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THE POTENTIAL ROLE OF TIMBER TRADE IN PROMOTING ECONOMIC DEVELOPMENT IN THE EAST AND CENTRAL AFRICA.

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Abstract

The African Economic Community an African Union organ aimed at establishing foundation for mutual economic development in Africa through economic integration. The EAC and COMESA are some of its key pillars for Eastern Africa. Construction sector is one of the key drivers of Kenya's economy currently undergoing rapid growth consequently need high materials inputs including timber that is further strained by prevailing ban on logging in public forests. Faced with timber shortage one of the fall back strategy is to imports from COMESA members endowed with vast forestry resources. Thus the differential endowments in forestry resources within COMESA provide opportunities for regional trade and investments to enhance sustainable economic contribution of the forestry sector to overall regional economic growth. To realize such vision there is need to harness information on the current status of forestry resources, industrial capacities, trade opportunities and potential investments within the regional economic blocks. In 2010 KEFRI initiated a study to evaluate the potentials of the forestry sector in Kenya, Ethiopia, Uganda, Tanzania, Rwanda and South Sudan to spur regional economic development through trade and investments in forestry business. The results revealed that the region is endowed with vast forest resources in total but greater disparity between countries. Smaller countries with high populations such as Rwanda, Uganda and Kenya are less endowed as compared to larger states of Tanzania and Ethiopia. The key forest based industries located in the region included biomass energy for textile and food processing, transmission pole treatment plants, saw mills and wood panel and constituted wood processing industries. Kenya was the most industrialized country with 441 industries, Tanzania (138), Uganda (103) and Ethiopia (45) most being saw mills. In terms of trade Kenya was the main importer of tree products that rose from 21,199 m^3 in 2004 to 51,400m^3 in 2009. The products imported were timber, treated poles and roundwood for carvings mostly from Tanzania, DR Congo, South Sudan, Malawi and Angola. Some of the key products that are traded heavily within the member countries were timber and transmission poles. The EAC countries are net importers of various manufactured wood based products mostly paper and paper products and reconstituted wood from Europe and Asia that can be manufactured within the region. The study reveals that there are vast opportunities in the region for investment in processing to meet the growing regional demand for processed wood based products and surplus for export. However, policy, legal and infrastructure challenges need to be improved to facilitate efficient trade in forest products between member countries.

Key words: Forest resources, trade, economic development

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1.0 Introduction

Many countries globally are forming regional blocks solely to promote trade and economic developments through market integration aimed at creating lager markets to attract investors and enable flow of goods and services. Within the umbrella of African Economic Community(AEC) an organ of African Union (AU) there are various economic blocks notably the East African Community (EAC) and Common Market for East and Southern Africa (COMESA) others relevant to Kenya are Southern African development Community (SADC) and Community of Sahelian-Sahara African States (CEN-SAD). These economic blocks include forestry resources rich countries of Tanzania, DR Congo, Congo, Angola, Central Africa Republic, Gabon and Cameroun. The forest type of forests found in these countries include tropical rain forest, tropical moist forests, tropical dry forests, mountain forests, mangrove forests and tropical lowland wood lands that have potential to produce range of goods and services that can be utilized to drive the economic development engine of regional countries. Similarly, investment in forest based industries and value addition businesses within the region will create employment opportunities, wealth and reduce imports of wood based products from outside the region. The market opportunities for forest based industries are enormous that include AEC membership of approximately 860 million including the COMESA 190 million and EAC 132 million people. The EAC and COMESA economic blocks are endowed with vast forestry resources hence provide opportunities for trade and investments to enhance sustainable economic development in the region. These products include raw hardwoods and softwood roundwood that can be processed into tradable products such as hardwood timber, charcoal, reconstituted wood products (plywood, boards, paper products parquets etc), treated transmission poles and other allied products that can be traded within the regional blocks. To realize such vision the current study attempts to harness information on the current status on forestry resources, industrial capacities, trade opportunities and potential investments within the regional economic blocks. The information will come handy for countries and investment firms willing to take advantage of the existing

opportunities to invest in processing and trade in the wide range of forest allied products within the region.

1.2 Study Methods

The study involved desk top reviews of available literature, interviews with key institutional officials and consultation with some COMESA country experts. In Kenya several institutions were consulted that included Kenya Forestry Service (KFS) offices, Kenya Forestry Research Institute (KEFRI), Kenya Power and Lighting Limited (KPLC), Rural Electrification Authority (REA), Kenya Bureau of Statistics (KBS), Ukambani Handicraft Cooperative Society, Kenya Plant Health Inspectorate Service (KEPHIS), RAI Ply Ltd, Tim Sales Ltd, Comply Ltd, and various transmission poles treatment plants.

2.0 Status of Forest Resources in East and Central Africa

The forestry sector in COMESA is dominated by the public sector that owns natural and planted forests that vary in terms of size and production outputs between countries. The common denominator in forest resources management in the region is population induced deforestation and degradation mostly due to encroachments and increasing demand for forest products. Most countries are exploring alternative forest product sources including domestic such as farm forestry and private forests that have largely remained as subsistence activities and its products entry into markets has largely been by default than design (Arnold, 2008). Complimentary strategy is exploring imports to fill demand gaps that local supplies cannot meet that can only happen under prudent policy and legal frameworks to failicitate flow of capital and goods between countries. The study revealed that most countries in COMESA region have enacted forestry policies and laws that lays foundation for export and import trade on forest products. In Kenya it has become a reality that domestic supplies may not meet the growing demand for timber accelerated by construction boom and population growth at the backdrop of declining product outputs from public forests and increased emphasis on forest reservations for water and biodiversity conservation.

The differential endowments in forest resources within the COMESA countries have provided an opportunity for flow of forest products from surplus to deficit countries. These developments have increased attention on market related research and accumulation of

information to enhance market driven forestry sector investments. The information gap on the potential opportunities for forest product markets in different countries has hindered decisions for investments in forestry development enterprises targeting region wide market niches. The potential benefit of interstate trade is attested by recent flow of timber from Tanzania into Kenya that sustained the construction and other wood dependent sectors to weather the severe timber shortage caused by the government ban on harvesting trees in public forests(Cheboiwo, 2009).

2.1 Potential roundwood production in ECA

Recent studies by Cheboiwo et al (2007) that assessed the status and potential of the forestry sector in some COMESA member countries of Kenya, Tanzania, Ethiopia, Southern Sudan, Uganda, and Rwanda. The results show that comparatively, Tanzania had the largest forest cover, followed by Ethiopia, Kenya, Southern Sudan, Uganda, and Rwanda in that order (Table 1). The bulk of the forest cover consisted of woodlands and bush lands that accounted for over 70% of the total forest cover in the study countries. In Kenya woodlands and bush lands mostly in ASALs accounted for 77% of the total but produced 30% of the total output, farms and settlements led in accounting for 60% of the annual output by volume whereas high forests and plantations account for less than 10%. In Rwanda data available showed that woodlands and parks produced over 60% of the total roundwood outputs with the rest from natural forests and in Uganda the bulk of forest products are harvested from woodlands and farms accounting for 68% of the annual outputs. In Tanzania tree products outputs from farms and settlements lead with an estimated 7.9 million tonnes per year and forest plantations follows at 700,000 cubic metres per year. In terms of plantation forests, Ethiopia leads with 262,162 hectares mostly Eucalyptus plantations for fuel wood and poles production. Kenya was second with 164,000 hectares, Tanzania third and Southern Sudan having the least with over 15, 796 Ha.

2.2 Industrial capacity

The studies on the installed processing capacities in the study countries indicate that there were many different types of industries in operation. Kenya the most industrialized country led with an estimated 442 wood based industries with over 80% being saw mills. However, most of the saw mills have remained closed since 2002 due the government ban on harvesting in public forest plantations. Similarly, Tanzania reported to host 138 wood based industries, Uganda (103) and Ethiopia (45) most of them saw mills. Rwanda did not report presence of wood based

industries. Since the government imposed a ban on harvesting in public forests in Kenya most some saw mills have shifted to Tanzania where the forest plantations were available for sale. Kenya reported to host top of the range complexes mostly reconstituted wood manufacturing industries some of which have established manufacturing plants in Tanzania and Malawi. The study revealed that the level of forestry sector industrialization in the selected countries is still very low for greater proportion consisted of old saw milling plants. The industries cited above include biomass energy sectors, mostly textile and tea processing industries, transmission pole treatment plants, saw mills and wood panel and constituted wood processing industries. The above exclude hundreds of power saw operators and hand sawyers that serve the domestic markets. There are huge opportunities for expansion and modernization of wood based industries in the region with more emphasis on wood resource use efficiency and capacity to process short rotation tree crops grown by smallholder tree growers.

Table1: Forest cover, roundwood production and industries in selected ECA countries

Country	**Forest cover (Ha)**	**Plantations (Ha)**	**Farm forests** (Ha)	**Annual output** Tonnes/m^3	**No. Industries**
Kenya	48,604,000	164,000	9,540,000	37,523,000 m^3	442
Rwanda	542,900	-	-	4,343,200 m^3	-
Uganda	20,465,000	35,000	8,401,000	53,676,500 m^3	103
Ethiopia	44,762,164	262,162	16,000,000	7,500,000 tonnes	45
Tanzania	88,702,000	150,000	51,000,000	8,758,000 m^3	138
Southern Sudan	33,000,000	15,796*	-	-	-

-information not available
* 50% verified so far

2.4 Timber trade trends in the region.

The moratorium on tree harvesting in public forests in Kenya was imposed in 1999 and complete ban in 2002 precipitated a shortage of sawn timber for construction activities in the country. In response the government zero-rated duty on imports of sawnwood to fast tract processing of import documents to ease the supply constraint that faced the construction sector. The developments have increased imports from neighbouring countries thus putting the country in a pivotal position in sawn timber trade in the region. The imported sawnwood was mostly

produced from *P. patula* from Tanzania that entered the Kenyan markets in 2003. Table 1 indicates the trade in timber has grown from approximately 21,200 m^3 in 2004 to 75,354m^3 by 2010 mostly softwood from Tanzania. Softwood timber imports from Malawi started arriving in Mombasa in 2005 and have spread to Nairobi and its environs (Cheboiwo and Langat 2006). After many years of restriction on harvesting of indigenous species from natural forests the country has been facing acute shortage of hardwood timber for woodworks sector except for the small quantities imported from DR Congo, Uganda, Southern Sudan and Angola. In 2007 Kenya imported 6,633m^3 hardwood from DR Congo valued at 0.64 billion (US$80 million) that rose to 18,645m3 valued at Ksh 1.78 billion(US$22 million) valued at by end of 2010. The increase was partially due to stretching of supplies to more countries including Angola and South Sudan. The imported hardwoods are used for high end furniture and fittings by woodworks mostly located in Nairobi and Mombasa. The hardwood imported into the country is highly priced and most woodwork firms outside Mombasa and Nairobi don't stock for their clients cannot afford. The official records indicate that value of imported timber into Kenya in 2009 from COMESA countries was worth Ksh1.8 billion (KFS, 2010). The trade in timber between Kenya and regional economic blocs of EAC and COMESA has enable the vibrant construction sector access timber materials critical to the growth of the real estate sector that registered a growth of 3.8% in 2010. Thus continued flow of timber into the country is a critical factor in the growth of the constructions sector in the country.

Table 2: Sawn timber imports by Kenya from ECA countries in 2004 and 2005

Year	Softwood (m^3)	Hardwoods (m^3)*
2004	21,199	-
2005	27,484	-
2007	-	6,633
2008	-	10707
2009	51,400	9267
2010	75,354	18,645

Source: Forest Department, Marketing Section (2006) and Annual Report 2008/2009, Kenya Forest Service, (2010). * Records Busia Zonal Office: Imports from DR Congo and Angola

2.4.1 The impacts of regional trade on timber prices

Kenya, more that other countries in the region, underwent a major timber shock within the last 10 years due to several factors, key being the imposition of the logging ban on harvesting in public forests. The decision had a quick impact on aggregate output from saw mills as most of

them were closed that translated into rapid increase in sawnwood prices in all market outlets in the country, especially in bulk consuming urban markets of Nairobi and Mombasa (Cheboiwo, 2009). The built up of the price increase reached its peak in mid 2002 when logging ban impacts filtered into regional market outlets. Sawnwood retail prices rose from Kshs 9,310-10,640/m^3 ($116-133) to over Kshs 33,250-39,000($416-487.5) per m^3. Similarly, cypress sawlog prices at farm level rose from Ksh 800 ($10) to Ksh 3000 per m^3 ($37.5) for premium logs mostly over 25 years. However, the continued rise in sawnwood prices in Kenya was checked in 2003 when a decision was made by the government to zero rate duty on imported timber and fasten customs clearance procedures to avoid crisis in the construction and woodworks sectors. Tanzanian timber was among the first to enter Kenyan markets in large quantities and the entry had immediate impacts as sawnwood prices fell from Kshs 33,250($416)/$m^3$ to less than Kshs 26,600 ($332.5) per m^3 but have resumed an upward trend since 2005. Entry of Tanzanian sawn timber was highly welcomed by the construction sectors and other consumers in Kenya (Cheboiwo and Langat, 2004). However, Kenya Timber Manufacturers Association (TMA) has argued that with expected KFS plantation stumpage price of pine to be set at Kshs 2,500 (31.25) per m^3, the retail price of sawnwood is likely to reduce by more than half if the ban is lifted (Makhanu, 2010)

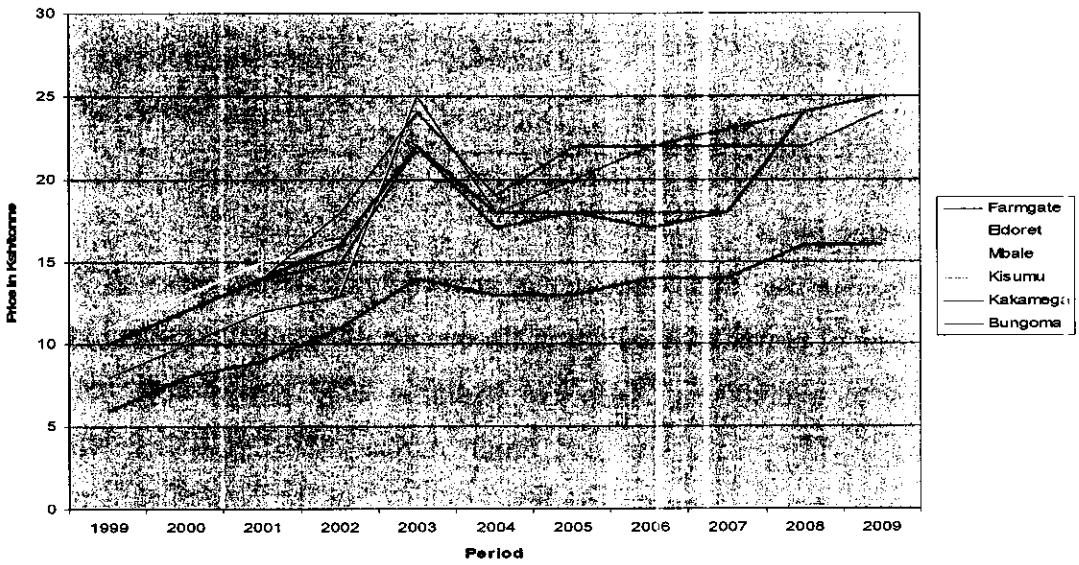

Figure 1: Sawnwood gate and retail price change between 1999 and 2009 in '000 Ksh.

3.0 Production and trade in transmission poles

3.1 Dynamics in pole processing in East Africa

In 2004 there were only 2 treatment plants in Kenya, 2 in Tanzania and non in Uganda. However, by 2005 there were 5 treatment plants in Kenya capable of treating 250,000 poles per year (Cheboiwo and Langat, 2006) that rose to 8 in 2009 capable of producing 450,000 treated poles per year (Cheboiwo, 2010). However, by January 2011 there were already 17 registered commercial treatment plants in the country with an estimated combined installed capacity of between 1 million and 1.5 million pieces per year and on the increase (Cheboiwo, 2011). The electricity distribution in the Kenya has been undergoing some rapid expansion that has created high demand for transmission poles by Kenya Power and Lighting Company (KPLC) and Rural Electrification Authority (REA) the two key players in the sector. In Tanzania the transmission pole treatment sector has grown to 7 plants with capacity of 345,000 pieces a third of which was being exported to Kenya the rest consumed in the country. In Uganda the treatment plants have grown to 4 mostly treating poles for local electricity distribution but have are eyeing the lucrative Kenyan markets as well.

Table 3: Transmission poles processing capacities

Country	Number	Estimated capacity in pcs	Major markets	Remarks
Kenya	17	1,500,000	Domestic	Exploring exports to COMESA
Tanzania	7	345,000	Domestic	Exporting to Kenya
Uganda	4	-	Domestic	Exploring exports to Kenya

Source: Cheboiwo (2011)

3.2 Trade in Transmission poles

Kenya has been traditionally the main importer of treated transmission poles in the region fueled by rapid expansion of power distribution in the country that saw its demand grow from 90,000 pieces in 1999 to 480,000 by 2010. For example 2006 Kenya imported 200,000 transmission poles mostly from Tanzania and South Africa valued at Ksh 2 billion ($25 million (Cheboiwo, 2011) that dropped to 150,000 by 2007 but the countries of origin had expanded to include Tanzania, South Africa, Brazil and Finland In 2008/2009 65,316 transmission poles were imported from Tanzania, Uganda and Chile. The imported transmission poles were through open tender that attracted exporters from various countries but

the competitive market prices for treated transmission poles have remained steady at between Ksh 10,000 ($125) and 13,000 ($163) for the last 5 years from both local processing plants and imports from outside the country (Cheboiwo, 2010). According to KPLC projections transmission poles imports is expected to decrease from 10% of its consumption in 2010 to zero by 2012 due to rapid expansion of local pole treatment plants and expansion of commercial growing Eucalyptus grandis by farmers and companies (Guda, 2010). The Kenyan firms are already exploring export opportunities in the region because of the expected surplus as KPLC reduces backlogs in connections and a possible shortfall in power generation if the planned investment to increase power generation by 25% year is not realized.

Table 4: Tenders Prices for Treated poles purchased by KPLCin April 2006 in US$ per piece

Company	9m in $	Ksh	10m in $	Ksh	11m in $	Ksh
TTI-Kenya	-	10,800	160	11,520	180	12,960
Sao Hill - Tanzania	150	10,800	160	11,520	180	12,960
TTP-SA	127.5	9,180	147.2	10,598	170.1	12,247

Source: Ministry of Energy, 2006

3.3 Price Trends in Transmission poles

Figure 2 show that the price dynamics for semi-processed poles has seen gate prices increase by 233% from Ksh 750 ($10) in 1999 to 2500 ($31) per piece by 2009 due to high demand from expanded number of treatment plants (Cheboiwo, 2010). The remunerative raw pole prices have motivated hundreds of farmers and tea estates to invest in commercial growing of *E. grandis* and *E. saligna* in many parts of the country mostly in Rift Valley, Central and Western provinces for production of semi-processed transmission poles (Cheboiwo and Langat, 2007). The prices for semi-processed poles from tree growers have progressively risen as some offers reached Kshs 4,000 ($50) for medium sized poles 180mm diameter and 12 metres length by January 2011(Cheboiwo, 2011). The prices for larger poles used in intercity electricity transfer that forms small proportion of the total demand as compared to smaller and medium distribution poles are relatively higher.

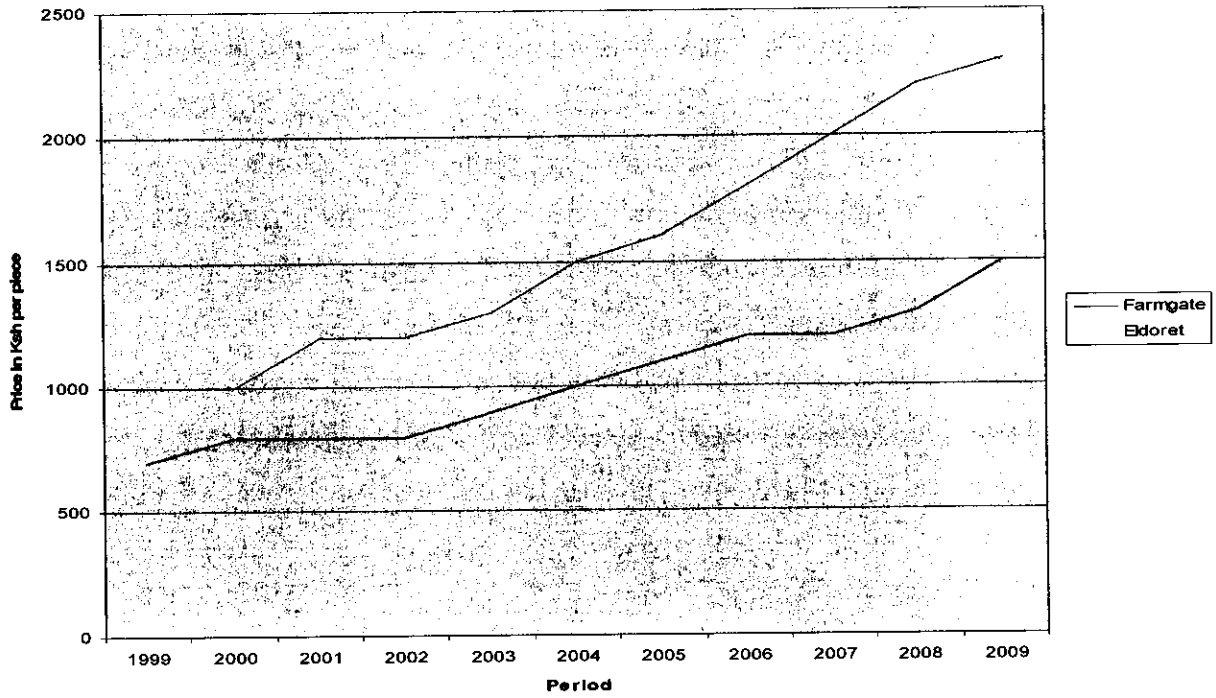

Figure 2: Seasoned Transmission poles farm gate and factory price changes between 1999 and 2009

In Uganda, the prices for seasoned poles have risen from 80,000 ($45) in 2007 to 140,000 ($70) with increased competition from expanding treatment plants in the country for 11 metre pieces and prices for treated poles ranged from $ 150 for 10m to $175 for 11m and $223 for 14 metre lengths. There are potential opportunities for export of seasoned transmission poles to Uganda given the differential factory gate prices between the two countries. The prices for treated transmission poles in the EAC are still on the rise and there are opportunities for local investment in treatments plants and interstate trade to enable stabilization of prices in the long term within the member countries.

4.0 Woodcarving

The wood carving sector in Kenya is an important sector with an estimated annual export value of Ksh 1.6 billion (US$ 20 million) involving 60,000 wood carvers that supports over 300,000 people. The over 800,000 tourist that visit the country every year wood carvings is one of the key collections to take home. The two key production areas are located at Wamunyu (Wamunyu Handicrafts Cooperative Society) in Machakos County and Bombolulu (Akamba Handicraft Cooperative Society) in Mombasa with smaller units scattered in many parts of the

country. The wood carving industry is relatively small and very specialized woodworks requiring very skilled artisans that require 600 tonnes of wood per year mostly indigenous wood. The most preferred wood have are *Dalbergia melanoxylon* (mpingo), *Brachylaena hutchensii* (Muhugu) and Olea Africana (Olive) among other indigenous hardwood species that have beautiful, dense and fine grained wood. These species have virtually been exploited in the wild and the current government ban on harvesting of indigenous species from public forests has left imports from the Tanzanian little small quantities from farms to filled the gap (Jan, 2010). Records indicate that imports from Tanzania have been in the decline and only 168 tonnes were imported through Lunga Lunga in the first 10 months of 2010 as compared to 11,300m^3 and 40,000 ballets in 2004 (Table 8). These development have translated into 75% fall of Kenyan wood carving share in international markets due to dwindling supplies of quality raw materials (Jan, 2010). The recent global economic depression depressed sales by 70% and the shortage of grade carving wood will hinder the recovery. The wood carving sector cannot afford hardwood from DRC and others sources due to high prices that will make their products uncompetitive in local and global markets. The sector is facing severe shortage of hardwood and has resorted to use of lesser species often of low quality for production of quality tourist grade carvings. The wood carving sector need to be facilitated to access some quality wood from the vast regional forestry resources since hardwood sources in the country are fast dwindling.

Table 5: Imports tree products imports through Lunga Lunga between January-October 2010

Year	Species	Wood carving
2004	Brachylaena hutchensii-Muhugu[1]	11,300m^3 40,000 ballets (pieces)
2010	Various indigenous[2]	168 tonnes

[1]KFS, Marketing section 2006 and [2]Kwale Zonal KFS Office, January, 2011

5.0 Trade in Plywood, Paper and Paperboard products

The Pan Africa Paper Mills (PPM) was the largest paper mill in Kenya that used to manufacture packaging materials, writing, and printing and newsprint papers until its closure in 2009. There are other 5 firms that manufacture several paper products including packaging, napkin tissues, straw boards, paper boards and Kraft liner. Before the closure of PPM the total domestic production of pulp and paper products was about 130,000 metric tonnes against the

country's demand of 220,000M/T per year. The collapse of PPM drastically reduced domestic production and increased imports from Europe, Tanzania, South Africa and Asian countries. Thus Despite being the most industrialized forestry country in the region Kenya is a net importer of various processed wood products. Table 9 show that in 2008 Kenya imported 2.9 million m^2 of plywood, 42,202 tonnes of newsprint, 47,703 tonnes of packing paper, 176,725 tonnes of other paper and 21,539 tonnes of pulp and paper board articles. The trend in imports has been upward for example imports of plywood increased by 98% between 2003 and 2008, newsprint (63%), printing paper(77%), packaging paper (114%), paper board products (345%) and pulp paper allied products (40%) in the same period. The collapse of PPM has translated into massive imports and increased the country's dependence on imported paper and allied products. The market for manufactured wood products in Kenya is very huge and investments in the forestry industrial processing in the country and ECA targeting the listed products are viable business opportunities. However, competitions from exporting countries in terms of quality and price need to be taken into consideration in feasibility evaluation for such investments.

Table 6: Plywood and paper and paper board products imports 2003-2008

Period	2003	2004	2005	2006	2007	2008
Plywood m^2 (000s)	1,489	2,209	2,034	3,637	2,218	2,948
Newsprint paper in tonnes	25,905	28,140	21,580	35,805	41,650	42,202
Printing paper tonnes	19,027	13,823	16,456	21,813	31,173	33,646
Packing paper in tonnes	22,276	21,390	24,491	29,686	28,417	47,703
Other paper and paper board	39,679	41,091	38,974	46,719	51,742	176,725
Pulp, paper and paper board articles in tonnes	15,427	9,471	13,555	16,212	21,215	21,539

Source: GOK (2009). Statistical Abstract, National Bureau of Statistics.

6.0 Barriers to regional trade in forestry products

The study on the potential trade in forest based products between member countries of EAC and COMESA) show that there are various factors that hinder interstate trade were mostly outlined below.

6.1.1 Timber quality

Though the conventional standards for various forestry products exist the only factor inspected at the border points is hygienic health carried out by Kenya Plant Health and Inspectorate Services (KEPHIS). There are no proper structural timber quality inspections such as structural dimensional sizes and seasoning to ensure that traded products meet conventional requirements for specified use. This is because key defects reported by importers of timber to Kenya was deferential in gauging that don't allow room for planning and sun drying that promote splits and hence low recoveries on resizing. The problems can be solved through rigorous skill improvement in sawing and investment in seasoning facilities.

6.1.2 High transport costs

The cost of imported timber into Kenyan markets is very high averaging Kshs 20,000 (US$398) per m^3 for softwoods from Tanzania and KES 96,000 (US$1,200)/$m^3$ for hardwood from DR Congo delivered at Mombasa and Nairobi. The high cost transport is due to poor road networks connecting production areas to consuming areas especially off trunk roads that contribute significantly to the delivery prices. This is attested by the fact that transport costs for timber from Tanzania accounted for over 33% of the retail prices in Mombasa and Nairobi outlets. Thus good road network will cut down the share of transport that can significantly reduce delivery price and make imported timber better priced.

6.1.3 High border levies

Despite the fact that regional blocks such as EAC and COMESA were aimed at encouraging inter member trade through preferential trade facilities mostly duty free regimes or low differential charges depending on the level of processing or local contents. In practice most of the provisions are yet to be put into practice for most importers are subjected various taxes at border crossing points by both the importing and exporting countries that include duty and value added taxes. The levies makes timber moved across borders less competitive in the local markets as compared to locally produced.

6.1.4 Policy and legal barriers

Many countries still have punitive policies and legal procedures that govern production and export of forestry resources with an objective of enhancing environmental conservation and

protection of natural assets. However, such punitive procedures have not been able to achieve the set objectives especially under conditions of high demand. Trade in hardwood timber partially operate under black market condition hence attract hefty facilitation bribes at various administrative points that add to the final costs. The conditions promote emergence of cumbersome import procedures that cut out competition enabling only well connected cartels to operate in the import business. Reforms in forest governance and legal environments will drastically reduce the environment of rent seeking and encourage competition in the sector hence likelihood of competitive prices at the delivery points that is likely to promote interstate trade.

6.1.5 Many players in timber import market chain

Marketing business involve some key players that offer essential services between production to consumption points each taking a share of the final price hence the fewer the more efficient the marketing systems in terms of costs. However, the movement of timber from Tanzania into Kenya for example involved several layers of players that unnecessarily added costs to the delivery price. These included exporters, importers, number of brokers and financiers that were active on both sides of the borders. These layers of players in the market value chain contribute to the overall costs of timber imports from Tanzania. Thus complex marketing systems brought about by unfavourable policy and legal regimes attract more players to facilitate the transactions at various points that make marketing systems less efficient. Thus policy and legal reforms are needed that will cut down on unnecessary players in market value chain in order to reduce product delivery costs.

7.0 Recommendations and conclusions

The differentiated production and consumption patterns in EAC and COMESA countries offer good opportunities for trade in tree products in the region. Despite the reforms being undertaken in the region the trade in forest products has remained behind other commodities due to policy, legal and infrastructural barriers that have hindered development of competitive markets and marketing systems. Kenya stands to benefits through open trade with ECA countries as opposed to restriction for it will not only ease the pressure on local natural forests but provide opportunity to exploit the vast regional high quality forest resources to become regional hub for secondary processing and export in the region. The forestry sector as part of its

contribution to Vision 2030 should factor in industrialization strategy including reviving the woodworks sector to position itself to tap widening supply potential areas that now include Tanzania, Central Africa Republic, Malawi, Zambia, Angola and DRC. Alternatively, Kenya should encourage its firms and individual investors' to venture into forest based industries within the EAC and COMESA to tap the vast forest resources for re-export of surpluses to Kenya and member countries. However, more reforms in forest governance including policy and legislative framework and development of transport infrastructure will be needed in order to promote sustainable management and exploitation of forest resources within the regional economic blocks for enhanced trade and economic development

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