

# Large and Small-scale SAWMILLING in South Africa

Forestry Sub-Sector Studies - Briefing I - January 2005



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This series of briefing notes provides summary information on the various parts of the forestry sector. The studies, commissioned by DWAF, focus on the role that each sub-sector can play in promoting poverty eradication. DWAF recognises the importance forests and forestry play in people's livelihoods and aims to create an environment that will increase forestry's impact on local-level development.

## Introduction

Sawmilling is the processing of sawlogs into sawn timber (lumber). The lumber produced is used by the building and construction industry. Lumber is also used as raw material for the manufacturing of a range of timber-based products such as furniture, shelving, flooring, doors, etc. The current log intake by South African sawmillers amounts to approximately 4.8 million m<sup>3</sup> per annum. The local sawmilling industry's output in terms of lumber produced is estimated at 2.2 million m<sup>3</sup> per annum. There are an estimated 315 sawmillers active in the South African market. The size of sawmills ranges from large operations with an annual log intake in excess of 200 000 m<sup>3</sup>, to small-scale mills (including bushmills) with an annual intake of less than 5 000 m<sup>3</sup>. Although small-scale mills account for 60% of the total number of establishments, they only process about 8% of sawlogs. The ten largest sawmills account for 30% of total production

output. The sawmilling sector is labour intensive and employs an estimated 30 000 people.

## Supply and Demand of Lumber

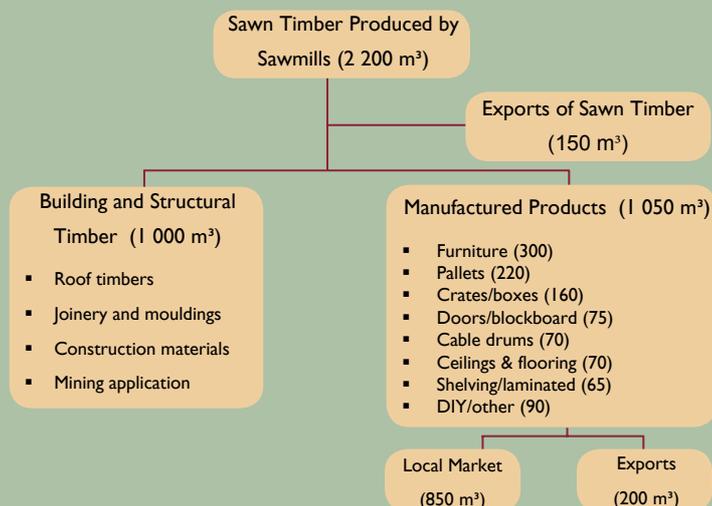
Box I illustrates the supply and demand for lumber produced in South Africa. About 150 000 m<sup>3</sup> of un-processed lumber is exported to various European and North American markets.

The balance of supply is equally split between building/structural timber applications and further value-adding operations. In the value-adding sector a range of products are manufactured and distributed to the market, as indicated in Box I.

20% of the manufactured items in this market (furniture, packaging, doors and DIY products) are exported. South Africa is almost self sufficient in lumber.

In addition to the lumber that is produced within South Africa, another 200 000 m<sup>3</sup> of exotic hardwoods (meranti, oak, etc) are imported annually. These are used mainly for mouldings, furniture, flooring, window frames, etc. Imports thus account for less than 10% of total domestic lumber demand.

Box I: Supply and Demand for Lumber in South Africa ('000 m<sup>3</sup>)



The sawmilling sector has remained fairly static over the past decade and has shown very little growth over the past 20 to 30 years. Sawmilling is generally not considered as an attractive investment area and large operators tend to restrict expansion and further major investments in sawmilling. This has to some extent opened up the market for small-scale sawmillers who are more flexible to the fluctuating demand for sawn timber.

## Value Adding

One cubic metre of sawlog input (into the sawmilling process) produces between 0.4 to 0.5 m<sup>3</sup> of sawtimber (lumber). Considerable value is added through the ensuing processes and the market values, expressed per cubic metre of sawlog intake, are presented in Box 2. It is clear that the production of graded lumber and downstream products are most beneficial as these yield the highest returns. Many of the smaller mills produce wet-off-saw lumber and this represents the low end of the market value chain.

Box 2: Sawmilling Value Chain

Processing Level	Rand per m <sup>3</sup> log intake
Sawlogs standings	120
Sawlogs delivered to mill	180
Wet-off-saw lumber	350
Dried and graded lumber	650
Final products (flooring, shelving, etc)	1 100

## Small-scale Sawmilling

Small-scale sawmilling is generally more common in areas that are far removed from major pulp mills and other operations consuming small wood and pulpwood.

There are an estimated 200 small-scale sawmillers in the market. Small-scale mills (annual sawlog intake of less than 5 000 m<sup>3</sup>) normally process sawlogs that are not suitable for the larger mills. Many of these are mobile and they move to areas where log supplies are available. The bulk of small-scale operations are to be found in the Eastern Cape, with lesser activities in Mpumalanga, Limpopo and Kwazulu-Natal.

The bulk of the timber produced by small-scale sawmillers is wet-off-saw, mostly ungraded. The products are mainly marketed to the informal

building sector in the surrounding areas where these mills operate. Some small-scale sawmillers add value to the output and produce products such as pallets, picket fencing, wendy houses, etc.

## Business Opportunities in Small-scale Sawmilling

Historically small-scale sawmilling developed largely around State-owned plantations where there was access to burnt areas, small wood and fall out areas from larger contractors. With the restructuring process and the privatisation of the plantations owned by the government, the small-scale sawmilling industry is facing problems especially with dwindling future log supplies.

An opportunity for small-scale sawmillers does however exist in the Eastern Cape. Small-scale sawmillers can utilise the restructuring process by using it as an opportunity to gain access to their own sources of log supply. One way in which this could be achieved is to form co-operative joint ventures that will enable them to obtain plantation resources. Such small-scale milling clusters (SSM clusters) should focus on obtaining and securing adequate raw materials supplies, possibly combined with primary processing and, especially, to focus on value-added downstream activities to create additional employment and income.

Generally small-scale sawmillers should independently investigate possibilities to participate further in the value chain. The manufacture of wet-off-saw timber is a marginal business and small-scale sawmillers should investigate ways and means of further adding value to their sawmill output.

The remaining Department of Water Affairs and Forestry managed plantations (those plantations that are still in the process of restructuring) contain large pockets of hardwoods. In some areas the market for hardwood is limited and restricted to poles and firewood only. In such areas consideration should be given to the establishment of small hardwood sawmills which could produce sawn timber and further downstream value-adding processes such as pallet and packaging manufacture.

The industry body, South African Lumber Millers Association (Salma), is instrumental in promoting industry development and can be contacted at telephone (011) 974 1061 or e-mail: [salma@acenet.co.za](mailto:salma@acenet.co.za) for more information.

