
Inter-Firm Relations, Governance and Upgrading Efforts in the Furniture Micro and Small Enterprises (MSE) Value Chain: Evidence from Addis Ababa, Ethiopia

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HIGHLIGHTS

- This study may serve as a reference and policy input for the academic circle and policy makers, respectively, in the areas of MSEs and value chains. More specifically, the findings of this article may help MSE operators and policy makers identify the key challenges in the sector, hence search for ways to resolve the same.
- This article is an original work related to MSEs and their value chains, particularly in the woodwork (furniture) sector.
- This piece of work is based primarily on a review of literature related to MSEs and value chains. Data were collected through questionnaires and interviews with the actors in the MSE (furniture) domestic value chain;
- The allocation of resources and benefits in the value chain is governed by domestic actors. In the absence of “lead firms”, furniture MSEs fail to qualify for the mainstream “buyer-driven” model and are left with the option and practice of “incremental upgrading” through learning-by-doing. Inter-firm relations and upgrading efforts are very weak, hence hindering entry into the competitive global markets.

Abstract

The objective of this article is to examine the nature and structure of inter-firm relations, governance, and upgrading efforts in the furniture Micro and Small Enterprises (MSE) value chain. The research is based on a review of related literature in the areas of value chains, MSEs, and a survey relating to MSE operators drawn from selected sub-cities of Addis Ababa. In Ethiopia, the wood furniture sector has a “domestic value chain” as major inputs are acquired from local sources, designs are crafted by local producers,

and furniture products are entirely meant for local markets. The allocation of resources and benefits in the chain is governed by the domestic value chain actors. Government enterprises hold sway over plantations and major inputs. MSEs take delivery of the primary inputs from wholesalers and retailers. MSE operators make decisions related to production, design, and marketing. Middlemen in the chain have a minor role as the products reach the final users directly. Hence, the chain’s downstream is characterized by a sharply short distribution channel. Non-market (horizontal), chiefly routine operational

connections, typify the feature of inter-firm relations; while “arm’s length” market-related linkages characterize the “supplier-MSE-buyer” relations. In the rare presence or nonexistence of “lead firms”, furniture MSE value chains fail to be in harmony with the conventional “buyer-driven” model. In the absence of buyer-dominated “quasi-hierarchical” relations, MSEs use “incremental upgrading” through “learning-by-doing”. Decisions to refurbish and upgrade the process of production are remarkably related to the hardware

(physical) components of the firm. The value chain of MSEs is constrained by a range of problems. The present status of “product design” indicates weak links in the chain. Inter-firm relations and upgrading efforts are very weak; hence hinder entry into competitive (global) markets. The findings of this research may help MSE operators and policy makers identify the key challenges in the sector, hence search for ways to resolve the same.

Keywords: Chain-Governance, Inter-Firm Relations, Micro and Small-Enterprises, Upgrading, Value-Chain

1. Introduction

Micro and small enterprises (MSEs) constitute the major part of private-sector enterprises and account for the largest share of employment in high-, middle-, and low-income countries of the world [1]. Moreover, micro and small enterprises have been recognized globally as a means of employment creation and economic growth. The most important policy relevance of MSEs can be observed under two key considerations: (i) the potential for employment creation and income generation and (ii) MSE competition with larger domestic as well as foreign enterprises in global markets, through industrial clusters [2]. In Ethiopia, MSEs are the host of diverse Income-Generating Activities (IGA) and a crucial means of survival for the people in urban areas. The sector is the second biggest means of employment next to agriculture [3]. As portrayed in the preamble of the 1997 MSE “Development Strategy”, the number of people engaged in “the informal sector activities and small-scale manufacturing industries is eight times larger than those engaged in the medium and large-scale industrial establishments”. The “2010/11-2014/15 Growth and Transformation Plan (GTP)” places special focus on the growth and expansion of the MSE sector. It was affirmed that MSEs play a “significant role in the national development

activities, particularly in the creation of employment opportunities and poverty reduction” [4]. Later on in 2011, a new MSE development strategy was produced by a national task force led by the Ministry of Urban Development and Construction (MoUDC) and the Federal Micro and Small Enterprises Development Agency (FeMSEDA), with the intent of building a “competitive” MSE sector that sets the basis for industrial development in the country [3]. The wood-work subsector is one of the sub-sectors identified as “the key subsector” by the new MSE development strategy [2].

According to UNIDO (2003), the wood-work sub-sector offers “opportunities for developing countries and their firms to participate effectively in the global economy”. The international furniture business is “liberalized; entry barriers to the Global Value Chains (GVC) are relatively low, thus can create export opportunities” [5][6]. The wood-work and furniture MSE sector is the focus of this article and studied within the wider setting of its value chain, working across public enterprises engaged in cultivating pine forests and supplying cut logs, distributors and brokers, sawmills, timber traders, furniture manufacturing MSEs, furniture product sales outlets and buyers. The purpose is to explore

inter-firm relations, chain governance, and upgrading exercised by the key actors in the sector.

2. Background

2.1. Value Chain

The concept of “value chain” was initially introduced by M. Porter in 1985 with his seminal work on “Competitive Advantage”. The value chain, according to M. Porter, is split into “primary” and “secondary” activities (Figure 1). The “primary activities”, which are basic to the making of a product or service, may be classified into five major areas: “inbound logistics, operations, outbound logistics, marketing, sales and services”. The “secondary activities” are support activities encompassing “procurement, technology development, human resources management, and infrastructure” [7-9]. Secondary activities are related to each of the primary activities in a manner to improve or upgrade their effectiveness and efficiency. “Margin” represents the profit, which the firm generates at the time it provides the product or service for which the buyer is “willing to pay more than the sum total of the cost of each activity”. This may require that the firm has to prudently manage the links between the primary and secondary activities in the value chain (*ibid*).

Michael Porter made a novel contribution to the theory and practical analysis of value chains. Then, many prominent scholars, including Gery Gereffi, John Humphrey and Hubert Schmitz (2000, 2001), Timothy Sturgeon (2001), Raphael Kaplinsky and Michael Morris (2001), Dorthey McCormick, and Michael Morris [10-17], delved into the subject further and provided us with definitions, descriptions and analysis of the most important features and dimensions of value chains. The concept of value chain represents “the range of activities required to bring a product or service to the end use” [11][14][18-20], [14]. Value chain refers to the interconnected processes of “design, input-sourcing, production, marketing, distribution, and support to the final consumer” [14-16]. A

value chain can be subdivided into extra value chains that would give rise to a complex construct [19]. Regardless of their differences, many people use “value chain” and “supply chain” interchangeably. Supply chain is “a transfer of commodity from one stakeholder to another in the chain; whereas, value chain is the value (utility) addition at different stages of transfer” [7]. At several stages, different stakeholders add value to augment the value of the final product. This makes “supply chain management a subset of the value chain analysis” [21].

The value-chain viewpoint relocates the attention of renowned scholars from “production” to “the sequence of activities that stretch from design to distribution” [11]. Production can be described as only “one of a series of value-added links in the process” [15]. If the value chain is a pattern of “products and services linked together in a sequence of value-adding economic activities” [16], the worth of the product then boosts as it moves through every segment of the chain. The process provides a useful configuration termed as “*input-output structure of the value chain*” (*ibid*). In a value chain, design is made first; raw materials and supplementary inputs are purchased; the transformation/production takes place; and the product is finally delivered directly or through wholesalers and retailers to the end users (Figure 2). At every stage, and at times, several segments of the chain, such services as warehousing, transport, and finance, will be introduced to ensure the process is working sustainably; support services may fulfill this task. Besides, a value chain has a “less visible” input-output arrangement formed from the “flow of knowledge and expertise” required to ensure the physical input-output structure works. In this context, the flow of expertise and knowledge is consistent with the flow of the physical components of the chain. Nevertheless, the vigor of knowledge and expertise fluctuates at different phases of the chain. For example, the scope of expertise or knowledge needed at the design phase can be greater than the

same needed at the production phase, which might only be “standard or routine knowledge” [16].

2.2. Inter-Firm Relations and Chain Governance

Firms are entering into inter-firm relations in order to achieve a set of business objectives. Through horizontal inter-firm relations, MSEs develop collective capacity that may enable them to compete with larger enterprises. Inter-firm relations enable mobilization of fragmented resources, hence render individual firms “less vulnerable to risks, foster exchange of know-how and information between MSEs and develop useful pool of collective knowledge” [2]. The “power relations”, expressed as *governance*, are fundamental to the analysis of value chains [11][13][15][18]. According to Humphrey and Schmitz (2001:22), governance is defined as “the inter-firm relationships and institutional mechanisms through which non-market coordination of activities in the chain is achieved”. The governance structure creates “division of labor”, which significantly shapes the distribution of resources, redistribution of benefits, the power of making such decisions, and the exercise of control in the value chain [13][22]. Value-chain analysis, in this respect, underscores the crucial issues of “...where markets are dominated and where the greatest rents are extracted” [17]. Governance is evident as some enterprises operate in accordance with the parameters sanctioned by other enterprises in the value chain.

“Global value chains” are controlled and governed by “lead firms” [11][13][16][18]. The structure of governance emerges to circulate information regarding the “parameters”, hence imposing obedience and monitoring across the chain. Lead firms stipulate “what is to be produced by whom” and also inspect the functioning of component suppliers. Authors like Humphrey and Schmitz specify certain criteria to be considered by the producers: “(i) What is to be produced; (ii) How it is to be produced; (iii) When it is to be produced; and (iv) How much is to be produced”. Lead firms need to govern the chain at

least for two reasons [11][13]: (i) when the buyer/lead firm “has a better understanding of the demands of the market than the supplier. The buyer then interprets the needs of the market and informs the supplier of what is required”. In this exercise, the buying firms are engaged in indicating, hence managing and checking performance of the suppliers; and (ii) when risks arise from a “failure to meet commitments”. The more buyer firms are vulnerable to risks from supplier malfunctions, the more such firms are involved in inspecting and correcting the value chain. Chain governance arises through either “arms-length market linkages or non-market relations”. The non-market governance emerges in the form of “network, quasi-hierarchy and hierarchy” [13]. “Network” refers to “cooperation among more or less equals”. “Quasi-hierarchy” represents “a high degree of control from buyers over suppliers”, while “hierarchy” describes the “direct ownership of local producers by buyers” (*Ibid*). In “networks”, enterprises have equivalent powers of governance. In the case of “quasi-hierarchy”, suppliers remain less dependent but are fairly subordinate to the buyers. In “hierarchy”, “vertical integration” develops within enterprises. Power imbalance (asymmetry) is indispensable to governance, as there are key players (lead firms) that are in charge of the inter-firm relations and division of labor in the chain. The governance structure influences the distribution and stream of resources in the chain [10][15].

2.3. Upgrading Efforts

Business enterprises or “clusters of enterprises” need to enhance their competitive status first in the domestic, then in the global value chain. Such efforts are achieved through what is termed in the value chain literature as *upgrading* [11][13][23]. Upgrading has to do with the practice of “organizational learning” aimed at improving the competitive standing of enterprises in GVCs. The task of upgrading is related to the practice of “making better products more efficiently and moving into more skilled activities along the value chain” [24]. Enterprises are required to wield

upgrading in reaction to the dynamics in the value chain and the environment. The practice is not confined to the efforts of individual firms; it also applies to the endeavor of countries in improving their competitive rank in the international trade networks [11][23]. In this respect, Porter (1990:73) noted that the competitive advantage of nations relies on “the capacity of its industry to innovate and upgrade” [9].

How can enterprises realize upgrading? Fleury and Fleury (2001:118); Humphrey and Schmitz (2000); and Morris (2001:132) suggest three trajectories of upgrading: (i) “product upgrading”, which involves the development of new product lines; (ii) “process upgrading”, which involves the “efficient transformation of inputs into outputs by introducing superior technology or re-organizing production systems”; and (iii) “functional upgrading”, which involves moving into new functions like “design or marketing”. Briefly explained, upgrading can be attained through improving “products, transformation processes and functions” [13][17][23]. Fleury and Fleury (2001:118) emphasize that there is upgrading if: (i) the process improves the “competitive position of the firm” compared with its former or current position and its competitors; (ii) the differences are the outcome of changes in the operation and competence of the firm; and (iii) it (upgrading) raises the “discretionary power” of the firm in relation to its rivals [23].

3. Methods

This study is principally qualitative and descriptive, intended to demonstrate inter-firm relations, chain governance, and upgrading efforts in the wood-furniture MSE sector in Ethiopia. In this study, the source of data was the wood-work MSE sector in the capital, Addis Ababa. According to the “Trade and Industry Development Bureau (TIDB)” of the City Administration, MSEs in wood-work related businesses may be classified as: “furniture-production, wood-sawing, timber-trading, traditional wood-works, wood-sculpture and

wood-fuel” (Table 1). From these six groups, the first three groups are interconnected in the value chain, as wood-sawing firms and timber traders provide timber to the furniture-producing firms. Furniture manufacturing is estimated to account for more than 60 percent of the volume of activities in the wood-work sector of the city. Timber trading and wood sawing businesses account for about 7.5 and 18 percent, respectively. The three lines of business (wood sawing, timber trading, and furniture) jointly make up more than 85 percent of the business operation in the sector. On the other hand, wood sculpture (3.5 percent), traditional wood-works (0.8 percent), and wood-fuel (10 percent) have a minor share, hence limited importance in the sector. Furniture manufacturing MSEs, sawmill operators, and timber traders are the primary sources of data for this research. The “March 2011 MSE Development Strategy” of Ethiopia categorizes MSEs in terms of “products” and “services”, manufacturing and service-providing enterprises, respectively. The financial upper limit for service-providing micro-enterprises is 50,000 Birr and 500,000 Birr for small enterprises. Micro-enterprises, as per the amended MSE Development Strategy, are those enterprises that have up to 5 employees (as well as “family labor”) and total capital of up to 100,000 Birr (for micro enterprises engaged in manufacturing). Small enterprises, on the other hand, are those enterprises that have 6-30 workers and assets of not more than 1.5 million Birr (for manufacturing enterprises) [25].

Three sub-cities having the largest numbers of MSEs, namely, Addis Ketema (11 sawmills; 47 timber trading stores), Kolfe Keranio (49 furniture MSEs; 20 sawmills) and Yeka (92 furniture MSEs; 19 timber trading shops) were selected for the study. The data were collected from fifty sample MSEs (i.e., 30 furniture MSEs from Yeka and Kolfe-Keranio sub-cities; 9 sawmills from Addis-Ketema and Kolfe-Keranio sub-cities, and 11 timber trading stores from Addis-Ketema and Yeka sub-cities) randomly drawn from the

purposely selected sub-cities. Lemi Kura was a newly formed sub-city at the time of data collection. The principal data collection instruments are interviews and direct observation. Interviews have been made to MSE operators, timber traders, and sawmill operators. Moreover, detailed discussions were held with pertinent sources like agency officials and relevant experts of furniture MSEs. Prudent observation of workplaces and workshops (and simultaneous conversations with operators) was made at some of the enterprises to augment the information obtained during interviews. A checklist was used to record the data obtained through observation. This was an important way of getting observable information on the condition of workplaces, workshops, stores, machinery and tools, types of inputs and products, and sales displays (outlets). Presentation and analysis of data are more qualitative.

4. Wood-Furniture Manufacturing MSE Value Chain

4.1. Input-Sourcing

The whole value chain covers three principal sectors: (i) the “extractive sector”, which is engaged in harvesting logs; (ii) the “industrial sector”, which is engaged in assembling and producing wood-furniture, i.e., manufacturing; and (iii) the “service sector”, which is engaged in daily sales, marketing and distribution, including wholesale and retail outlets for wood-furniture and related goods. Timbers, sawn-woods, fabricated-boards like “Medium Density Fabricated-board (MDF) and High Density Fabricated-board (HDF)”, ply-woods and chip-wood boards serve as the main raw-material inputs for manufacturing furniture [26]. MSE and sawmill operators, timber and fabricated-board traders revealed that MDF is more widely available in the domestic market than HDF, which is of course accessible only to the robust MSEs. There are also supplementary inputs, like chemicals (paints and adhesives), textile materials, nails, plastics, irons, metals, etc. Primary inputs such as sawn wood, timbers, and

chip-wood boards are mainly acquired from local markets and, to a certain level, imported from abroad. Inputs like “plywood sheets, laminated HDF, MDF and décor composites” are largely imported from abroad. Imported inputs are well processed, very well designed, and fine-looking, as contrasted with the domestic ones.

Previously, cut-logs (raw logs, named locally as “gindilla”) used to come from the native and original forest areas. The largest parts of such forests were found in the South-Western rain forest regions of the country, including Bebek, Wolega, Jimma, Illubabor and Tapi. Some of the forests have also been available in some districts of the Shewa (Woliso, Ambo, Shashemene-Langano, etc.) and Bale (Dolo-Mena) regions. Currently, however, it has become increasingly difficult to obtain cut logs from the native forests as the thickness of the forests has been drastically reduced. Currently, pine trees of “*Cupressus Lusitanica* and *Pinus Patula*” serve as the principal source of cut logs and timber supply for the wood-furniture sector. Public enterprises cultivate “*Cupressus lusitanica* and *Pinus patula*” and supply logs and timber. *Cupressus lusitanica*, locally known as *Yeferenge Tsid*, is more abundant and widely found than, but of lesser quality than, “*Pinus patula*”. Sawmill operators and timber retailers assert that, in addition to “*Cupressus lusitanica* and “*Pinus patula*”, eucalyptus trees are also used as a source for producing logs and timber. Nevertheless, the logs and timber from “eucalyptus trees” are for civil construction purposes, not for furniture manufacturing. Government-owned (public) enterprises frequently try to get cut logs from these trees within a radius of 330 Km. Pine trees are extensively found around Ambo, Wollega, Borena, Illubabor, Bale, Shashemene-Munesa and Jima (Kafa) of the South and South-Western areas of Ethiopia. Time is not only physical distance; it is a setback as it requires about 25-30 years to plant, grow, and cut trees to reap fairly sufficient logs. As it is terribly difficult to get such forests in the vicinity, some capable firms, both private and public, use “mobile saw-

mills” to find cut logs from the distant areas in which such forests are available. Heavy trucks carrying cut logs enter the capital city through several routes. In many cases, the logs may not be readily sent to the stockrooms, as all are sold right from the trucks. This is mainly because of the scarcity of cut logs. The process of getting cut logs is not that simple since there are middlemen (particularly brokers) who are actively engaged in the process. The brokers, of course, help to connect sellers and buyers and accelerate the marketing (particularly the selling-buying) process. However, backward linkages in the value chain are frequently messed up because of the fraudulent behavior of brokers. Strange price hikes are thus persistent challenges in the market.

4.2. Sawmill Micro and Small Enterprises

Four groups of sawmills are distinguished based on “ownership”: “(i) public (government-owned) sawmills, commonly known as *factories*, which are located mainly at or close to the plantations; (ii) sawmills owned by timber traders; (iii) sawmills owned by furniture manufacturing MSEs; and (iv) private sawmill MSEs (engaged only in sawing and providing related services)”. Some years back, sawmills were also situated at “industry villages” of government-supported but privately-owned MSEs [2]. Declining quality of cut-logs, scarcity of supply, mounting costs, risks to safety, lack of storeroom, lack of modern machinery, and regular electric-power disruption are among the most important drawbacks indicated by the sawmill owners and operators. Input sourcing becomes a difficult task due to stiff competition; hence sawmill firms are often forced to acquire “inferior quality” logs. Sawmill MSEs found in the city are not properly located as timber distributors in the value chain. Due to the challenges indicated above, production (output) volume is quite small; thus, timber offered by the sawmill MSEs is mainly for those micro-level (survivalist) furniture enterprises. MSEs with a strong capital base own sawmills or turn to alternative supply sources, including government-owned sawmills, “factories” and private timber traders. Ignoring local sawmills and

looking for other sources could hold back the growth of local sawmills and have an obstructing effect on the likely market linkages between the sawmills and wood-furniture MSEs. A brief summary of the details on sawmills is provided described in Table 2.

4.3. Timber Distributors

Wholesalers and retailers have an indispensable role in distributing solid woods of different types, timbers and auxiliary inputs to micro and small enterprises. Timber suppliers, both wholesalers and retailers, trade domestic (local) and imported timbers and diverse types of “solid-woods”. The local timbers come chiefly from pine trees and also from eucalyptus trees and (rarely) from other original (native) trees. Interviews have been administered to the timber traders, and the results are summed up as five key themes: “items traded, business status, supply sources, customers, and problems often encountered in the business” (Table 3).

4.4. Production: Furniture MSEs

“Production” is the core segment (component) of the wood-furniture MSE value chain as it serves as a connecting spot of upstream and downstream functions of the whole chain. The production process relies on three options of inputs: (i) domestic (local) inputs; (ii) imported inputs; or (iii) a mix of the above, local and imported inputs. MSEs are engaged in the production of assorted types of furniture products. All of them are typically engaged in the “design, production, and sales of furniture products” right from the starting point to the final product. The structure of production is therefore fairly “vertically-integrated”: inputs enter into the firm; production proceeds in the workshops; eventually different types of wood-furniture products stream out to the market. The “global furniture industry” is classified into four main categories (UNIDO 2003:2-3) as: “(i) office furniture, (ii) kitchen furniture, (iii) bed-room furniture, and (iv) living/dining and shop furniture”. These product

categories have their own market segments (*ibid*). In this article, furniture products are identified as “household furniture” and “office furniture”. Household furniture includes tables, chairs, armchairs, TV stands, beds, bedside tables, walk-in closets, normal and built-in cupboards, doors and windows, kitchen cabinets, wooden ceilings (*perline*) and floors (parquet), wooden stairs and handrails. Office furniture mainly includes items like chairs, armchairs, tables, school desks, cupboards, shelves, windows and doors. Strong capital and a large number of labor force are required for office furniture production. “Small” rather than “micro” enterprises are appropriate to this category of furniture products. Micro enterprises are particularly suitable for the production of small volumes of household furniture. Such enterprises are heavily affected by shortage of capital, inadequate experience, and lack of trained labor to entertain large orders. Unlike this, buyers of office furniture may take into account the physical size, look, and reputation of the firm before placing large orders. In general, most of the MSEs are engaged in manufacturing wood furniture for the household market segment. Competence in design is crucial in this sector, as similar and comparable products are flowing from such Far East countries as China, Indonesia, Thailand, the Philippines, Malaysia, etc. Furniture products from these countries have better finishing and are more attractive when compared to the local products. This is primarily due to the advanced design complemented with elegant “finishing”. It is hard to find domestic MSEs using professional (hired) designers and advanced technologies. Designs are normally manual. As a result, the current state of design represents a feeble link in the value chain. It hinders timely upgrading and entry into the relatively more competitive domestic market and the global furniture value chain [27].

Micro and small enterprises produce furniture ordered mostly for household purposes; as a result, any single order is small by any measure. Furniture production of MSEs is directly

related to the end users (consumers). This is contrary to the practice in the footwear MSE sector in Ethiopia where, according to Tegegne (2009), “wholesalers and retailers are the main clients in the domestic market”. Unlike footwear products, the physical features of furniture make it difficult to pass through the middlemen in the channel of distribution. However, there are also enterprises engaged in wholesaling and retailing imported furniture mainly from the Asian countries [2]. In the domestic furniture sector, nearly all of the MSEs get orders from (and retail their products to) the final users. In this regard, the intervention of retailers and wholesalers is insignificant. As a result, the channel of distribution remains very short, as it has only the producer and the final consumer. In this type of market chain, enterprises can “directly reap the profits generated from retailing the products” [27]. This can be among the key benefits of short distribution channels. Competition is likely to come from local products or imported goods. Previously, competition was meant to be among local products. Recently, competition from imported goods is significantly increasing. Consumers’ wants and demands are frequently changing. More and more imported goods are coming, hence increasing the competitive position of imported goods over domestic products. Value chains are made up of “the value-adding activities of different actors across the chain. The various activities and processes ultimately contribute to the value creation of the product” [19]. Six major actors are identified along the principal route of the wood-work MSE value chain (Figure 3). These are described as: “(i) public enterprises, (ii) distributors and brokers, (iii) sawmill enterprises, (iv) timber traders, (v) furniture MSEs, and (vi) buyers (primarily, the final consumers)”.

The relationship chain between these actors can be understood as being organized in three main phases: Phase one is at the chain’s upstream part where ‘public enterprises’ are identified as dominant players and prime suppliers of inputs. At this primary stage, government-

owned enterprises are linked to: (i) distributors and brokers; (ii) sawmill firms; and (iii) wood-furniture MSEs. Phase two is somewhat composite as it involves interactions among three main actors: (i) brokers and distributors, (ii) sawmill firms, and (iii) timber sellers. These actors function as secondary suppliers of logs and timbers (the key inputs) to the users, technically identified as “*industrial buyers*” who purchase key inputs for reprocessing cut logs or reselling timbers to other users such as sawmill operators, timber sellers, and furniture producers. Nevertheless, distributors (and brokers) predominate in the supply and distribution of such inputs. Phase three is at the value chain’s most downstream part and is considerably dominated by the functions of furniture MSEs. The products directly reach the final buyers (consumers). The role of the retailers is quite insignificant, however. In this case of insignificant presence or absence of the middlemen, the value chain is obviously created by a “short distribution channel”, directly linking the producers and the final users (Figure 3).

5. Inter-Firm Relations (IFR) in the Wood-Furniture MSE Value Chain

“Horizontal inter-firm relations” are helpful for enterprises in any economic sector. MSEs, in particular, are required to develop cooperative relationships as often constrained by shortages of certain resources. Through cooperation, MSEs can benefit from other MSEs in the industry. Besides, helpful inter-firm relations may serve as a prerequisite or potential for enterprises spatially congregating to develop “*business clusters*”. MSEs practice inter-firm relations in several ways, and “non-market linkages” dominate such forms of relations. Non-market relations are visible as a way of exchange of design, labor, information, joint purchase of inputs, borrowing and sharing of resources, and cooperative use of transport facilities. However, the most familiar and common form of non-market relation is “information exchange”. MSEs may regularly exchange information relevant to their business. The communication set-up hosts information that

ranges from daily rumors to facts related to the business and the market at large. Information relating to the availability and costs of inputs, hand tools and machines, labor, rents, and transport is very important to the owners/operators. Information pertaining to price levels is also very useful. Furthermore, information about registration, licensing, assessment, and taxation practices is all important to the operators. Though “information exchange” is the main mode of relationship, MSEs also have supportive relations in sharing tools and machines (usually as rents), borrowing money and inputs, and exchanging designs between themselves.

Sub-contracting exercises can also be seen as a means of promoting robust inter-firm relations, though this practice is likely to yield quasi-hierarchical, rather than horizontal, relations between enterprises. Sub-contracting is not a normally expected practice in the MSE sector. Two reasons can be mentioned for this. First, the firms are unable to launch operations on a bigger scale; they may not take large orders, thus will have little interest in sub-contracting (forward linkage). In case there are certain instances of sub-contracting, these are from large and medium enterprises (backward linkage). Second, firms are normally keen or willing to cede opportunities of business to others. MSEs may jointly settle several business-related issues and advance various interests through what is described by Helmsing (2005) as “business associations (BA)” [28]. However, MSEs working in the woodwork and furniture sector do not have such business associations. Some of the MSEs, of course, admitted to having “mini” pecuniary (revolving fund) associations named as “*equb*”, which may be distinctive to the Ethiopian business experience. Generally, operators use the money collected through *equb* to launch new businesses or upgrade the existing ones.

Apart from inter-firm horizontal relations among the MSEs, there are also vertical relations between (i) MSEs and input suppliers and (ii) MSEs and buyers of the products. Both market

(arm's length relations) and non-market relations are apparent in this context. However, "transaction" is the main mode of market relationship since it describes the selling and buying functions. The thicker (forward) and the thinner (backward) arrows show the movement of "materials" and "finance", respectively. The arrows also represent the stream of "information" in various directions (Figure 4). Vertically, upstream (between MSEs and input-suppliers) and downstream (between MSEs and buyers) relations take place. The notion of "vertical" doesn't in any way suggest hierarchical relationships in the case of which some firms appear superior and others subordinate. Here, it is merely meant to represent the upstream and downstream linkages in the value chain. Real "hierarchical" relationships and coordination are evident only in the enterprises that have a vertically integrated business structure, incorporating activities of input supply, furniture production and sales. As highlighted by Humphrey and Schmitz (2000:4), horizontally there is a network of relationships "between firms of more or less equal power" [13]. On top of market transactions, there are also different modes of relationship between MSEs and input suppliers. Information exchange, purchase on credit, and quality control are the major forms of relations. "Information exchange" is again the main form of relationship between MSEs and suppliers. MSEs may need "input-related information" from the suppliers, whereas the suppliers need "demand-related information" from MSEs. Suppliers change the volume of supply, input quality, and prices on the basis of the information. Quality control is among the important areas of the relationship between MSEs and input suppliers. Since the quality of input is critical to the quality of a product, product quality control has to start right from input sourcing. Suppliers have a critical role to play in this respect. At this primary stage, the task of quality control is discharged by both the input suppliers and the furniture producers. Other stakeholders (like the buyers) will be on board at the latter stages. Purchase on credit expedites market transactions. It often takes place between

those parties that have strong trust. "Arm's length market linkages" represent the relations between intermediate input suppliers (notably, the distributors, saw-mill firms, and timber-sellers) and the users ("*industrial buyers*", who buy for business purposes).

Relation with buyers in reality means relation with *direct consumers*, who are remarkably important in the business. If "retailers" were vital in the distribution channel, they can have the opportunity to enter into "*quasi-hierarchical*" relations with the producers of furniture. This could be real if the retailers: (i) offer design and specification of products; (ii) have the upper hand in sales and marketing activities; and (ii) have a definite role as middlemen at the lowest part of the channel of distribution. But that is not the case, as the lowest part is dominated by the "direct consumers". Exchanging information, product specifications, and controlling quality are valuable matters of relations between the MSEs and the direct users (final consumers). Buyers/users inform producers during the time of order about what has to be produced in what material, size, and quantity. These measures may help as a way of pre-control. After the goods are produced, the buyers may remark on the products and ask for corrective measures in case there are certain deviations. This exercise is helping as a means of post-control. In both instances, producers can have the leverage of ensuring the quality of the product. Market connections represent the relations in the value chain's downstream part. Relations among the actors can be varied and complex. However, the main areas are outlined in Table 4.

6. Chain Governance in the Value Chain

According to Humphrey and Schmitz (2001:21), "a chain without governance would just be a string of market relations". Governance is indispensable for making important decisions in the value chain. In this regard, the three basic types of governance are "inter-firm networks, quasi-hierarchy, and hierarchy" [11-13][18]. "Quasi-hierarchy and

hierarchy” are not familiar to the wood-work MSE sector. “Quasi-hierarchy” is not common in the wood-work MSE value chain due to the absence of: (i) “lead firms” or “industrial buyers” that could exercise control over the producers and (ii) “subcontracting” practices in the wood-work MSE sector. If the wood-work MSE value chain had retailers and wholesalers as leading buyers, these “industrial buyers” could have been able to specify the parameters, including “what should be produced”, “the quantity”, “the quality”, and “when to produce”, etc. At last, the MSEs (the producers) will be under tight pressure to meet the specified requirements. The value chain’s downstream end is remarkably dominated by “direct consumers” whose role is evident in exerting influence on price and product quality. Their influence and control over the producers fade when the consumers directly buy ready-made products. Their influence gets momentum when orders and specifications are proposed for new products. Hierarchy as well is not common, though some degree of “vertical integration (hierarchy)” is possible in the public enterprises, which have a vertically integrated organizational structure consisting of saw-mills and supply outlets. In this structure, the relationship is essentially hierarchical. Moreover, market linkages are evident in the relations between public enterprises and the other buyers, including saw-mill firms, distributors (suppliers), and wood-furniture MSEs. Given that there is scarcity of supply and there is a situation in which public enterprises dominate in the most upstream areas, the value chain is thus identified as “*supply-driven*”. A kind of “hierarchical relationship” may be seen in the wood-furniture MSEs that have furniture manufacturing workshops, own sawing mills, timber supply and retail outlets under one (integrated) enterprise.

Besides *quasi-hierarchy* and *hierarchy*, enterprises may also practice “private governance” through “local business associations” (BA) [28]. Business associations regulate the activities of the members and safeguard group interests. However,

MSEs cannot exercise “private governance” in the absence of business associations. Apart from internal agents, external agents as well could exercise some level of governance. External agents, notably government agencies, exert “public governance” when they set up “product and process parameters” [11][13]. However, this is not realistic in the wood-furniture MSE sector since government agencies are chiefly concerned with: (i) the regulation of standards for highly sensitive industries, such as food processing and pharmaceutical production, and (ii) enforcement of Inland Revenue duties like the issuance of licenses and tax collection. Wood-furniture MSEs get key inputs from domestic sources, and their products are exclusively for the consumers in the domestic markets. As a result, the distribution of resources and the allocation of benefits or payments in the value chain are governed by the domestic actors. Finance initially comes from rudimentary and most basic local sources like “personal savings, family transfers, and micro-credits”. Machinery and tools (except the “modified” ones, locally termed as “*modific*”), chemicals, and extra components and spare parts are imported, and MSEs acquire such items from the local retailing firms. Decision-making power within the value chain is at the disposal of government enterprises which regulate and control the plantation of pine forests and the supply of major inputs (notably, cut logs and timber). In the channel of distribution, the key inputs are controlled by the domestic wholesaling firms, the brokers and retailers. MSE operators make product designs and production decisions. The designs made this way are for internal (firm-level) use, not for external (sales) purposes. Finally, furniture products are delivered to the final consumers without intervention of the middlemen. The chain of relationships begins with public enterprises (the most upstream actors) and runs down across several segments (midstream actors) until end products reach final consumers (the most downstream actors). All of these are domestic; hence, the chain is said to be governed by domestic (local) actors. Upstream, public

enterprises predominate in governing the chain. The leading distributors may purchase raw logs and timber from public enterprises and supply the same to the sawmill MSEs and the timber traders. At this stage, distributors and brokers have a crucial role in regulating and governing the market of inputs. The transaction becomes smooth and simple once the inputs are in the hands of the sawmill firms and the timber distributors. At this stage of the chain, the furniture MSEs will have several choices to acquire the key inputs. Lastly, end products may arrive at the retailers and the final-users, the process in which the role of retailers is not that significant, as most of the orders come directly from and the products go directly to the final users.

7. Upgrading Efforts in the Furniture MSE Value Chain

Competitive pressures compel business firms to “innovate and upgrade” [13]. The action of “lead firms” in the quasi-hierarchical value chains intensifies competitive pressure and also induces producers to innovate and upgrade various aspects of the enterprise (*ibid*). In this form of relationship, the principal buyers (the lead firms) disseminate information to the producers and the suppliers. However, this kind of quasi-hierarchical relation does not exist in the wood-furniture MSE sector. In this scenario of absence, MSEs will try to employ and take advantage of “incremental upgrading” through “learning by doing” (*ibid*). In the existing state of stiff competition, as a result of ample access to imported and locally-produced goods, upgrading becomes vital not only to succeed but also to survive in the sector and the market. Micro and small enterprises may practice upgrading optionally as product, transformation (production) process, or function (moving into other but related business activities), or a combination of a few or all of these upgrading alternatives. The most familiar trend of upgrading is in the area of the *production process*. MSEs may see some opportunities for upgrading in this case (Figure 5). Some of them introduce new hand tools and machinery. Some can creatively reuse

what they have or look for other less-expensive directions, such as using modern working methods, introducing the latest management techniques, or skills training for the employees. Some of the measures (such as getting new machinery and tools) are expensive, especially for those financially constrained micro enterprises. This can discourage the hope of graduating and advancing into the higher tiers of the “hierarchy of enterprises”. It also confronts their energy required to deal with the changing business environment. However, the efforts to use new machines and tools, better inputs and managerial techniques, and operational methods may serve as a starting point to see possibilities of recent technological progress in the sector.

MSE’s efforts to upgrade the “production process” are mainly directed and confined to the hardware/physical dimensions of the firm, like buying new tools and machines. The practice of buying new machines includes the acquisition of “locally modified machines” known as “*modifics*”. The efforts to upgrade through better management techniques and advanced skills training are not as important as the measures taken to augment the hardware dimensions of the firm. MSE operators may not have sufficient capital to invest in the software aspects of the firm as it cannot bring immediate returns. Product upgrading depends on the acquisition of better quality raw materials, supplementary inputs and superior product design. The record of MSEs in this regard is not that satisfactory. The “survivalist objectives of micro enterprises” and “rising costs of inputs” are the prime causes for the observed substandard level of product upgrading. MSE operators also use product diversification (in the wood-furniture product lines) as a strategy for taking advantage of niche markets and averting business risks. MSEs may also try other (non-production) functions using “*functional upgrading*”. Nevertheless, turning to this field of upgrading is not as such simple for micro and small enterprises engaged in “furniture production”. Functional upgrading may be practiced in the domains of “design and

promotion". Though furniture MSEs are widely engaged in "product design" functions, the designs are not for transaction (external) purposes but for internal use in the workshop. The main types and features of upgrading efforts are summarized in Table 5.

8. Conclusion

Value chains can be global or domestic. The idea of "*domestic value chain* (DVC)" has to be considered with some level of caution, as it is more relevant to the "most downstream activities (forward linkages)" of the value chain. Final products are exclusively for local consumers in the domestic market. If the focus is on "backward linkages", MSEs use inputs not only from domestic/local sources, even though the lion's share of the inputs still comes from domestic sources. This can confuse one's perception of the notion of the DVC. What dictates the value chain to be "*domestic*" is the degree to which the chain is well entrenched in the domestic setting, as inputs are predominantly acquired from local sources, production decisions and designs are done by the domestic producers, and final products are meant for local consumers of the domestic markets. A couple of basic forms of relationship are identified: (i) relations among MSEs (IFR) and (ii) relations between MSEs and suppliers/buyers in the value chain. "Horizontal, non-market linkages" typify *inter-firm relations*, while "arm's length market linkages" dominantly prevail in the "supplier-MSE-buyer" relations. The network of relationships takes place horizontally between the MSEs, "vertically" between suppliers and the MSEs and, lastly, between the MSEs and the buyers. The furniture MSEs obtain main inputs from local sources, and their products are destined for local/domestic markets. As a result, the "allocation of key resources and the distribution of benefits" in the value chain are controlled and governed by the domestic actors. Upstream, power in the value chain reigns in public enterprises since they own and control pine forests. Public enterprises, of course, manipulate the initial distribution of key inputs. Once entered the

distribution channel, the key inputs will be controlled by the domestic wholesaling firms, the brokers, and the retailers. Downstream, decisions pertaining to production and product designs are made by MSE operators/owners. However, designs are only for "internal consumption" at the firm level. Finally, furniture reaches direct consumers without notable involvement of the middlemen.

Competition requires micro and small enterprises to renovate operations and upgrade products. As Porter (1990) contends, MSEs turn out to be more competitive in reaction to "pressures and challenges" that may emanate from imported goods and similar local enterprises. MSEs, like medium and large enterprises (MLE), gain advantages from "strong domestic rivals, aggressive home-based suppliers, and demanding local customers" (*ibid*). Competitiveness of MSEs is attained through refurbished and improved operations and the ultimate performance of the whole value chain. When value chains effectively perform and become competitive, actors in the chain receive utmost benefits out of the process. *Upgrading* is elemental to remain competitive in the sector. The decisions made by MSEs to upgrade the "*production process*" are very much associated with the hardware (physical) features of the firm, like bringing in new tools and machines. The actions to upgrade with better and advanced managerial techniques and skills training are not as important as the measures of upgrading the physical parts of the firm. Going into "*functional upgrading*" is not that easy for the MSEs operating in the wood-furniture industry, though it is practiced to some extent in the specialized areas of "design and promotion". When there are engagements in the product design functions, such engagements are not for transactional purposes as such. Generally, upgrading efforts help create a more competitive and robust sector. This will inspire local suppliers to supply (distribute) quality inputs. Moreover, effective competition is likely to extend benefits to local consumers whose

choices will be satisfied by varied, improved, and quality products to be offered at fair prices.

The relevance of “*chain governance*” is more evident in the presence of “buyer-driven” models and active engagement of their actors, identified as “lead firms”. Lead firms: (i) exert control over the suppliers in the “quasi-hierarchical” relations; and (ii) make critical decisions on what should be produced and also suggest or directly propose product “designs”. This is the manner of relationship in the GVC. Gary Gereffi’s concept of “buyer-driven” value chains refers to the global commodity chains (GCC). Contrary to that, furniture products of MSEs in Ethiopia are entirely destined for local markets, and almost all decisions pertaining to “design, input-sourcing, production and marketing” are made by domestic actors. Particular decisions relevant to the types and volume of products are made by the producers and the local buyers. In this perspective, wood-furniture products of the DVC are not consistent with the Gereffi’s mainstream buyer-driven model assumptions. In this context, there is no space for the local producers to be controlled and governed by the “buyers”, known as lead firms. Also, there is no ample opportunity to gain benefits from the buyers/the lead firms in their learning, innovating, and upgrading efforts. Therefore, operators of wood-furniture MSEs rely on their own caliber to exercise “incremental upgrading” (or “learning-by-doing”) (*ibid*), instead of enjoying full advantage of ready-made, “buyer-driven”, upgrading-related prescriptions.

The strengths/limitations in the performance of MSEs begin right from the upstream activity of “input-sourcing” and pervade the “process of production” and the downstream activities of bringing products to the final users. The same also applies to the aligned “support services” along the distribution channel. As MSEs upgrade, mature, and graduate to MLEs, the process augments the opportunity for entering into the GCC. At this advanced stage, enterprises may acquire “international standards” of production;

find out pertinent strategies for global competition; and generate foreign currency through successful forward linkages. With an adequate level of experience, local firms might link up with global lead firms in the industry. This process enables effective incorporation and integration of enterprises into the GVC. The central hypothesis of the GVC model, according to Gereffi (1999), is that domestic furniture MSEs have to link up with the eminent “lead firms” in the industry in order to grow and contribute to the national economy. It is important to observe that domestic value chains operate “in the same way as global chains” (Kuzilwa and Ngowi 2009:189). Both models involve “design, input-supply, production and marketing”. This may lead to the conclusion that effective and thriving performance of enterprises in the domestic value chain ultimately determines their entry into the global value chain (*ibid*).

DECLARATIONS

Acknowledgments: The authors would like to extend their deepest gratitude to those wood furniture micro and small enterprises (MSEs), sawmill firms, timber traders, and public enterprises that were supportive in providing the necessary data for this study.

Author’s contribution: This study has been conducted entirely by the author. The overall findings related to exploring the facts on the ground and major problems in the sector, and recommendations to alleviate some of the key problems, are the efforts and contributions of the author.

Conflict of interest: There is no conflict of interest in relation to this piece of work.

Copyright Permission: Not required. Author’s own work

Data Availability: The data will be available on request.

Funding Source: No funds have been received from any funding institution or agency for this article.

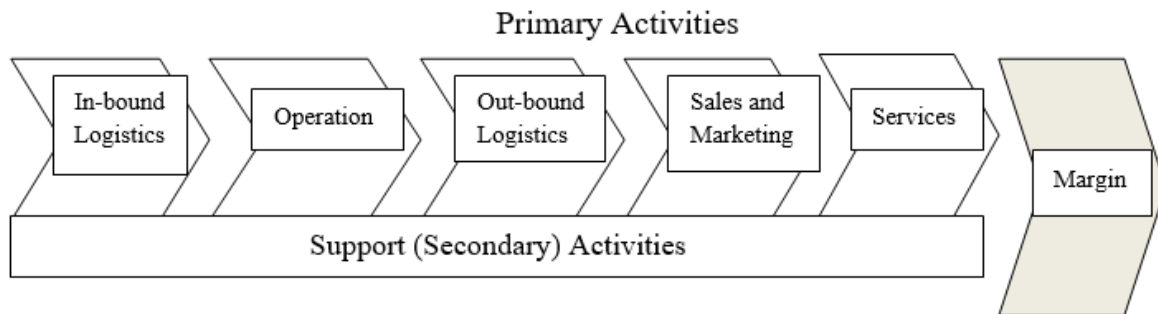
Use of AI and AI-assisted technologies: No AI or AI-assisted technologies have been used in composing and organizing this article.

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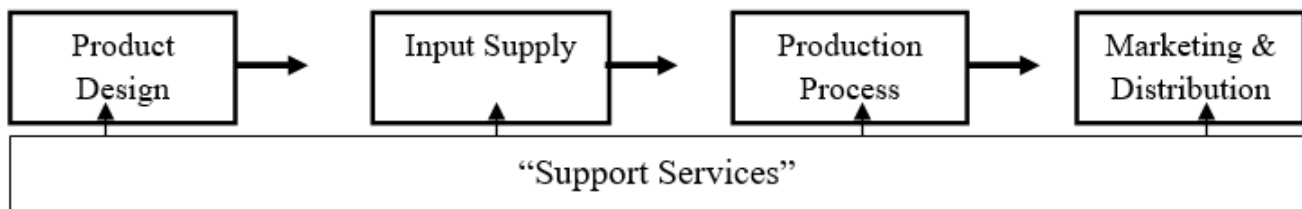
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Figures



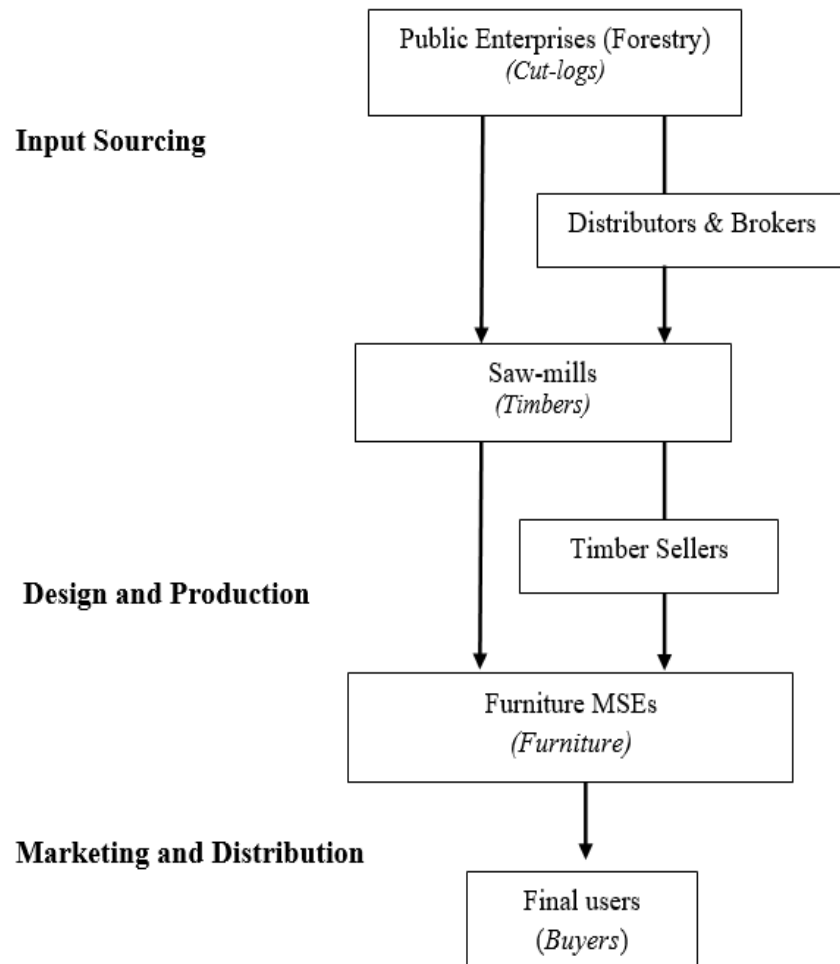
Source: adapted from the works of Porter (1985)

Figure 1: Porter's Model of Value Chain



Source: McCormick (2001)

Figure 2: Linear Configuration of the Input and Output Activities



Source: field survey

Figure 3: Concise portrait of the wood-work (furniture) value chain

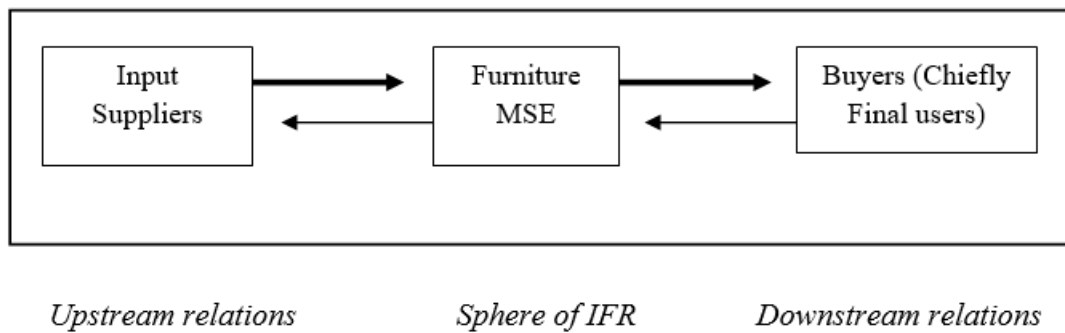
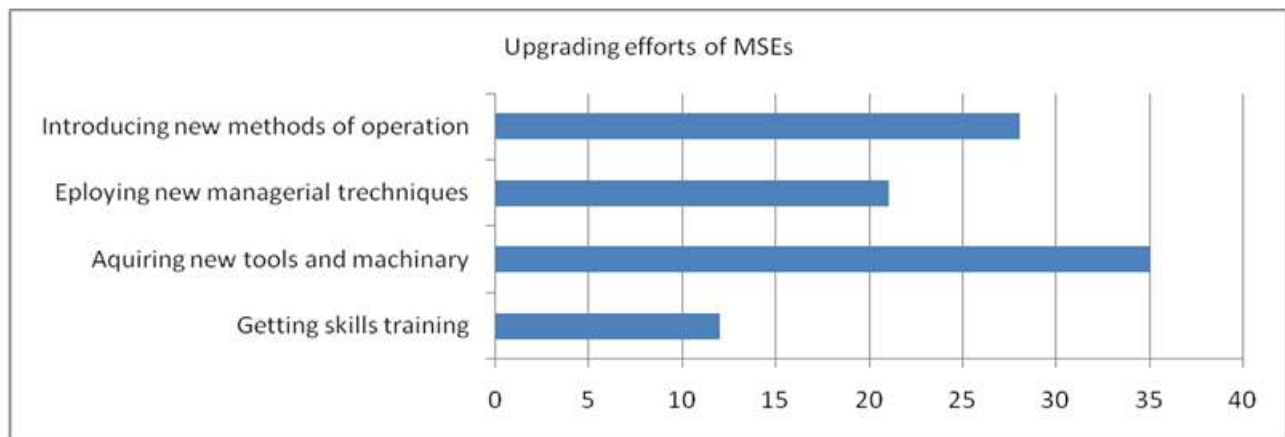


Figure 4: Market Relations: transactions



Source: field survey

Figure 5: Measures tried to upgrade the production process*

*The “total count of responses” is more than the actual “sample size” due to the frequency of “multiple responses”.

Tables

Sub-Cities	Furniture MSEs	Wood-Sawing	Timber-Trading	Traditional Wood-Work	Wood-Sculpture	Wood-Fuel	Sum
Arada	43	3	4	1	2	6	59
Addis-Ketema	17	11	47	1	8	11	95
Lideta	13	-	-	-	3	1	17
Chirkos	36	4	8	2	1	2	53
Yeka	92	1	19	-	2	9	123
Bole	33	1	9	-	3	2	48
Akaki-Kaliti	32	4	5	-	-	1	42
Kolfe-Keranio	49	20	7	-	1	23	100
Nifas Silk-Lafto	35	1	9	-	-	-	45
Gulele	10	-	-	1	-	6	17
Lemi Kura	-	-	-	-	-	-	-
Total	360	45	108	5	21	61	599

Source: Compiled from the records of TIDB

Table 1: Spread of Wood-Work Micro and Small Enterprises

Description	Major	Others	Remarks
Product types	Timber products of different types/forms	Chip-woods, <i>purlin</i> ceilings; floors, wooden; fire-woods	At times involved in renting machines and selling spare logs
Inputs	Cut logs; rough timbers	Working premises; machinery and hand tools, electric power and labor	Occasionally purchase used timbers for reprocessing
Input sources	Cut log distributors: wholesalers	Retailers; other sawmill owners (in some cases)	Logs sold in <i>Merkato</i> (the biggest market area in Ethiopia); (Brokers heavily involved)
Customers (Major buyers)	Micro and small enterprises (MSEs)	Timber retailers; others	
Drawbacks in the business	• Small supply and inferior quality inputs • Cost of inputs • Broker-induced challenges • Power deficiency	• Lack of safety and storage • Lack of modern machines	Also face challenges of: • Business slowdown and decline of income • Shortage of working premises • Escalating costs of rents • Shortage of accessories and spare parts • Shortage of finance

Source: interviews made to the sawmill owners and operators

Table 2: Sawmill MSEs: synopsis

Description	Major	Others	Remarks
Items-traded	Pine timbers and solid woods of various forms	Chip-wood boards; eucalyptus timbers for construction works	Some are in the business of selling imported timbers (locally termed as “ <i>Austria</i> ”)
Business status	Chiefly retailing	Wholesaling and retailing	Some are in the business of import and distribution of timber
Supply sources	Wholesalers	• Industry villages • Government-owned “factories” • Saw-mills (private)	Part of the timber-traders have own saw-mills (procure logs in large volume from public-owned enterprises)
Principal buyers (clients)	• Building contractors • Wood-Furniture MSEs	• Small retailers	Some of the timber traders have own wood-furniture manufacturing MSEs
Challenges in the business	• Scarcity of supply • Rising input costs • Declining quality of timbers • Mounting rental costs	• Unfair competition (supplies) • Declining business activities	Also face problems of: • At times unreasonable tax assessment practices • Value-added tax-related problems

Source: interviews with timber traders

Table 3: Timber Trading: synopsis

Forms of relations	Main areas of relations	Remarks
Inter-firm relations	Exchanging information Sharing machinery and tools Borrowing money	Arranged (listed) in the order of importance
Relations with suppliers (<i>input suppliers</i>)	Market (Transaction) Exchanging information Controlling quality Purchasing (inputs) on credit	Market (transaction) is the principal form of relationship The rest are arranged in the order of importance
Relations with buyers (<i>retailers</i>)	Market (Transaction) Exchanging information Product specification Controlling quality Promotion	Market (transaction) is the principal form of relationship The rest are arranged in the order of importance
Relations with buyers (<i>direct consumers</i>)	Market (Transaction) Exchanging information Product specification Controlling quality	Market (transaction) is the principal relationship Arranged irrespective of the order of importance

Source: field survey

Table 4: Areas (types) of Relations

Types of Upgrading	Means of Upgrading	Extra efforts	Prime purpose
Product Upgrading	Acquisition of better and quality raw materials and supplementary inputs; Improved product design	Diversification (increasing product assortments)	Commercial
Transformation Process	Introducing new tools and machines; Introducing new working (operation) methods	Using new management techniques; Getting skills training and using other less-costly methods for upgrading the production process	Improving (upgrading) the production process
Functional Upgrading	Design	Promotion	Non-commercial (for internal use in the workshop)

Source: field survey

Table 5: Upgrading Efforts