

Understanding markets for tree products in Kenya: key goods and price trends

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For a long time forestry as an enterprise has ranked low in Kenya. Limited efforts have been put to collection of long-term data about markets and tree product price dynamics. This undermines the ability of forestry investment decision makers to identify existing market niches and prices for various products.

To fill the information gap, the Kenya Forestry Research Institute (KEFRI) in 1999 initiated a long-term market study. The study involved conducting annual market surveys on tree product flows, changing market niches and product prices in the country. The key regional data collection centres were in Western Kenya including Nakuru, Eldoret, Kitale, Kakamega, Kisumu, Busia, Mbale and Bungoma. In Central, data is collected in Nyeri, and Nairobi. The Eastern Kenya circuit includes; Meru, Embu, Kitui, and Machakos. The Coastal region centres are Mombasa, Kilifi and Malindi.

The key tradable tree products monitored are charcoal, sawnwood, transmission poles, firewood and construction poles. Data on industrial firewood was collected from sample factories out of the sixty five (65) Kenya Tea Development Agency (KTDA) affiliated factories, while thirty nine (39) were privately owned estate factories affiliated to the Tea Growers Association. Data was also collected from sawmills, farmers, food and textile processing industries scattered across the country. Data on transmission poles was collected from samples of the more than sixty five (65) wooden pole treatment plants in the country. The study has also expanded to monitoring tree product imports from East and Central African countries through



Drying of timber on the yard. Almost all timber available for trade is not seasoned, and often is used in its wet state. Photo BGF

the key entry points of Busia, Malaba, Lunga Lunga and Namanga.

PRICE DYNAMICS OF TREE PRODUCTS IN KENYA

Sawnwood

Most of the softwood was produced in the country with minimal imports from Tanzania while most of the hardwood was imported from the DRC and Tanzania. Cypress ranged from KES 25,423 per m³ in Eldoret to KES 39,406 per m³ in Malindi.

Similarly Pine was the cheapest in Nairobi and most expensive in Nyeri. Mahogany ranged from KES 63,559/m³ in Nairobi to KES 79,661/m³ in Malindi due to the cost of transport. The same scenario applied for Mvule that was cheapest in Nairobi and most expensive in Eldoret. Cedar from Narok and some imports from Tanzania was more expensive in Mombasa and cheapest in Eldoret possibly, due to proximity to production areas of Uasin Gishu and Keiyo-Marakwet Counties (Table 1).

Table 1: Retail prices of sawnwood in selected Towns in 2005 (KES/m³)

Town	Cypress	Pine	Mahogany	Mvule	Cedar	Camphor	Grevillea	Eucalypts	Indigenous
Malindi	39,406	30,932	79,661	79,661	41,425	65,677	-	-	-
Mombasa	28,813	24,576	61,440	82,627	47,457	-	24,576	-	-
Kisumu	36,016	31,779	-	-	-	-	20,338	20,338	20,338
Bungoma	32,203	29,661	-	-	32,203	-	28,813	-	-
Nairobi	27,118	29,661	63,559	67,796	-	-	18,644	18,644	18,644
Nakuru	25,423	23,305	-	-	31,779	-	17,796	-	-
Kericho	25,423	-	-	-	-	-	-	22,033	22,033
Nyeri	41,525	41,525	-	-	-	-	17,372	18,220	21,186
Busia	-	-	-	84,745	-	-	12,711	12,711	20,339
Eldoret	25,423	-	-	-	29,661	-	17,796	44	52

Cypress: *Cupressus lusitanica*

Pine: *Pinus patula*

Mahogany: various species like *Khaya anthothea*, *Entandrophragma excelsum*

Mvule: *Milicia excelsa*

Cedar: *Juniperus procera*

Camphor: *Ocotea usambarensis*

Grevillea: *Grevillea robusta*



Eucalyptus timber, a growing source of raw material on the market, warping and also splitting (though that could have been worse). Photo BGF

Construction poles

The poles found in most urban areas were mostly harvested from Eucalyptus and in a few cases from cypress thinnings. In the Coastal region,

the poles were mostly harvested from *Casuarina equisetifolia*, highly demanded for construction of "makuti" buildings popular with tourists. The poles are also used in low-value construction

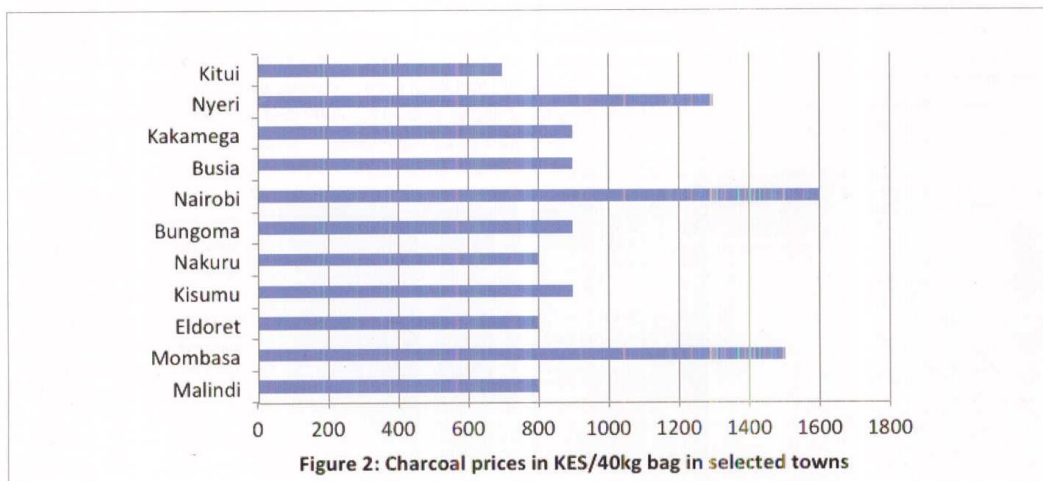
works such as scaffolding in high-rise buildings and construction of cheap houses and kiosks. The construction pole prices were highest in Malindi and Mombasa as compared to the other urban areas. Pole prices varied depending on the species, diameter and length.

Table 2: Retail prices (KES/pce) for construction poles in selected towns in the country

Town/Prices	3"	4"	5"	6"	7"	8"
Malindi	900	1200	1500	2,300	-	-
Mombasa	700	800	900	1000	1100	-
Eldoret	50	75	175	250	-	350
Kisumu	60	-	120	-	-	400
Nakuru	-	-	150	-	-	-
Nairobi	150	160	180	200	-	-
Embu	-	150	-	-	-	-
Kitui	130	140	150	-	-	-
Nyeri	-	140	150	-	-	-

Charcoal

Charcoal has remained an important source of energy for cooking by most urban households in the country and key charcoal supply zones are mostly located in ASALS. In the Rift Valley, Western and Nyanza, the supply counties include Turkana, West Pokot, Baringo and Keiyo-Marakwet. In the Coastal region, the key production counties include Kwale, Tana River, Kilifi, Machakos, Kitui and Makueni. Central Kenya received most of the charcoal from Narok, Kajjado, Laikipia, Machakos



and Kitui Counties. The retail prices for charcoal were higher in Nairobi (KES 1,700), Mombasa (KES 1,500) and Nyeri (1,300) whereas prices in lower Eastern, the key supply zones, were lowest. The price differences are accounted by transport costs, profit margins and transaction costs including levies and bribes paid to various regulatory bodies and county governments.

Table 3: Retail prices for charcoal in major urban centres

Industrial Firewood

There are many industries that depend on firewood for energy to drive their industrial processing. They range from textile, food processing and tea curing and they are mostly found in Central Kenya, Nyanza and Rift Valley. Other firewood market niches include institutions (schools and hospitals), private (restaurants, kiosks) and industrial enterprises. The large firewood consumers in western Kenya include KTDA-affiliated tea processing factories (currently about 65) and private estates under the Tea Growers Association, currently numbering 39 and spread across the tea growing areas in the country. KTDA prices range from KES 1,800 to 2,500 /m³. Pwani Oil Industries recorded the highest prices as compared to others. The prices offered by industrial firewood consumers are as listed in Table 3.

Table 3: Selected industries using industrial firewood in the country.

Industry	Location	KES/m ³
Rupa Textiles	Eldoret	1800
Kenknit	Eldoret	2,000
Corn Products	Eldoret	2,000
Lessos Creameries	Eldoret	2,000
Arkay Industries	Eldoret	2,000
Homalime	Koru	2,500
D. EA Ltd	Nakuru	2,000
Menengai Industries	Nakuru	2,000
Njoro Canning	Njoro	2,000
Elites Bread	Nakuru	2,000
Bidco Industries	Nakuru	2,000
Highland Paper Mill	Eldoret	2,000
Homalime Ltd	Koru	2,500
Pwani Oil	Mombasa	3,500

Transmission poles

The country has over 65 transmission pole treatment plants due to recent rapid expansion to meet the high demand for transmission poles by Kenya Power and Lighting (KPL) and Rural Electrification Authority (REA). Farm gate prices ranged from KES 2,200-2,500 and KES 3,800-5,000 at the factory gate. Table 3 shows some prices for selected factories.

TREE PRODUCT PRICE TRENDS 2009-2013

Price trends for key tradable forest products such as sawnwood, charcoal, construction poles and transmission poles show that normalized prices have been on an upward trend as shown in Figures 2a, 2b, 2c and 2d. The prices for the selected products that were traded within the country except for charcoal in Mombasa exhibited a smooth upward trend. However, sawn wood recorded a price spike in local markets in 2002

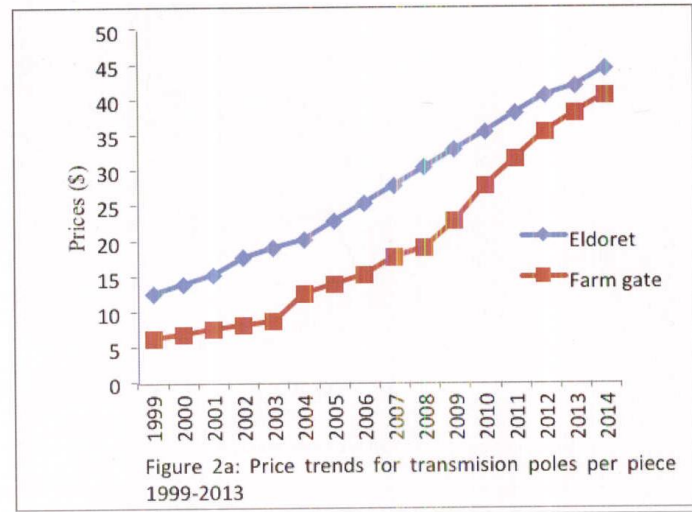
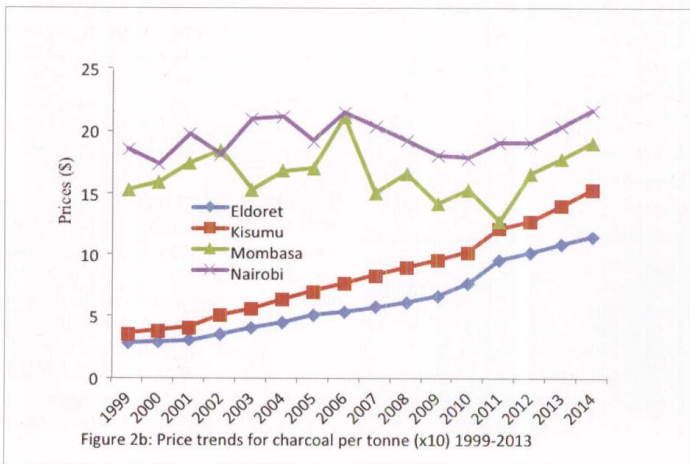


Figure 2a: Price trends for transmission poles per piece 1999-2013

Table 4: Selected treatment plants, location, capacities and factory gate prices per pole.

Company	Location	Installed capacity/yr	Unit price
TTI-EATEC	Eldoret	50,000	3,000
TTI-EATEC	Londiani	40,000	-
TELKOM-GTI	Gilgil	72,000	3,200
Timsales Ltd	Eiburgon	84,000	3,000
Comply Ltd	Nakuru	36,000	3,300
EA Cabro	Elmenteita	90,000	3,300
Typsy Timber Treatment Ltd	Eldoret	72,000	2,800
Muringa Holdings Ltd	Limuru	50,000	3,400
KUZA Ltd	Kitale	40,000	-
Murendat Timber Treatment Ltd	Nakuru	40,000	3,300
Rosogo Enterprises Ltd	Molo	115,000	3,200
Keystone Treatment Services	Lessos	25,000	2,500



immediately after the ban on logging in public plantation forests. The upward price trend was checked by the entry of imported sawn wood from Tanzania in 2003. The products price trends reflected the supply and demand dynamics of the specific products in the country.

In summary, prices for the selected forest products are likely to increase in the medium and longer term due to an expected growth of demand by a vibrant construction sector and projected constrained supplies from both public forests and farm forests.

Source: Own Annual price and products flow dynamic surveys 2014-2015

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