. Plantations of all sizes are distributed evenly throughout Uganda, making planting efforts fragmented (see Figure 2 and Figure 3).

The consequences for the timber market are envisaged to be either a collective marketing scheme like Natal Cooperative Timber (NCT) in South Africa or an all-for-themselves buyers market as current information inequities will persist in later scenarios. A possible scenario is that small and medium growers in a certain location band together like the 2,000ha plus "Mubende group" which consist of high profile individuals who planted on two adjacent CFR's and private land.

Information on timber demand and market trends is researched by the mother companies of large scale investors and integrated accordingly into their business models and plans. Contrary to them medium and small sized planters usually possess very little reliable market information. According to UNIQUE (2010a) they are in particular interested on markets for thinning products and in how they could possibly profit by adding further value to their products, e.g. by incorporating harvesting and sawmilling.

Investors should be informed on:

- Major timber users/processors and their requirements,
- Price trends for different products throughout the value chain,
- Profit margins throughout the value chain,
- Vertical and horizontal integration and
- Price parameters influenced by silviculture (esp. pruning).

4 Uganda regional timber trade

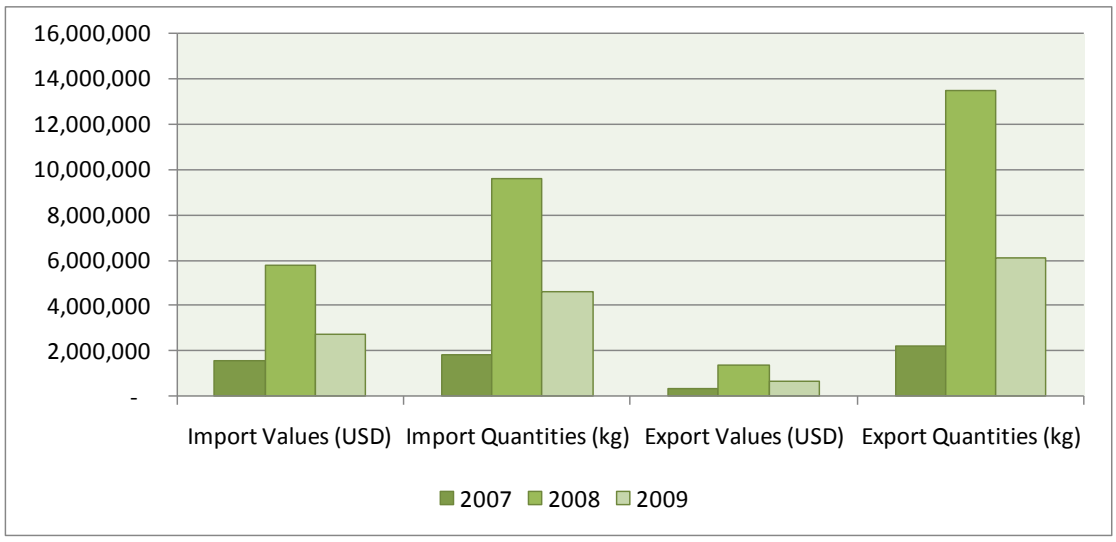
4.1 Trade with round wood

Ugandan export of round wood timber is banned (ministerial ban on timber export imposed in 1992) in order to avoid depleting the indigenous forests. However, data from the Uganda Revenue Authority (URA) shows higher round wood exports than imports (Figure 5). This positive trade balance for round wood may result from re-exports of round wood imports, using Uganda as a transit country. Round wood imports that remain in Uganda for further processing can be distinguished into two major segments:

- Tropical hardwood imports. These imports are mostly illegal and serve either the informal markets or the high value segments (e.g. Mahogany).
- The second segment is Conifer and Eucalypt round wood (also poles) coming from plantations. These imports serve the same markets as the Ugandan plantations do, thereby import of Pine timber is very limited.

There is a significant difference between import and export values for round wood. One reason for this difference is that imports are recorded at Cost Insurance Freight (CIF) prices and exports are recorded at Free on Board (FOB) prices and are therefore up to 40% less. Furthermore, round wood imports comprise treated timber and high value species, whereas exports consist mainly of untreated round wood of small dimensions.

Figure 5: Round wood trade data 2007 – 2009 for Uganda



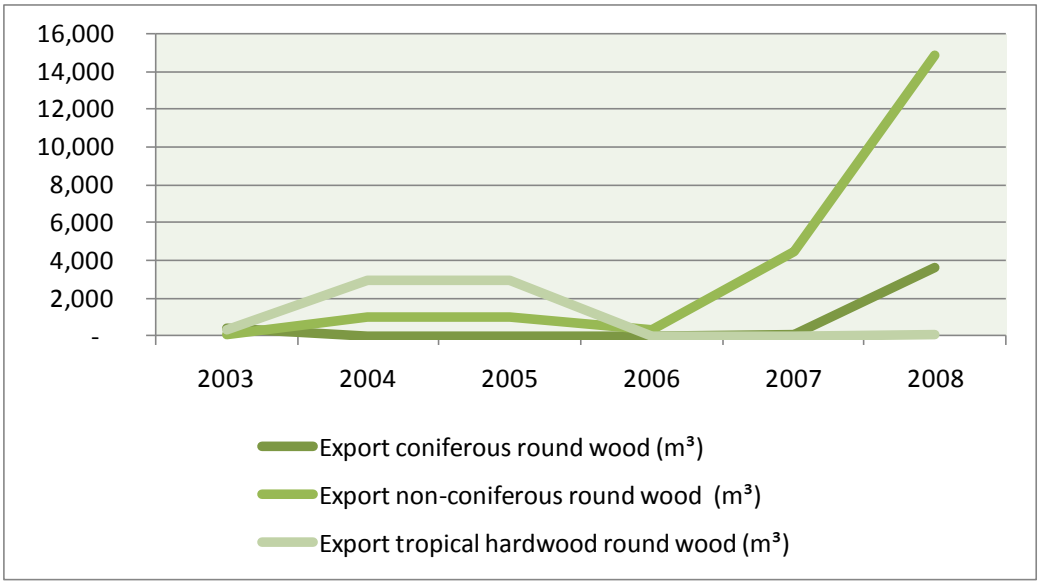
Round wood (HS 4403) trade data for Uganda 2007 to 2009 (Source: URA 2010)

Round wood trade data from the Food and Agriculture Organization (FAO) (Figure 6 and Figure 7) differs from URA data (Figure 5). The variations are basically caused by delayed recordings of trade volumes, resulting in shifts of traded volumes between years (e.g. imports recorded by FAO in 2007, partially occur in URA data for 2008). However, if corrected the traded volumes are corresponding.

Export volumes of round wood (Figure 6) are mainly constituted of non-coniferous species, whereby tropical hardwoods (indigenous species) are not of significant weight. The majority of exports are made up of exotic hardwood species, i.e. Eucalyptus. The export of round wood

under this classification has increased rapidly since 2006 to around 15,000m³ in 2008. Coniferous round wood exports have also grown with a growth rate of almost 200% from 2007 to 2008.

Figure 6: Industrial round wood exports according to species 2003 - 2008



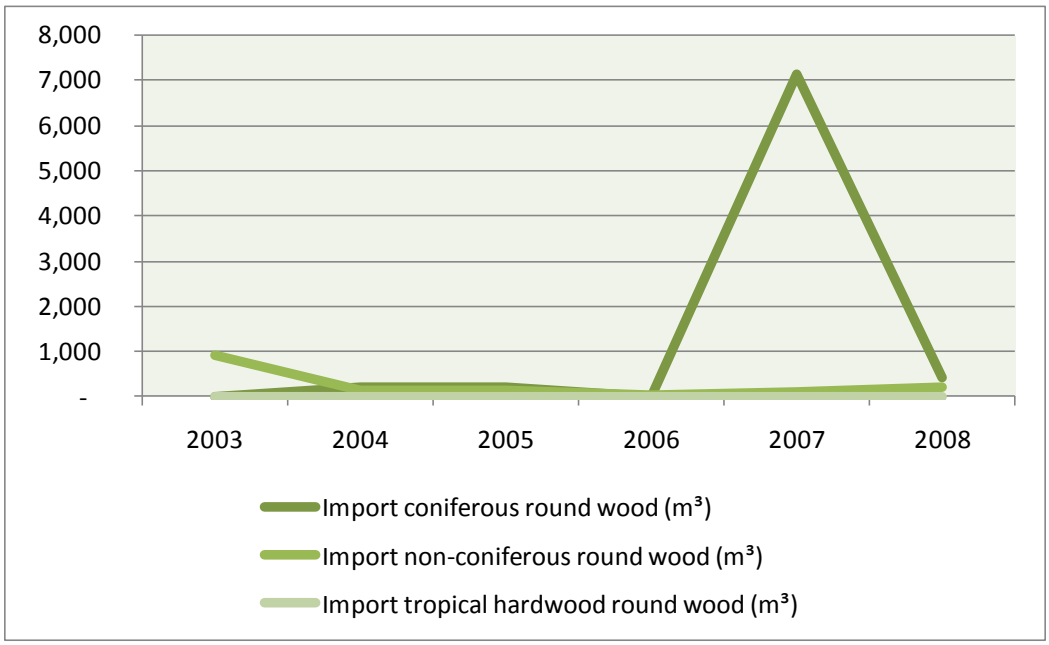
FAO data on Ugandan industrial round wood exports 2003 – 2008 in m³ (Source: FAOStat 2010)

Industrial round wood imports (Figure 7) comprise mainly conifers with a recent peak in 2007/2008. Round wood trade in the region is heavily affected by illegal imports from neighbouring Democratic Republic of Congo (DRC). Thus, official import of hardwood species competes with illegally cut hardwoods from natural forests. Therefore official import figures remain relatively low (around some hundred tonnes annually) and most likely don't reflect actual imports.

Within a study conducted by Forest Monitor (2007), the major flows of timber and wood products in the great lakes region were compiled considering illegal timber trade from DRC. The information indicates that about 40,000m³ of round wood are imported to Uganda, of which 20,000m³ are in transit to Kenya and others. That means that 20,000m³ remain in Uganda for further processing (which is actually more than double the volume that has been imported officially in the peak year 2007/2008). The economic implications of illegal timber trade are widely known: negative impact on price level, which indirectly have impact on labour wages, losses to national revenue authorities and negative economic effects of environmental damages caused by illegal logging.

The remarkable peak of round wood imports in 2007/2008 (Figure 7 and Figure 8) cannot be explained definitely. Since exports in these years have also increased significantly, the high import figures may be caused by transit trade through Uganda to other destinations.

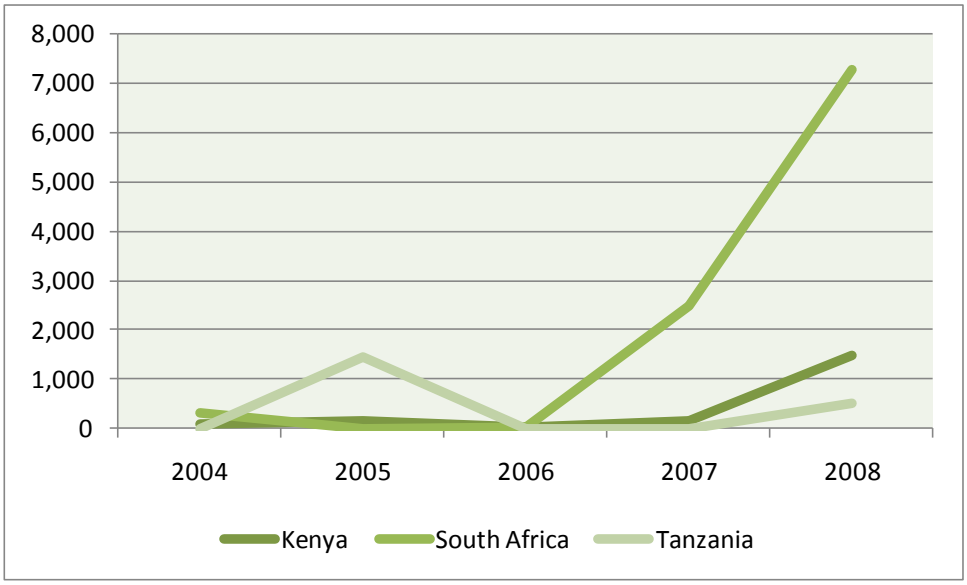
Figure 7: Industrial round wood imports according to species 2003 – 2008



FAO data on Ugandan industrial round wood imports 2003 – 2008 in m³ (Source: FAOstat 2010)

The main countries of origin for industrial round wood imports to Uganda are the direct neighbours (Kenya and Tanzania) as well as South Africa (Figure 8). Imports from all three countries have increased over the last years, with South Africa having reached an all time high in 2008 with more than 7,000 tons of round wood exported to Uganda.

Figure 8: Countries of origin of industrial round wood imports 2004 - 2008

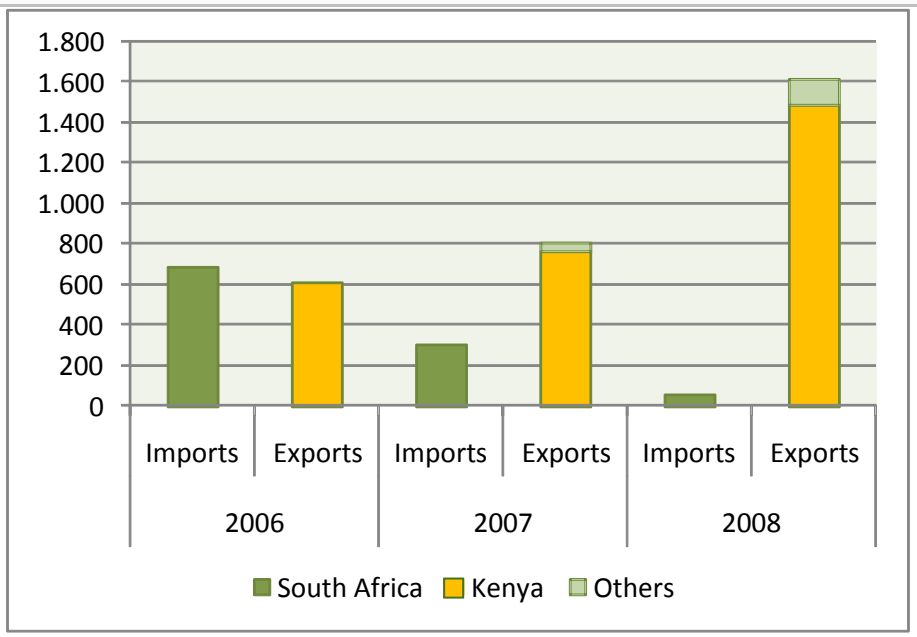


Major source countries of industrial round wood imports 2004 – 2008 in tons (Source: UN COMTRADE data 2010)

4.2 Trade with poles

In recent years Uganda has increased its exports of poles to the neighbouring countries (see Figure 9) peaking at an export volume of more than 1,400 tons in 2008, while South Africa's role as major supplier for poles for Ugandan consumers has significantly decreased. The major outlet for Ugandan poles is Kenya. Other destinations are not yet of importance. This export trend is positive since plantations in Uganda will be able to produce for foreign markets in the years to come.

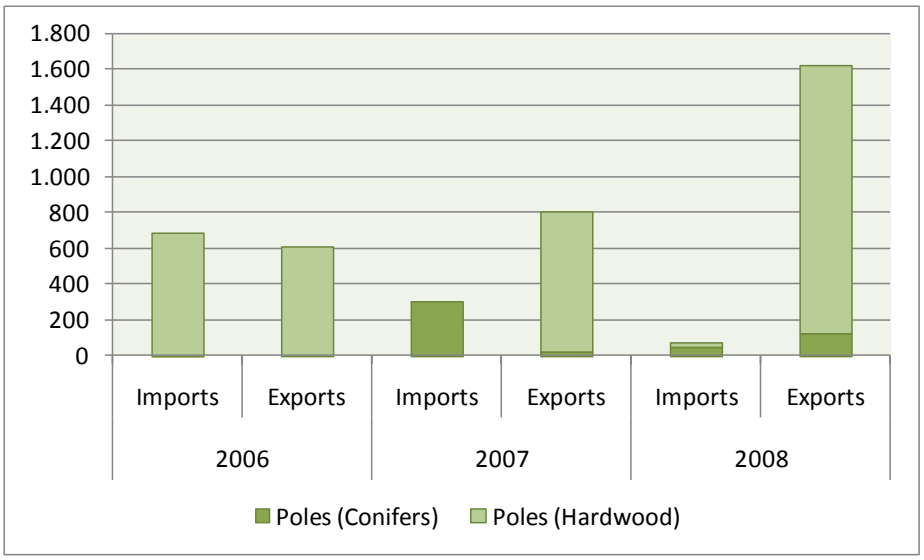
Figure 9: Trade with poles 2006 – 2008: Major trade partners



Major trade partners for poles 2006 to 2008 in tons (Source: UN COMTRADE data 2010)

Overall, hardwood poles are dominating Ugandan exports, while pole imports in 2007 and 2008 consisted mainly of conifers (Figure 10).

Figure 10: Trade with poles 2006 – 2008: Species

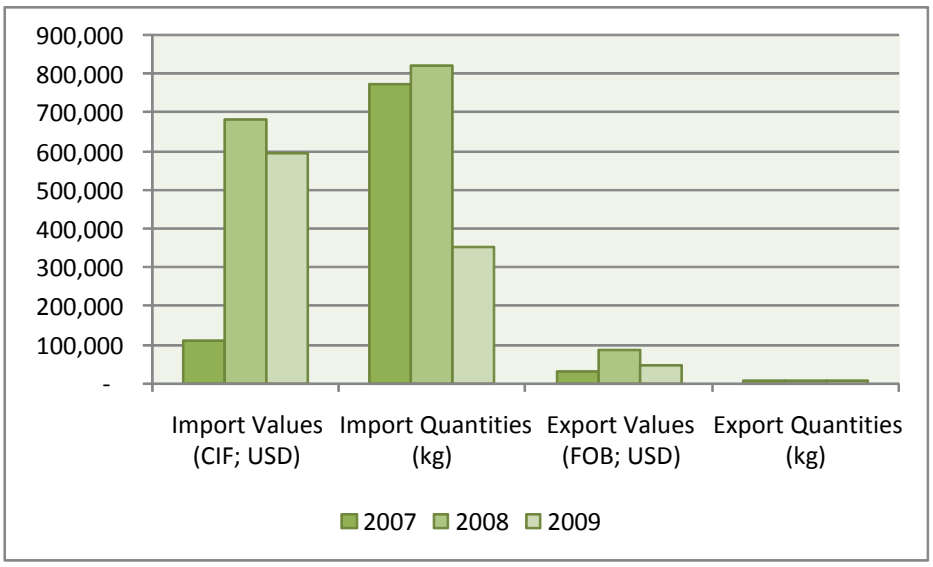


Trade with poles 2006 to 2008 by species in tons (Source: UN COMTRADE data 2010)

4.3 Trade with sawn wood

Due to the high demand within the country the quantity of sawn wood exports is low, whereas imports have reached almost 350 tons in 2009. Major permanent regular partners are neighbouring countries (Kenya, DRC, Tanzania and Sudan). Other trade partners are Turkey, USA and the United Arab Emirates, but these are rather one-off deals than regular market outlets.

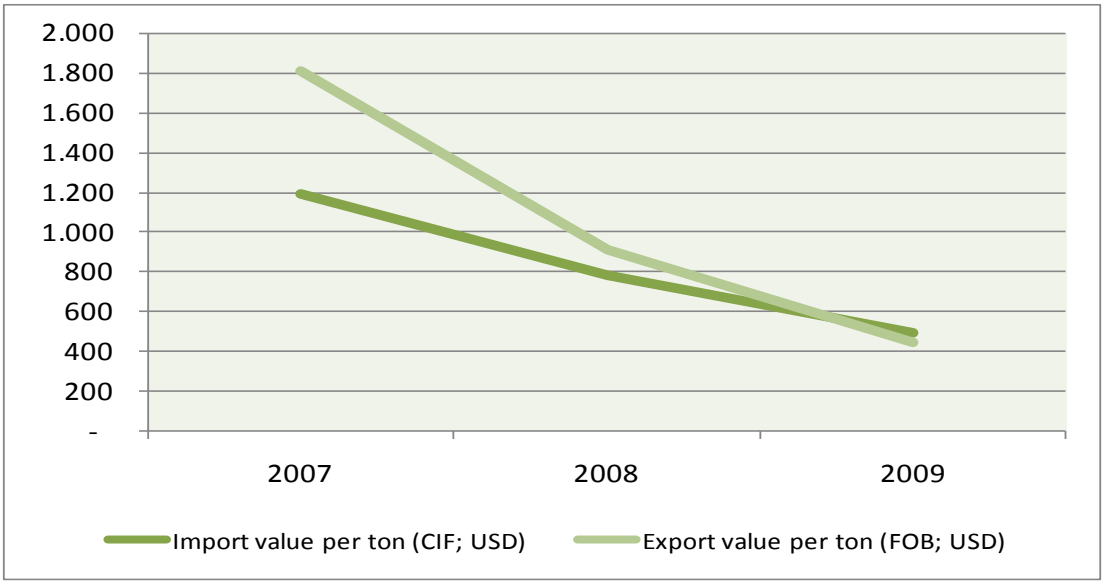
Figure 11: Sawn wood trade data for Uganda 2007 – 2009



Sawn wood trade data for Uganda 2007 to 2009 (Source: based on URA 2010 data)

Overall analysis of URA data shows that import of sawn wood has significantly dropped by more than 50% in 2009 coming from more than 800 tonnes in the years before (Figure 11). Price levels for imported and exported sawn wood have converged (Figure 12). Both developments are indicators that the demand for sawn wood has decreased in 2009, which is certainly an effect of the international economic crisis.

Figure 12: Price levels for sawn wood trade 2007 - 2009



Price levels for Ugandan sawn wood (HS 4407) imports and exports 2007 to 2009 (Source: calculated based on URA 2010 data)

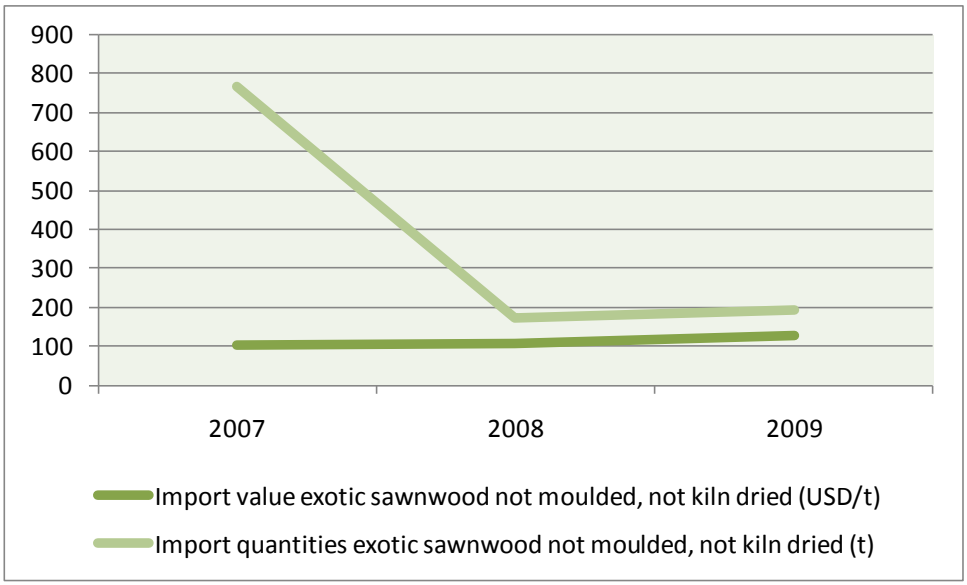
Pine and eucalypt sawn wood products are hardly identified in the trade statistics as such. However, rough sawn wood (not moulded, not treated, not kiln dried; see Figure 13) is imported at an average value of around 150 USD (CIF) per ton (or approx. USD 100 per m³)[4]. Prices have slightly increased over the past three years. The price level for imported sawn wood is significantly below the market prices of Ugandan produced sawn timber (see Table)[5]. Imported quantities dropped from almost 800 tonnes in 2007 to about 200 tonnes in 2009 (Figure 13), which might be an effect of reduced activities in Uganda's construction sector but could also have been caused by increased supply from Ugandan sources.

Sawn wood exports are not of any importance so far. However, in 2008 exports cumulated with an increasing number of destinations. Quantities of several tones were exported to DRC, Kenya, Tanzania and Sudan. Other destinations included China and the United Arab Emirates.

[4] Assuming an average wood density of 0,7 g/cm³ of air dried timber.

[5] Assuming that 20-30% of import value (CIF) is transport. The FOB price in the country of origin is between 70-80 USD / m³. Exchange rate UGX 100,000 = USD 44 (www.oanda.com Aug – Sep 2010)

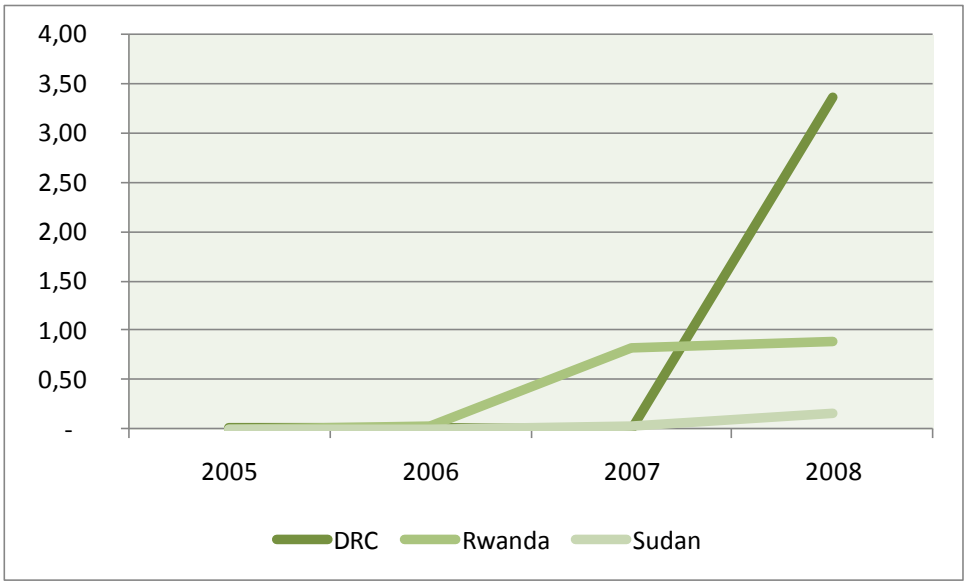
Figure 13: Import quantities and average values of rough sawn wood 2007 - 2009



Quantities and price levels for Ugandan (HS 4407) imports of minor sawn wood products (untreated, not dried) 2007 to 2009 (Source: calculated based on URA 2010 data)

Imported sawn wood mainly comes from the neighbouring countries of Rwanda, Sudan and DRC (see Figure 14). Kenya and Tanzania only export marginal quantities of sawn wood to Uganda.

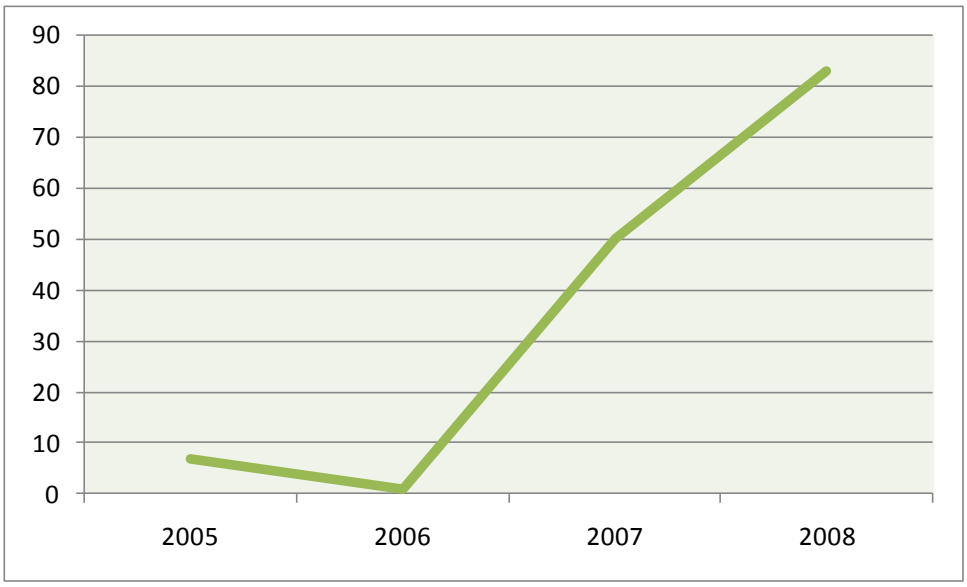
Figure 14: Countries of origin for sawn wood 2005 to 2008



Countries of origin of imported sawn wood (in tons) 2005 to 2008 (Source: UN COMTRADE data 2010)

Major trade partner for sawn exports from Uganda has been Kenya (see Figure 15) that has increased imports significantly since 2004. Other destinations for Ugandan sawn wood are Rwanda, Sudan and others. However, these countries hardly reach significant volumes.

Figure 15: Kenyan round wood imports from Uganda 2004 - 2008



Kenyan sawn wood imports (in tons) from Uganda 2004 – 2008 (Source: UN COMTRADE data 2010)

4.4 Other wood products

4.4.1 Veneer

Imports of veneer sheets used in plywood production and furniture manufacturing have increased by more than 450% since 2007 and reached approx. 78 tons in 2009 (Annex: Figure 25). The majority of the imported veneer is processed in Uganda. Export figures are volatile and are constituted of re-exports and small exports of Ugandan produced veneer.

The significant increase in veneer imports indicate increasing demand on the Ugandan market, driven by Ugandan based manufacturers of plywood and furniture. This sector does not seem to be affected by the economic crisis as much as the construction sector.

4.4.2 Plywood

Uganda's Plywood imports have increased by more than 100% within the last three years reaching more than 2,000 tonnes in 2009 (Annex: Figure 26). Exports are also increasing; driven by – amongst other traders – Ugandan based Nileply Ltd. which is increasingly entering the markets of the neighbouring countries (mainly Sudan, DRC and Kenya).

Price levels differ significantly between imported and exported plywood (Annex: Figure 26 and Figure 27). While exported plywood was about 4,000 USD per tonne, the plywood imports hardly reached 1,000 USD per tonne. However, price levels for exports have significantly fallen since 2007, which either may be a consequence of decreasing demand (caused by the economic crisis) or by increased competition from imported plywood from Asia.

Major trade regional partner for plywood is Kenya (Annex: Figure 28). Almost all plywood imports originate from there. Imports from Kenya were stable until 2006 and have increased significantly (almost 300%) since 2007. However, whether the plywood imported from Kenya is produced in-country or imported from overseas is not clear. In terms of exports, Kenya, Sudan

and DRC are the important destinations, with DRC being the most important amongst them. However, exports to DRC have fallen over the past years.

4.4.3 Particle and fibre boards

Particle and fibre boards are highly demanded products in Uganda. Imported quantities of particle boards reached almost 2,500 tonnes in 2009 (Annex: Figure 29). Development of import quantities has remained stable over the past three years. Fibre board imports were about 2,800 tonnes in 2009 coming from 1,200 tonnes in 2007 (Annex: Figure 30). Until 2009 exports of both product groups were not significant. However, in 2009 a sharp rise in particle board exports was recorded. If this is not a false recording in the statistic database, this can only be re-exports to neighbouring countries.

4.4.4 Carpentry and joinery

Carpentry and joinery products, mainly builders' joinery / carpentry, doors and windows are important trade items. Although the trade balance for Uganda is negative, this product group is of special importance for local value adding, offering employment and income for many small and medium enterprises in Uganda. Import values and quantities are more or less stable since 2007. Export values and quantities vary between 100 and 200 tonnes and 200,000 and 300,000 USD respectively. (Annex: Figure 31)

Major trade partners in terms of imports are Kenya, Turkey and the United Arab Emirates. In terms of exports Kenya, DRC and Sudan are the most important destinations for Ugandan joinery / carpentry products. (Annex: Figure 32)

4.5 Summary and discussion

International trade statistics show that the demand for timber and wood based products in Uganda is very high and cannot be satisfied with the resources available internally. The notable exception is poles. Here export figures are rising while import figures show a decline. However, round wood (HS4403) trade figures may to a certain extend include poles (HS4404) depending on how URA classified imports and exports.

Imports of raw products (round wood, poles and sawn wood) come from mainly DRC, Sudan and South Africa. Exports, again with the exception of poles to Kenya, are negligible. More advanced products like veneer, plywood, particle and fibre board, carpentry and joinery have stronger export markets. Importing countries are especially Kenya, Sudan and DRC. Imports come mainly from Kenya.

Imports of plywood, particle and fibreboard have risen substantially during the last years suggesting that substitution of timber with these reconstituted wood products is taking place.

Trade values per unit are significantly higher for carpentry, particle and fibre board and plywood than they are for sawn timber. This in combination with the export ban for round wood, comparatively low wages in Uganda and high amounts of low value raw materials available (thinnings, off cuts, shavings and saw dust from low conversion technology) needed for their production makes a strong case for investment in production facilities that can supply the national and regional markets. Regional markets like Kenya, Tanzania, Sudan, DRC and Rwanda

should be targeted with processed wood products rather than round wood or sawn timber in the future.

5 Market analysis

The market analysis is based on interviews with wholesalers and retailers as well as on expert judgments of UNIQUE experts.

The market can be stratified by timber volume traded, location of a given business, the end use the traded timber will see and the grade of vertical integration.

Volume traded: The market is comprised of a multitude of small and medium sized retailers and workshops and only a few big companies in the furniture and construction sector and at the moment only one factory producing reconstituted timber products (Nileply).

The quantity of the timber traded in Uganda is unknown, but changes in volume traded are reflected to a certain extend in prices (see chapter 5.1).

While interviewees are often willing to share the volume of timber used in their businesses, the actual number of businesses in the market and their respective size in terms of timber consumption are unknown. Official statistics showing timber movement and use across the country are scarce, incomplete and difficult to access (e.g. NFA timber movement permits).

Business location: Most of the timber is sourced from the DRC (native species) or CFR's and private farms in western and south-western Uganda (native and plantation species). While timber traders, processers and consumers can be found all over Uganda, most of the timber traded is used in the bigger population centres like Kampala where much of the economic development takes place.

Prices are likely to reflect the proximity and therefore direct accessibility of the resource (demand can be satisfied without intermediaries) as well as transport distances.

At the moment timber prices are expected to rise due to the enforcement of maximum tonnage of lorries by Uganda National Road Authority (UNRA). Various sources stated that they will be able to transport only half to two-thirds of the usual amount of timber with one transport. Price per piece (standard sizes of 4x2x14 or 6x2x14) will likely be increased by UGX 500 up to UGX 1,500.

The higher transport costs will be passed on to the final customer. However, it was also stated that dealers expect the enforcement to slacken considerably towards the end of the year.

End use: Timber is used mainly in construction, for interior fittings and furniture.

The end use determines species and quality required (see chapters 5.1 and 5.2).

Vertical integration: Businesses can source their timber through intermediaries or directly from the producer/saw miller. In some cases processors possess their own plantations (e.g. Nileply) and/or saw mills.

By encompassing operations upstream or downstream along the value chain dependencies on other actors are minimized thereby reducing transaction costs and increasing the overall profit margin. The downside of vertical integration is clearly the broadening focus of operations making it more difficult to develop core competencies and a clear focus for the business.

5.1 Retail market

Retailers provide a broad selection of species that are used for carpentry as well as in construction. Pine, eucalypts and Kirundu show quick turnover, while native hardwoods such as Mahogany, Mvule and Nkalati are used in lesser quantities due to their higher price and different use. Figure 16 to Figure 20 show the inflation adjusted retail price trend for some of these species. The overall trend shows an increase with a sharp drop at the end of 2008. This drop lags approximately one year behind the height of the worldwide financial crisis and can be attributed to less investment especially in the housing sector. Only the price of pine seems to recover since the beginning of 2010.

Asked for their preferences for certain tree species most timber dealers mentioned foreign species, in particular pine, whereas the carpenters preferred hardwoods. Due to the restricted availability of the most favoured hardwoods – Mahogany and Mvule – and the resulting high prices, carpenters often revert to lesser known species like Nkalati. Musizi in contrary was rarely named. Availability is the main criteria according to which the interviewed people ranked their preferences for certain wood species. Demand on the market or customer preferences were just the second most important criteria indicating a strong sellers market and a resource shortage. Basically all timber – irrespective of species or quality – can currently be quickly sold. Among the carpenters durability was the most important criteria followed by workability and customer preferences.

Figure 16: Price trend for Pine for standard sizes

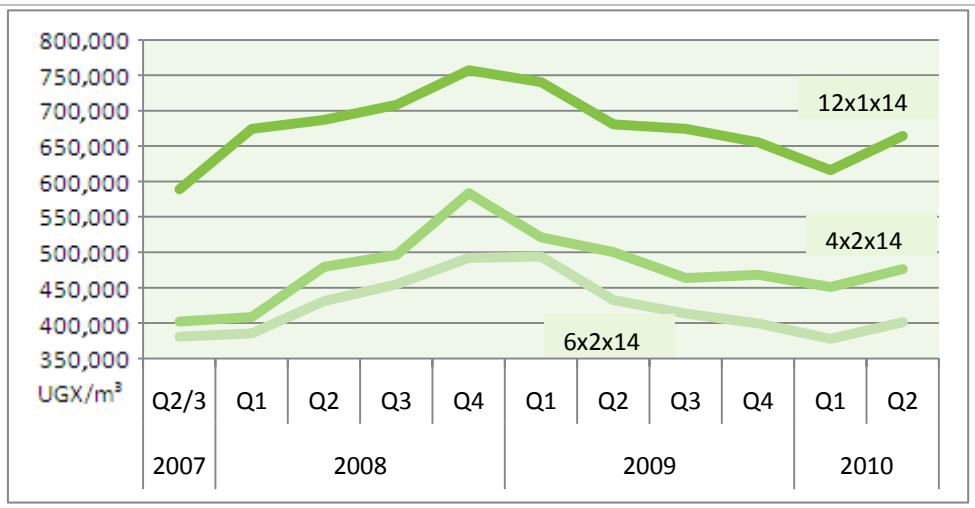


Figure 17: Price trend for Eucalyptus across standard sizes

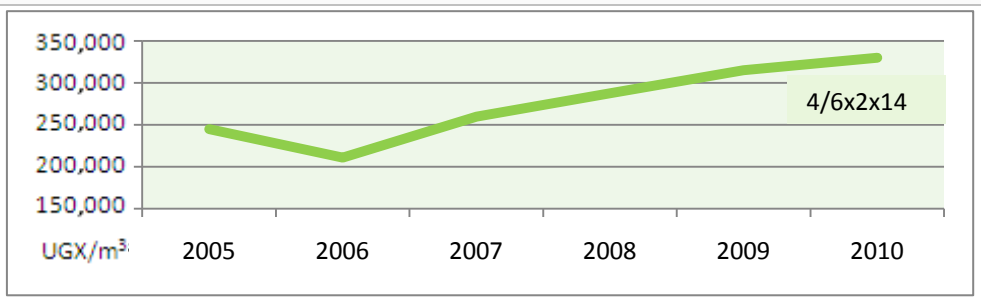


Figure 18: Price trend for Mvule

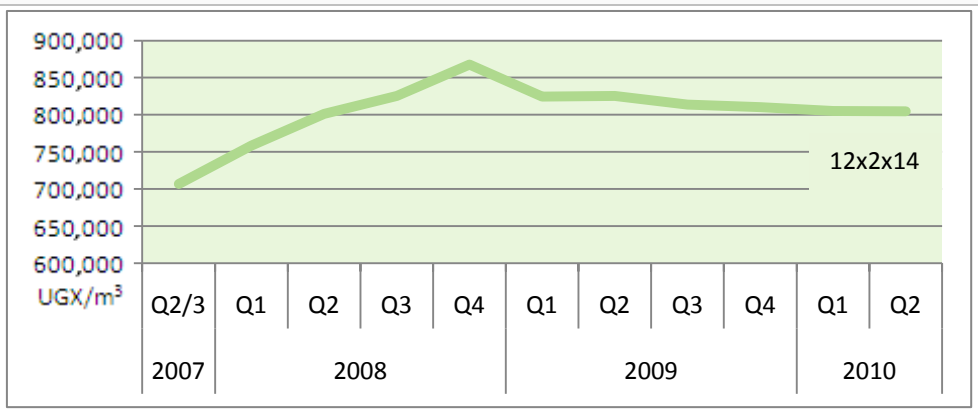


Figure 19: Price trend for Mahogany

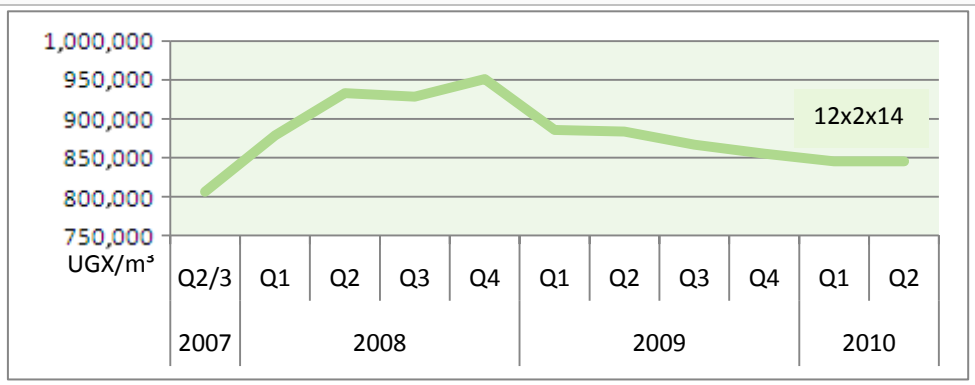
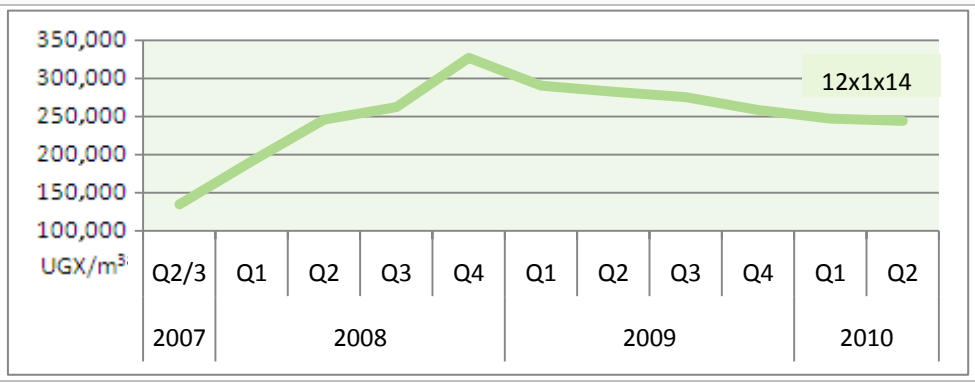


Figure 20: Price trend for Kirundu



Retailers stated that due to the scarcity of cypress, which by now has almost entirely disappeared from the market, pine is used as cheap substitute in construction. By now pine is gradually being replaced by eucalyptus, despite its often inferior characteristics.

The prices provided in Table 2 are retail prices. Retailers also sell timber in large quantities directly from the saw mill to the buyer. Here no average prices are available. However, as stated by some retailers the price difference between wholesale and retail is approximately 10%.

Table 2: Current retail prices for selected species and sizes

Specie	Size	Price (UGX)	
		Per m^3	Per piece
Eucalyptus	Poles	97,000	2,100
Kirundu	12X1X14	279,000	9,300
Eucalyptus	4X3X14	303,000	10,000
Musizi	12X1X13	409,000	13,500
Pine	6X2X14	459,000	15,200
	4X2X14	545,000	12,000
	12X1X14	760,000	25,100
Mvule	12X2X13	921,000	60,800
Mahogany	12X2X14	967,000	63,900
Nkalati	12X2X14	1,029,000	68,000
	12X1X14	1,211,000	40,000

Quality, other than deviation from standard size, is barely addressed by the retailer, i.e. through grading of sawn timber. It is up to the customer to select the planks according to his preferences; the price will be the same.

Adding value by treating or drying timber is not practiced at the retail stage. It is the secondary processor who will do so or else timber is used in construction without further enhancement.

5.2 Secondary processors

Vertical integration is a business strategy commonly found along the timber value chain in Uganda. Most of the bigger businesses (revenue above UGX 100 million and / or more than 20 employees) are vertically integrated; some encompassing all stages along the chain. An example for horizontal integration – integration of businesses from the same level of the chain, e.g. two sawmilling companies joining – could not be identified in the course of this study.

The difficulties in accessing resources forced several sawmilling businesses to shift their focus. Instead of downsizing or even going out of business the more entrepreneurial saw millers diversified downstream into furniture production with several businesses realising the growing potential of the upper quality segment. Additionally, the irregular supply on the market resulted in secondary processors integrating upstream into sawmilling and partly even into forestry to secure resource access. The trend, however, clearly points to businesses increasingly concentrating on secondary processing.

Especially larger companies are often not clearly specialised into either construction or furniture production. Often they will provide the entire work including furnishing the house.

Procurement security in terms of quantity and quality is a major concern of all businesses commenting. Sourcing is done through retailers or saw millers, or in a few cases from company owned plantations. Native species mostly come from private forests and are bought through timber dealers. The most sought after species, Mahogany and Mvule, which are close to depletion in Ugandan forests, are increasingly imported from eastern Congo (DRC) and southern Sudan. The trade from Sudan is likely to increase in the future because of the improving secu-

rity situation both in northern Uganda and southern Sudan. Also Sudan has extensive mature plantations of Teak; the surplus produced will likely go to export markets like Uganda (White, 2008). However, the legal status of those imports remains opaque – especially concerning the clearance of the timber by the respective authorities in Congo and Sudan since those are still feeble and unable to control illegal activities. (Tennigkeit, 2005).

The majority of the interviewed companies used internal quality standards to select the timber. Those standards, however, vary significantly in terms of sophistication and in their influence on the procurement policy. Some companies source their wood still primarily according to price just considering basic criteria like: no severe defects (cracks, splits) or widespread fungi or insect attack. Small businesses often source their wood according to need – based on actual orders. Other companies give specifications already to the suppliers and hence establish more long-term relationships. Basic quality control systems are in place. Quality timber is sourced when available and stored until used.

Overall, the willingness to pay a premium for better and in particular constant quality is there. There is a clear tendency to establish more long-term relationships to suppliers being reliable to deliver according to quality specifications. In the upper quality segment relationships between buyers and suppliers become increasingly more trustful.

Some companies reacted to the increasing difficulties in getting adequate timber by shifting to wood-based panels (especially chip-boards and fibre-boards) which are imported through Kenya from South Africa or China. The wood-based panels can be sourced without major difficulties, do have reliable quality standards and are competitively priced.

Companies employ different strategies to deal with difficulties in sourcing timber:

- Substitution of pine with low quality hardwoods,
- Aggregation of timber from local timber dealers; storage, re-cut and drying is done internally and
- Substitution of timber with other materials.

Price differences between the retail market and wholesale users are small. They are in the range of 5 – 10% and are influenced by quality requirements.

Timbers used in construction are pine, eucalypts and Kirundu. One company stated interest in buying cypress when available despite its higher prices because of its superior characteristics.

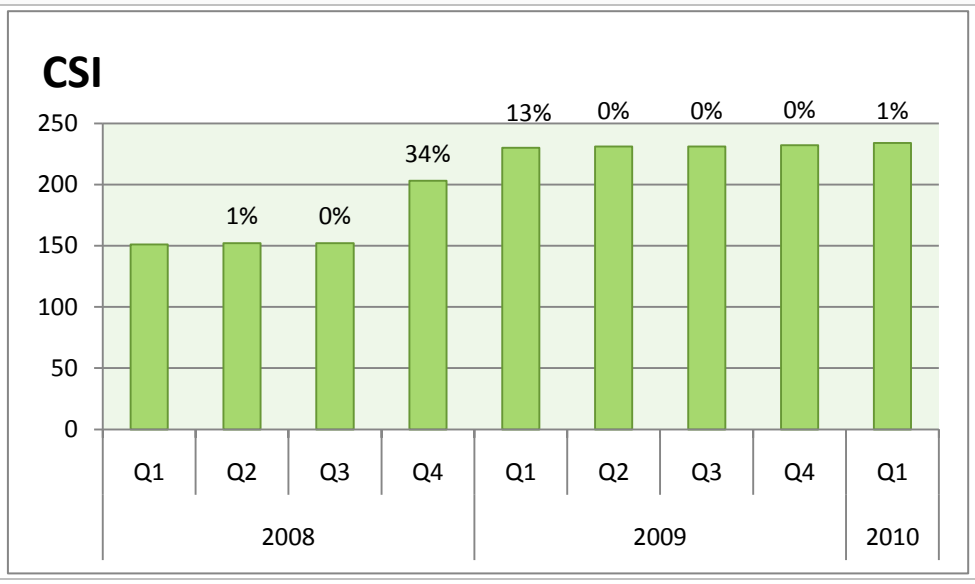
Hardwoods, in particular Mahogany, Mvule and Nkalati are used for furniture and interior furnishings. Plywood and fibre board are also used increasingly in combination with veneer or laminate.

The annual consumption figures of construction companies vary significantly depending on commercial, industrial or housing projects they undertake. The higher the proportion of housing estates on the books of the construction companies the higher the proportion of high quality timber needed. Low quality pine timber with the dimension 6x1x14 (feet x inch x inch) is used and re-used for shuttering in concreting by companies like NHCC.

Figure 21 shows the development of the construction sector index (CSI) for timber since 2008. While it does not indicate changes in volume or provides prices for different wood products it can serve as an indicator of the overall price trend for timber since 2006 (the base year). After a sudden increase in prices at the end of 2008 prices for timber used in the construction sector have remained stable. The discrepancy to retail prices (which showed a strong downward trend in early 2009) may be caused by an increase in volume of timber used in construction,

due to lower prices. Ultimately the CSI can only serve as broad long term indicator but is not likely to show smaller or short lived changes in the timber market.

Figure 21: Timber in the Construction Sector Index



The percentage above each column shows the increase of timber prices in comparison to the period before. Source: UBOS (2009, 2010)

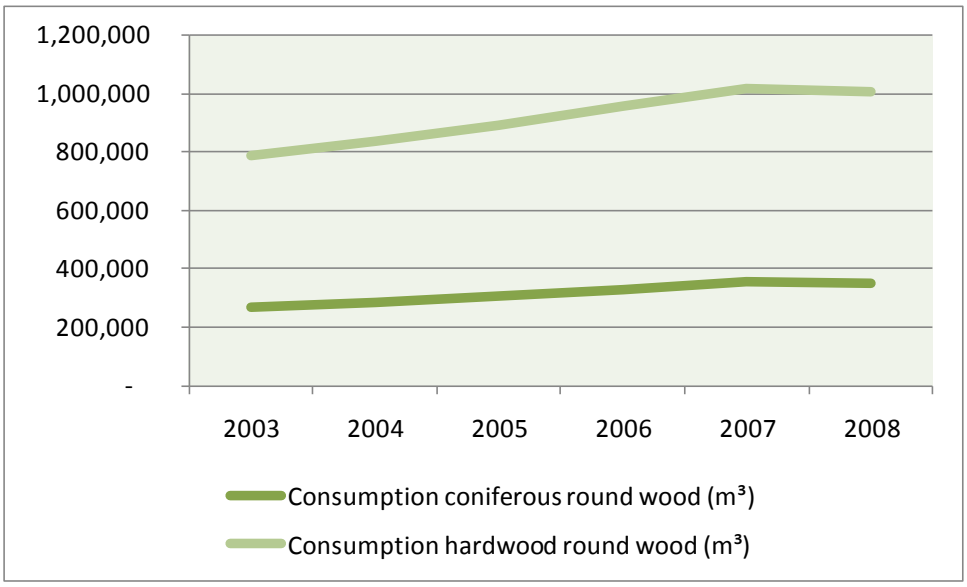
6 Demand and price projections

The available data for timber production and consumption in Uganda is fragmented and unreliable. Accordingly, it cannot be recommended to develop and use an econometric model to forecast the future timber demand in Uganda.

When estimating future timber demand in the Ugandan context it is important to use a transparent approach so that, with more precise information, the estimates can be adjusted. The following parameters are needed to give an estimate for the future demand of saw logs:

Historic round wood consumption: According to FAO data, industrial round wood consumption in Uganda has increased from 2000 to 2008 by around 28%. This is an average annual increase of 3.5% (Figure 22).

Figure 22: Round wood consumption 2003 – 2008



Industrial round wood consumption in Uganda 2000 to 2008 (Source: FAOstat 2010)

The vast majority of the in-country produced and imported industrial round wood is processed to sawn timber and finally consumed in Uganda, while the export figures of sawn timber are very low.

Current annual consumption of sawn timber: FAO in 2005 surveyed the operating pit sawyers and saw mills in Uganda assessing their production capacities and actual production. The study established that about 240,000m³ of sawn timber is produced in Uganda annually. In 2005 around 1.2 million m³ of round wood were consumed in Uganda, indicating that recovery over all types of sawmills is only 20%.

The FAO figures will be used as starting point for the projection of future timber demand in Uganda (Figure 22), assuming an average recovery rate of 20%.

Growth rate of sawn timber consumption (linear): The growth of timber consumption is closely related to the Gross Domestic Product (GDP) growth. In the last 10 years the GDP in Uganda has increased. (Between 2007 and 2008 by 8% alone.) This growth is expected to continue in the next years, however at lower rates due to the actual financial and eco-

nomic crisis (GDP of around 6% in 2009). Further, European Studies (UNECE 2005) show that – with growing maturity of the economy – the average growth in timber consumption is lower than the average GDP-growth.

For the period between 1993 and 2010 the FAO (2003) estimated an average rate of 4% growth in sawn timber consumption for Africa. Based on the available data this was roughly confirmed for Uganda by FALKENBERG & SEPP until 1999.

Substitution effects: With the lack of adequate figures for price elasticity, substitution effects have to be estimated and figured in. Growing shortage of timber will result in price increases and strengthen the trend towards substitution. Considering these observations, the most realistic average growth rates for the next 20 years for sawn timber consumption are estimated to be around 3% annually.

Population growth and forest area decrease: The projection assumption is supported by the correlation between population growth and forest area in Uganda. ACODE (2007) estimated a decreasing forest area per capita from 0.3ha in 1995 to 0.1ha in 2020.

As displayed in Table 3, a demand for saw logs of about 2.5 million m³ can be expected in 20 years time (at an annual growth rate of 3% and assuming a recovery rate of 20%) based on the assumptions detailed above. The predicted supply from plantations of 1.7 million m³ (year 2030, see chapter 2) will not cover the predicted demand in 2030.

Table 3: Estimated future demand for saw logs at 20% recovery rate (in Mio. m³)

Annual growth rate	2005	2010	2015	2020	2025	2030
1%	1.20	1.26	1.33	1.39	1.46	1.54
2%	1.20	1.33	1.46	1.62	1.78	1.97
3%	**1.20**	**1.40**	**1.61**	**1.87**	**2.17**	**2.51**
4%	1.20	1.46	1.78	2.16	2.63	3.20
5%	1.20	1.53	1.95	2.49	3.18	4.06

This figure changes significantly with higher recovery rates (Table 4). At a recovery rate of 40% the demand for saw logs is almost half as high (down to 1.25 million m³) as predicted in this forecast (up to 2.5 million m³). With proper management, usage of more efficient technology and capacity building the average recovery rate of sawmilling operations in plantations can be expected to go up to 40% in 2030. Table 4 and Figure 23 show deficit and surplus in terms of timber volume for the year 2030, when the supply reaches its peak. Increased recovery rates can significantly contribute to ensured timber supply.

Table 4: Demand vs. supply scenarios at different recovery rates in 2030

Recovery rate	Predicted demand (in m³)	Predicted production from plantations (in m³)	Surplus / Deficit (in m³)
20%	2,510,000	1,676,000	-834,000
30%	1,673,333	1,676,000	3,000
40%	1,255,000	1,676,000	421,000

Figure 23: Projection of timber volume demand and supply for different recovery rates for the year 2030

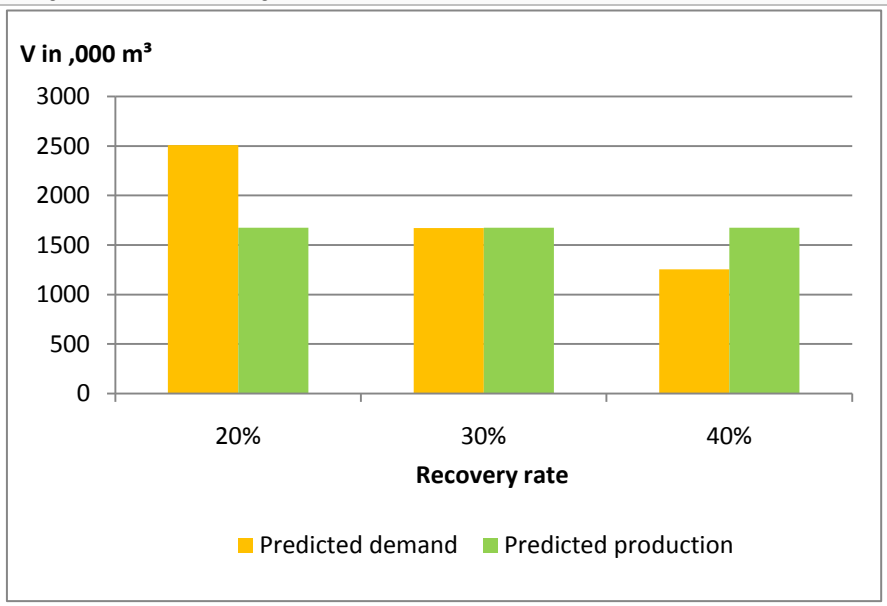
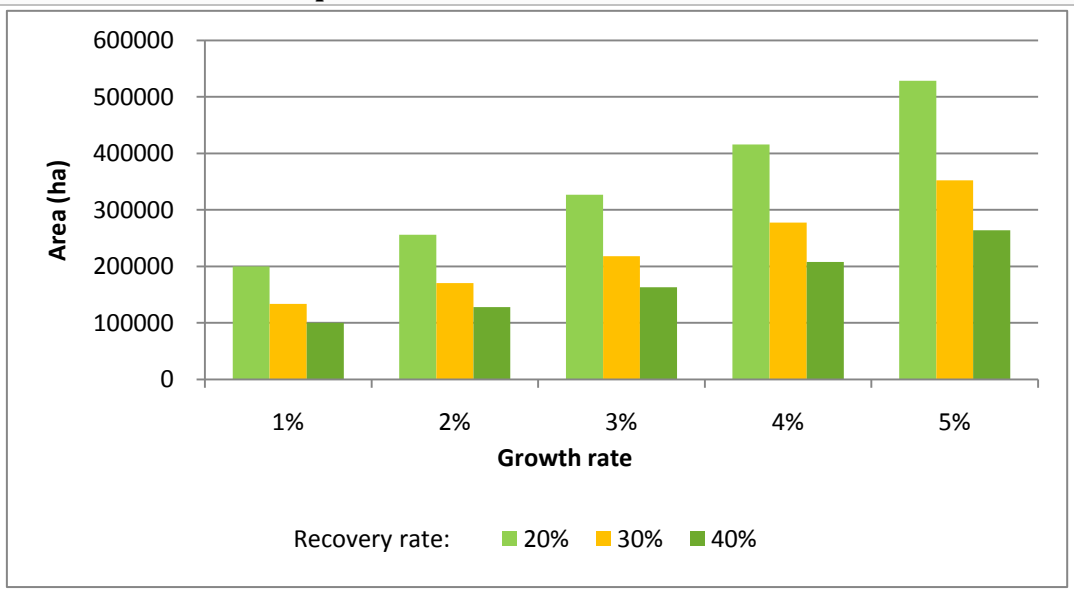


Figure 24 shows the total area of plantations established that is needed to cover the national timber demand in 2030 sustainably. At a growth rate of three percent and a recovery rate of 20 % more than 300,000 ha must be established until 2030. That equals more than 14,000 ha annually when taking into account the already established 40,000 ha of commercial plantations.

Figure 24: Plantation area needed to sustainably cover the timber demand based on the predicted demand for 2030



Assuming a rotation period of 20 years, 30% harvesting losses and harvestable volume of 200 m³/ha

7 Recommendations

The findings in the report clearly indicate the need:

- For continued plantation establishment and
- To encourage local and foreign investment into processing plants with better technologies that will increase recovery rates and use otherwise wasted wood.

Therefore we recommend:

1. Further support for planters and the wood processing industry should be provided in order to create a sustainable and viable forest sector.
   Training of investors in plantations and their employees must be kept up and expanded into related topics such as saw milling techniques and marketing of a variety of timber products. (See also UNIQUE, 2010a)
   Regular networking events that will strengthen regional integration and cooperation of the sector horizontally and vertically should be initiated with the help of Uganda Timber Growers Association (UTGA), SPGS and other potentially interested organisations like Uganda Investment Authority (UIA) and the Private Sector Foundation.
2. The SPGS cluster approach should be refined and the data base for yield prediction improved in order to be able to make more accurate predictions about where and when as well as how much timber will be available (see UNIQUE 2010b). Well founded predictions like that will help to encourage investment into the processing sector.
   Clusters can be refined according to access roads and already existing secondary industry or areas where these industries can be established (e.g. considering the often quite high energy demand). Additionally proximity to trading centres with high demand might be considered.
   This will also enable the UTGA to follow the cluster approach when providing services to its clients.
   SPGS might consider outsourcing data gathering and storage to a third party provider, provided that SPGS clients will give their consent.
3. Market transparency should be improved, for example with regular reports as envisioned by SPGS (Timber Market section in the quarterly published SPGS newsletter, see Annex). This will provide investors with the necessary information for sound business planning.
   In the future this can be expanded into a market information system like the South African Lumber Index, which depends on advertising and subscription. However, at the moment Uganda's forestry sector and wood processing industry is likely not ready to incorporate such a costly tool into their business planning. This will hopefully change when businesses realize the benefits they can gain from reliable market information.

8 Literature

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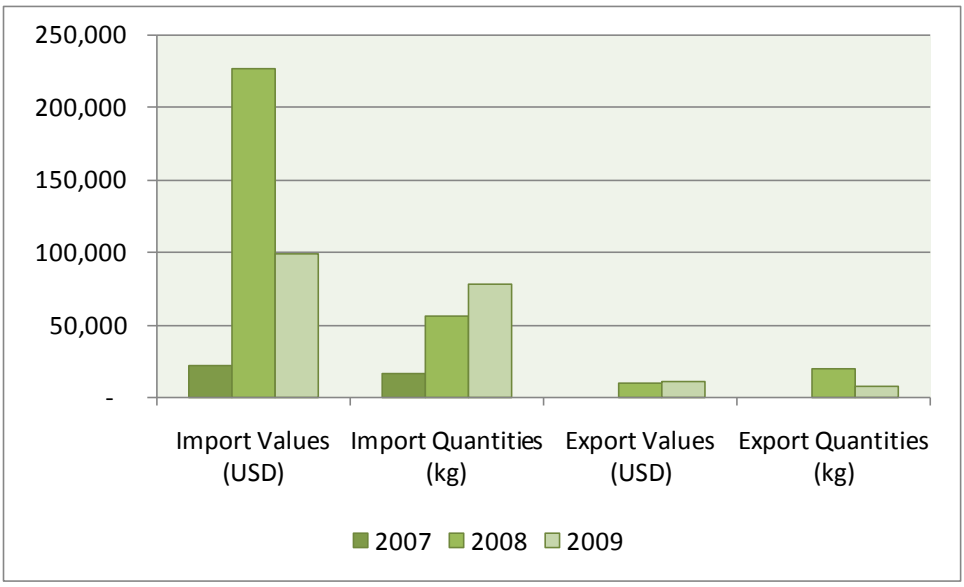
Annexes

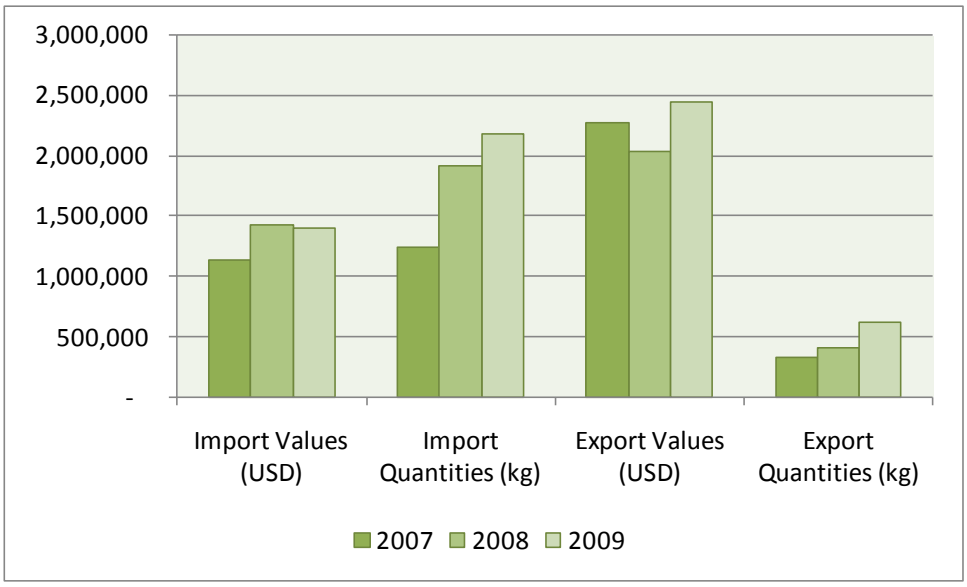
Figures for international trade with other wood products

Figure 25: Veneer trade data for Uganda 2007 - 2009



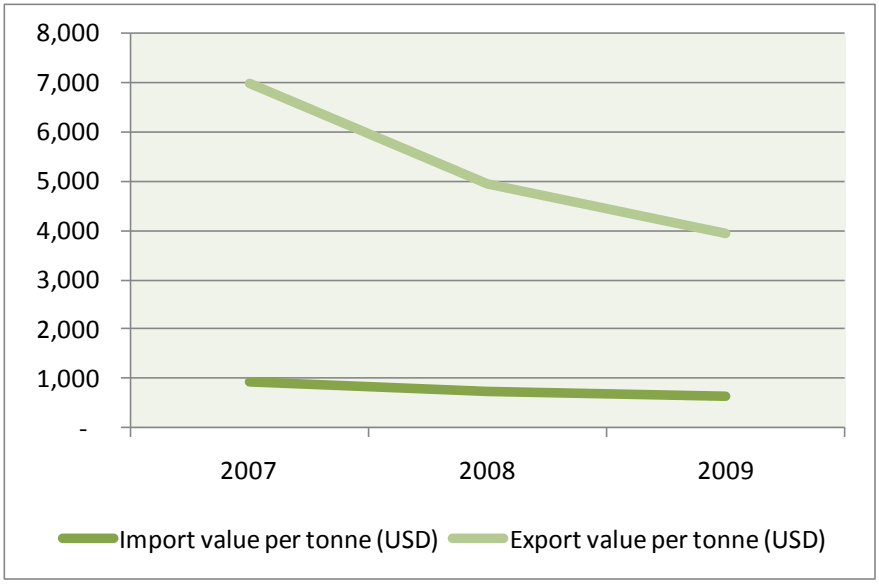
Veneer (HS 4408) trade data for Uganda 2007 to 2009 (Source: based on URA 2010 data)

Figure 26: Plywood trade data for Uganda 2007 - 2009



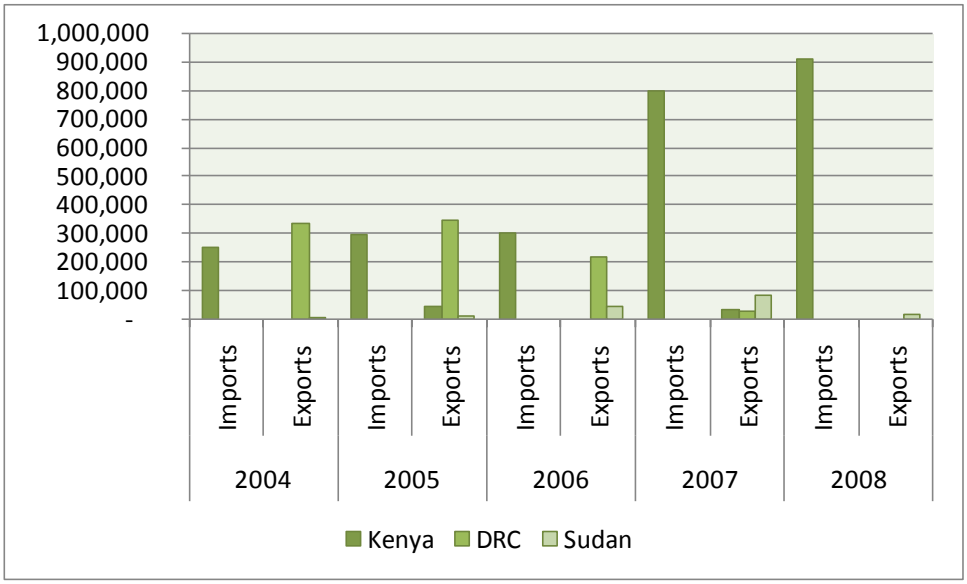
Plywood (HS 4412) trade data for Uganda 2007 to 2009 (Source: based on URA 2010 data)

Figure 27: Average values of for plywood imports and exports 2007 - 2009



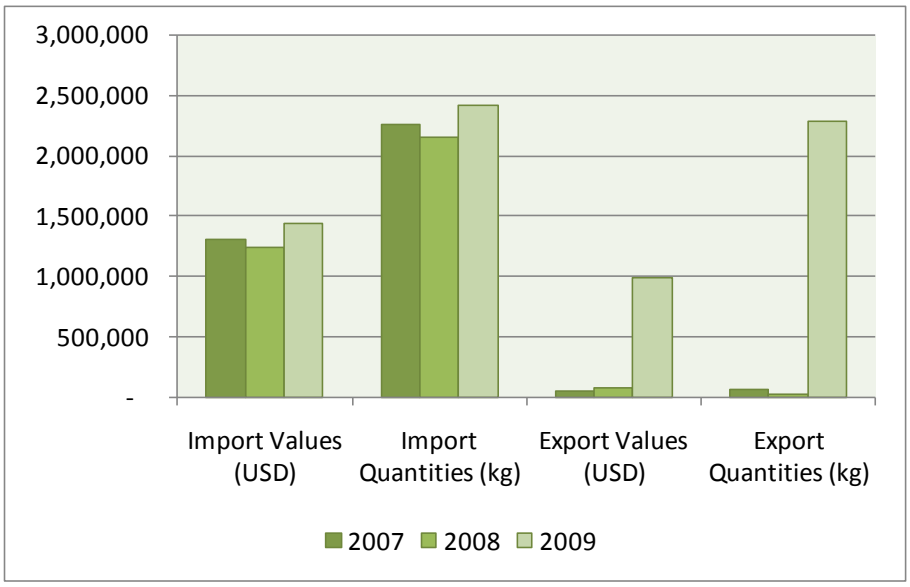
Average values for Ugandan plywood (HS 4412) trade 2007 to 2009 (Source: calculated based on URA 2010 data)

Figure 28: Major regional trade partners for Plywood



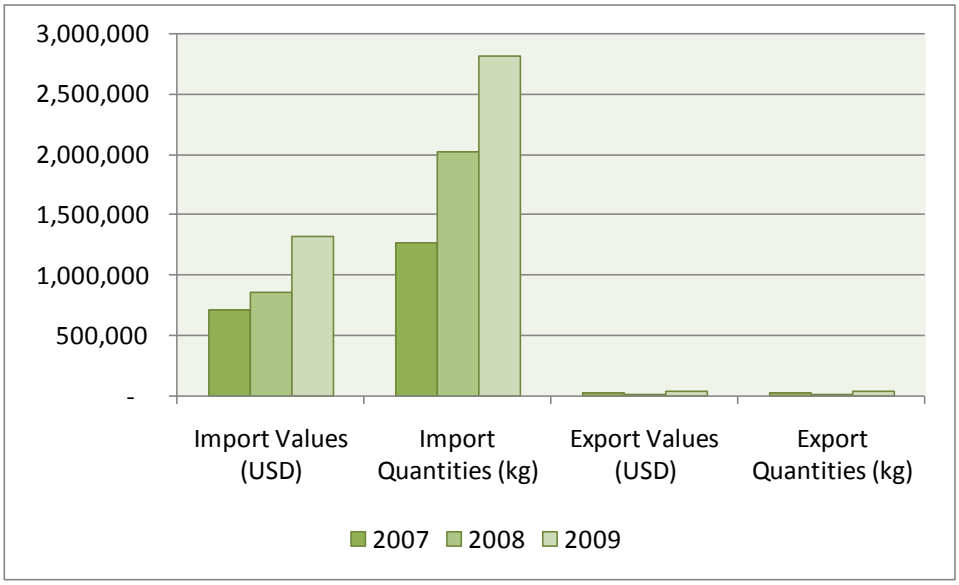
Major regional partners of Uganda in plywood (HS 4412) trade 2004 to 2008 (all values in USD; Exports are FOB values; imports are CIF values; Source Comtrade 2010)

Figure 29: Particle board trade data for Uganda 2007 - 2009



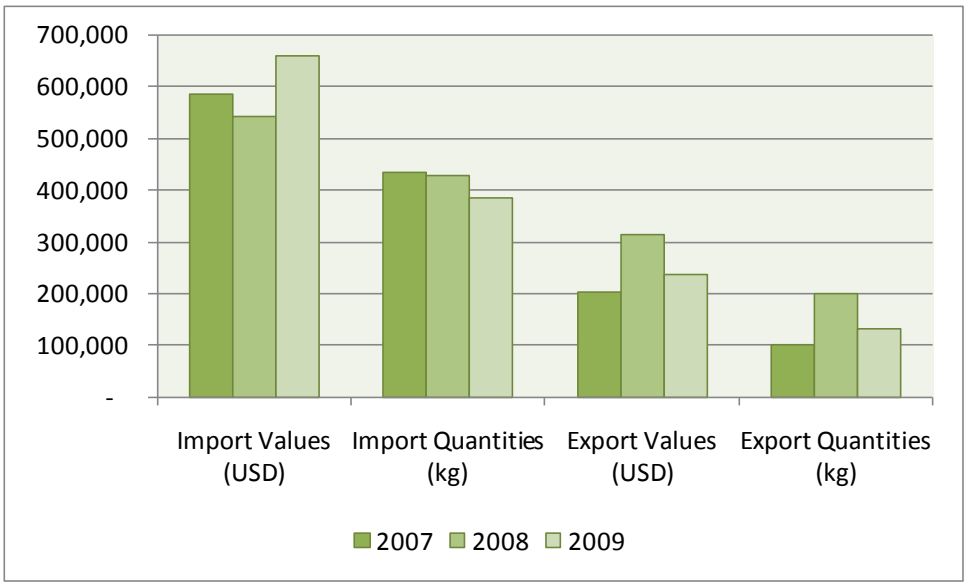
Particle board (HS 4410) trade data for Uganda 2007 to 2009 (Source: based on URA 2010 data)

Figure 30: Fibre board trade data for Uganda 2007 - 2009



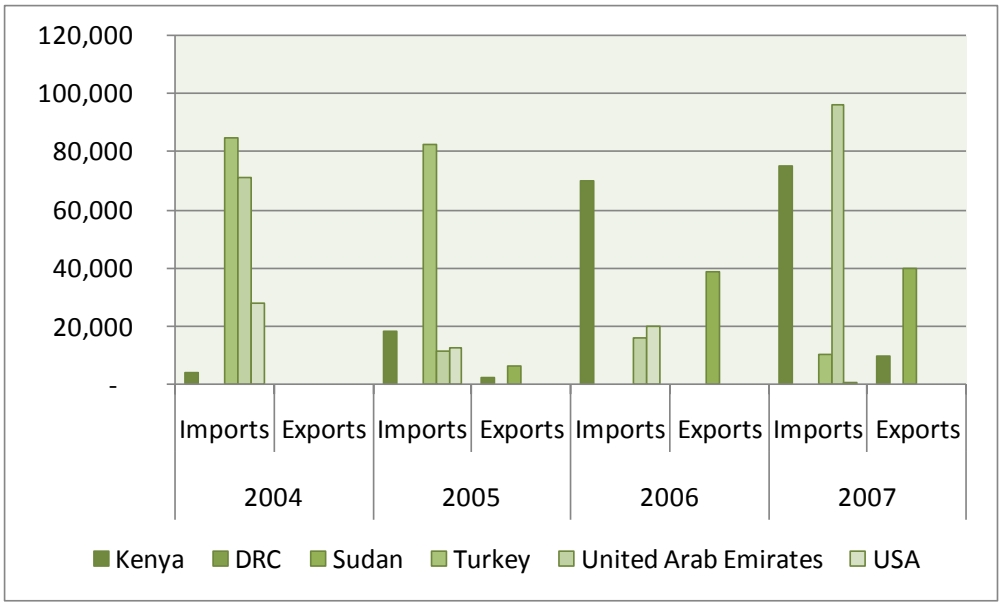
Fibre board (HS 4411) trade data for Uganda 2007 to 2009 (Source: based on URA 2010 data)

Figure 31: Carpentry and joinery trade data for Uganda 2007 - 2009



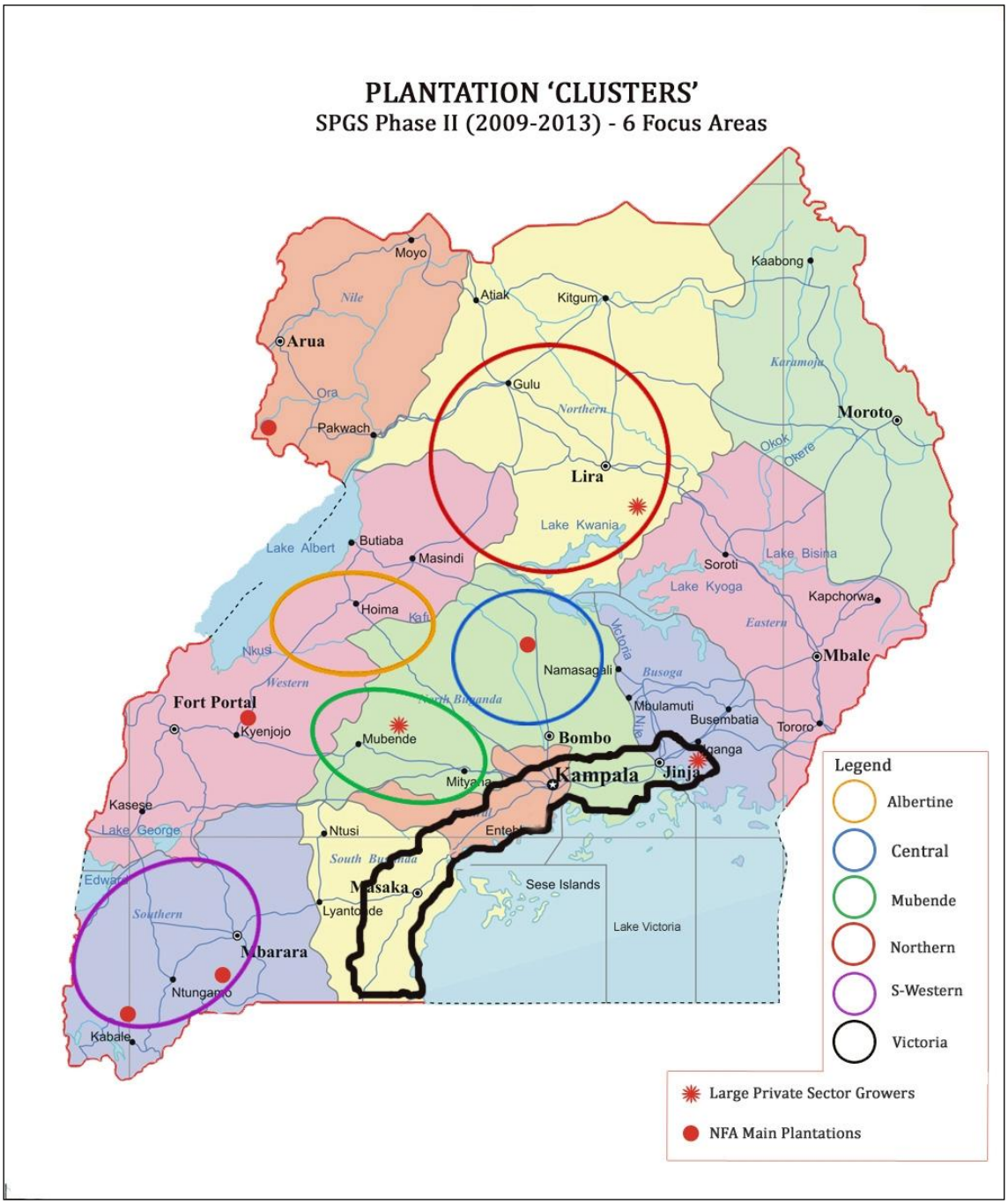
Carpentry and joinery (HS 4418) trade data for Uganda 2007 to 2009 (Source: based on URA 2010 data)

Figure 32: Major trade partners for carpentry and joinery products



Major partners of Uganda in carpentry and joinery (HS 4418) trade 2004 to 2007 (all values in USD; Exports are FOB values; imports are CIF values; Source Comtrade 2010)

SPGS Plantation Clusters



Source: SPGS

SPGS Market report

SAWLOG PRODUCTION GRANT SCHEME - SEPT - NOV. 2010. ISSUE NO. 29

TIMBER MARKET REPORT – July 2010

Table 1 shows retail prices as stated by timber dealers across Kampala in the second quarter of 2010. Prices for eucalyptus and pine have increased significantly when compared to the first quarter in 2010. The price for Mahogany stayed the same, while Kirundu and Mvule show a very slight downward trend.

Table 1:Current retail prices for selected species and sizes

Specie	Size (inch x inch x foot)	Price per piece (UGX)
Eucalyptus	Poles 4-6 inches	2,100
Kirundu	12X1X14	9,300
Eucalyptus	4X3X14	10,000
Musizi	12X1X13	13,500
Pine	6X2X14	15,200
	4X2X14	12,000
	12X1X14	25,100
Mvule	12X2X13	60,800
Mahogany	12X2X14	63,900
Nkalati	12X2X14	68,000
	12X1X14	40,000

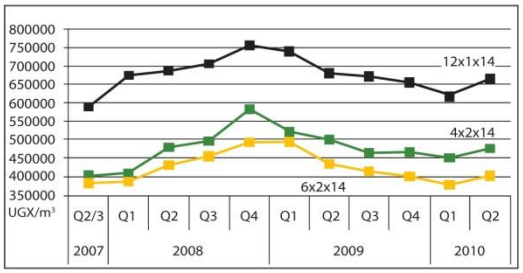
Kampala retail prices, 2nd quarter 2010 (Source: UNIQUE)

Prices, especially for timber species with a large turnover such as pine, eucalyptus and Kirundu are expected to go up in the third quarter 2010, due to UNRA's enforcement of maximum tonnage carried by trucks. Dealers stated possible price increases for up to UGX 1,500 per piece.

Two other potentially interesting species, cypress and Musizi can at the moment not be found in significant quantities in Kampala markets. The old cypress stands on CFR's have been harvested while Musizi as of now is not established as a major plantation species, meaning the supply comes mainly from single trees grown in agricultural areas.

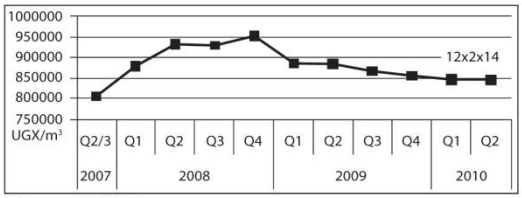
Figure 1-3 show the price trends of major timber species in Uganda over recent years, based on retail prices in Kampala. Until 2008 prices were steadily increasing, but dropped when the financial crisis reached Uganda. Since 2010 prices seem to be once more on the upward trend or in case of native species remain steady at a high level.

Fig. 1: Price trend for Pine



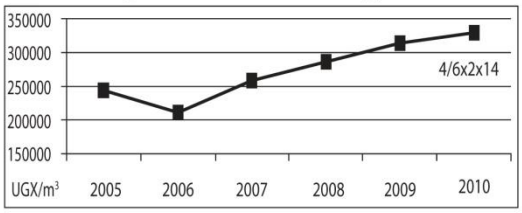
(Source: UNIQUE)

Fig. 2: Price trend for Mahogany



(Source: UNIQUE)

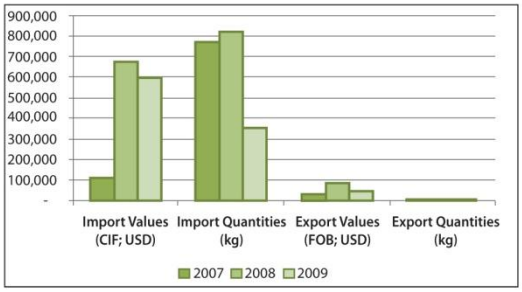
Fig. 3: Price trend for Eucalyptus



The trend is given across standard sizes, the value for 2008 was interpolated (Source: NFA street comparison and NFA timber yard price list)

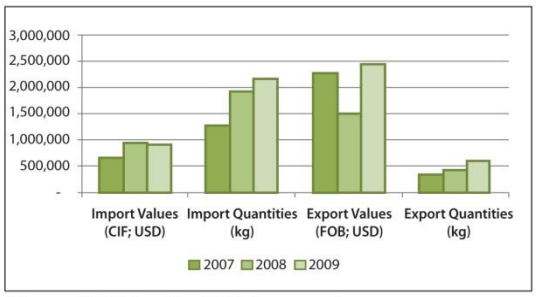
Fig. 6 shows imports and exports of sawn timber and plywood. While the import quantity of sawn timber decreased in 2009 to less than half of the year before, the import value stayed almost the same. The most likely explanation is that timber imports of cheaper timber species that can be supplied locally decreased while those of the more valuable timbers like Mvule or Mahogany were still imported due to their scarcity in Uganda. Timber imported illegally is not reflected in that statistic. More plywood is imported than exported. However there is a large discrepancy between export quantity and value. Here it can be assumed that most of the plywood exported is not produced in Uganda but simply traded onwards to DRC and Sudan. The major supplier of plywood for Uganda is Kenya.

Fig. 4: Sawn timber imports and exports



(Source: UBOS, based on URA data, 2010)

Fig. 5: Plywood imports and exports



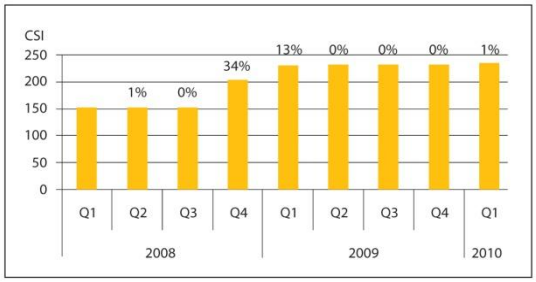
(Source: UBOS, based on URA data, 2010)

The construction sector index (CSI) is calculated by the Uganda Bureau of Statistics (UBOS) based on a monthly survey. The CSI is comprised of building materials and labor costs in the construction sector and is calculated for six different project types. Timber is included only in the construction of houses (residential buildings constructed i) privately or ii) by construction companies and iii) non-residential buildings). Across these three timber and wood products contribute with 9.9% to the actual building.

Fig. 6 shows the development of the CSI for timber since 2008. While it does not indicate changes in volume or provides prices for different wood products, it can serve as an indicator of the overall price trend for timber since 2006 (the base year). After a sudden increase in prices at the end of 2008 prices for timber used in the construction sector have remained stable. The discrepancy to retail prices (which showed a strong downward trend in early 2009) may be caused by an increase in volume of timber used for construction, due to lower prices. Ultimately the CSI can only serve as broad long term indicator but is not likely to show smaller or short lived changes in the timber market.

NB. Editor's note: we are planning to publish this market report every 3 months in SPGS News. Let us know what you think of the information provided here and what you would like to see in future reports.

Fig. 6: Timber in the Construction Sector Index



The percentage above each column shows the increase of timber prices in comparison to the period before. (Source: UBOS, 2009, 2010)

MARKET NEWS FROM AROUND THE WORLD

Thanks to NORSKOG's Arné Rørå for this information.

BIOMASS now generates 32% of all energy in Sweden. Biomass energy has now surpassed oil to become the number one source for energy generation in Sweden. The increased competition for logs and wood chips between the pulp industry and energy sector has pushed wood fibre prices to new highs. In local currency (Swedish krona), pulpwood prices in Q1 2010 were almost 20% higher than five years ago.

GLOBAL SAWLOG PRICES are up 17% over the past 12 months, with the biggest gains seen in Northern Europe and Oceania.

EUCALYPTUS LOG prices in Brazil have gone up 25% in the past year. Demand for *Eucalyptus* logs has increased in some regions in Brazil not only from pulp and panel manufacturers, but also from sawmills that are producing timber from both pine and *Eucalyptus* for the construction market. The Brazilian pulp industry consumes some 45% of harvested *Eucalyptus* logs, while an estimated 48% is used for fuelwood and for making charcoal for the steel industry. A growing but still small consumer of *Eucalyptus* logs is the sawmilling sector, that in 2009 used around 4% of the total log harvest.

QUOTATION

"We are drowning in a sea of information but are starved for knowledge"
John Naisbitt (US Business writer; 1929-)

FEEDBACK

"Thanks to you and your team for the Tree Planting Guidelines: it is a big resource for contractors!
Joseph Ikwap (Contractor: All Round Foresters).

"Thank you very much for the arrangement of the workshop in Masindi (August 2010) and several plantations in Luwero. Also thank all the staff who were so helpful and took their time to explain to us everything carefully"
(Olama Marino).

"Thank you for the latest Newsletter. We are always happy to read SPGS News as the articles are very useful to Green Resources staff here in Tanzania. We are discussing possible contributions from our forestry operations in Tanzania: something will happen in the near future!"
(Mwaniki Ngibuini).

Interviewed companies and organisations

Interviewed Companies and organisations			
Company	**Type of Business**	**Name**	**Time of interview**
Budongo Saw mills	Furniture	J.V. Patek	Aug 10
ERIMU	Furniture and timber dealers	M. Kizito	Apr 09
Global Woods	Planter	J. Mokwena, M. Baldus	Apr 09
Green Resources	Planter	D. Ayiekoh	Apr 09
Interio Construct	Formerly construction and furniture	F. Eichinger	Aug 10
Kapkwata Saw Mills Ltd.	Furniture and timber dealers	J. Phaguda	Apr 09
National Housing	Construction	P. Onyango	Jul 10
New Forests Company	Planter	P. Le Roux	Apr 09, Oct 10
NFA	Timber trade	J. Ndimukulaga	Jul 10
	Plantations	I. Kikangi	Jul 10
	Timber sale		Jul 10
Nileply	Planter	Bashkar Kannan	Apr 09, Oct 10
ROKO	Construction, Interior and Furniture	A. Flores	Jul 10
Seyani International	construction and interior	D. Vekaria	Jul 10
UBoS	Statistics – Construction Sector Index	P. Opio	Jul 10
	Statistics – Imports/exports	A. Ki Lubega	Jul 10