

Collective Action Opportunities for Upgrading the Value Chain of Small-scale Wooden Furniture Enterprise in Hawassa, Ethiopia

Master Thesis

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Declaration

I hereby declare that this seminar paper, entitled 'Collective Action Opportunities for Upgrading the Value Chain of Small-scale Wooden Furniture Enterprise in Hawassa, Ethiopia', is all my own work. I have only used the sources or resources I have explicitly referenced. I have attributed all direct and indirect quotations.

Berlin, 16.04.2020

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List of acronyms

AAFM	Aruaru Association of Furniture Makers
ACU	Anloga Carpenters Union
APKJ	Jepara Small-scale Furniture Producer Association
cm	Centimetre
CIFOR	Center for International Forestry Research
CSA	Central Statistics Authority
DL	Development Level
ETB	Ethiopian Birr
EPRDF	Ethiopian People’s Revolutionary Democratic Front
FAWAG	Furniture and Wood Products Association of Ghana
FeMSEDA	Federal Micro and Small Enterprise Development Agency
FeSMMIDA	Federal Small and Medium Manufacturing Industry Development Agency
FUJCFoSA	Federal Urban Job Creation and Food Security Agency
g	Gramm
GPS	Global Positioning System
h	Hour
kg	Kilogramm
m	Meter
MDF	Medium-density Fibreboard
MEFCC	Ministry of Environment, Forest and Climate Change
MFI	Microfinance Institution
MoTI	Ministry of Trade and Industry
MSc.	Master of Science
MSE	Micro and small enterprise
NGO	Non-governmental Organization
OMI	Omo Microfinance Institution
OSFESA	Oromia State Forest Enterprise Supervising Agency
PAR	Participatory Action Research
PFM	Participatory Forest Management
PLC	Public Limited Company
PPE	Personal Protective Equipment

SME	Small and medium enterprise
SNNPR	Southern Nations, Nationalities, and Peoples' Region
SP	Sole Proprietorship
TUD	Technische Universität Dresden
TVET	Technical and Vocational Education and Training
UNEP	United Nations Environmental Programme
USD	United States Dollar
VA	Value Added
VCA	Value Chain Analysis
WAG	Woodworkers Association of Ghana

Abstract

Background – Ethiopia is challenged with a widening domestic wood supply gap and concurrent rapid population growth. Along with these developments, the population’s growing purchasing power is driving the demand for wooden furniture. The majority of this demand is satisfied by small-scale enterprises. Adding to the domestic wood supply uncertainty, such enterprises are exposed to various challenges, such as infrastructural limitations, unfavourable market conditions, weak government support, or skill gaps, thereby hindering their development and often situating them in a subsistent and poor survival state.

A development opportunity comes to light when considering that small-scale wooden furniture enterprises are linked to a critical natural resource base, exposed to growing markets, and mostly consist of individuals with an entrepreneurial vision. If guided effectively, this sector has the potential to drive an economic environment of innovative entrepreneurship, create skilful employment, and disseminate propulsive market signals towards wood suppliers. Collective action is a frequently discussed upgrading option for countering development barriers in the context of emerging economies and therefore, is explored as a potential upgrading mechanism.

Aim – This study aims to develop a potential institutional model of collective action among small-scale enterprises in Hawassa, Ethiopia.

Method – The study follows the general procedure of a value chain analysis and frames the collective action model as a potential value chain upgrading strategy. As the target actor is poorly studied, an explorative and descriptive research approach is applied. In-depth interviews were conducted with 54 wooden furniture enterprises to gain insight into their value chain position and condition, cost structures, network ties, as well as challenges. Then, individual enterprises were asked to envision a desired collective action upgrading scenario. Several key informant interviews were also conducted with direct (internal) and indirect (external) value chain actors to forge a holistic value chain structure as well as to triangulate data.

Results and conclusion – The situation for small-scale furniture enterprises was found to be highly unfavourable. The most substantial issue is the limited access to adequate factors of production, especially regarding the production site, physical capital and financial capital. With markets failing to provide these, enterprises were often observed to engage in social network ties with other furniture enterprise to enable access to resources. In addition, the government’s role in supporting these enterprises was found to be weak and poorly organized. Access to support services was observed to be obstructed by ethno-centrism as well as a high labour turnover amongst development agents. Promised trainings and access to factors of production were either rarely fulfilled or qualitatively low.

To counter these issues, an institutional collective action in the form of a business association is recommended. On the basis of a literature review, empirical evidence on the status quo of the target enterprises, as well as their perception on upgrading scenarios, the study develops a model association, describing its form, purpose, institutional arrangements as well as the characteristics of participating actors and potential members. It is purposed to facilitate stable network ties and act as a collective voice for improving the condition of small-scale furniture producers. It especially serves to lower transaction costs with authoritative entities, supports the access to improved business development services, such as microfinances or trainings, and advocates for improved market conditions. In the long run, the association will help small-scale enterprises collectively develop into innovative and resource efficient businesses, thereby driving and improving local forest-based markets.

1 Introduction

Ethiopia's declining forest resource base poses a threat to the economic stability of the forest sector, to the livelihoods supported by forest resources, and the biodiversity preserved in natural forests. The widening domestic wood supply gaps also have an impact on several value adding sectors and the employment these sectors provide, such as the furniture sector, which depends on a stable supply of qualitative wood. The forest pressures and the demand for wood is predicted to persist due to population growth and the coupled increase in purchasing power (MEFCC 2017).

The challenge for Ethiopia lies in preserving and restoring natural forests and simultaneously enabling a sustainable development of livelihood strategies and forest-linked economic sectors. Recommended solutions are widespread and dynamic, including enhancing sustainable forest management practices, the expansion of plantations and agroforestry systems, higher value creation in the processing subsectors through means of innovation and resource efficiency, coordinating forest-linked value chain activities, as well as the sufficient consumption of wood (MEFCC 2018b, 2018c; Lemenih and Kassa 2014).

An important forest-linked sector, for which little research has been done so far, is the furniture sector. Furniture-producing businesses are crucial manufacturing entities engaged in value-adding activities that contribute significantly to Ethiopia's economic growth. National demand for furniture is expected to grow rapidly due to the population's enhanced purchasing power. Currently, furniture businesses are mainly linked to domestic wood supply chains and rely to a great extent on native lumber, making the wood supply gap trends worrisome for this industry (MEFCC 2017, 2018a).

These businesses are thus stuck in somewhat of a clench between insecure raw material supply and enhancing furniture demand (Haile Gebremariam et al. 2009). The most vulnerable actors of this sector are also the most abundant, namely micro and small enterprises (MSE). Collectively, these contribute the highest value added within the sector (CSA 2014, 2018). Yet, their development is mostly stagnant due to unfavourable market conditions, infrastructural limitations, knowledge gaps, or weak institutional arrangements (Gebreeyesus et al. 2018; Haile Gebremariam et al. 2009).

The Ethiopian government has recognized the sector's relevance, and especially the importance of MSEs, for economic growth and poverty alleviation. In order to support small enterprise development, the government is pursuing an enhancement of business development support services, such as trainings or microfinances, which are intended to help enterprises overcome development barriers (Gebreeyesus et al. 2018; Ali et al. 2016; Zenawi 2012). Nevertheless, the

outreach and effectiveness of these services have been observed to be limited due to selection bias, poor service quality, as well as limited extension capacity. The overall situation suggests the need for improved and additional upgrading options for small-scale furniture enterprises in Ethiopia (Chinigò 2019).

Since these actors are understudied, formulating a relevant upgrading strategy initially requires an assessment of their status quo. A value chain analysis (VCA) is a valuable tool that assesses activities that are required and conditions that affect different stages of a product life cycle (Trienekens 2012; Kaplinsky and Morris 2001; Macqueen 2008). It has frequently been used to characterize current economic activities of actors with development potential (Bolwig et al. 2011; M4P 2008; Melati et al. 2013). The situation analysis is used to identify development barriers and their underlying systematic causes, which commonly acts as a basis to recommend actions for sustainable development (Springer-Heinze 2018a, 2018b).

Literature suggests that diverse forms of enterprise collaboration can act as mechanisms to counter challenges that arise due to economic instability and resource scarcity and therefore, enable upgrading (Kozak 2009; Macqueen et al. 2006). Especially in emerging economies, small-scale enterprises often partake in inter-firm cooperation and social networking to gain access to resources, such as information and knowledge, financial support as well as diverse physical assets (Biggs and Shah 2006; Berrou and Combarous 2012; F-Jardon and Pagani 2016). Such linkages reduce the disadvantages of being small by generating market opportunities as well as enabling access to resources that cannot be individually accessed due to capital shortages (Nichter and Goldmark 2009; Berrou and Combarous 2012; Boso et al. 2013).

Several studies have demonstrated that effective vertical and horizontal linkages are key determinants for MSEs' improved performance and development (Obeng 2019; Nganga et al. 2011; Li and Geng 2012). Formal forms of collective actions, such as business associations, have the potential to act as platforms that sustainably facilitate intentions and benefits behind inter-firm cooperation and networking (Purnomo et al. 2014; Doner and Schneider 2000; Inkoom 2014; Macqueen et al. 2006). Against this backdrop, collective actions amongst small-scale furniture enterprises in Ethiopia have the potential to allow for higher value adding capacities, thus enabling a wider distribution of societal benefits (Coles and Mitchell 2011).

Applying such upgrading to small-scale furniture enterprises has the potential to further disseminate market signals to local wood suppliers, enable a coordinated and improved distribution of natural resource across forest-linked value chains, drive up the value of a bio-based sector, and economic growth with low inequality (Coles 2011; MEFCC 2017; Lemenih and Kassa 2014; Nambiar 2019). This master thesis will therefore conduct explorative research on

small-scale wooden furniture enterprises located in Hawassa, Ethiopia, in order to characterize and analyse their value chain, investigate the potential role of collective action upgrading strategies, and ultimately formulate a vision for change.

1.1 Research objectives

The overlying goal of this research is to envision a potential institutional form of collective action as an upgrading strategy for small-scale furniture enterprises in Hawassa, Ethiopia. This will be achieved through the following underlying objectives.

1. To review literature and subsequently model a conceptual framework.
 - a. To review analytical procedures of value chain development research.
 - b. To further interpret, portray and gain a focused insight on the notion of 'collective action' in the context of enterprise development in emerging economies.
 - c. To gain insight into features of functional and successful institutionalized forms of collective action on the basis of success stories in similar contexts.
2. To analyse the value chain and social network of small-scale furniture enterprises.
 - a. To examine the legal framework and government-provided business development services.
 - b. To map the value chain linked to small-scale furniture producers in Hawassa.
 - c. To precisely characterize the furniture enterprises.
 - d. To give insight into the direct and indirect value chain actors linked to small-scale furniture enterprises in Hawassa.
 - e. To detail the existing vertical and horizontal social network amongst small-scale furniture enterprises in Hawassa.
 - f. To quantify enterprises' input-output structures based on a functional unit.
 - g. To economically assess the focused value chain position of furniture enterprises in terms of key cost structures, prices, and simplified value added.
 - h. To assess governance and access structures of the enterprises' value chain position.
 - i. To gain insight into the precise challenges faced by furniture enterprises and link these to underlying systematic causes.
3. To capture the perception of enterprise leaders towards potential forms of collective action.
 - a. To gain insight into enterprises' desired upgrading options.
 - b. To explore the enterprises' acceptability towards diverse recommended forms of collective action.
 - c. To capture the perception of enterprises' towards selected potential forms of collective action in terms of perceived benefits, risks, and desired facilitating conditions.
4. To detail a potential institutional form of collective action on the basis of small-scale enterprises' status quo assessment and success factors discussed in literature.
 - a. To match the status quo findings with a 'best bet' collective action upgrading strategy.

- b. To describe the collective action model in terms of its potential common purpose, internal structures, and activities.

The expected outcome are recommended action points for the implementation of the collective action vision.

1.2 Organization of the thesis

The thesis is organized into four core segments, namely a literature review and background study, the research methodology, results of the value chain analysis, and the scenario development of a 'best bet' upgrading strategy. The background study initially gives further insights into the status and future development of forest-linked sectors in Ethiopia, especially looking at micro and small wood-based furniture enterprises. Furthermore, a theoretical framework provides guidance on value chain analysis approaches as well as potential collective action upgrading strategies, followed by a discussion on possible institutionalized configurations of collective actions and success factors of these. The review then acts as the basis for the conceptual framework.

The background study is followed by the research methodology, which further details the study site, the research design, sampling techniques, data collection methods, and data analysis methods. Results of the status quo assessment will be structured based on the general procedure of a value chain analysis. Finally, developing an upgrading scenario will occur by first, summarizing proceeding results, then choosing a 'best bet' upgrading strategy, and subsequently detailing the strategy in a model that considers key success factors identified in the literature review.

2 Background and literature review

2.1 Forest-based value chains in Ethiopia

Ethiopia's dependence on forest-based natural resources has a long history. Due partially to a lack of fossil fuel reserves, Ethiopia's population has been depending on wood as a resource to carry out basic livelihood activities such as heating, cooking and sheltering. The wood dependence is the provenance behind Ethiopia's persisting rates of deforestation (Uhlig et al. 2017, p. 22). With the nation's rapid population growth and accelerating economic development, the impacts on forests remain a concern as the expansion of agricultural and urban landscapes continue to contest tree covered areas. The subordinate economic value of forest-provided products and services hinders its ability to act as frontrunner in the competitive land use arena, especially in comparison with agricultural land use systems (Sutcliffe et al. 2012; UNEP 2016).

Ethiopia's growing population and their demand for wood, especially fuelwood, resulted in the nationwide forest coverage to reduce over time to a current estimated 15% (MEFCC 2018a; Lemenih and Kassa 2014; Gebrehiwot et al. 2014). Subject to this destruction are many native tree species such as *Cordia africana*, *Hygenia abyssinica*, *Juniperus procera* and *Podocarpus falcatus* (Haile Gebremariam et al. 2009) and the ecosystems of which these trees are a part of (Lemenih and Kassa 2014).

Many endemic tree species are characterized by their slow growing nature, which contraries the fast-growing and dynamic forest-based sectors and markets (Teketay 1993; MEFCC 2018a). Consequently, already back in the 1890s, *Eucalyptus* trees were introduced to confront energy shortage problems that several regions were facing (Uhlig et al. 2017, p. 22). These fast growing trees produce wood dimensions optimal for charcoal production, firewood and construction poles within 4 to 5 years of growth (Kidanu et al. 2005). Plantations of exotic trees species have somewhat eased the pressure on natural forests. By now, some areas of Ethiopia are witnessing expanding total forest coverage due to the planting of exotic trees such as *Eucalyptus*. Nevertheless, planting such species are not without risks and have been linked to issues such as soil erosion, soil acidification and inherent imbalances to the ecosystem of endemic species (Uhlig et al. 2017, pp. 22–25; MEFCC 2017; Haile Gebremariam et al. 2009).

Overall, the challenge lies in preserving and restoring native forests while maintaining an inclusive development of the country's economy. Due to the apparent livelihood dependence of forest resources, the conservation of forests through a strict prevention of forest access is a debatable approach in Ethiopia. In search for more sustainable methods, alternative population-forest relationships emerged, especially exploring different forest use systems (Sutcliffe et al. 2012; MEFCC 2017). Participatory forest management (PFM) is a decentralized forest management approach that involves and intends to benefits local communities in the management of valuable forest resources and has been initiated in several regions of Ethiopia (Ameha et al. 2014).

Furthermore, plantations are increasingly supplying domestic markets with wood and thus, ease the pressure on remaining natural forests. Yet, these predominately consist of fast-growing species such as *Eucalyptus*, *Cupressus*, *Pinus* and *Acacia*, whereby *Eucalyptus* covers around 90% of total planted forests in Ethiopia (Lemenih and Kassa 2014; MEFCC 2018a). Valuable native tree species mainly grow in preserved natural forest but also to a lesser extent on communal grazing lands and small-scale farms. Local policy restricts the harvesting and transportation of endemic tree species by demanding obligatory permits. This, for one, discourages deforestation but also makes it more difficult for planted native trees to be marketed (Lemenih and Kassa 2014; Haile Gebremariam et al. 2009; MEFCC 2017).

Many local farmers traditionally incorporate indigenous tree planting within their farming systems (MEFCC 2017). Such agroforestry systems provide various economic and environmental benefits (Amare et al. 2019; Dessie et al. 2019). A technical report provided by the MEFCC (2017) states that small-scale woodlots and trees on farms will need to play a significant role in dealing with Ethiopia's domestic wood supply issues. Yet, a lack of incentives caused by poor market linkages, discouraging policy, limited supportive services and limited farmer knowledge, are causing a decline in farmland agroforestry systems with indigenous tree species (Amare et al. 2019; Haile Gebremariam et al. 2009). The development of smallholder farmers is key for enabling inclusive economic growth of low-income countries and a further promotion of agroforestry systems could enable this (Nambiar 2019; Raworth 2018).

Lemenih and Kassa (2014) stress the importance of market signals in driving the expansion of small-scale plantations. A high value-adding timber subsector in Ethiopia that has the potential to further disperse market signals and improve vertical coordination is the furniture sector (MEFCC 2017). As the demand for fuelwood will possibly slowly diminish due to Ethiopia's expanding power grid, the increasing demand will be significantly driven by the rising raw material needs of the construction sector and the increasing demand for wood-based products such as furniture (MEFCC 2017, pp. 9–10). The population's growing purchasing power is predicted to raise demand for wooden furniture products by almost 400% by 2033 (base year 2013) (MEFCC 2017, p. 13). Currently, the majority of demand is satisfied by small and medium sized enterprises (SMEs) (MEFCC 2017, p. 39).

Many Ethiopians, especially the younger generation in urban areas, are generating income by initiating or participating in small-scale furniture operations. These often hope to grow into a stable business that will support their livelihoods in a sustainable manner (Gebreeyesus et al. 2018, pp. 50–52). Yet, the entrepreneurial vision and efforts are often not rewarded with a prosperous business. As with many small-scale enterprises in developing countries, these face various development challenges which often situates them in a subsistent and poor survival state. MSEs often struggle to make profit due to infrastructural limitations, unfavourable market conditions, knowledge gaps or weak institutional arrangements. This hinders their sustainable development and thus, their ability to enable long-term and wide-ranged societal benefits (Haile Gebremariam et al. 2009; Gebreeyesus et al. 2018, pp. 118–120).

The widening supply gap additionally challenges the development of the furniture sector. In order “to meet the needs of Ethiopia's growing economy, a supply gap of 4.4 million cubic meters industrial roundwood will need to be closed” by 2033 (base year 2013) (MEFCC 2017, p. 12). The furniture production in Ethiopia mainly is supplied with indigenous wood such as *Cordia africana*, *Juniperus procera* and *Podocarpus falcatus* at certain ages of maturity, as these are

believed to have a higher quality. Yet these are becoming increasingly expensive and rare due to poor woodlot planning, insecure supply chains and deforestation, and is increasing the sector's dependence on imported lumber (Haile Gebremariam et al. 2009; MEFC 2018a).

The preceding review essentially shows the clashing circumstances of Ethiopia's increasing furniture demand and inability to provide sustainable supply sources of native timber. The wood value chains are clearly entangled in a variety of challenges. Solutions for the forests of Ethiopia need to be widespread and dynamic (MEFC 2018b). The overall development should be seen as an opportunity to simultaneously improve the forest resource base and linked forest-based sectors for poverty alleviation and rural development (Nambiar 2019). This work will primarily explore and investigate conditions and development potentials of a processing subsector, namely the wooden furniture sector.

2.2 Micro and small wood-based furniture enterprises in Ethiopia

Along with Ethiopia's population and economic growth came an expansion of the furniture sector. Registered large and medium furniture manufacturing firms increased their nation-wide percentage of value added from 1.55% in 1996 (CSA 1997, p. 25) to 8.32% in 2017 (CSA 2018, p. 22) amongst all large and medium sized manufacturing firms. For the same years, the number of establishments went from 75 (CSA 1997, p. 53) to 510 (CSA 2018, p. 53). Small-scale enterprises also made a significant jump in the development by increasing its percentage of value added from 4.26% in 2002 (CSA 2002, p. 16) to 17.44% in 2014 (CSA 2014, p. 19) and witnessing a growth in the number of establishments from 1,099 (CSA 2002, p. 16) to 17,693 (CSA 2014, p. 19) amongst all small-scale enterprises.

For the year 2014, the bundle of small-scale enterprises made a higher economic contribution than the bundle of large and medium-sized furniture manufacturers. Precisely, small-scale operations in the furniture sector made up an estimated 90% of the economic contributions of this sector (CSA 2018, 2014; MEFC 2018a). A study revealed that amongst MSEs, the furniture sector is one of the most important subsectors in major Ethiopian cities (Gebreyesus et al. 2018, xviii). The development of the furniture sector in Ethiopia is perceived to further follow this trend. Private household demand for furniture is expected to increase from 0.8 million m³ in 2013 to 1.8 million m³ in 2033. Adding to that, the commercial and public sector will enhance such demand by requiring furniture for e.g. offices, restaurants, hotels and schools (MEFC 2017, p. 81).

Yet, the persisting wood supply gap adds to the uncertainty of whether the demand increase can be met. For now wood flows into the furniture subsector from three supply sources, namely plantations (41.2%), imported logs (6.7%) and unspecified sources (52%) (MEFC 2017, p. 38).

The unspecified sources incorporate informally imported wood, PFM-sourced wood, illegal harvesting as well as informally sourced wood from smallholder woodlots or plantations (MEFCC 2017, pp. 25–26). Sourced logs typically either go through a trade route or through the formal sawmilling industry. The trade route often involves the use of daily labourer that pit-saw timber into semi-processed lumber which is then mostly sold to a local trader. Small-scale furniture makers then frequently purchase lumber boards from such traders (MEFCC 2017, p. 39; Haile Gebremariam et al. 2009, pp. 14–17).

The sawmilling route is dominated by larger mills, mainly operated under state owned agencies such as the Oromia State Forest Enterprise Supervising Agency (OSFESA) (Haile Gebremariam et al. 2009, p. 15). Raw materials sourced from such sawmilling operations also partially make its way to local small-scale furniture producers. Furniture demand can be differentiated by commercial and public furniture (16.7%), urban furniture (42.5%) and rural/low income furniture (40.8%) (MEFCC 2017, p. 39). The following figure visualizes a typical value chain linked to small-scale furniture enterprise in Ethiopia.

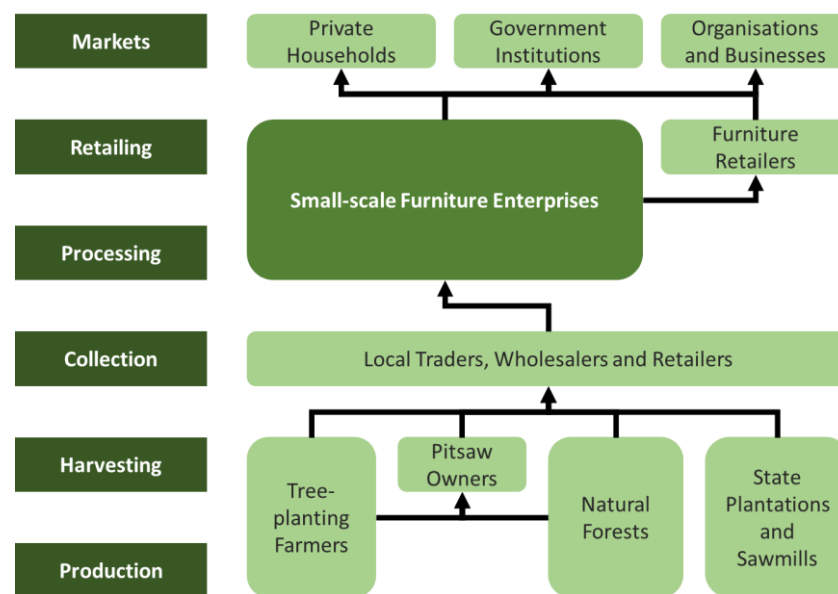


Figure 1: Map of typical small-scale furniture linked wood value chains of Ethiopia (self-depicted based on Haile Gebremariam et al. 2009 and MEFCC 2017)

Considering the above, it is clear that the collection of small-scale enterprises in Ethiopia plays a significant role in the configuration and development of the furniture sector and thus, they can be considered as influential players within forest-linked value chains. Currently, small-scale enterprises are exposed to a variety of challenges which hinders their development. Major challenges of manufacturing MSEs in Ethiopia were found to be the lack of adequate working premises, lack of access to credit, the fluctuating supply of electricity and the lack of business support services (Gebreeyesus et al. 2018, p. 119).

Main challenges specific to small-scale furniture producers include lack of sufficient initial capital, lack of smooth supply of raw materials and obstacles from government rules and regulations (CSA 2014, p. 37). Several studies have also observed that furniture producers have limited access to modern technologies, as these are often not available on local industrial supply markets but also cannot be purchased with the limited financial capital available. The furniture sector is also challenged with a shortage of qualified personnel. Many employees that engage in the business have limited to no training and perform based on past experiences. These aspects hinder an innovative and qualitative production which in turn would further increase market shares (Tafesse et al. 2016; Haile Gebremariam et al. 2009; Gebreeyesus et al. 2018; Getaneh 2014).

The current situation for many small-scale furniture enterprises is bleak and thus, requires upgrading. As a reaction to the apparent challenges, Ethiopian policy has initiated various efforts to support this sector through regulations and support programs. These will be discussed in the following segment.

2.3 Enterprise development policies in Ethiopia

As of 2005, the Ethiopian People's Revolutionary Democratic Front (EPRDF) launched a political action plan that incorporated the intention of rapid economic transformation within the realm of a 'development state'. A key component of the strategy was the promotion of MSEs (Chinigò 2019), which play an important role in reducing poverty in developing countries (Maksimov et al. 2017).

During the time of the former prime minister Meles Zenawi, Ethiopia dived into the transformative phase termed the 'development state'. Meles Zenawi argued that without a period of rapid economic growth, the nation would not "*achieve broad-based socio-economic development and at the same time to keep the plurality of 'people, nations and nationalities' together in the Ethiopia state*" (Chinigò 2019, p. 83). The strategy partially dissociated itself with the neoclassical paradigm, which proposes that state intervention in economic activities should remain minimal and limited to the protection of individuals and property rights. The neoliberal avenue theorizes that without much government intervention, markets would develop efficiently (Zenawi 2012). The problem with this avenue of development, especially for developing countries such as Ethiopia, was that this would drive self-interest maximizing rent-seeking rather than value creation. Without value creation, Ethiopia would lack a comparative advantage and thus, be trapped in a stagnating state of economic development (Waal 2013).

Thus, a certain degree of state invention was argued to be necessary to purposefully "*guide the private sector to make its decisions in a manner that accelerates growth by using a set of*

incentives and disincentives” (Zenawi 2012, p. 169). In order to achieve its aspirations, the ‘development state’ of Ethiopia embodied several transformative elements that intended to have impacts both in ideological and material nature. Local bureaucratic institutions and systems were significantly enhanced to facilitate three general elements:

1. Formalizing existing economic activities, creating new job opportunities, and enforcing the local structure of social and political control.
2. A policy emphasis on ‘group first’.
3. The socio-economic transformation of individuals’ attitudes towards savings (Chinigò 2019).

The elements essentially aimed to encourage and stimulate the formalization of MSEs and thereafter, encourage innovation and economic persistence (Chinigò 2019; Gebreeyesus et al. 2018). Public services facilitated a process that directed the unemployed to entrepreneurship. In order to allow for this process to be inclusive, the services prioritized the establishment of collective groups (Chinigò 2019). In legal terms, an enterprise can be established in form of a cooperative (Haile Gebremariam et al. 2009). This intended to embody a joint business project that would allow for interdependent accountability among members as well as enable a wider participation in the development process. The group aspect would further allow for better access to financial services due to possible internal accountability or ‘group collateral’ (Chinigò 2019, p. 84).

The Federal Micro and Small Enterprise Development Agency (FeMSEDA) established in 1998 is the main directorial authority for this development process (Haile Gebremariam et al. 2009). The organization is decentralized down to district and sub-city administrative levels, where unemployed gain access to the development services (Chinigò 2019; Gebreeyesus et al. 2018). A reform that took place in 2011 then further incorporated an emphasis on the role of technical and vocational education and training (TVET) institutions as crucial elements for the success of enterprise development. TVET colleges were set up throughout Ethiopia to create a technical workforce for certain growth sectors. The colleges targeted mainly low skilled and poor fractions of the population but eventually widened to target people with an more advanced educational background and thereby intends to further generate MSEs with a higher level of technical, managerial and marketing skills (Gebreeyesus et al. 2018). Furthermore, many existing manufacturing enterprises are given technical skill, marketing management, financial management, entrepreneurship and kaizen training. These are mainly provided free of charge by government offices and mostly last for one week (Gebreeyesus et al. 2018, p. 94).

Access to credit also is often considered a key success factor in enterprise development. In Ethiopia, regionally established Microfinance Institutions (MFI) are purposed to provide MSEs

with financial services. MSEs can gain access to micro-credits when fulfilling the specific requirements requested by the MFIs. It has been observed that both the trainings and the financial services are guided by the elements of the ‘development state’ by incentivizing group dynamics as well as saving habits (Chinigò 2019).

In 2016, the FeMSEDA was further branched into two focused agencies, namely the Federal Small and Medium Manufacturing Industry Development Agency (FeSMMIDA) and the Federal Urban Job Creation and Food Security Agency (FUJCFoSA). The FeSMMIDA focuses its efforts on further guiding sectoral development to industrial scale levels whereas the FUJCFoSA oversees the progress of manufacturing micro enterprises and non-manufacturing micro and small enterprises (Gebreeyesus et al. 2018). Manufacturing enterprises comprise enterprises engaged in textile and tailoring, leather and leather products, agro-processing, metal works and engineering, woodworking (including furniture production), as well as traditional artefacts and jewellery works (Gebreeyesus et al. 2018; Ali et al. 2016). Regulation No. 201/2011 (Federal Democratic Republic of Ethiopia 2011) differentiates micro and small enterprises as follows:

Table 1: Criteria differentiating Micro and Small Enterprises in Ethiopia (Federal Democratic Republic of Ethiopia 2011)

Level of the Enterprise	Number of people engaged	Total assets (ETB)	Total assets (USD) ¹
Micro Enterprise	≤ 5	≤ 100,000	≤ 3,400
Small Enterprise	6-30	≤ 1,500,000	≤ 50,994

Ethiopia’s enterprise development strategy also applies a cluster development program as a strengthening business development tool. Industrial clusters are general defined as a “*geographic concentration of economic activities within a certain sector producing similar and closely related goods*” (Ali et al. 2016, p. 2). Such an agglomeration intends to reduce costs due to logistical advantages, raise collective innovation and interfirm cooperation, and further enable the flow of knowledge and skills. The program is used as an incubation and growth tool that selects certain enterprises and provides factors of production such as land and machinery that otherwise are not adequately available and thus limit growth. Enterprises who are selected for a cluster are able to stay for 5 years before advancing production to a medium sized industrial scale (Ali et al. 2016).

Despite the number of initiatives put forward by the government, the socio-economic impact of the diverse development policies has remained limited (Chinigò 2019). It is criticized that enterprise “*success has largely depended on the closeness of beneficiaries to local administrative structures*” (ibid. p.82). Corruption, limited capacity, low quality, and the access complexity of

¹ On September 1st the exchange rate was 1 United States Dollar (USD) = 29.415163 Ethiopian Birr (ETB) or 1 ETB = 0.033996 USD

business development services are restricting factors (Haile Gebremariam et al. 2009; Gebreeyesus et al. 2018; Shumetie and Watabaji 2019). Recent debates have focused on whether or not such a pathway will enable continuous long-term development (Chinigò 2019).

This especially applies to sectors such as the furniture sector, which are closely linked to a regional natural resource base that is suffering from degradation. The uncontrolled development of such a sector may further accelerate environmental degradation and therefore has the potential to destabilize markets or increase a dependence on global value chains (Haile Gebremariam et al. 2009; MEFCC 2017). Little research has been done to explore sustainable upgrading strategies for this domestic sector. Therefore, this study will apply value chain analysis to initially identify conditions and development opportunities and following that, explore the potential of collective action as an upgrading strategy.

3 Theoretical framework

3.1 Value chain analysis

Macqueen (2008) mentions that in order to find out ways to further support small-scaled enterprises, an initial assessment of the existing value chains is required. Such an assessment is commonly referred to as a value chain analysis (VCA) and involves mapping chains of particular production sectors, quantitative and qualitative assessments looking at value distribution along the chain, as well as identifying potential points of intervention for upgrading the chain (Macqueen 2008). Over the past decades, studies of value chains have gone through several theoretical developments with the intention of fitting diverse contextual research settings (Trienekens 2012). This study will be guided by the conceptual approaches rooted in and related to value chain development research, as it intends to formulate a development strategy for small-scale furniture enterprises in Hawassa (Springer-Heinze 2018a, 2018b). Value chain development “*describes the process by which the value chain is enhanced through a variety of interventions*” (Poschen et al. 2014, p. 147).

3.1.1 The value chain structure

A value chain alone can be defined as “*the full range of activities which are required to bring a product or service from conception, through the different phases of production (involving a combination of physical transformation and the input of various producer services), delivery to final consumers, and final disposal after use*” (Kaplinsky and Morris 2001, p. 4). Each stage of the value chain adds value to a product unit through a variety of inputs (e.g. manpower, knowledge, raw materials) and eventually leads it to a final market. The entire chain is surrounded by an immediate environment which effects the chain through e.g. development services or rules and regulations (Poschen et al. 2014). Actors of value chains can be differentiated between direct

actors, which contribute value to the product in questions, and indirect actors, which have an external effect on the value chain constellation (M4P 2008; Tafesse et al. 2016). A broad configuration is depicted in the following figure.

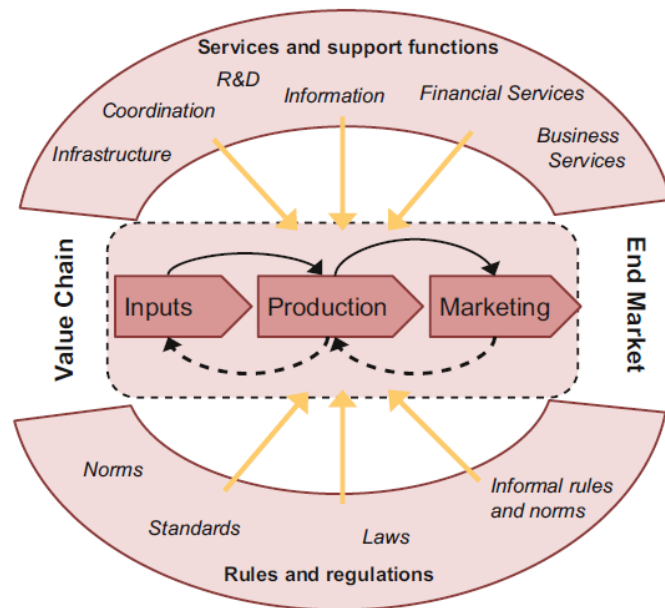


Figure 2: Constellation of a value chain (Poschen et al. 2014, p. 150)

3.1.2 Value chain analysis in developing countries

According to Trienekens (2012) a value chain analysis in developing countries consists of three scales, namely (1) the network structure of the value chain, (2) the value added production, as well as (3) the governance and bargaining position of the value chain actors, and related distribution of value added. The assessment of the network structure essentially aims to depict vertical and horizontal flows of a product unit. Vertical components display units shifting from the primary producer until the end-consumer or disposal stage, whereas horizontal components shows connections within the same value chain stage (Trienekens 2012). Mapping the network structure of a value chain can take on two analytical dimensions. First, the input-output structure illustrates the identified actors, their vertical and horizontal interrelationships, as well as the flows of related products (Trienekens 2012; Gereffi and Korzeniewicz 1994).

Vertical flows of the related product depends to a large extent on market channel choices, which are determined by internal factors such as product characteristics or marketing strategies, as well as by external factors such as the surrounding infrastructure or the access to price information. Horizontal network structures depict interdependencies of actors of the same value chain node (Trienekens 2012). The analysis of horizontal network structures is rooted in social network theory, thereby assessing factors that facilitate relationships, exchanged resources, social roles of relationships, as well as tie strength i.e. the measurable strength of a relationship. Such as assessment helps understand the intentions, benefits, and risks of

horizontal enterprise networks (Berrou and Combarrous 2012; Springer-Heinze 2018a). The second analytic dimension is the territorial structure, which depicts the geographic distribution of the value chain (Gereffi and Korzeniewicz 1994).

3.1.3 Value added

The value added production is the value that is created and added by each stage of the value chain (Springer-Heinze 2018a). Value added is *“the difference between the sale price of goods sold and the cost of material and supplies used in production”* (Klemperer 1996, p. 537), which can be influenced by a variety of factors such as market conditions and linkages, consumer willingness to pay, producer’s technical skills and production capacity (Trienekens 2012). An enterprise’s ability to capture a value gives indication on an actor’s innovativeness, market share, as well as production input efficiency (Springer-Heinze 2018a).

3.1.4 Value chain governance structure

The third element of the value chain analysis then portrays the governance structures that determine and regulate the nature of the value chain and the distribution of value added (Trienekens 2012). This includes internal governance set by the participating actors themselves as well as the governance that is external to the value chain but nevertheless has an immediate effect on it. External institutional arrangements include legal government frameworks or other standard setting organizations (Springer-Heinze 2018a). Internal governance structures are guided by *“informal rules which determine the behaviour of value chain operators beyond the realm of law”*, such as those determined by social norms of business networks (ibid. p.87).

In general, the given internal and external forces and rules govern the allocation of resources as well as the relationships among value chain actors and thus, influence the level and distribution of value added. The goals of assessing the value chain governance is to detect power concentrations and price setting mechanisms as well as to find out what drive resource flows and allocations (Kaplinsky and Morris 2001; Springer-Heinze 2018a; Poschen et al. 2014).

Furthermore, Gereffi et al. (2005) differentiates between five value chain governance types, namely (spot) markets, modular, relational, captive and hierarchy value chains. The types are distinguished depending on the degree of explicit coordination as well as the degree of power asymmetry along the value chain. The scale is best visualized as follows:

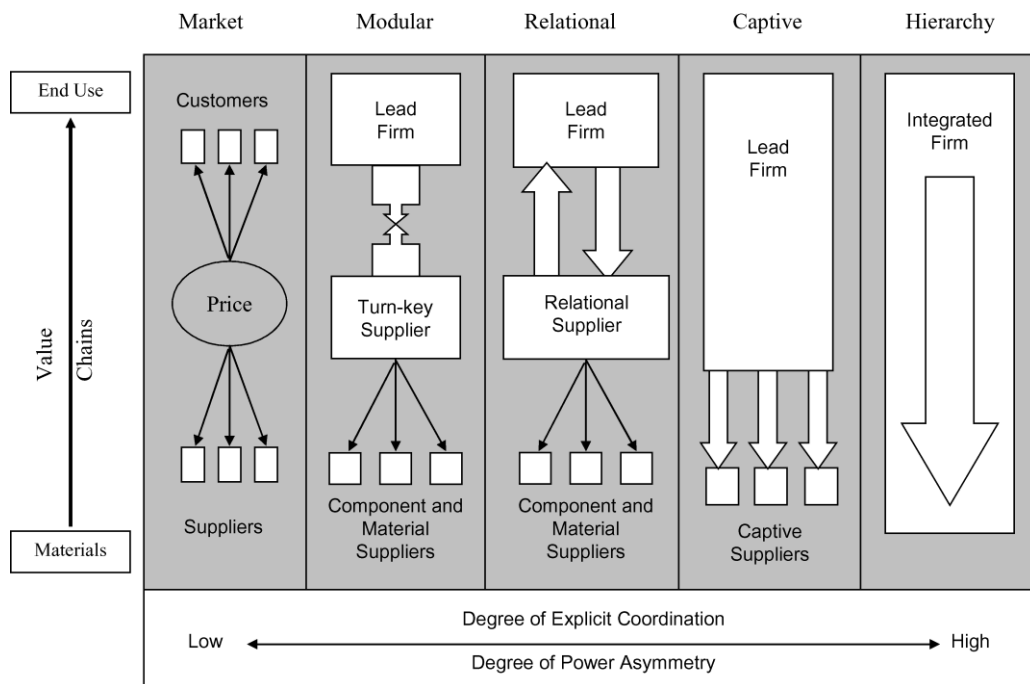


Figure 3: Scale of value chain governance types (Gereffi et al. 2005)

The governance types principally build on a transaction perspective by explaining the relationships between the actors of different value chain nodes and is therefore, more widely used to assess the vertical dimensions of the value chain. For example, if transaction costs are high, actors may steer towards a hierarchy type value chain, as integration or contracting may diminish transaction costs. Thus, describing transactions and governance structures of the value chain ultimately gives insight into how and why certain market channel structures emerge (Trienekens 2012; Gereffi et al. 2005; Springer-Heinze 2018a).

3.1.5 Value chain access structure

Adding to that, it is also important to investigate what enables and maintains the market access and income of value chain actors. This is where the theory of access developed by Ribot and Peluso (2003) comes into the picture. Generally, the theory of access considers “*the constellations of means, relations, and processes that enable various actors to derive benefits from resources*” (Ribot and Peluso 2003, p. 153). Specified resources include for example knowledge, labour, markets, capital, or social networks (Ribot and Peluso 2003). Market conditions in developing countries are commonly characterized by high uncertainties and risks (Trienekens 2012), meaning that various access can be decisive for an actor’s effective value chain participation. This perspective can also help explain the horizontal distribution of income across actors of the same value chain node. Actors engaged in similar value chain activities may diversify incomes depending on the degree of access to relevant resources (Ribot 1998).

3.1.6 Challenges of value chain actors

A further critical aspect that is also integrated in the value chain analysis process is following up on the precise challenges faced by the target value chain actors. Assessing the challenges is key for initiating a value chain upgrading strategy. In addition, in order to effectively identify possible areas of intervention, the root causes of these challenges need to be investigated, which can be done by linking constraints to governance structure or other value chain characteristics (Poschen et al. 2014; M4P 2008).

3.2 Value chain upgrading

Once this portion of the value chain analysis is complete, one may proceed to start conceptualizing a value chain development strategy. In the context of value chains in developing countries, value chain upgrading encompasses the overcoming of certain barriers (Kilelu et al. 2017; Poschen et al. 2014) and the subsequent shift to higher value-adding and more rewarding value chain positions (Bolwig et al. 2011). Value chain upgrading can occur by means of different upgrading strategies. Bolwig et al. (2011) identify three upgrading strategies that are particularly relevant for small producers in developing countries, namely improving the process or product of the same value chain node, changing and/or adding functions throughout several value chain nodes, and improving value chain coordination.

3.2.1 Process, product and functional upgrading

Improving the process within a value chain node generally means increasing process efficiencies or reducing negative externalities. On the other hand, improving the product means increasing the value of the product itself through e.g. innovation or quality enhancement. Functional upgrading occurs when a value chain actor extends its functional abilities by integrating production stages that would otherwise be carried out by downstream or upstream value chain actors (Bolwig et al. 2011).

3.2.2 Improving value chain coordination

Improving value chain coordination is appearing to be a useful approach, particularly for small-scale producers, and take shape either vertically, meaning between value chain actors of different stages, or horizontally, meaning among value chain actors of the same functional value chain node. A strong vertical relationship can facilitate stable communication streams. One tool is the establishment of contractual arrangements between buyer and suppliers, which enable secure supply streams as well as lower transaction costs. Nevertheless, forming strong, long-term vertical relationships is a gradual and often challenging process that may involve trust-building and a clear demonstration of win-win conditions. An eased accomplishment of strong vertical relationship often requires a strengthened and respected position in the value chain

(Coles 2011). Enhanced horizontal coordination can act as a precondition for better vertical coordination. For example, an established cooperative with multiple members will have a more respected image on the bargaining table than individual enterprise leaders (Bolwig et al. 2011).

Horizontal coordination can be described as *“the process of firms collaborating within a functional node to achieve a strategic balance between competition and collaboration”* (Coles and Mitchell 2011, p. 143). For small-scale operations in developing countries, acting collectively is way to overcome barriers that arise simply due to the nature of being small. Small-scale enterprises are often characterized by low capital, low profitability, poor skills, unsuitable production facilities, powerless political voices, and limited access to external support services (Kozak 2009; Coles and Mitchell 2011).

Group actions can overcome such disadvantages by pooling resources to share costs and risks, achieving economies of scale, sharing skills, sharing collateral for access to financial services, and advocating their position with a collective political voice (Biggs and Shah 2006; F-Jardon and Pagani 2016; Kilelu et al. 2017). The form in which value chain actors of the same node organize horizontally can depend on the regional conditions, the purpose of horizontal alliances, the scale and various other factors (Coles and Mitchell 2011).

Generally, such an approach can also be referred to as collective action, which is when a group of people or enterprises carry out a common action in pursuit of the group’s shared interest (Meinzen-Dick et al. 2004). Overall, the precise aspects of an envisioned horizontal form of collective action and the procedure to arrive at these aspects needs to be determined on the basis of a methodology adapted to the situation at hand (Springer-Heinze 2018a).

All in all, there is wide variation of approaches to upgrade value chains in developing countries. Yet, a prevalent measure to facilitate and achieve various upgrading is through collective action. Horizontal collective action further permits vertical coordination and functional upgrading, it facilitates skill sharing and thus product and process upgrading, or it groups individual actors to have a greater impact on the governance structure of the value chain (Trienekens and van Dijk 2012b). Due to its possible multi-functionality and its recognized relevance for small-scale operations in developing countries (Biggs and Shah 2006; Coles and Mitchell 2011; Macqueen 2008), this study will investigate the role it can play for the case at hand. As the subject is relatively recent, the following segment will first dive into a theoretical clarification and reflection of collective actions.

3.3 Upgrading with collective action

Humans are essentially social beings. The human capability to communicate and coordinate activities is central as to why *Homo sapiens* have arrived at such an influential and

overshadowing role in the natural world. Being effectively organized in larger groups is possible due to the human ability to imagine a collective purpose that takes place within fictitious boundaries (Harari 2014; Tyler 2011). A collective purpose or interest of a group of people is often achieved through actions coordinated within the structures of an organization. An organization can vary in many aspects such as type, shape and size (Olson 1965, pp. 5–8). Examples of organizational types include communities, businesses, social networks or military units (Harari 2014).

The term ‘collective action’ can be generalized as a common action that is carried out by a group of people in pursuit of that group’s shared interests. The coordination of such actions occur through an organization and when routinely applied over and over again, the manifestation of the collective action can become institutionalized (Meinzen-Dick et al. 2004; Macqueen 2004). A precise institutional form of collective action depends on specific context at hand. Yet, systematic methods for choosing and modelling collective action upgrading strategies are scarce in literature. Still, the precise description of collective action element can occur on the basis of passed learnings and success stories, which guide the modelling and real-time development process of a collective action upgrading strategy (Springer-Heinze 2018a, 2018b; Macqueen 2008; Macqueen et al. 2006; Coles and Mitchell 2011).

3.3.1 Collective actions for enterprise development in emerging economies

Studies on the topic of institutional forms of collective action among enterprise units in developing countries is also fairly limited (Ratten 2014). Researchers are often clouded by the sceptical presumption that collective actions among enterprises are driven by individual incentives and eventually result in conflicting interests. Collective action participants thereby seek “*unproductive rents rather than the common or public interest*” (Doner and Schneider 2000, p. 262), a logic emphasized by the works of Mancur Olson (Olson 1965; Doner and Schneider 2000).

Nevertheless, such a viewpoint oversees the case of collective actions as an instrument for economic development of small firms in emerging economies, which has been observed to result in positive outcomes for the common interest of groups as well as towards societies that are likely to be impacted (Doner and Schneider 2000). In order to gain focused insight into such aspects, collective actions will be further discussed within the generalized context of small-scale enterprises in developing countries. In general economic terms, the significance of organized collective action among enterprises in emerging economies is explained through market failure, social structures, state activity (or inactivity) as well as through the lens of the resource-based view (Guillen 2000).

In developing countries, collective action often emerges as a reaction to unfavourable conditions that are similar across numerous individual economic actors (Kilelu et al. 2017; Macqueen et al. 2006). The persistence of unfavourable conditions can sprout a collective purpose to organize and act. Market failures arise when entrepreneurs face difficulties in obtaining inputs from supply markets (Guillen 2000) or when struggling to sell products even though sufficient demand does exist (Shiferaw et al. 2008). Such failures emerge “*due to asymmetric information, high transaction costs and imperfectly specified property rights*” (Shiferaw et al. 2008, p. 25). Enterprises that are bound together can overcome market failures by institutionalizing mechanisms of e.g. sharing resources, orders, transport and information, thereby reducing transaction costs (Coles and Mitchell 2011, pp. 143–146; Guillen 2000).

State activity or inactivity can also be an initiator for groupings of enterprises. For one, governments can distribute subsidies for the formation of collective enterprises and therefore encourage their formation (Guillen 2000). The Ethiopian enterprise development policy, which incorporates micro-finance service plans, favours enterprises that are legally organized as cooperatives. Sole proprietorships have a harder time at gaining access to enterprise development services (Gebreyesus et al. 2018; Haile Gebremariam et al. 2009). On the other hand, state inactivity can inspire collective action to demand more effective economic framework policies or at least to install a platform through which small-scale enterprises can strengthen public-private relationships (Inkoom 2014; Guillen 2000; Coles and Mitchell 2011).

The resource-based view of realized collective action implies that enterprises proactively establish strategic alliances in order to gain access to resources, such as labour, knowledge or technology, as well as to repeatedly enter new markets. Alliances amongst enterprises through this viewpoint are induced by more opportunistic motivations to establish a more stable and competitive position on the market rather than reacting to market failures (Guillen 2000; Obeng 2019; Macqueen et al. 2006). Types of such alliances could include research & development contracts, joint production for large orders, joint marketing or other contract-based economic activities (Das and Teng 2000).

All in all, collective actions spawn as a result of a collective purpose, problem or opportunity. The incentives for the emergence of collective actions described above are frequently observed economic characteristics of developing countries (Nichter and Goldmark 2009). It plays an important role in the development of enterprises in such contexts and has already emerged in a variety of forms.

3.3.2 *Informal collective actions through networking*

Often, collective action takes place informally. Small-scale enterprises in developing countries are characteristically embedded in informal vertical and horizontal inter-enterprise relationships, which, as the proceeding discussion has revealed, are established due to resource limitations, social structures, economic survival, or market opportunities (Coles and Mitchell 2011; Nichter and Goldmark 2009; Biggs and Shah 2006). Informal relationships are collective actions in the sense that they facilitate a reciprocal exchange of resources. The collection and nature of such relationships contribute to an enterprise's social capital (Berrou and Gondard-Delcroix 2018). A higher social capital of an enterprise can potentially enable easier access to diverse assets, such as financial support, market information or technical skills (Trienekens and van Dijk 2012a).

The strength and nature of the inter-enterprise relationships at different stages of development determines its economic outcome and may be influenced by factors such as trust or social norms (Berrou and Combarous 2012). Generally, weak network ties (relationships) can facilitate the exchange of e.g. market information, whereas strong ties are more likely to enable risk sharing or the access to financial capital. This is because strong ties are built on high trust levels or strong social homophily, making it more likely for valuable resources to be exchanged. Nevertheless, there is a risk of being locked in static strong relationships, which has been previously observed in developing countries (Berrou and Gondard-Delcroix 2018; Nichter and Goldmark 2009; Berrou and Combarous 2012).

For example, Kebede (2018) finds that the strong social network embeddedness of informal enterprises in Addis Ababa, Ethiopia, has a negative impact on enterprise profit. This is attributed to several factors. For one, the built up dependence on these networks leads to a general contentment of the enterprise position and a subsequent inactivity towards business development. Second, the social value of the relationships limit profitability because of the selling at lower prices or the sharing of financial capital. Furthermore, strong relationships require a high investment of an informal enterprise's scarce resources, which ultimately stagnates enterprise development (Kebede 2018).

The described over-embeddedness of this case is also partially linked to Ethiopia's collectivistic culture and the high values placed on family and kinship networks. In essence, whether the nature of informal enterprises' networks has a positive or negative impact on enterprise development depends on the context at hand (Kebede 2018). Contrary to this case, Berrou and Combarous (2012) show that strong network ties among informal enterprises in Bobo-Dioulasso, Burkina Faso, result in greater economic outcomes. This is partially explained by the

network acting as resilience tool within the context of an instable economic environment (Berrou and Combarous 2012).

Overall, previous research has frequently suggested that having a well-established social network can have a positive impact on the development of small-scale enterprises in developing countries (Stam et al. 2014). Yet entrepreneurs are required to recognize the advantages and disadvantages of inter-enterprise relations and react to these according to their ambition (Nichter and Goldmark 2009). This means being able to evolve enterprise networks over the course of development and balancing relationships on the strength of ties spectrum to find an optimal combination (Berrou and Combarous 2012; Kebede 2017; Martinez and Aldrich 2011).

The small collection of literature that does exist on this topic generally agrees upon the need to steer small enterprises in the right networking direction and to support the formalization of this process (Kebede 2018; Macqueen et al. 2006; Biggs and Shah 2006; F-Jardon and Pagani 2016; Tuffa Birru 2011). Berrou and Combarous (2012) stresses the “*distinct need for institutions that foster interaction between entrepreneurs*” (Berrou and Combarous 2012, p. 26). Such institutions can take shape in the form of a business association, which have been observed to enable upgrading for small-scale enterprises in the past. Yet, the configuration and degree of success varies depending on the context, which is why these aspects need to be investigated (Doner and Schneider 2000; Macqueen et al. 2006).

3.3.3 *Collective action for enterprise development: Cases for business associations*

There are numerous exemplary cases of spawned institutional forms of collective action identified in literature. In Jepara, Indonesia, a hub for furniture production, the Jepara Small-scale Furniture Producer Association (APKJ) was formed as a reaction to the potential vulnerability of small-scale furniture enterprises in a global market arena as well as to their dependant networking relationship with domestic furniture brokers. The purpose of the association is to support the members in gaining access to financial credits and widening their market reach, which in turn would improve members’ potency and competitiveness in the global market. The association was initiated by a team of researchers, stakeholders and government extension units lead by the Centre for International Forestry Research (CIFOR), and established through a participatory action research (PAR) approach. This approach went through three loops that consisted of several phases (Purnomo et al. 2014).

For the first loop, a planning phase conducted an initial participatory stakeholder analysis and a detailed analysis of the regional furniture value chain. Second, the action phase incorporated comprehensive livelihood surveys of the target group, in which small-scale furniture producers expressed the need for an association as means for development. Following that, the project

requested and initiated the APKJ. To initiate the APKJ, representatives of small-scale furniture producers from sub-districts of Jepara were gathered to decide upon a vision as well as the institutional structure of the association (Purnomo et al. 2014).

This was followed by a monitoring phase, which involved raising the awareness of the association and creating a platform where members could discuss the association's development. A reflection phase then observed that the project sprouted an encouraging initiative that had already shown positive impacts on association members. The project then continued to go through two more loops of similar phases that aimed more at developing actors' capacity and the strengthening of association processes. In the end, through careful planning and a highly participatory approach that involved all interest groups, the project implemented a collective action upgrading strategy that has resulted in small-scale furniture producers to gain enhanced access to training programs, bank credits and new markets (Purnomo et al. 2014).

A further notable case is the one of associations among woodworkers in Kumasi, Ghana. In contrast to the APKJ, which developed through a facilitating extension program, several associations of woodworkers in Kumasi emerged partially through self-organization. Over many years, Anloga, a district of Kumasi, rapidly evolved to become a centre for informal and formal woodworking activities. Three associations represent the woodworkers located in Anloga, namely the Furniture and Wood Products Association of Ghana (FAWAG), the Woodworkers Association of Ghana (WAG), and the Anloga Carpenters Union (ACU). The FAWAG, for example, aims to promote the members' interests, represent these interests before relevant institutions, enable effective communication with stakeholders, as well as create new market linkages and stimulate export. It is led by an executive committee that is voted for every two years at a general assembly of association members (Inkoom 2014).

At one point, Kumasi city authorities were concerned with the fact that the magnitude at which production activities were taking place surpassed the spatial and infrastructural capacity of the neighbourhood Anloga. The sector's concentration resulted in accumulating sawdust pollution and the expansion of production on public spaces, which obstructed traffic and movement within the residential area (Inkoom 2014).

The different associations proved to be effective during the state's non-participatory attempt to re-locate many small-scale woodworkers outside of the urban setting. Woodworkers would be moved to unsuitable areas that lacked market access and required infrastructure development. Eventually, city authorities and associations collaborated to enable a smooth process of relocation. Also, the associations supported its members in the relocation process by providing land and other assistance during resettlement. The overall process was only effectively possible

due to the central representation of the woodworkers and the facilitated effective communication across interest groups (Inkoom 2014).

All in all, contrary to the assumption that collective actions emerge only to enable rent-seeking behaviour by the participants, some cases reveal that when implemented effectively and purposefully it can have a positive outcome for the common interest. Several valuable lessons learned from the cases presented give insight into the condition under which institutional collective actions can be productive to fulfil the common purpose. These have also been adequately summarized by Doner and Schneider (2000) in the context of business associations, who reveal that successful activities of associations take place under the conditions of strong *“internal associational capacities”* and the presence of *“external pressures to make productive use of that capacity”* (Doner and Schneider 2000, p. 262).

3.4 Features of functional business associations for enterprise development

3.4.1 *Internal associational capacities*

Features of strong internal associational capacities *“include high member density, valuable selective incentives, and effective internal procedures for mediating member interests”* (Doner and Schneider 2000, p. 263). In the case of Jepara, a high portion of furniture industry is made up of SMEs, meaning an association of the majority of these SMEs, which is what the APKJ is working towards, would represent a near monopoly of the sector (Purnomo et al. 2014). In the case of Anloga, the small-scale woodworking enterprises similarly make up the major share of the furniture sector and almost all are represented in a woodworking association (Inkoom 2014). In such cases, not being part of an association has been observed to be costly (Doner and Schneider 2000).

A strong common purpose is a key component of functional business associations. It should represent an interest that is shared among the potential members, thus aiming to improve the welfare both on an individual and a collective level (Macqueen et al. 2006). Valuable selective incentives or tangible benefits should be manifested in the collective purpose and selective to the association, thereby making it difficult to access the benefits individually and when not participating (Doner and Schneider 2000; Coles and Mitchell 2011). Gains should be able to directly support enterprise operations and outweigh overall participation costs (Springer-Heinze 2018b; Kazoora et al. 2006).

Yet, it is important that individual gains are perceived to be solely achievable through developing and strengthening the collective organization and the internal proactive interactions of its members. This strengthens the philanthropy among members and enhances member compliance with benefit distribution activities. Still, it is also important that tangible benefits

should take up an allocation procedure that enables a fair distribution across members (Doner and Schneider 2000; Macqueen et al. 2006).

For the case of Jepara, joining the APKJ gave members upgrading support, namely the aided access to trainings or financial credits, and wider market opportunities, as it organized spots in furniture fairs as well as distributed market information that would strengthen the small enterprises bargaining position (Purnomo et al. 2014). For the Anloga case, being part of a woodworking association enabled better effective communication with external institutions but also helped enterprises fortify their position on the international market by helping these to meet quality standards of the export market (Inkoom 2014).

Progressive features of effective internal procedures for mediating member interests have been observed to include voting systems, a degree of flexibility in adjusting the rules, transparency, as well as extensive interaction opportunities that allow for effective member consensus. Voting systems can be weighted by member size or go by a one member one vote scheme. For larger associations characterized by higher member heterogeneity, proportional voting could be more effective at recognizing the importance as well as neglect of certain member aggregations. Nevertheless, common interest are probably best represented and also encouraged by equal voting rights (Doner and Schneider 2000; Macqueen et al. 2006).

It is additionally important that all potential members are involved and play an influential role in developing association rules and overall norms, thereby further guaranteeing a wider member acceptance of the institutional architecture (Doner and Schneider 2000; Coles and Mitchell 2011). Transparency in association operations and association-related member activities is also consider essential, as it can reduce monitoring expenses and increase compliance with rules (Doner and Schneider 2000; Macqueen et al. 2006).

Finally, the association needs to provide room and opportunities for members to reach consensus in decision-making processes. Over time, this will allow for homogenous preferences to develop amongst members. Such a course is more straightforward with smaller groups (Doner and Schneider 2000). Also, building on pre-existing social networks and successful past experiences has been observed to be a constructive element for association success (Coles and Mitchell 2011; Agrawal 2001; Springer-Heinze 2018b).

In general, initial association development stages require trust-building and incentivized social networking, which induces and is followed by tolerance towards and perceivable benefits of heterogeneous network structures (Purnomo et al. 2014; Kebede 2017; Macqueen 2004). Heterogeneous member characteristics and skills contribute to the diversification of benefits that can emerge from relationships (Devaux et al. 2009; Agrawal 2001; Kebede 2017).

Ultimately, the precise and optimal rules and structures of an association highly depend on the context at hand and thus, can only somewhat emerge after an initial assessment of the status quo (Doner and Schneider 2000; Coles and Mitchell 2011).

3.4.2 Encouraging external factors

“External factors, especially competitive markets and government pressure, encourage associations to use their institutional strength for productive ends” (Doner and Schneider 2000, p. 261). Associations may form reactively or proactively (Macqueen et al. 2006). In the case of Jepara, the furniture association emerged as a reaction to member vulnerability during a turbulent period of the market (Purnomo et al. 2014). In the case of Anloga, associations initially formed due to a combination of pre-existing relationships and recognition of collective opportunities, but eventually benefited from the established central communication streams with local authorities (Inkoom 2014). Both cases substantiate that competitive markets strengthen the common purpose and therefore, the success of the association.

Government pressure, or rather support, is also a key external driving factor for association success. For one, governments often need to provide the incentives to initiate the formation of the association and subsequently support and monitor its development process. Incentives may emerge in the form of subsidies or market linkages (Coles and Mitchell 2011; Agrawal 2001; Doner and Schneider 2000). A process of third-party enforcement, support, and monitoring is precisely the case with the APKJ in Jepara. A group of government officials, extension agents, and researchers acted as the external facilitators of the association development process (Purnomo et al. 2014). Strong external facilitators have the potential to properly foresee challenges of enterprises that can be potential grouped and subsequently nudge and guide association formation and action (Macqueen 2008; Springer-Heinze 2018b; Devaux et al. 2009). Altogether, business association success factors are summarized in the following table.

Table 2: Association success factors (Agrawal 2001; Coles and Mitchell 2011; Doner and Schneider 2000; Macqueen et al. 2006; Purnomo et al. 2014; Springer-Heinze 2018a)

Success factors	Internal
	Focused common purpose
	Philanthropy, social goals
	Common values and interests among members
	Selective social and economic benefits
	Fair distribution of benefits
	High member density
	Pre-existing networks
	Member interdependence
	Heterogeneity of member endowments or skills
	Transparent and effective communication
	Voting system
	Participatory association development
	Flexible internal rules and structures
	External
	Initial external support
	Competitive and dynamic markets

4 Conceptual framework

The goal of this study is to envision and describe an institutional form of horizontal collective action, namely a business association, which has the potential to act as an upgrading strategy for small-scale enterprises in a developing country. For this, the study matches features of functional business associations identified in literature with the assessed status quo of the subject's value chain position as well as the subject's perception towards possible value chain upgrading strategies. This follows the value chain development procedure described by Springer-Heinze (2018a, 2018b), which underlines that elaborating value chain development strategies requires an assessment of the status quo as well as the identification of preconditions for successful cooperation mechanisms. Furthermore, the thesis thereby seeks to strengthen the position of Berrou and Combarous (2012), who emphasize the need for institutional forms of collective action among entrepreneurs, as well as to react to the appeal of Poteete and Ostrom (2004) to understand the functioning of collective actions in different contexts.

Coles and Mitchell (2011) note that the most appropriate collective action configuration *"depends upon the common objective as well as individuals' resources and knowledge and group rules and relationships"* (Coles and Mitchell 2011, p. 144). It is further underlined that the functionality of the collective action form is influenced by a variety of factors, such as the collective tangible benefits, the strength of the common purpose, acceptability, government support, the capacity of individual members, shared norms, effective institutional structures, external pressures, or successful past experiences (Coles and Mitchell 2011; Agrawal 2001; Doner and Schneider 2000).

The thesis will derive these features by combining background research, a situation assessment through means of a value chain analysis, as well as a moderate approach to participatory action research (PAR). The value chain is studied to gain key insights into the individual resources, knowledge, and existing relationships. Governance and access structures serve to further explain the nature of the subject's value chain position and differences between actors of the same value chain node (Trienekens 2012; Ribot and Peluso 2003).

The examined challenges will indicate the precise common objective of the upgrading strategy, thereby complying with the argument of Kilelu et al. (2017) which denotes value chain upgrading in emerging economies as a process of *“unlocking socio-technical [...] and institutional barriers”* (Kilelu et al. 2017, pp. 1104–1105). The diverse elements of the status quo assessment will enable matching the challenges to underlying systematic causes, which ultimately will serve to effectively guide the formulation of the upgrading strategy (Poschen et al. 2014).

The moderate participatory aspect is reflected by exploring the perception of enterprise leaders about upgrading desires as well as recommended forms of collective action (Purnomo et al. 2014). The empirical evidence is matched with the reviewed literature in order for the collective action vision to encompass a certain degree of relevance and appropriateness for the conditions at hand (Doner and Schneider 2000). The output, a modelled business association, is thus described in terms of its legal form, common purpose, institutional structure as well as the activities that would support the achievement of the common purpose, and essentially will serve to upgrade the small-scale furniture enterprises located in Hawassa, Ethiopia, to higher value adding positions. MEFCC (2017) precisely recommend the establishment of a business association among small-scale wooden furniture enterprise in Ethiopia.

Nevertheless, it is clear that the most appropriate form of upgrading only emerges through a strong participation of the relevant stakeholders (Purnomo et al. 2014; Melati et al. 2013; Springer-Heinze 2018a). Therefore, the final recommendations will consider the established collective action vision but allow for a degree of flexibility and deviation depending on collective desires that emerge during a participatory process of value chain upgrading. The conceptual framework is visualized in the following figure.

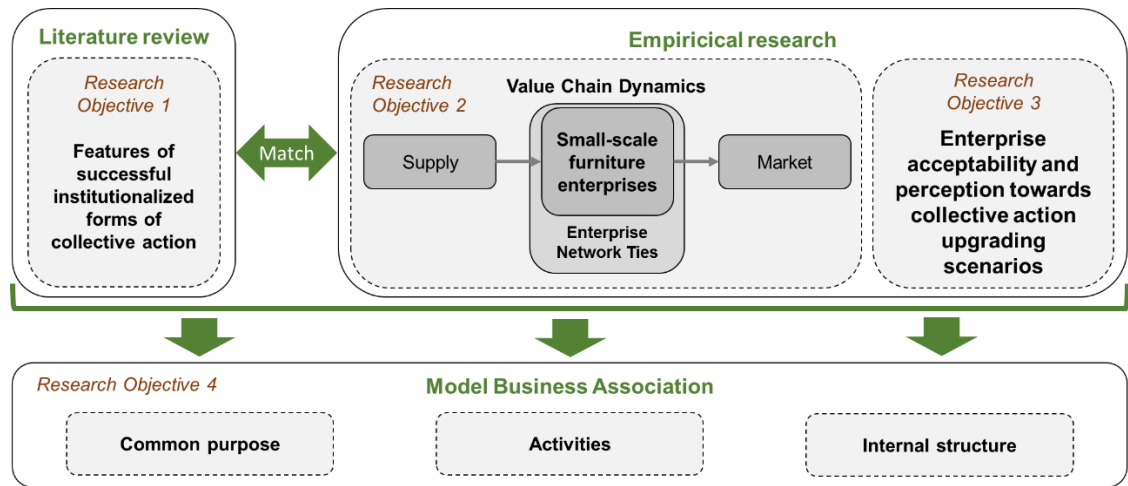


Figure 4: Conceptual framework

5 Method

5.1 Study site

The study site was located in Hawassa, which is the capital of the Southern Nations, Nationalities, and peoples' Region (SNNPR) state of Ethiopia. Here, there is a high presence of wood traders and small-scale wooden furniture enterprises (Degefu 2018). The SNNPR state hosts the highest share (ca. 30%) of Ethiopia's furniture manufacturing sector (Getaneh 2014, p. 48). The area around Hawassa has also suffered greatly from deforestation, partially caused by commercial wood extraction and resulting in Lake Cheleleka, a twin lake of Lake Hawassa, to dry out completely (Dessie and Kleman 2007).

Hawassa is located in the Sidama Zone and precisely, in the district of Hawassa Town. This district is made up of 8 sub-cities, for which 7 were chosen to be relevant for this study, namely Addis Ketema, Bahil Adarash, Haik Dar, Mehal Ketema, Menaheria, Misrak and Tabor. Each of these sub-cities are further divided into *Kebeles*, which is the lowest administrative level in Ethiopia (Grant et al. 2020; SNNPR City Administration 2017). This is depicted in the following map.

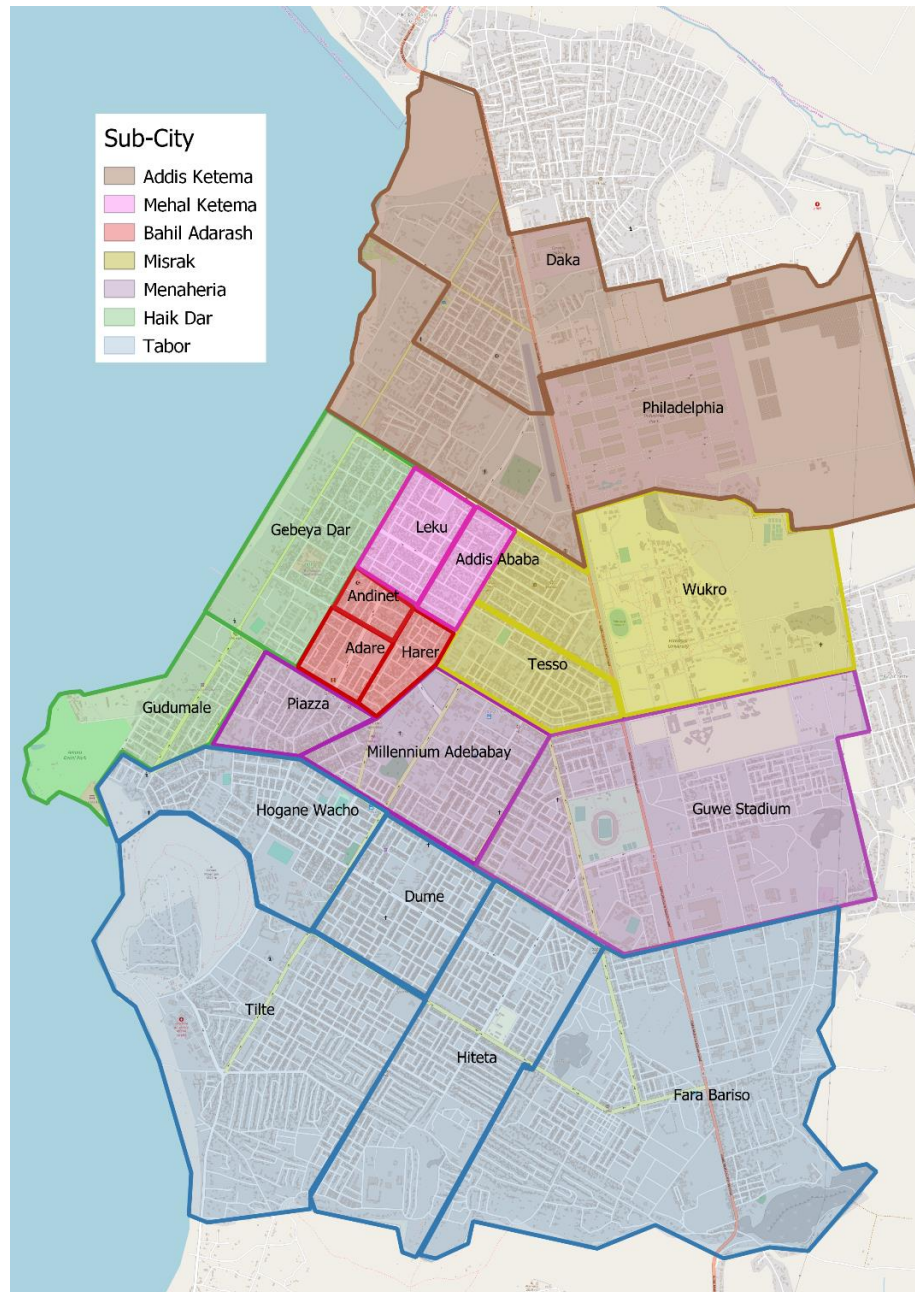


Figure 5: Map of Hawassa city, divided into sub-cities and Kebeles (self-constructed based on SNNPR City Administration 2017 and Grant et al. 2020)

In 2017, Hawassa’s urban population was estimated to be around 335,500. The population growth rate is estimated to be around 4% per annum. Around 65% of the population is estimated to be below the age of 25 (Grant et al. 2020). Adding to Hawassa’s general relevance as a study site, this research also is a contribution to the WoodCluster project. This project aims at assessing and finding solutions for supply and demand gaps of wood-based products in East Africa. It is a joint project lead by the Technische Universität Dresden (TUD), which partners with universities and institutions from Germany, Uganda, Tanzania, and Ethiopia. Chefasine, a Kebele of the Hawassa Town district, has previously been comprehensively studied for its *Eucalyptus* production within the frame of the WoodCluster project. A research gap of the region and a

knowledge gap for the project are wood-based furniture processing actors and their role within the forest-based economy (WoodCluster 2017; Munuyee 2018).

5.2 Research design

A survey approach is applied, with the unit of analysis being the small-scale wood processing enterprises operating in Hawassa. The study adopted an exploratory and descriptive research method and underwent three overlying research phases, namely pre-fieldwork, fieldwork and post-fieldwork phases. Prior to the fieldwork phase, a broad concept was established based on what was known of the situation in Hawassa and stated criteria under which the fieldwork would limit its exploration. The guiding purpose in this sense was to research wood processing sectors and assess existing or potential forms of collective action. Given the explorative nature of the study, the initial concept was revised throughout the fieldwork activities (Yin 2014).

Fieldwork activities were conducted following the order of (1) preparatory and guidance discussions with experts, (2) explorative surveys, (3) concept revision, (4) precise definition of the sample group, (5) trust-building with the sample group, (6) final surveying, (7) data input, and (8) revising and finalizing conceptual framework. Fieldwork took place between August and October 2019. On the basis of the data collected, the final theoretical and conceptual framework was developed during the post-fieldwork activities.

By combining the value chain analysis frameworks described by Trienekens (2012), Poschen et al. (2014), Springer-Heinze (2018a) and Kaplinsky and Morris (2001) with participatory action research (PAR) approaches described by Purnomo et al. (2014) and Bolwig et al. (2011), this research study will be guided by the following adapted research steps:

1. Determining the geographical distribution of the value chain linked to small-scale furniture enterprises
2. Give insight into the legal framework and external support services
3. Mapping the value chain
4. Characterizing value chain actors
5. Describing and assessing the networking structure of value chain actors
6. Calculating value-added of production
7. Detailing value chain governance and access structures
8. Identifying binding constraints and their underlying systematic causes
9. Capturing the upgrading desires as well as the acceptability and perception towards recommended upgrading strategies
10. Choosing and describing a 'best bet' upgrading strategy
11. Formulating a vision and strategy for sustainable systematic change

The sequence of these research steps goes from a macro-level to a micro-level, in order to first, give insight on the bigger picture of the value chain (e.g. external framework, value chain map)

and then, research the subject of interest in more detail (e.g. enterprise characteristics, networks) (Springer-Heinze 2018a). This procedure can be generally depicted as follows.

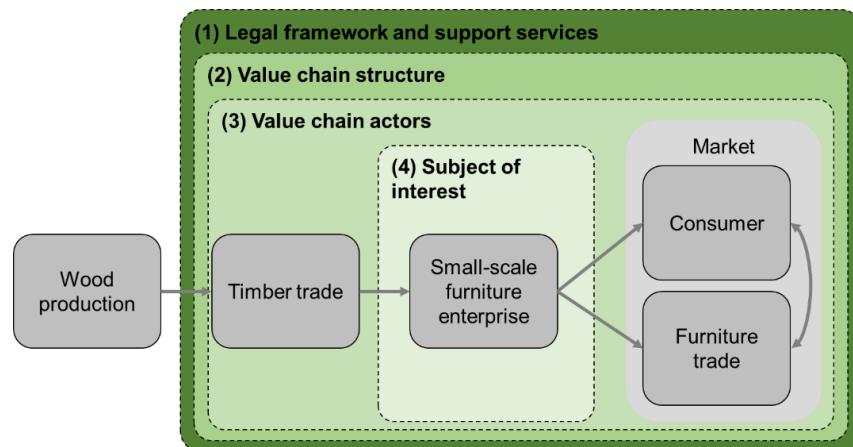


Figure 6: Analytic dimensions and procedure of the value chain for this research study (self-constructed on the basis of methods described by Springer-Heinze (2018a))

Value chains are complex and in order for these to be simplified, the analysis will set its focal point on the subject of interest (Kaplinsky and Morris 2001). For this study, the subjects of interest are the small-scale wooden furniture enterprises located in Hawassa, precisely informal, micro and small enterprises. The value chain analysis will be limited to the direct linkages these furniture actors have with other value chain actors. This includes upstream actors, such as wood traders and wholesalers acting as raw material suppliers, and downstream actors, such as end-users and furniture traders. Furthermore, the external framework which directly impacts the position of small-scale furniture enterprises will also be determined (Springer-Heinze 2018a).

The legal framework impacts the value chain position through taxation, laws, licenses or permits. The subjects of interest are assessed in terms of the horizontal and vertical structure on different dimensions, namely the input-output structure as well as the social network dynamics (Gereffi and Korzeniewicz 1994; Trienekens 2012; Springer-Heinze 2018a). The vertical structure depicts the streams and relationships of actors across value chain nodes, whereas the horizontal structure investigates this amongst actors of the same value chain node (Bolwig et al. 2011). Adjoining relationships of the subject enable transactions of inputs, such as raw materials, labour, land, capital, information, and outputs. Data on the cost structures and prices of such inputs and outputs was collected (Springer-Heinze 2018a).

For this study, simplified value added calculations can be determined at the furniture producer's point of purchase of the raw materials as well as at the point of sale of the end-product. Due to the actor-focused nature of this study, the value-added calculations serve more as an innovation indicator of the enterprises' skills, whereby the horizontal differences of value-added expresses skill diversity (Ribot 1998; Springer-Heinze 2018a). This contrasts the prevailing use of value-

added calculations, whereby it is instrumented to assess the value distribution across the whole value chain (Trienekens 2012).

Value chain governance and access structures dictate the set-up of the value chain and thereby explain the nature of the product transformation process, value-added, as well as benefit distribution. Value chain governance serves more to identify forces that structure the value chain vertically (Trienekens 2012), whereas the access structure explains structural differences across horizontal actors (Ribot 1998). The subject's value chain position depends on the relationships it has with various stakeholders as well as the surrounding external environment, which is primarily shaped by geographical and regulatory dimensions. (Ribot and Peluso 2003; Trienekens 2012; Springer-Heinze 2018a).

The entirety of the status quo value chain analysis helps understand the challenges faced by the small-scale furniture enterprises, which are conveyed through the perspective of the enterprise leaders. This ultimately serves to effectively guide the formulation of the collective action upgrading strategy (Bolwig et al. 2011; Melati et al. 2013; Poschen et al. 2014). The diverse elements of the value chain analysis are summarized in the following table.

Table 3: Indicators for the research objectives 2 (described indicators mainly based on Bolwig et al. (2011), Kaplinsky and Morris (2001), Springer-Heinze (2018a), and Trienekens and van Dijk (2012a))

Research objective 2	
Value chain analysis elements	Indicators
Geographical distribution	<ul style="list-style-type: none"> • Enterprise locations across Hawassa sub-cities and <i>Kebeles</i> • Locations of supply and demand markets
Legal framework	<ul style="list-style-type: none"> • Business licensing procedure • Legal enterprise forms • Tax structures and enterprise tax costs
External support services	<ul style="list-style-type: none"> • Enterprise establishment support procedures • Financial services • Skill training support services • Industrial cluster development program
Value chain actors and actor characteristics	<ul style="list-style-type: none"> • Legal forms • Development level • Enterprise leader gender, age, education, and work experience • Enterprises' number of full-time and temporary employees • Motivation behind enterprise establishment • Availability and characteristics of production and market space • Availability of financial credits • Physical assets of enterprises (machinery) • Intangible assets (teamwork, management and technical skills) • Characteristics of upstream and downstream value chain actors
Value chain activities	<ul style="list-style-type: none"> • Input acquiring process • Transportation routes • Furniture production steps • Market activities and channels
Vertical and horizontal network	<ul style="list-style-type: none"> • Horizontal network ties (social role, resources shared) • Strength of horizontal network ties (trust level, contact frequency, abundance) • Vertical network structures and facilitating conditions
Input-output structure	<ul style="list-style-type: none"> • Inputs (major wood-based raw materials, auxiliary materials, finishing materials, labour-time, energy) • Outputs (furniture product, by-products, waste)
Cost structures and prices	<ul style="list-style-type: none"> • Rent and energy costs • Employee wages • Purchase price of machinery • Costs of wood raw materials • Price of products
Value added of production	<ul style="list-style-type: none"> • Costs of wood raw materials • Price of products
Value chain governance structure	<ul style="list-style-type: none"> • Vertical value chain structure and differences
Value chain access structure	<ul style="list-style-type: none"> • Horizontal value chain structure and difference
Challenges	<ul style="list-style-type: none"> • Enterprise challenges and underlying causes

After assessing the enterprises' value chain, the study will proceed to investigate upgrading options. The discussion will commence by capturing the desires as well as the acceptability and perception towards recommended upgrading strategies (Purnomo et al. 2014). By combining the insights gained from the literature review with the results of the value chain analysis and the desires of the target group, a 'best bet' upgrading strategy is decided upon (Bolwig et al. 2011), namely institutionalized collective action in the form of a business association.

The literature review has made clear that a variety of factors impact the success of business associations in developing countries (Doner and Schneider 2000), which is why this study further incorporates a description of the upgrading vision in form of a business association model. The literature review will guide the discussion of an 'appropriate' form of upgrading by assessing the success and failure of past and present cases in similar conditions (Springer-Heinze 2018a). Several components of the overall situation analysis will contribute indicators for upgrading features to a greater extent and thus, for the sake of guidance, the following table summarizes which methods will contribute key inputs. Yet, in essence, the mix of quantitative and qualitative methods applied will contribute indicators across the dependent variables and collectively support the development of the outcome.

Table 4: Research matrix

Overlying objective: To envision a potential institutional form of collective action as an upgrading strategy for small-scale furniture enterprises in Hawassa, Ethiopia.			
Research objective 4	Research objective 1	Research objectives 2 & 3	
Variable	Factors	Indicators	Data analysis
Common purpose	<ul style="list-style-type: none"> • Focused and simple common purpose; • Reflect common interest and enable selective benefits; • Philanthropy, social goals; • Common values and objectives. 	<ul style="list-style-type: none"> • Existing network structure; • Challenges and underlying systematic causes (linked to market and government failures); • Desired upgrading scenario; • Perception towards collective actions (desired benefits, risks and facilitating conditions). 	Value chain analysis; Social network analysis; Content analysis; Participatory action research
Internal structure	<ul style="list-style-type: none"> • Low transaction costs; • Initial external support; • Proximity, high member density & small groups; • Pre-existing networks, social capital; • Member interdependence; • Fair distribution of selective benefits; • Operational transparency; • Committed and actively participating members; • Voting system; • Participatory development and flexibility in adjusting structure and rules. 	<ul style="list-style-type: none"> • Enterprise characteristics; • Geographic distribution; • Value chain actors (indirect and direct); • Production activities; • Products and market channels; • Value chain governance and access structures; • Legal framework and support services; • Value added; • Existing network structure; • Challenges; • Perception towards collective actions (desired benefits, risks and facilitating conditions). 	
Activities	<ul style="list-style-type: none"> • Heterogeneity of endowments; • Effective operations for achieving common purpose; • Evolving procedures; • Effective conflict resolution procedures. <p>(Agrawal 2001; Coles and Mitchell 2011; Doner and Schneider 2000; Kazoora et al. 2006; Macqueen et al. 2006; Purnomo et al. 2014)</p>	<ul style="list-style-type: none"> • Activities are guided by the common purpose and implemented by the internal structure; • Enterprise characteristics; • Production activities; • Products and market channels; • Governance and access structure; • Indirect and direct value chain actors; • Legal framework and support services. <p>(Bolwig et al. 2011; Coles and Mitchell 2011; Kaplinsky and Morris 2001; Macqueen 2008; Poschen et al. 2014; Purnomo et al. 2014; Springer-Heinze 2018a, 2018b; Trienekens and van Dijk 2012a)</p>	

5.3 Sampling technique

This study focuses on a precisely defined subject of interest, namely small-scale wooden furniture enterprises located in Hawassa. Small-scale enterprises include informal, micro and small sized enterprises (MSE) and will be more strongly studied in a combined manner rather than assessing differences amongst enterprise levels. Still, in some instances, the development levels will help assess difference in enterprise characteristics. The criteria to select enterprises for this research follows Ethiopia's legal categorization of informal, micro and small enterprises:

- **Informal enterprise:** Not yet licensed
- **Micro enterprise:** People engaged ≤ 5 ; Total assets in Ethiopian Birr (ETB) $\leq 100,000$ ETB
- **Small enterprise:** People engaged 6-30; Total assets ≤ 1.5 million ETB (Federal Democratic Republic of Ethiopia 2011)

Due to the political situation at the time of fieldwork, it was not possible to obtain a list of registered enterprises from sub-city administration offices. Therefore, a multistage-sampling procedure was applied, which included a random-walk (Kebede 2017) and a subsequent snowball sampling technique (McCormick and Schmitz 2001). Before sampling commenced, an expert was consulted to identify hotspots of furniture production in Hawassa. Three sub-cities were identified to have a high number of small-scale furniture producers, namely Haik Dar, Menaheria, and Tabor.

The subjects for the interviews were the leaders of the enterprises. Enterprises that were legally cooperatives identified a leader internally whereas with sole proprietorships the business owner was identified as the enterprise leader. Specific days of the week were selected for the application of random-walk sampling in certain sub-cities. For example, Haik Dar was a market district and on market days a high supply of wood enters the market. On these days, enterprise leaders were usually not available because of supply runs. In highly clustered areas, every second to third enterprise on a road was approached at random for an interview. In less concentrated areas, every identified enterprise was approached for an interview.

Once an initial sample was available, the process was narrowed through snowball sampling (McCormick and Schmitz 2001). As part of the first survey, enterprises were asked to identify other relevant small-scale furniture enterprises located in Hawassa (Berrou and Combarous 2012). The interview also inquired on the structure of the vertical value chain, which allowed an identification of upstream, downstream and external value chain actors that would be subject to questioning at a later stage. These actors included timber traders, furniture traders, medium-scale furniture enterprises, government representatives and a representative of the Omo Microfinance Institution (OMI). The following table summarises the sample size and actor distribution.

Table 5: Sample distribution, sample size and data collection method

Actor	Sample size	Data collection method
Furniture MSEs (leaders)	54	1 st In-depth interview
Furniture MSEs (leaders)	40 (out of the 54)	2 nd In-depth interview
Lumber wholesalers	4	Key informant interviews
Furniture retailers	2	Key informant interviews
Government officials	2	Key informant interviews
Microfinance institution	1	Key informant interview
Medium-sized enterprises	3	Key informant interviews

5.4 Data collection

5.4.1 Primary data collection

The research conducted primary data collection in an exploratory manner, meaning the collection phase endured several stages. First, a more comprehensive overview of the situation in Hawassa was made through field observations as well as preparatory discussion with experts from partnering universities of the WoodCluster project. The primary contact persons enabled to widen the network to extension units of the small-scale manufacturing sector in Hawassa, which includes the furniture sector. It was soon clear that there were many small-scale wooden furniture enterprises spread out through the urban scape of Hawassa. In some areas, the enterprises were in purposely constructed clusters, whereas in other areas, such as the market district, enterprises spontaneously agglomerated (Yoshino 2011).

The sectoral clustering of wooden furniture enterprises hinted a presence of horizontal collective action. At this point, initial explorative interviews and open discussions were required to enable a concept revision and a precise definition of the target sample group. Subjects for this were 4 randomly selected woodworking enterprises in different sub-cities of Hawassa at different economic development stages. Furthermore, an extension agent linked to the enterprise development branch of Hawassa city authorities was subject to inquiry.

This phase also allowed for questionnaires to be tested and revised. With results of these initial interviews, it became clear that no strong and institutional forms of collective actions were in place, thereby steering the study's concept into the direction of assessing the potential role of specified forms of collective action. A collection of key informant interviews, in-depth interviews and field observations were used to collect data that support the core results of this thesis. For all the interviews, an interpreter was used to translate the questions into either Sidamo or Amharic. The responses were then translated into English and noted down.

The applied in-depth questionnaires were semi-structured, allowing the subjects to openly express relevant issues and enabling the interviewer to somewhat deviate from the interview structure, thereby enabling a refined flow of the interview. This enabled a more precise compilation of information, as the interviewee stays focused on relatable topics (Thomas 2011).

These in-depth interviews were split into two parts for the purpose of trust-building. This was recognized as essential due to on-going political unrests linked to the Sidama independence referendum as well as the potential competitive circumstances of the furniture sector. Building up trust further ensures that data, especially sensitive information such as finances or political stances, is more accurate (Hammett et al. 2015).

A total of 54 furniture enterprises were interviewed for the first part of the in-depth interview, which mainly collected qualitative data (See Table 17 in appendix). This sample was reduced to 40 furniture enterprises for the second part of the in-depth interview, due to various reasons, such as irrelevance to the study purpose, low compliance and willingness, or time deficits. The second part collected a mix of qualitative and quantitative data (See Table 18x in appendix). The structure and elements of the questionnaires aimed to collect the variables given in Table 3 and 4.

Key informant interviews were conducted to substantiate data collected through other means as well as to gain a more complete understanding of the status quo conditions of the small-scale furniture enterprises. These were semi-structured and were often accompanied by open discussions. They aimed to collect both quantitative and qualitative data. The structure and content depended on the interviewee. The sample size for these interviews was 12, consisting of 4 lumber wholesalers, 2 furniture retailers, 2 government officials that represented the enterprise development agency, 3 medium-sized furniture enterprises as well as 1 key informant from the OMI. These interviews in particular gave insights into the external framework structures, including the legal framework and business development services, as well as the direct upstream and downstream configuration of the furniture enterprises' value chain.

Field observations were similarly applied to substantiate data collected through other means but was also used to capture activities taking place along the wood-based furniture value chain. These included observing horizontal and vertical networking activities, production activities, trading and transportation activities, sales and bargaining methods, as well as relevant objects. Often these observations initiated open discussions with actors engaged in the activities.

5.4.2 Secondary data collection

Secondary data was sourced from literature as well as from several interviewees that provided relevant documents. At the Hawassa City administration office, the job opportunity/creation & enterprise development director provided documents that described the enterprise development services relevant for small-scale furniture enterprises as well as provided a list of enterprises located in Hawassa that had access to these development services. A complete list of furniture enterprises was available on a sub-city administrative level but was not retrievable

due to the political situation resulting in many directors of sub-city administrative offices being discharged, creating a responsibility vacuum. This had an impact on the sampling technique described previously.

Another important component of the data collection process was the literature review. An array of literature exists on the matter of 'collective actions among small-scale enterprises in developing countries' (Marques 2017; Nichter and Goldmark 2009; Kebede 2018). Yet, institutional and sustainable forms of such collective actions have been insufficiently researched (Doner and Schneider 2000; Barry and Wilkinson 2011; Ratten 2014). Thus, to develop customized interventions (Nichter and Goldmark 2009) and construct an institutionalized model of collective action for the case at hand (Berrou and Combarous 2012), the self-constructed conceptual framework was strongly built on literature that studied collective actions on different levels and across varying scientific terms.

Various databases were used for the collection of relevant literature, including 'Science Direct', 'SpringerLink', 'Google Scholar', the Rhine-Waal University's 'Katalog PLUS' as well as 'ResearchGate'. Important keywords during the search were 'collective action', 'business networks', 'business associations', 'social capital', 'network ties', 'coopetition', 'collaborative entrepreneurship' or 'interfirm cooperation' in combination with 'developing countries', 'micro and small enterprises', 'emerging economies', 'manufacturing enterprises' or 'economic development'. This core theoretical construct was linked to methodological approaches and applications of 'value chain analysis and upgrading', for which relevant literature was also sought. Once several initial pieces of literature were available, the review continued with snowball sampling, thereby tracing referenced literature. This mainly enabled a collection of academic journal articles but books, government reports, reports from research institutions and other grey literature were also used.

5.5 Reliability of data

In order to allow for consistency in the data collected, a mix of methods and sources was used to collect data. Open discussions and questionnaires with indirect actors of the value chain, such as government extension agents and sector experts, allowed for data to be verified. Furthermore, the main subjects were studied through multiple data collection methods, namely in-depth interviews, field observations, frequent open discussions, or documentation. The literature review partially confirmed the data collected by assessing similar studies (Yin 2010).

An additional important component was the interview approach. It aimed to build up a sense of trustworthiness between interviewer and interviewee. Dividing the in-depth interview into two parts enabled the subject to feel a sense of familiarity and comfort throughout an interview

session. The semi-structured approach of the questionnaires also gave the interviewee the ability to deviate to topics that strongly represent their point of view. At times the questionnaire thereby facilitated open discussion, allowing for a sense of balance among interview participants. Trust-building is key for the reliability of data (Crawford et al. 2017; Hammett et al. 2015). All in all, the mix of data collection tools and sources allows for the data to be adequately triangulated (Yin 2010).

5.6 Data analysis

5.6.1 *Qualitative content analysis*

Qualitative data collection was a key component of this explorative study and thus comprehensively collected. For this data, qualitative content analysis was used to analyse the transcribed texts of the conducted interviews. Qualitative content analysis follows a systematic review and subsequent interpretation of qualitative data. The steps for this analysis were: (1) transcribing interview material; (2) categorizing and selecting relevant material; (3) building a coding frame; (4) segmentation; (5) main analysis; (6) presenting and interpreting the findings (Schreier 2015).

MaxQDA was used to categorize and code the relevant data sets. Codes were selected on the basis of the variables of interest for the elements of the applied value chain analysis. For the analysis, the interview material was scanned for word and phrase repetitions and patterns, and subsequently summarized. Quotations from interviews were used to strengthen described data patterns. The data was also compared with patterns in secondary data as a mode of affirmation.

5.6.2 *Statistical evaluation*

Descriptive statistics were used to assess the quantitative data. For this, Microsoft Excel was used as an analysis tool. The data is mainly presented as frequency distributions or described using the arithmetic mean. Frequency distributions are classed in categories or class intervals and graphically displayed in bar or line charts. For some quantitative data, the arithmetic mean was calculated and categorically clustered into relevant enterprise characteristics in order to somewhat show correlations between chosen variables (Kazmier 2003). Sample sizes differ in some cases because two different interview sessions were conducted with the enterprise leaders, whereby the second interview session had a lower sample size.

5.6.3 *Geographical distribution*

During fieldwork, the GPS locations of the enterprises and other relevant locations were collected using a GPS device. Mapping was done using the software tool QGIS. GPS data was inputted into QGIS and then mapped on an OpenStreetMap template of the city of Hawassa.

5.6.4 *Value chain mapping*

For this study, the value chain will be visualized in a vertical arrangement and will portray direct actors, indirect actors, supporting actors, and activities (Springer-Heinze 2018a).

5.6.5 *Horizontal and vertical network structure and characteristics*

The value chain map shows the vertical linkages between the direct actors across value chain nodes, symbolized with an arrow. Horizontal relationships take place amongst actors operating within the same value chain node. The furniture enterprises' vertical linkages with suppliers and buyers are qualitatively assessed in terms of their frequency, trust, and embeddedness. Horizontal linkages are assessed by adapting the 'strength of tie' method applied by Berrou and Combarous (2012). Assessing relationships, i.e. network ties, essentially is a feature of social network analysis theory (Berrou and Combarous 2012).

Rather than assessing the individual relationships, the enterprises were asked to judge the collection of personal ties with other furniture enterprises. The content of network ties is judged by three dimensional elements, namely the social role, exchanged or shared resources, and the strength of the tie. The social role was categorically divided into business tie, friendship or kinship, proximity (e.g. neighbour), or professional homophily (Berrou and Combarous 2012), and exclusively selectable by the questioned enterprises. Business ties are established in order to gain economic benefits, whereas professional homophily relationships are established out of a wholesome interest in one another's profession. Exchanged or shared resources were categorically divided into diverse common enterprise assets and activities, particularly market and production premises, receivable product orders, supply purchasing, labour, raw materials, product components, financial capital, machinery, technical skills, or market information, for which the enterprise could indicate multiple options.

The strength of tie is measured with multi-item scale summarized into an index score. The included scalable items were the level of trust, the frequency of interaction, as well as the number of personal network ties with other furniture enterprises. The level of trust was scaled on a Likert scale of 1 to 5, with 1 being "I do not trust them at all" and 5 being "very trustworthy". The frequency of interaction was similarly scaled on a Likert scale of 1 to 5, with 1 being "not frequent" and 5 being "very frequent". The number of personal network ties were scaled with the 5 numerical categories "0", "1-5", "6-10", "11-15", and ">15". Including the number of personal ties within the strength of tie score allows the score to represent the strength of the sum of personal ties.

The three elements are combined through averaging and presented in the form of an index labelled 'strength of tie score'. Subsequently, by converting it into a percentage, it is expressed

for each enterprise on a single scale of 0 to 1, former being the weakest and latter being the strongest tie score (Berrou and Combarrous 2012; Meyer 2011). A cross-tabulation of the content of tie elements is used as a basis for analysing the actor's horizontal relationships, whereby the social role and the exchanged or shared resources are presented in terms of their combined average frequency of occurrence. The strength of tie is presented in terms of the average strength of tie score in reference to the social role and the resource shared.

5.6.6 Quantifying the value chain

The value chain was quantified in a simplified manner by focusing on a single functional unit, namely the production of a wooden chair. For this, data on wood-based input raw materials as well as production times was collected. The enterprise leaders were asked to indicate the quantity, dimensions, as well as type of lumber preferably used for the production of a single chair. With the estimated dimensions, for which width, length and height were given in meters (m) and centimetres (cm), a volume was calculated in cubic metres (m³).

The volumes were converted using air-dry wood densities (moisture content 12%) given in the African Wood Density Database of the World Agroforestry Centre. According to this database, *Cordia africana* has a wood density of 0.46-0.64 g/cm³ and *Pouteria adolfi-friedericii* a wood density of 0.45-0.545 g/cm³ (Carsan et al. 2012). The median of these values was used for calculating the weight of the input raw materials in kilograms (kg). For inputted medium-density fibreboards (MDF) a density of 750 kg/m³ was used for conversion (Plymaster 2010).

5.6.7 Economic analysis of the value chain

Several cost structures were investigated, precisely employee wages, purchase prices of machinery, paid taxes for 2018, as well as energy and rent costs. Rent costs incorporate expenses for production and market spaces. These were averaged for the analysis. The simplified value added calculations were conducted on the basis of the quantified value chain data. Cost data was collected for the utilized input raw materials and price data was collected for the chair end-products (Springer-Heinze 2018a). Simplified value added was calculated using the following equation.

$$Value\ Added = P - \sum_{i=1}^n (RM_i \times Q_i)$$

Whereby P is the price of the end-product, RM is the cost of a piece of the required wood-based input raw material i , and Q is the quantity of the wood-based input raw material i required for the production of a single output unit. Some enterprises were not able to provide the sought data, and were excluded from the calculation, thereby reducing the sample size for value added data to 34. A comparison of the simplified value added across horizontal value chain actors

indicates skills in pricing, bargaining, innovation, and resource efficiency. Clustering the average value added into enterprise characteristics somewhat displays correlations between selected variables (Springer-Heinze 2018a; Kazmier 2003). For all cost and price data, a currency conversion rate from the 1st of September 2019 of 29.415163 Ethiopia Birr (ETB) per US Dollar (USD) or 0.033996 USD per ETB was applied (XE 2020).

5.6.8 Challenges and upgrading options

The individual enterprises were questioned on their distinct problems and challenges. These were open questions which allowed for the enterprise leaders to openly express and elaborate on the key issues and obstacles that confront enterprise development. The collection of challenges and expressed general desires from the initial interview sessions were used as basis for identifying upgrading options.

The enterprises were also asked to openly express their upgrading desires and after, to give their perception towards specified potential collective action upgrading options. Recommended potential collective actions included industrial clustering, enterprise cooperatives, and business associations, and were initially generally discussed in terms of their potential benefits, risks and desired facilitating conditions. The results are clustered into mentioned issues and depicted terms of their frequency of mentioning. Content analysis of these served to examine the challenges in more detail.

5.6.9 Choosing, describing and evaluating a 'best bet' upgrading strategy

In order to detail a potential upgrading scenario, this segment initially summarizes key findings from the proceeding status quo assessment. Key challenges but also success stories are wholly discussed with references to their potential underlying systematic causes. This leads to a reflection on what precisely needs to be improved in order to enable an upgrading of the small-scale furniture enterprises in Hawassa. Furthermore, the enterprises' perception towards the recommended forms of collective action give a wider insight into their willingness to participate in such future upgrading pathways.

A recollection of success stories that apply upgrading mechanisms to successfully overcome similar challenges are matched with the issues at hand to formulate a more precise upgrading scenario, namely a business association. The association is then detailed in terms of its key characteristics and visualized in a model. Key characteristics thereby closely consider the circumstances of the potential subjects and success factors discussed in literature.

6 Results

6.1 Geographical distribution

The questioned enterprises were distributed across five sub-cities of Hawassa, namely Menaheria (35%), Tabor (28%), Haik Dar (22%), Addis Ketema (11%), and Bahil Adarash (4%) (54 respondents). Wood supply mainly came from the Old Market ('Gebeya Dar') and the New Market ('Addis Gebeya'). Enterprise leaders and lumber wholesalers and traders stated that lumber probably originated from small-scale tree-growers located throughout the Sidama zone, including the districts ('*Woreda*') of Chere, Bensa, Aroresa, Aleta Wendo, as well as south of Hawassa Town. Yet, other sources were also said to be likely. Furniture traders mostly sold their products at the furniture market in Haik Dar but also often sold products in neighbouring cities and towns such as Shashamene, Tulla, and Arba Minch. The distribution of the questioned enterprise is depicted in the following map of Hawassa.



Figure 7: Distribution of questioned furniture enterprises in Hawassa

6.2 Legal framework and external support services

Small-scale enterprises in Hawassa mainly interact with the local government branches of the Ministry of Trade and Industry (MoTI) on different administrative levels, including *Woreda*, *Kebele* and sub-city levels. The MoTI is supported by the FeSMMIDA and the FUJCFoSA² (Chinigò 2019; Gebreyesus et al. 2018). The interaction is required for business licensing and the access

² Federal Small and Medium Manufacturing Industry Development Agency (FeSMMIDA); Federal Urban Job Creation and Food Security Agency (FUJCFoSA)

to development support services. Open discussions with enterprise leaders and relevant authorities as well as legal texts (Federal Democratic Republic of Ethiopia 2016) reveal that when an individual or a group aspires to form an enterprise, one must go to the local *Woreda* administration offices and request to license a business. This commences a process whereby government officials evaluate documentation and the available assets and subsequently approve or disapprove the business license request based on a precedent of whether or not the individual or group is eligible and capable to run the type of business in question. If noticed that the potential entrepreneurs require development in certain aspects before the business is formalized, these might be linked to development services such as trainings.

Once licensed, the enterprise is listed in a tax registry. Sub-city level tax officers collect taxes from the registered enterprises. There are several types of business organisational structures for which the taxing procedure differs, including sole proprietorship (SP), public limited company (PLC), shared companies, partnerships, and cooperatives. Development services are also organized by sub-city offices, but in coordination with promotion offices at *Woreda* and *Kebele* levels. The sub-city offices have branches and officers in charge of enterprise formation and development (Chinigò 2019; Haile Gebremariam et al. 2009). This study found the most popular forms for small-scale furniture enterprises to be sole proprietorships and cooperatives.

For sole proprietorships, no standardized financial accounting system is required and auditing is rare. This and the simple registration and licensing process are reasons for the popularity of this legal form amongst emerging small-scale enterprises (Haile Gebremariam et al. 2009). Taxes are usually estimated by the tax officer and collected on a door-to-door basis. Cooperatives, or sometimes referred to as group enterprises, have gained popularity since the implementation of Ethiopia Micro and Small Enterprises Development strategy. This is meant to guide mainly unemployed individuals through an enterprise establishment process by providing access to diverse development services, such as trainings or microfinance provisions. An emphasis of this strategy is on changing the *“individual attitudes towards saving (‘saving first’), as well as inculcating the primary of group work over individual work (‘group first’)”* (Chinigò 2019, p. 86). Cooperatives are legally required to consist of at least 10 individuals (Federal Democratic Republic of Ethiopia 1998), but this was observed to vary on regional administration levels (Haile Gebremariam et al. 2009).

To determine the development level, government agents follow a procedure for establishing the new enterprise on the basis of registered unemployed individuals. An enterprise development director of the Hawassa city administration framed the process as follows.

On the sub-city administration level, unemployed persons are selected from an unemployed registry (unemployed persons go to sub-city administration office to register as unemployed). Together with the unemployed one of 5 sectors are chosen for them to work in. These include manufacturing, construction, service, urban agriculture and trade. Wood working falls under the category of manufacturing. Once the sector is selected, groups are formed. These groups consist to 30% of persons with experience or training in the sector and 70% of persons that have no experience of training in the sector. Initially the group undergoes vocational training (technical training specific to sector) and general orientation support (given across sectors). The members are provided jobs to build their capital. Once savings have reached a minimum specific to the sector, they can receive credit from micro finance institutions linked by the government. For the woodwork sector, the government provides 90% of capital, 10% are savings. Land for operations and marketing are provided by the government. Nevertheless, a minor rent fee has to be paid. The government provides 20 stages of support, which are continuous throughout the development of the enterprise. The maximum funding provision by the government is 1.5 million ETB. Beyond this capital level, enterprises are expected to operate independently from government funding as medium sized enterprises. Once they reach this status (“graduation”), they are linked with investors such as the development banks that further enable the access to financial support.

— **Director of the Hawassa City FUJCFoSA**

Development agents used the criteria shown in Table 13 of the appendix to oversee and measure enterprise development progress. Important aspects were thereby the enterprises’ total assets and number of employees, which put them in six development categories, as shown in the following table.

Table 6: Key development criteria for wood and metalworking enterprises (sourced from an internal document provided by the development agent)

Criteria	Absolut beginner or informal enterprises	Beginner micro enterprise	Developing micro enterprise	Beginner small enterprise	Developing small enterprise	Medium enterprise
Development level	1	2	3	4	5	6
Total assets (ETB)	< 50,000	50,000-75,000	75,000-100,000	100,000-500,000	500,000-1,500,000	>1,500,000
Total assets (USD)	< 1,700	1,700-2,550	2,550-3,400	3,400-16,998	16,998-50,994	>50,994
Number of employees	≤ 5			6-30		>30

A challenge in the monitoring procedure highlighted by the key informant was that many participants already engage in other economic activities or jobs that are not specified, thereby taking away the chance of persons in more desperate situations to find jobs. Furthermore, many misuse the financial capital provided for business development purposes by, for example, building their own private house or buying a vehicle. A closer and more effective auditing and monitoring process thus needs to be in place. For now, development agents use the following

criteria for enterprise development levels in order to track the development progress of a supported enterprise.

The enterprises questioned for this study were ‘absolute beginners’, micro and small enterprises and thus, fell into the first five development levels. The following table shows the tax levels observed for the questioned enterprises with respect to their legal form as well as their development level.

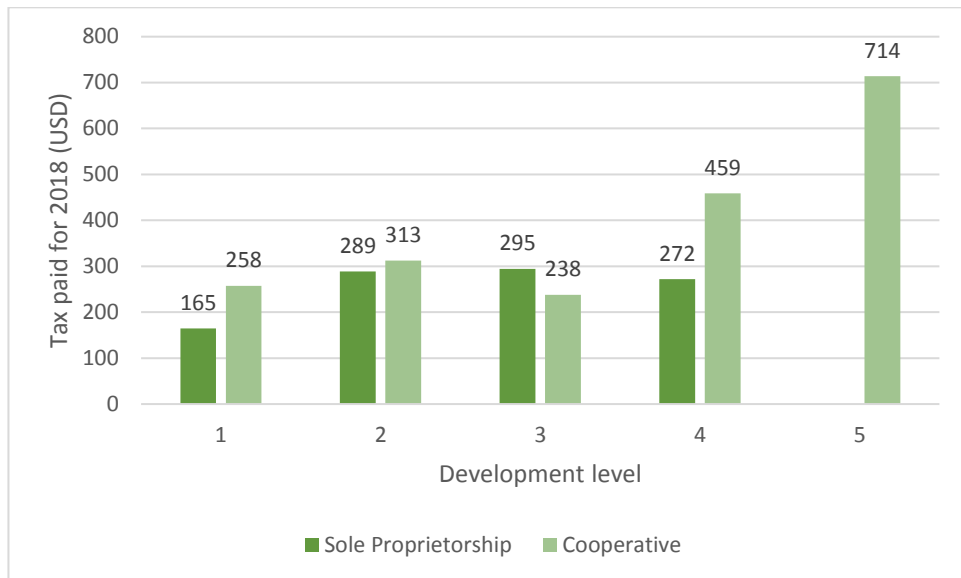


Figure 8: Average 2018 annual enterprise tax with reference to development levels and legal enterprise status (40 respondents)

Legally established enterprises can also gain access to development services through an application process for which a business license is the minimal requirement. Cooperatives are meant to have a better chance at receiving government support services but SPs are also eligible. Enterprises can go to sub-city administration offices and inquire about possibilities to gain access to trainings or government-provided production sites in industrial clusters.

Only around 15% (of 54 respondents) of the enterprises questioned in this study received a training that was applied for or offered by development agents. These were all short trainings ranging from 1 to 2 weeks in length and taught basic soft skills such as financial management or marketing. In most cases, the training receivers were cooperatives who were subsequently able to implement a form of financial accounting, which helped to estimate payable tax levels more effectively.

In Hawassa, there are three industrial clusters set up by the government for the purpose of enterprises development. One of these was intended for enterprises engaged in textile and leather operations whereas the other two were aimed at manufacturing enterprises, such as furniture or metalworking enterprises. These sectors are targeted due to their perceived

potential to make high contributions to Ethiopia's economic growth. One of these clusters was intended for small-scale operations, whereas the other for medium-scale operations. For this study, two small-scaled furniture enterprises operating in one cluster and two medium-scaled enterprises operating in another cluster were interviewed.

The small-scale enterprise industrial cluster is intentionally located outside of the urban centre of the city in the Guwe Stadium *Kebele*. The cluster consists of SP and cooperative enterprises engaged in somewhat similar manufacturing operations, such as metalwork and woodwork. Access to the cluster was gained through an application process. The enterprises had to move their production from the city centre to the industrial district in which the cluster was located in. Within the cluster, enterprises had access to wide production halls and were able to lease machinery from the government. Regular trainings were also provided. Product orders mainly came from government institutions.

The notion behind these industrial clusters was to enable enterprises to develop their production capacities and profits through the benefits of development services and the spatial concentration of enterprise engaged in similar activities. After 5 years of operating within the cluster, enterprises were planned to move to another site to continue their operations on an enhanced scale. Yet, some of the enterprises questioned have been in the cluster for more than 5 years and, as long as taxes and rent was paid, there appeared to be no concern that they could be asked to leave.

For microcredits, development agents would redirect enterprises to local microfinance institutions. In Hawassa, one of these is the Omo Microfinance Institute (OMI). Here, enterprises can receive a microcredit after fulfilling certain requirements. As a first step, one opens a savings account, on which 10% of the desired loan has to be saved. The loan requires the applicant to provide one of the four types of collateral:

- a. Site plan – This is land, property and/or physical assets that the individual or enterprise owns.
- b. Salary – When an employed individual applies for a loan, his or her regular salary can act as a liability.
- c. Bonding – This is when grouped individuals agree to be liable for each other's credit obligations.
- d. Government guarantee – This is where the government acts as one's guarantor.

The interest rate is 18% for males and 17% for females and follows a decreasing repayment model, meaning, for example, that if one pays the principle rate fully in the first month, the rate will decrease in the following month. If the rate is not repaid in a timely manner, a penalty payment would be imposed.

6.3 Value chain map

Based on the semi-structured interviews with the enterprises and the key informant interviews with diverse value chain actors, the value chain of the small-scale furniture enterprises in Hawassa can be depicted as follows.

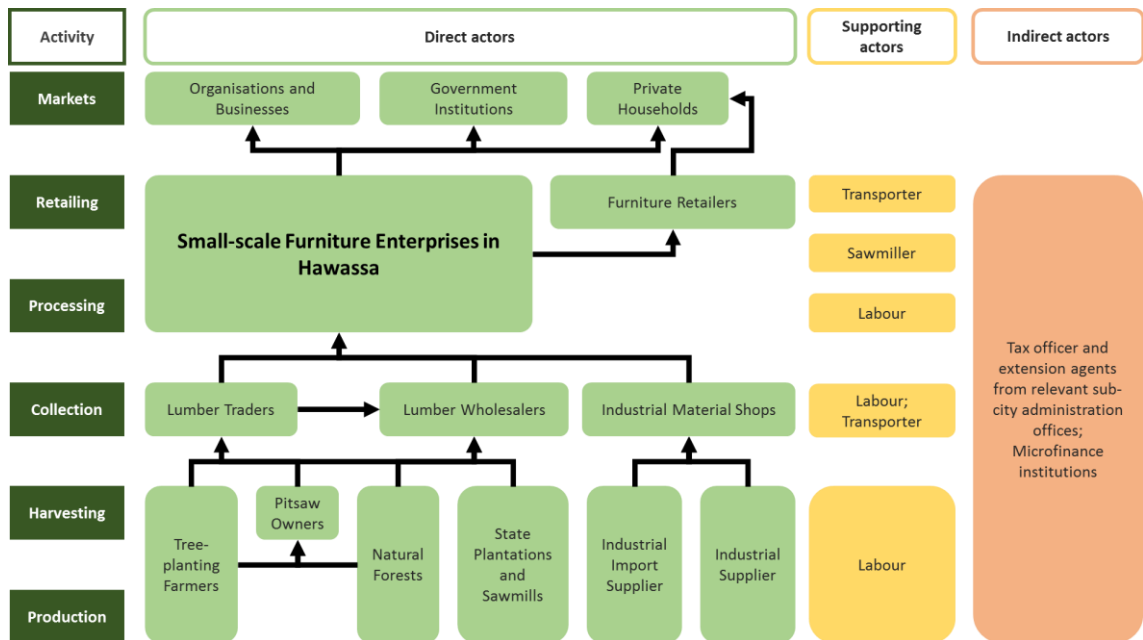


Figure 9: Value chain map linked to small-scale furniture enterprises in Hawassa (self-constructed based on Haile Gebremariam et al. (2009))

Native wood was either purchased from central lumber markets in Hawassa or was delivered by wood traders to the production site. The latter was predominately observed amongst more developed enterprises. The issue with receiving wood supply through this avenue was that the buyer did not have much supply variation to choose from and would have to accept the quality of the wood received from the trader. At lumber markets, the enterprises had the option to assess many types of wood that varied in terms of the tree species, quality, age, dimensions or colour. This allows the enterprise to find a more suitable raw material for specific furniture end-products. The two centralized lumber markets were observed to be the “Old Market” located in the Haik Dar sub-city and the “New Market” located in the sub-city of Tabor, where semi-processed lumber was sold by wholesalers.

Wood was often mentioned to originate from smallholder tree growers and farmers spread throughout the Sidama zone, but often the origin was unknown by the wholesaler. Imported processed lumber could be purchased at several industrial material shops in Hawassa that specialized in selling imported materials. These also sold imported MDF, chipboards or plywood. Other input materials, such as nails, glue, machinery, sanding paper, paint, varnish, lacquer, hand tools, domestically produced MDF, plywood and chipboards, as well as diverse furniture components (e.g. metal parts, hinges, handles or hooks) were purchased at local industrial

material shops. In two cases, furniture producers used wooden pallets as their raw material for furniture. The pallets were assumed to originate from the Hawassa Industrial Park.



Figure 10: A centralized lumber market in Hawassa selling semi-processed lumber of different tree species

Native wood from lumber wholesalers and traders is supplied as pit-sawn semi-processed lumber. Some lumber wholesalers have small-scale sawmilling machinery, which could be used to refine the lumber into suitable sizes and shapes. Several small-scale sawmilling actors were concentrated around wood markets, who purchased semi-processed lumber and processed, stored and sold it in refined forms. The wood from small-scale sawmillers was said to largely be purchased by actors from the construction sectors or end-users that used it for private housing construction. Furniture producers mostly had their own table saw machinery. The ones that did not, processed the semi-processed lumber at small-scale sawmilling enterprises or at other furniture enterprises. Depending on their relationship with the actor, this would take place at a price or free of charge. Lumberboards were transported in larger quantities on trucks and in smaller quantities on donkey carts. Donkey carts and their handlers waited at wood markets and could be hired by enterprise leaders to transport purchased boards to the production site.



Figure 11: Lumber wholesalers loading a donkey cart for transport (©Hintz)

Furniture enterprises made a variety of different products and indicated that they rarely continuously produced the same models of furniture. The products were frequently suited to customer order specifications. Some enterprises had picture catalogues from which customers could choose products from or get an impression of previously made products. In some cases, enterprises had a marketplace where products were displayed and sold. Products included beds, tables, chairs, cabinets, closets, sofas, cupboards, and shelves. Customers were predominately observed to be end-users. Furniture was also purchased by retailers, often in larger quantities, and was brought to furniture markets in Hawassa, Shashamene or other nearby towns and cities. In rare cases, enterprises received larger orders from churches, organisations or government institutions to make office or school furniture. Many by-products accumulated during the production of furniture, especially chip-wood, sawdust or unusable wood parts. Chip-wood and sawdust was often collected in sacks and sold to traders or end-users, who would use the dust for ground beddings or firewood. Left over wooden parts were also either sold or distributed in the neighbourhood to be used as firewood.



Figure 12: A small-scale furniture enterprise in Hawassa, Ethiopia

6.4 Enterprise characteristics

The furniture enterprise leaders that were subject of the in-depth interviews consisted of 94% males and 6% females. This shows that work in this sector is prevalently conducted by males. Only 1 of the female enterprise leaders actively participated in the furniture production process. Furniture production is physically labour-intensive and may be traditionally seen as an activity more suitable for males (Melati et al. 2013).

Most furniture entrepreneurs (46%) were between the age of 31 and 40, followed by entrepreneurs between the age of 25 and 30 (32%), over 40 (13%), and under 25 (9%). It was observed that 48% of enterprise leaders attended secondary school until grade 10. Also, 32% completed 12 years of school, whereas 18% did not continue their education past primary

school. Only around 15% of the respondents received short government-provided TVET trainings, which taught soft skills such as financial management (Gebreyesus et al. 2018).

The entrepreneurs that completed a longer TVET training (up to 3 years) mostly received technical training specific to their sector, namely woodworking (22%), but also other fields such as construction or metalwork (7%). The technical trainings were provided up to 81% by government institutions but also to a lesser extent by aid or church organisations (19%). Around 20% of the respondents had a university degree and studied law (3 respondents), accounting (2 respondents), human nutrition, pharmaceuticals, chemistry, gender equality or film production (1 respondent respectively).

Thus, overall only 22% of the respondents had technical training in the field of woodworking. The remaining 78% relied upon past experiences that were gained through a previous employment at another wood-based furniture enterprise. On average, enterprise leaders gathered 8.4 years of experience in the woodworking sector before starting their own business. Demographic characteristics of the furniture enterprise leaders are summarized in the following table.

Table 7: Demographic characteristics of respondents (54 respondents)

		Frequency	Percentage (%)
Gender	Male	51	94%
	Female	3	6%
Age	18-25	5	9%
	25-30	17	31%
	30-40	25	46%
	40 and above	7	13%
Education	No Education	1	2%
	Grade 1-4	2	4%
	Grade 5-8	8	15%
	Grade 9-10	26	48%
	Grade 11-12	17	31%
Higher education	TVET Woodworking	12	22%
	TVET other	4	7%
	University graduate	11	20%
	Short TVET	8	15%

Around 67% enterprise leaders started their business on the basis of previous work experience at another furniture enterprise and without technical training in woodworking. Several university graduates had a side-job in the sector to finance their studies. After their studies, these decided to start their own furniture business either because of the lack of job opportunities in their studied field or due to their persisting passion in woodworking. One enterprise leader describes the experience as follows.

After my studies in human nutrition and my side-job at a large furniture enterprise, I had enough money to purchase a jigsaw cutter machine and with that I started my informal business. Initially I was only producing small wooden animal figure. Now, after 3 years in the business, I am making kitchen tables, coffee tables, beds, chairs and shelves.

— 28 year old leader of a micro-sized furniture enterprise

Others were in the wood trading business for a while before functionally upgrading into furniture production. In 3 cases, the family's property previously rented their space to furniture producers and eventually took over the business. The majority of TVET graduates worked at a larger furniture enterprise and collected work experience before starting their own business. Yet, in 2 cases TVET graduates started their business right after graduating. In 3 cases, the enterprise leaders had no experience in the furniture making business but perceived the sector as a business and investment opportunity and thus, a way to make a living with higher income.

Previous woodworking employees also had a similar motivation when starting their own business, as the pay was low as an employee and therefore hoped to make a better income with their own business. The sector is generally perceived to be growing and to be a source for stable income. Enterprise leaders started off with only very little financial capital, from which they purchased essential hand tools and hand machinery such as cutters. The starting capital generally came from personal and family savings or accessed through network ties that were established while working as an employee at a furniture enterprise.

We (5 cooperative members) were previously working at a larger woodworking enterprise but were not satisfied with our wage, which is why we started our own cooperative business. We started with a small contribution from all members to rent machines and land. The initial capital was just 6000 ETB (203.98 USD). Once our financial capital grew, the enterprise was able to purchase its own machine and further grow its capacity.

— 28 year old leader of a small-sized furniture enterprise

The average number of full-time employees of the questioned enterprises was 2.4 whereas the average number of temporary employees was also 2.4 at the time of questioning. Temporary employees were involved when enterprises received large or numerous orders, which could not be produced with the capacity at hand. Thus, the total number of employees fluctuated greatly over time as orders were generally unpredictable. The employee statistics are a timestamp representation of the enterprises at the time of questioning. The distribution of total number of employees can be represented in the following figure.

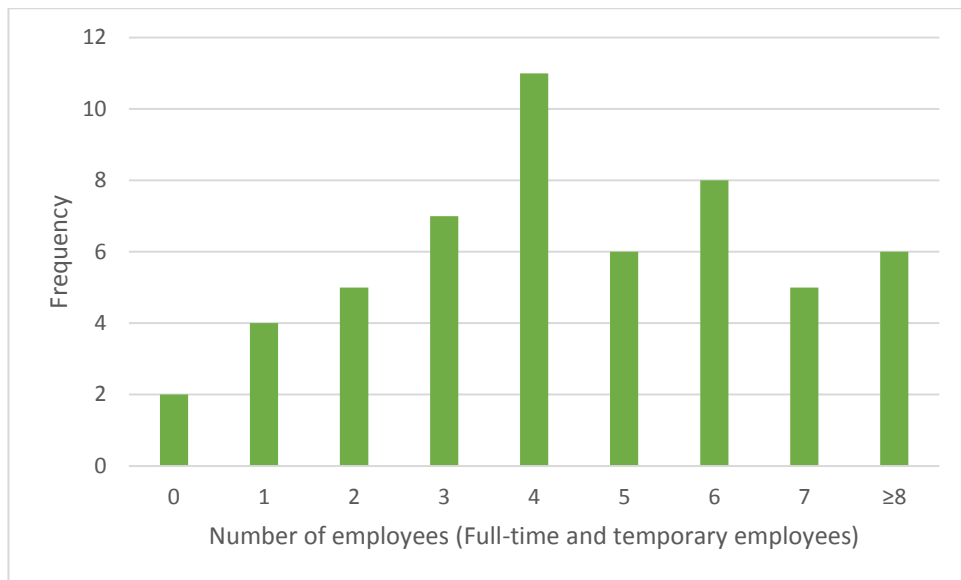


Figure 13: Frequency of the number of employees at small-scale furniture enterprises in Hawassa (54 respondents)

Often, labourers simply came by the enterprise to inquire for job opportunities. Otherwise these workers were recommended by other actors in the enterprise leaders' social network. If skill training was required, this was provided informally by the enterprise leaders or other employees. Employees were involved in acquiring inputs, the processing steps of the furniture production, or marketing. Only in one case did an enterprise have an employee that was in charge of financial auditing.

The most popular legal enterprise form observed was sole proprietorship (SP) (59%). These forms are often favoured because of the simple registration process. At early development stages, SPs are not required to have standard accounting systems in place and also are rarely audited. Nevertheless, such a form positions the business owner with unlimited liability. As these enterprises rarely have an accounting system or a collection of receipts, sales volumes are often communicated verbally to the tax officer, who then decides the tax levels through estimation. A past study found that tax levels were often unfavourable for the enterprises (Haile Gebremariam et al. 2009). In total, 59% of the enterprises claimed to administer some form of financial accounting, whereas 26% did not or only collected receipts and noted down advanced payments for orders (15%). The ones who did conduct financial accounting were generally well educated or experienced, whereas those who did not had a lower educational background.

The second most legal form observed was a cooperative (31%). Intentions behind establishing an enterprise in the legal form of a cooperative was to gain access to government-provided development services, such as financial capital from microfinance institutions, production sites within government-established industrial clusters, or trainings (Haile Gebremariam et al. 2009).

With these incentives, the government intends to allow for inclusive enterprise development, as legally a cooperative guarantees the equal distribution of benefits across multiple members.

The average number of cooperative members was found to be 4. These cooperative members consisted to 70% of family members, but in only two cases the cooperative family members were actively involved in the enterprise operations. The remaining cooperatives (30%) were made up of cooperative members who were friends with woodworking skills. The fact that the majority of the cooperatives consist of inactive family members shows that the actual status of cooperatives does not correspond to government intentions. Several entrepreneurs (7%) were in the process of licensing their business and operated informally at the time of questioning. Only one of the enterprises subject to this research was legally a PLC.

Around 76% of enterprises rented their production space. Only 20% had ownership of the property used for the production. The remaining enterprises questioned (4%) were located in government established industrial clusters and paid rent to the government at a much lower rate. Production housing was framed with *Eucalyptus* poles and covered and roofed with plastic tarps or corrugated galvanized metal roofing. Only the production spaces in the industrial clusters had appropriate roofing and cemented walls. In almost all cases space was limited and often, the production spilled out on to the street in front of the production site. 17% of the enterprise had a separate marketing space, where products were stored and displayed. Others (26%) used a separate area at the production site to store or display products.



Figure 14: A small-sale furniture entrepreneur and his confined workspace in Hawassa

Only 20% enterprises indicated that they were receiving or have previously received a microfinance credit. The credits were received from the Omo Microfinance Institution in Hawassa. Only in one case did the enterprise also receive a credit from another commercial bank. 54% of the questioned enterprises used their site plan as collateral, which included

physical assets and enterprise property. In other cases, a family home (27%) or guarantor bonding (18%) was used as collateral. Those who underwent a failed attempt of receiving a microfinancial credit, failed at fulfilling collateral requirements.

Physical assets of the enterprises were machinery and hand tools. Enterprises indicated to work with tables saws (57%), routers (65%), paint compressors (62%), sanders (70%), drillers (40%), jigsaw cutters (65%), and hand wood cutters (25%). On average, the enterprises judged the lowest importance on business management skills as an intangible asset, as seen in the following diagram.

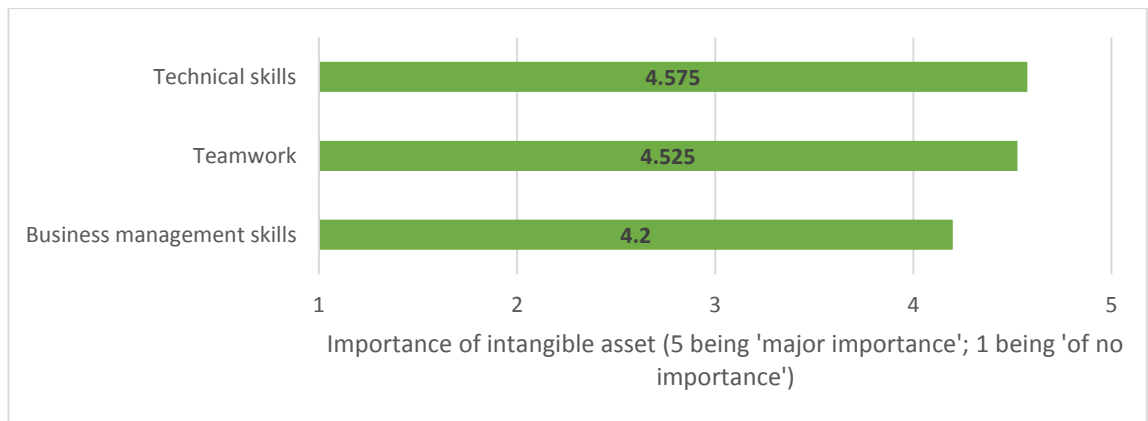


Figure 15: Average enterprise importance towards intangible assets (40 respondents)

With reference to the development levels (DL) and criteria presented in Table 6, the enterprises’ distribution for the 1st and 2nd questionnaire was as depicted in the following diagrams.

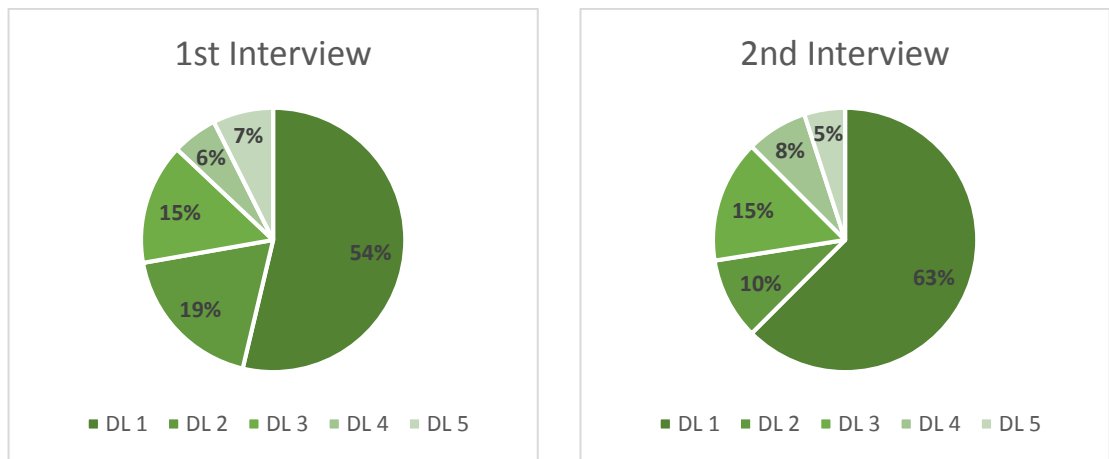


Figure 16: Frequency distribution of questioned enterprises across development levels (DL) for the 1st (54 respondents) and 2nd interview (40 respondents)

6.5 Upstream and downstream value chain actors and associated market information

The value chain linked to small-scale furniture producers in Hawassa consisted of diverse direct value chain actors that were involved in the commercial activities along furniture product life cycles.

6.5.1 *Wood traders*

Some small-scale furniture enterprises had relationships with wood traders. These would transport semi-processed lumber from rural areas of the Sidama zone to the furniture enterprises' production site in Hawassa. The traders pay and organize the transport of the raw materials. The traders were usually well known by the enterprise leaders and higher levels of trust facilitated their relationship. Some traders would give the furniture producer a supplier credit if the raw materials could not be paid for right away. Delivery times would either be determined between the dealing actors or decided by the wood trader, who came by with supply on market days. When wood is ordered from a wood supplier, it usually takes several days for it to arrive at the production site. Some enterprises saw this as problematic, as it often delayed the production.

6.5.2 *New market lumber wholesalers*

The "New Market" of Hawassa is located in the sub-city of Tabor and emerged only a few years ago as the city of Hawassa was expanding rapidly. Here, the sale of semi-processed lumber mainly comes out of a marketplace that is operated by a trading cooperative. This marketplace is wide but surrounded by corrugated iron fencing. A few small-scale sawmillers and furniture producers are concentrated around this wood market. The trading cooperative was established with support from the Tabor sub-city Cooperation Development department. It started with 10 individuals who initially independently produced or sold furniture. They approached government development services with the idea of a wood trading cooperative and received training and a marketplace.

The cooperative has now been in place for 7 years and has in the meantime expanded its member base to 63 individuals. At its peak, the member base accumulated to over 90 individuals but due to the government support being insufficient and not as expected the number of members has been declining. The cooperative members have different roles and functions. Overseeing the cooperative operations is a cooperative committee, which consists of a leader, administrator, cashier, auditor, controller and five purchasers. The tasks are as follows are depicted in Table 14 of the appendix.

Around 30 members usually remain at the market site, where they are involved in selling, loading and unloading lumber. A further 30 members are typically active in the field. In groups of 5, these members search for products by going to different districts and approaching farmers that are willing to sell their standing trees. The timber is harvested and semi-processed in an open-pit or at small-scale sawmillers or carpenters located in rural areas. Sometimes the wood is processed by the farmer and stored on the farmer's land, ready to be sold as semi-processed

lumber. Then transport to the market in Hawassa is organized. The trader cooperative only had a legal license to trade at the market space in Hawassa, but no permits to transport native wood. Transport therefore mostly occurred at night, after midnight, to avoid control checkpoints that were in place throughout the day.

Sometimes members were also tasked in disseminating market information to buyers or collect information about timber consumption trends. Revenue made by the members is collected by the committee and is used to pay off cooperative costs and contributions before profits are distributed to its members. The level of profits received by each member depended on their performance, which was measured by their load of work, amount sold, provided starting capital, or level of contribution made to cooperative development by e.g. collecting purposeful information. The committee works on a voluntary basis and does not receive additional salaries.

Some wood traders come directly to the market space to sell their products. The wholesalers value addition activities then include unloading, semi-processing with a small table saw machinery, sorting and loading. Sorting occurs based on the size and shape of the wood as well as the tree species. Customers include carpenters, construction enterprises, sawmillers, and traders. Some buying and selling prices of given lumber dimensions are listed in the table below. These are estimated average prices and real-time prices may vary from this, as the pricing also depends on other factors such as bargaining, season, or quality of the lumber.

Table 8: Market prices for different lumber products at the New Market in Hawassa

Species	Dimensions	Buying price in USD (ETB)	Selling price in USD (ETB)	Est. quantity sold per week
Wanza (<i>Cordia africana</i>)	3mx25cmx4cm	8.50 (250)	10.20 (300)	50
Zigba (<i>Podocarpus falcatus</i>)	3mx25cmx4cm	4.93 (145)	5.78 (170)	100
Tsid (<i>Juniperus procera</i>)	3mx25cmx4cm	4.42 (130)	5.10 (150)	100
Grevillea (<i>Grevillea robusta</i>)	3mx25cmx4cm	3.40 (100)	4.08 (120)	50
Warka (<i>Ficus spp.</i>)	3mx25cmx4cm	2.38 (70)	3.06 (90)	300
Avocado (<i>Persea americana</i>)	1mx25cmx4cm	0.85 (25)	1.26 (37)	200

The main motivation behind establishing the cooperative was to grow and enable more stable incomes for its members. The cooperative is seen to have enabled this. Even if the members' financial capital is low, the cooperative aimed to have accumulated enough financial capital to support its members. For example, if a family member passes away, the cooperative and its members will support the affected. The cooperative members' skill diversity also allows for resilience and organisational development.

In 2016, a large fire destroyed the new market and the cooperative lost assets valued around 1 million ETB. Their collective structure enabled them to rebuild their operations. Some members

lent the cooperative financial capital without interest in order to enable this rebuilding. Also, the members emphasized that such a structure allows you to build strong social relationships. Over time, the participating members have become intimate friends and are willing to share resources. Nevertheless, this took time and at the beginning, transaction costs between the members was high due to lower levels of trust and many coordinative activities.

On the other hand, the cooperative profit levels are still somewhat limited. This has to do with the low level of value addition that is commonly observed in trading activities. It is simple cycle of buying and selling, and therefore it is vulnerable to market shocks and fluctuations. As the cooperative also bulk purchases much of the timber, a lot of timber that is qualitatively low is received. Poor quality timber is hard to sell and sometimes ends up rotting on the market site. In order to overcome this issue, cooperative members indicated wanting to expand their value adding activities by, for example, adding further timber processing or even furniture production activities.

6.5.3 Old market lumber wholesalers

The old market lumber wholesalers are located in the sub-city of Haik Dar. The sub-city Gebeya Dar had a high presence of wood wholesalers, small-scale sawmillers, furniture producers and furniture wholesalers. The lumber wholesalers in Gebeya Dar are not collectively organised as compared to the wood wholesalers at the new market site. Here, wholesalers mostly collect semi-processed lumber on smaller properties that are often also used for residential purposes. On market days, traders deliver truckloads of wood, and sell and distribute lumber to the different wholesalers as well as to small-scale sawmillers or furniture producers.

The wood suppliers were experienced in this process and knew many of the actors throughout the district. The experience helped allocated the different sizes and types of lumber to the most appropriate marketing and processing actors. For example, long flat planks were delivered to sawmillers who traded with construction enterprises, whereas shorter but thick branches and stems were delivered to furniture producers who could, for example, process these into chair legs with a woodturning lathe. Some estimated average prices of different wood types and dimensions of the lumber wholesalers in Haik Dar are given in the table below. The price differences in comparison to those at the New Market can partially be attributed to difference in product quality and bargaining power.

Table 9: Market prices for different lumber products at the Old Market in Hawassa

Species	Dimension	Buying price in USD (ETB)	Selling price in USD (ETB)	Est. quantity sold per week
Wanza (<i>Cordia africana</i>)	3mx25cmx4cm	4.42 (130)	4.59 (135)	300
Zigba (<i>Podocarpus falcatus</i>)	3mx25cmx4cm	3.74 (110)	4.42 (130)	200
Tsid (<i>Juniperus procera</i>)	3mx25cmx4cm	3.57 (105)	4.08 (120)	300
Grevillea (<i>Grevillea robusta</i>)	3mx25cmx4cm	2.72 (80)	3.06 (90)	300
Warka (<i>Ficus spp.</i>)	3mx25cmx4cm	2.04 (60)	2.21 (65)	500

Despite not being collectively organised, these wholesalers are nevertheless socially networked to certain degree. Wood traders often provide timber wholesalers with supplier credits. Wholesalers also inform the traders which other wholesalers or other buyers particularly need wood. Sharing such information with the supplier is said to enable price advantages. The lumber wholesalers and some sawmillers are organised in an “*lqqub*”, which is a traditional way to pool and save financial resources in Ethiopia. It involves the participating actors to pool money regularly which is then paid out to a selected participant by means of a lottery. Each cycle allows each participant to receive the pooled money once. The *lqqub* organized amongst wholesalers and small-scale sawmillers in Haik Dar consisted of 50 members, which contributed 300 ETB (10.20 USD) per week. Each week one member would receive a pay-out of 15,000 ETB (509.94 USD).

One major challenge for the wholesalers and traders in Haik Dar is the unfavourable infrastructure. The roads within and around the marketspaces of Haik Dar were often very congested with pedestrians and traffic. The wood-loaded trucks often had difficulties reaching the buyers. The high presence of small-scale furniture producers also obstructed the roads due to their production spilling out onto the street. Also, the prices of wood fluctuated throughout the year. For example, in September the wood raw material prices increase because this is the coffee season. During this time, farmers get additional revenue from coffee and therefore do not sell their standing trees. Trees are preferably sold when the farmer has no other produce to generate an income from.

6.5.4 Small-scale sawmillers

These actors processed semi-processed lumber into boards with specific dimensions. They mainly sold to construction actors or end-users. In rare instances do furniture producers acquired their raw materials from such sawmillers. This was because furniture producers had their own table saw machinery. Also, as furniture production mostly occurred following product orders, furniture producers required very specific wood types and dimensions that were not provided by the sawmillers. Furniture enterprises that did not have their own sawmilling

machinery sometimes came to the small-scale sawmillers with their raw materials to process them into the desirable shape and size. Depending on their relationship this could be done at a price or free of charge.

A group discussion with some of these sawmillers revealed that they were mainly challenged with electricity supply issues or machine breakdowns. Most were only equipped with one small table saw machine and if the power went out or the machine broke down, they would not be able to work. In case of machinery breakdowns, the diverse sawmillers help each other with technical skills to repair machines or replace parts. If a machine is broken for a longer time, the sawmillers would help each other to fill capacity gaps.

6.5.5 Furniture retailers

In Haik Dar, there is also a furniture marketplace. Several retailers market new and second-hand furniture here. The market is concentrated in two streets widening across two blocks in northern Haik Dar. The space of the individual furniture retailers used for displaying products is in most cases in front of a residential home. These pay rent to the owner of the house they are located in front of. Others are located in the middle of the market and do not pay rent.

Furniture retailers are solely involved in the buying and selling of furniture. They buy their new furniture from furniture producing enterprises or second-hand furniture from private individuals. Sometimes furniture producers would restore old furniture and sell these to furniture retailers. In some cases furniture retailers would place larger orders of furniture at furniture enterprises to make use of price benefits from bulk purchasing. One furniture enterprise describes this situation.

A chair would cost 400 ETB (13.60 USD) if it is ordered individually but 250 ETB (8.50 USD) for furniture retailers because these bulk purchase and can find products priced similarly elsewhere, which is why I have to lower the price.

— 31 year old leader of a micro-sized furniture enterprise

Furniture retailers would also sometimes have a well-established relationship with furniture producers. These would supply furniture on credit and collect payment from the furniture retailers once the product was sold. Pricing of the furniture depends on bargaining, quality of the product, or product materials. Products consisting of imported wood sell at a higher price. The market for furniture is perceived to be growing but the high price of raw materials is said to also increase prices of furniture products, which makes it difficult to implement price-based competition strategies. Adding to that, the market space is poorly sheltered. A lot of furniture stands out in the open and if not sold quickly, it deteriorates in the sun and rain.

6.6 Inputs and furniture production activities

Each furniture product is characterized by a different production process. Generally, first the carpenter typically makes a design and production plan based on the desired end-product. Based on the design, the carpenter predicts the required amount and type of wood. The appropriate wood is purchased at wood markets or ordered from raw material suppliers. Enterprises questioned purchased their raw materials at the old market in Gebeya Dar (35%), at the new market (33%) or at both (17%). Reasons for choosing where to buy raw materials depended mainly on the proximity to the markets but also depended on whether required wood types and sizes were available. Only 17% had acquired raw materials from a wood supplier that delivered to the production gate.

Wood from the market is transported with a donkey cart to the production site. As it was the rainy season during the time of fieldwork, many enterprises mentioned that planks would still be too wet when purchased and required longer periods in the sun for drying before being processed.



Figure 17: A small-scale furniture enterprise in Hawassa drying wood in the sun before processing
Depending on the product, other inputs were required, such as MDF, paints, varnish, nails, glue, metal components, handles, leather or textiles. The wood used for the production of furniture originated from tree species indicated in the graph below.

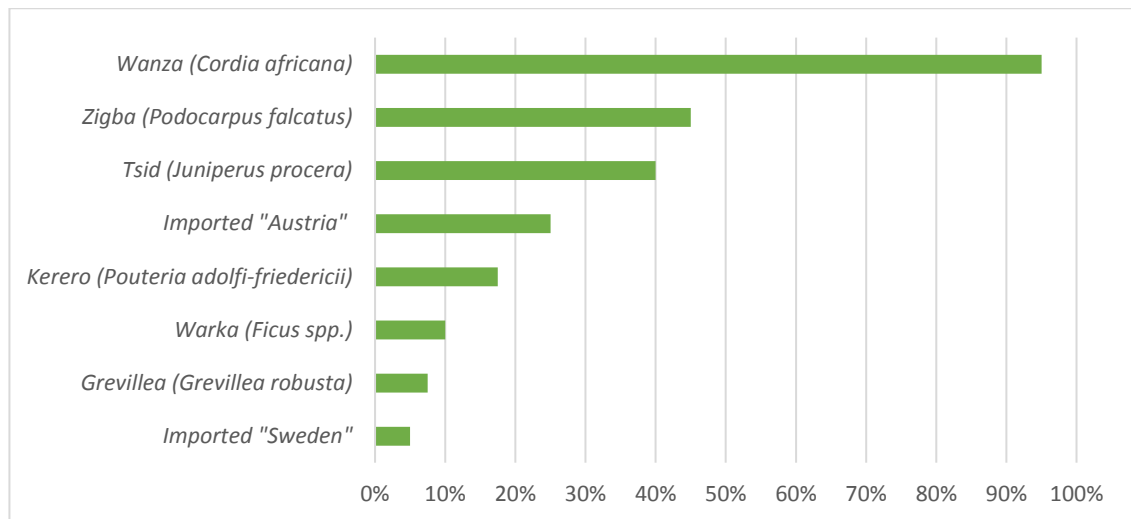


Figure 18: Frequency of utilized tree species for furniture production (multiple answers possible, 40 respondents (enterprise leaders), n=98)

Cordia africana (Amharic: Wanza) was the most popular utilized tree species observed. Historically, *Cordia africana* has been an important part of Ethiopian furniture and is still perceived as one of the most suitable wood for furniture production. Furthermore, customers prefer furniture made from this type of wood, as the native wood is believed to have the best quality (Haile Gebremariam et al. 2009). An emerging tree species that is supplying a few wooden furniture enterprises is *Pouteria adolfi-friedericii* (Amharic: Kerero) (Desalegn et al. 2015). This material was said to be somewhat rare on the supply market but highly valued by furniture customers.

Customers generally prefer wood from "Wanza", but nowadays "Kerero" wood is being increasingly sought for. A furniture set consisting of 1 table and 6 chairs and made from Cordia can be sold for 30000 ETB (1019.88 USD). But if it made from "Kerero" it can be sold at a price of 70000 ETB (2379.72 USD).

— 59 year old leader of a micro-sized furniture enterprise

The raw materials are then cut into the appropriate shapes with a table saw, handsaw and jigsaw cutter. Afterwards, a router is used to trim and shape the furniture components. For some components such as chair legs, a woodturning lathe was used for shaping. At some enterprises and industrial shops, pre-processed product components such as chair legs could be purchased by enterprises who did not have wood lathe machinery. With a sander or sanding paper, the surfaces would then be smoothed. Paint was subsequently applied to the individual product components, either using a paint compressor or a paint brush. Paint drying occurred out in the open and often on the roadside. Painted wooden components would also often be coated with finishing materials such as varnish. The components were mostly assembled with hand tools. Nails, screws or glue was used as affixing additives.

In many cases, the small-scale enterprises did not have the appropriate machinery needed for some of the processing steps. Often components were processed at other furniture enterprises, mostly at larger-scale enterprises who were well equipped. Machinery used here included stationary bandsaws or wood moulders. The larger enterprises usually requested a payment per piece processed. Other enterprises rented or lent machinery such as compressors, jigsaw cutters or drillers from other furniture enterprises close by.



Figure 19: The inside (left) and outside (right) production space of a small-scale furniture enterprise in Hawassa

Each processing step was usually divided amongst the labourers. For example, labourers were divided into the tasks cutting, carving, sanding, painting and assembly. Entrepreneurs with only 1 or 2 labourers worked on each processing step together. The entrepreneurs and labourers almost never wore personal protective equipment (PPE), even though these were carrying out activities that exposed them to sawdust, paint fumes, heavy objects, loud noises and sharp machinery. One entrepreneur mentioned that labourers would frequently cut their hands, which added medical costs to the enterprise.

6.7 Products and market channels

All enterprises indicated they were capable of making a wide variety of different types of furniture, including chairs, tables, beds, cabinets, closets, and sofas. Market channel streams and choices for these products were affected by various factors, including the surrounding infrastructure and location, access to market information, internal abilities of the producers to match and make use of market demand, as well as fulfilling product requirements (Trienekens and van Dijk 2012a). In general, two avenues of sale were observed, one involving an order-based production and selling, the other involving the displaying and selling of products.

Order-based production and selling required gaining access to certain customers that would make the product orders. Overall, four types of buyers placed orders at the small-scale furniture enterprises, namely end-users, furniture retailers, government institutions, as well as other organisations or businesses. End-users who placed orders either came by the production site at random, knew the entrepreneur beforehand or came because of a recommendation.

Enterprises who were located in busy marketing areas such as in Gebeya Dar received many new customers, as many people come to this area to find certain products, including furniture. Gebeya Dar is a well-known area for purchasing furniture in Hawassa. Enterprises which were located in less busy streets or side avenues stated that the influx of new customers occurred rarely due to the production site being somewhat hidden. In order to make their location more visible, enterprises would place several furniture pieces on the roadside.

End-users who placed orders were also received through recommendations, either from a personal contact of the customer or from another furniture enterprise that was not capable of fulfilling the desired product order. Reasons included capacity limitation or technological constraints. Some advanced payments were received from customers for product orders, but this occurred at irregularly. Enterprises required a down payment, ranging from 20% to 50% of the final product price. An advanced payment was often necessary for the small-scale producers, as limited financial capital was available to finance the production of the ordered products. Entrepreneurs would often aim to at least be able to cover the raw material costs with the advanced payments.

Furniture retailers were only observed to have a vertical relationship with furniture producers in Gebeya Dar. This was probably because of the proximity to the market space, which enabled easier transport on donkey carts. Sometimes furniture retailers from other cities, such as Shashemene would order in larger quantities and transport these on trucks. Other larger orders were sometimes received from other businesses or organisations, such as restaurants, cafes, bars, offices, hotels, pensions, NGOs, churches or industrial businesses. Access to such orders were mostly the entrepreneurs' reputation, skillset and capacity. A church, for example, would request furniture that required very refined carving skills, where as a bar would require some knowledge in interior design.

We produce for orders mainly. I design some of the furniture using a computer program. From that stage on we plan the production. We have established a good name and image to supply bars and restaurants with furnishing. We work closely together with the customer to meet their specific desires. We often visit the bar or restaurant site. We always try to have a new and innovative way of furnishing such businesses. For our most recent project, we are using a very long and wide piece of wood which will be used as the top for a bar. It is from a 200 year old Juniperus tree.

— 30 year old leader of a micro-sized furniture enterprise

Government institutions would also often advertise the opportunity to produce an order for e.g. schools or governmental offices. Enterprises could apply for the order and then participate in bidding scheme to gain access to these orders. Usually, the enterprise offering the lowest price for the specific order would win the bid. Only in rare cases did small-scale furniture enterprises

gain access to such orders. This was due to their lack of price bidding competitiveness with larger enterprises as well as their limited production capacity. In two cases, small-scale enterprises coordinated their pricing strategies to be able to compete against prices set by other bid participating enterprises.

With available market information, we can gain access to bidding orders. These bids usually choose the lowest price and we coordinate to set the lowest price. For example, when three enterprises are in a bid, two would increase the price so the third one gets it.

— **27 year old leader of a micro-sized furniture enterprise**

A second sales avenue involved the display of products and thus enabled a direct purchase of furniture products. Enterprises that had their production site in less visible streets were seen to sometimes have separate rented market spaces, where products would be displayed. This then also required hiring a sales employee, who was at the market space. Rent paid for the market space was always higher than the rent paid for the production site. Some of the enterprises dedicated a space on the production site to displaying products. The ones that did not have enough space in the production area, displayed products on the street, which was problematic for traffic but also for the products, as these were at times exposed to the rain and sun. With a display area, customers could get an impression of entrepreneurs' products and skills, but also could directly buy products. Sold products were typically transported using donkey carts.



Figure 20: An enterprise's market space (left) and purchased furniture being transported (right)

Overall, most enterprises were observed to be involved in a multichannel marketing strategy, producing for orders and market display. Products sometimes proceeded through several market channel stages, including trading, transport and retail. An overview of the frequency of the observed market channels is shown in the following graph.

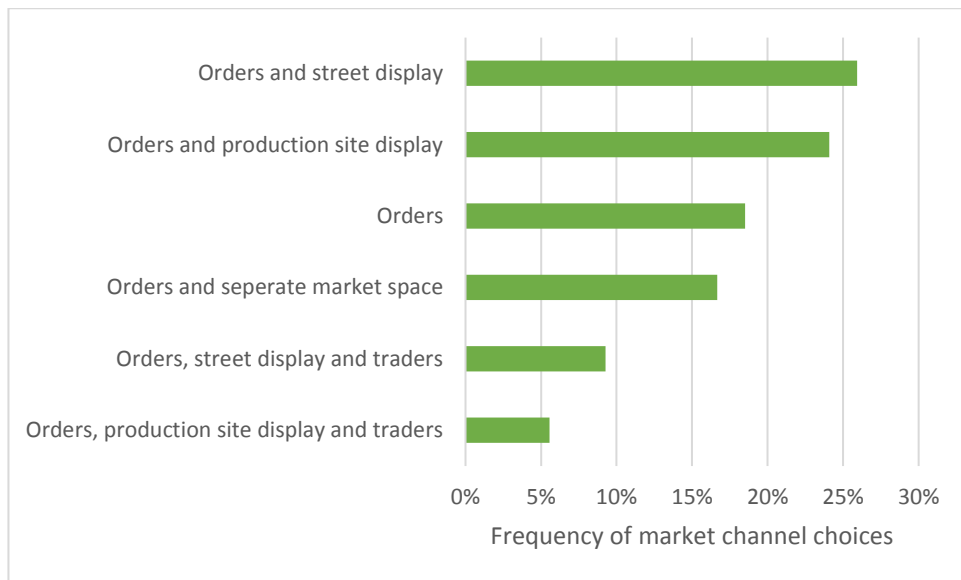


Figure 21: Frequency of market channel choices of small-scale furniture enterprises in Hawassa (54 respondents)

6.8 Horizontal and vertical network structure and characteristics

The purpose of the analysis in this segment is to describe the network structure of vertical and horizontal value chain actors linked to the questioned small-scale furniture enterprise. A more detailed analysis was done concerning the horizontal networks amongst furniture enterprises by assessing the content of the personal network ties, which includes an investigation of the relationship's social role, its strength as well as the exchange resources (Berrou and Combarrous 2012).

Strong vertical relationships with wood traders or furniture retailers were rarely observed. Most furniture enterprises acquired their raw materials at open markets, where many wood wholesalers operated simultaneously. Specific furniture required particular types of wood in terms of quality, colour, shape and size. Entrepreneurs thus did not prefer to be locked in strong vertical relationships with certain suppliers, but rather preferred to be able to diverge easily from one supplier to another. This would enable wider access to a variety of raw material types. Going to markets allowed the entrepreneur to assess and compare the available types and prices of wood and find the suitable input option for the furniture end-product. The few enterprises that were locked in strong relationship with wood suppliers were challenged with delayed delivery times, inappropriate wood quality and lack of raw material diversity. On the other hand, a strong vertical relationship with suppliers facilitated an exchange of financial support through supplier credits.

The unfavourable market conditions also required the enterprises to diversify their market channels with multichannel marketing strategies. Strong vertical relationships with customers were not present. This was because most customers were private end-users. Around 15% of the

enterprises had frequent exchanges with furniture retailers. Yet, the relationships were essentially business ties and thus, moderately weak due to a lack of trust and intimacy. Only in one case did the furniture enterprise give the furniture retailer a supplier credit, but this was said to be more out of financial necessity of both actors rather than being supported by a strong social relationship. All in all, the vertical linkages of small-scale enterprises are typically characterized by weak and diverse ties with multiple wood suppliers and furniture buyers.

Horizontal network ties amongst small-scale enterprises were assessed more extensively. The strength of the individual enterprises' personal network was measured with a multi-item scale including number of personal ties, frequency of interaction, as well as level of trust. The social role of the relationship was categorized into friendship or kinship, proximity, business tie, and homophily of profession. Furthermore, the resources that were shared through these network ties were also investigated. The following table presents a cross-tabulation of the results.

Table 10: Cross-tabulation of network ties (multiple answers possible, 40 respondents (enterprise leaders), n-total=154, n-social role=51, n-resources=103 ;self-constructed on the basis of Berrou and Combarous (2012))

Shared resource	Friendship or kinship	Carpenter homophily	Proximity	Business tie	Sum	Avg. tie strength
Market space	0.7%	0.0%	0.0%	0.0%	0.7%	0.400
% within social role	1.6%	0.0%	0.0%	0.0%		
% within resource	100.0%	0.0%	0.0%	0.0%	100.0%	
Workspace	1.3%	1.3%	0.7%	0.7%	3.9%	0.800
% within social role	3.1%	7.4%	3.6%	3.0%		
% within resource	33.3%	33.3%	16.7%	16.7%	100.0%	
Product orders	2.6%	2.0%	2.0%	3.3%	9.9%	0.817
% social role	6.3%	11.1%	10.7%	15.2%		
% resource	26.7%	20.0%	20.0%	33.3%	100.0%	
Supply orders	0.7%	0.0%	1.3%	0.7%	2.6%	0.800
% social role	1.6%	0.0%	7.1%	3.0%		
% resource	25.0%	0.0%	50.0%	25.0%	100.0%	
Labor	2.6%	0.7%	1.3%	0.0%	4.6%	0.733
% social role	6.3%	3.7%	7.1%	0.0%		
% resource	57.1%	14.3%	28.6%	0.0%	100.0%	
Raw materials	1.3%	0.7%	0.7%	0.7%	3.3%	0.889
% social role	3.1%	3.7%	3.6%	3.0%		
% resource	40.0%	20.0%	20.0%	20.0%	100.0%	
Product components	1.3%	1.3%	0.7%	0.7%	3.9%	0.911
% social role	3.1%	7.4%	3.6%	3.0%		
% resource	33.3%	33.3%	16.7%	16.7%	100.0%	
Financial capital	3.3%	1.3%	0.0%	0.7%	5.3%	0.778
% social role	7.8%	7.4%	0.0%	3.0%		
% resource	62.5%	25.0%	0.0%	12.5%	100.0%	
Machinery	10.5%	4.6%	5.3%	7.2%	27.6%	0.679
% social role	25.0%	25.9%	28.6%	33.3%		
% resource	38.1%	16.7%	19.0%	26.2%	100.0%	
Technical skills	6.6%	2.6%	2.6%	2.6%	14.5%	0.804
% social role	15.6%	14.8%	14.3%	12.1%		
% resource	45.5%	18.2%	18.2%	18.2%	100.0%	
Market information	11.2%	3.3%	3.9%	5.3%	23.7%	0.741
% social role	26.6%	18.5%	21.4%	24.2%		
% resource	45.5%	18.2%	18.2%	18.2%	100.0%	
Sum	42.1%	17.8%	18.4%	21.7%	100.0%	
% social role	100.0%	100.0%	100.0%	100.0%	100.0%	
% resource	42.1%	17.8%	18.4%	21.7%		
Avg. tie strength	0.709	0.767	0.758	0.626		

All the network ties observed took place under informal conditions. The most frequently observed social role of these ties was friendship or kinship (42.1%). Business ties (21.7%) was the second most frequently observed social role, followed by proximity (18.4%) and homophily

of profession (17.8%). The three most commonly shared resources through the network ties were machinery (27.6%), market information (23.7%), and technical skills (14.5%). The strongest tie scores took place within homophily of profession (0.767) and proximity (0.758) relationships, and were noticeably present when product components (0.911), raw materials (0.889) or product orders (0.817) were shared. None of the enterprises were observed to be embedded in more than 15 personal ties with other small-scale furniture producers or locked-in kinship relationships, which is why an over-embeddedness paradox and therefore, a negative impact of these relationships is unlikely (Kebede 2018).

Homophily of profession relationships were particularly strong because small-scale furniture enterprises shared many of the same challenges and went through similar past experiences. Enterprises knew how difficult it was to start a business with limited resources available and thus they were very willing to support other small-scale enterprises in difficult conditions. They encouraged each other to continue even though the challenges were overwhelming and were happy to see others succeed due to their support. Furthermore, several enterprises sustained these relationships in order to learn from each other, give each other ideas, or collectively solve a problem. When sharing a similar passion in woodworking, it was said to be fulfilling to be able to share such strong complementary interests.

Proximity relationships mostly occurred in Haik Dar, where there was a high concentration of small woodworking enterprises. The close proximity of other similar enterprises enables spontaneous and short-time lending of hand tools and machinery in particular but also technical support (e.g. repairing machines) or the sharing of market information. Two of the enterprises questioned were located in government-provided industrial cluster facilities. Their proximity in the cluster enabled the sharing of almost all the resources listed. Yet, the preservation of these network ties was mainly due to strategic business purposes. Interacting amongst each other gave insight into one another's innovation, pricing strategy, and helped with capacity limitations. These enterprises mainly produced for larger government orders and had to prove to be competitive and capable to produce such orders. Significant differences in the strength of ties can be observed across sub-cities. Enterprises located in the sub-cities Addis Ketema and Haik Dar had the highest ties strengths due mainly to the area's density of woodworking enterprises. The following table shows average tie strength differences across sub-cities and *Kebeles*.

Table 11: Average strength of ties across Hawassa sub-cities and *Kebeles* (40 respondents)

Sub-City	Average strength of tie	Kebele	Average strength of tie
Addis Ketema	0.733	Philadelphia	0.733
Haik Dar	0.695	Gebeya Dar	0.695
Menaharia	0.692	Guwe Stadium	0.727
		Piazza	0.800
		Millenium Adebabay	0.550
Tabor	0.654	Dume	0.700
		Hiteta	0.467
		Fara Bariso	0.600
		Hogane Wacho	0.667
Bahil Adarash	0.500	Adare	0.400
		Andinet	0.600

Business ties were frequently observed but were characterized by the weakest strength of ties amongst the social roles. Business ties were often initiated out of necessity for enterprise survival. For some enterprises, such ties were essential in order to gain access to resources that could not be self-acquired due to limited capital or market failures. These ties particularly enables access to machinery. Some enterprises (26%) even paid an access fee, for example, paying 200 ETB (6.80 USD) per day to use a paint compressor of a neighbouring enterprise or paying 15 ETB (0.51 USD) per piece of processed timber using another enterprise’s table saw. Also, in some instances these relationships were used to gain strategic access to market information or to counter capacity limitations by sharing large orders. Gaining access to machinery without a fee mainly took place in friendship or kinship relationships. These relationships also show a tendency to facilitate the sharing of more sensitive resources, such as financial capital or market information.

When matching the strength of ties with regard to the enterprises’ age and development level (considers total assets and number of employees as shown in Table 6) the variations as seen in the following figure can be observed. The development level plays a stronger role in increasing the strength of enterprise ties in comparison to the age of the enterprise.

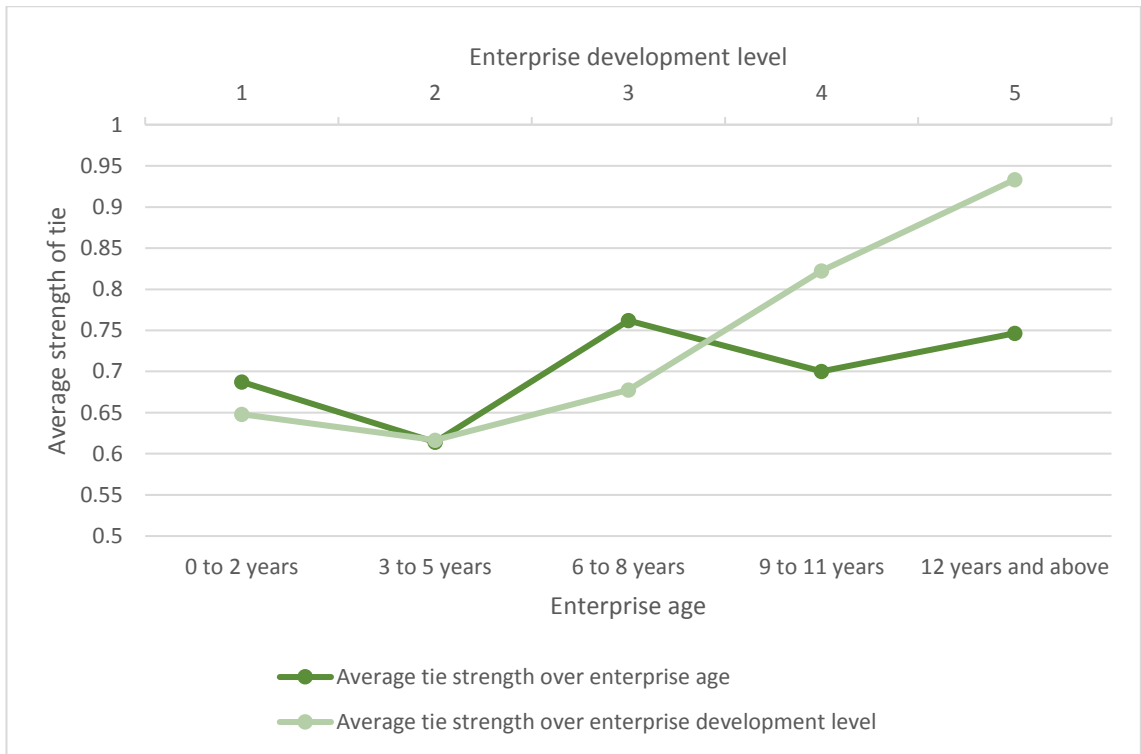


Figure 22: Average strength of tie score in reference to enterprise age and enterprise development level (40 respondents)

When taking a closer look at the individual relational strengths and types in regards to the different development stages of the enterprises, these can generally be characterized as follows. In early stages of development, enterprises engage in many weak ties with neighbouring enterprises or business ties to acquire missing resources such as machinery, and in only a few strong ties, which facilitated access to financial starting capital or skill development. In multiple instances, these strong ties were with furniture enterprises where the entrepreneur was previously employed at.

Once somewhat adequate resources were available, entrepreneurs maintained the personal ties but shifted to exchangeable resources that would enable a wider market reach, such as the sharing of market information. This would eventually drive the output of production, for which a more diversified network was necessary to enable a wider access to different resources. In the long-run, the enterprises would try to find an effective balance between strong and weak ties in order for the former to enable skill sharing, innovation and market access (e.g. through sharing large orders), and the latter to especially enable access to market information. Similar tendencies are observed by Kebede (2018).

6.9 Quantified input-output structure of a product unit

The inputs and outputs of small-scale enterprises' position in the given value chain is heterogeneous and depends to a great extent on the product specifications. All of the enterprises partially produce based on orders they received from their customers, by which the

customers define the product specifications. After some initial test interviews, it turned out that quantifying the total inputs and outputs for a given timeframe was a very lengthy and erroneous process, partially due to the fluctuating production outputs. Enterprise leaders also were generally very busy but also had difficulties recollecting past input-output production quantities as well as no or inaccurate documentation of this. Therefore, the study diverged to a simplified quantification and analysis of the enterprises value chain by focusing on a functional product unit and the leading cost component.

The selected functional unit for which data was identified to be procurable and comparable across the studied furniture enterprises is one wood-based chair. The production of one chair went through several stages, which each required different inputs. Material inputs could be differentiated in terms by major, auxiliary and finishing materials. Other inputs included labour-time and energy. The outputs of each processing stage were products, by-products and waste. The end-products can be grouped into two marketable chair models. One (chair model 1) that only consisted of wood and is relatively cheap, whereas the other (chair model 2) requires two major materials, namely wood and MDF, and is sold at a relatively higher price. The study was able to quantify major materials and labour-time for the given functional unit. Auxiliary materials, finishing materials and energy were highly variable and undocumented amongst enterprises and thus, could not be accurately determined. Average input levels are shown in the diagrams below and are differentiated based on the product model.

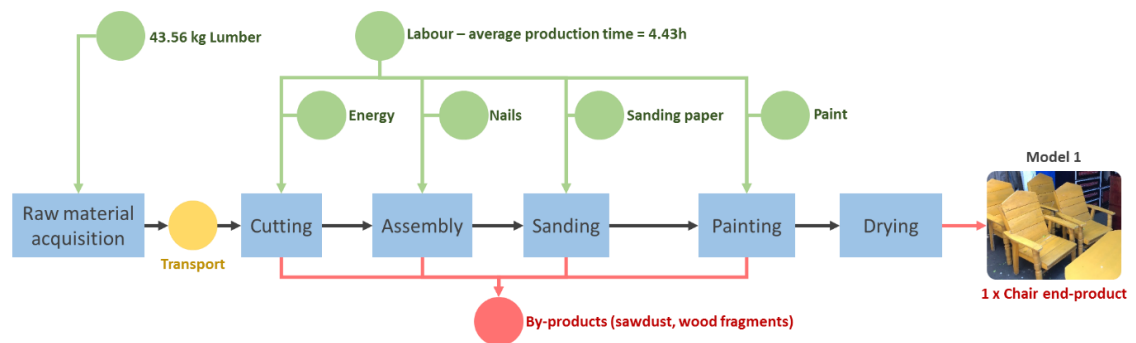


Figure 23: Input-output flow diagram for chair model 1

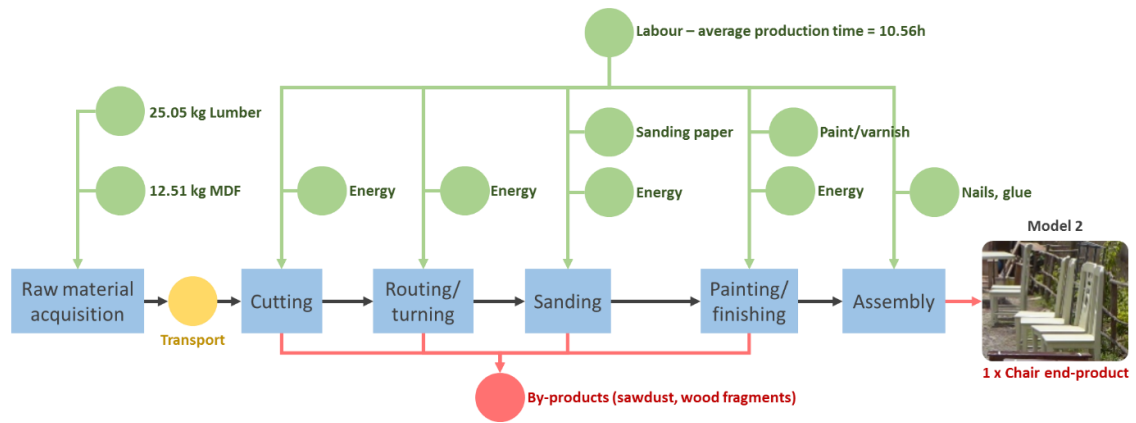


Figure 24: Input-output flow diagram for chair model 2

With reference to the wood density of *Cordia africana* and *Pouteria adolfi-fredericii* listed in an African Wood Density Database (Carsan et al. 2012), the average mass wood consumption was determined to be 43.56 kg for the first chair model and 25.05 kg for the second chair model. For the second model, MDF was also used for the chair seat, for which an average utilized mass was determined to be 12.51 kg. A significant but undetermined amount of this mass ended up as by-products. The average production time was 4.43 hours and 10.56 hours for model one and two respectively. For the second chair model, a wider range of machinery was required, namely, a table saw, hand cutter, jigsaw cutter, router, sander, paint compressor and driller. The first chair model was a simple model, only requiring a table saw and cutter. The chair legs were purchased by the enterprises in a form semi-processed with woodturning machinery. The chair was assembled with nails and a hammer, painted with a paintbrush as well as smoothed with sanding paper.

The preferred wood input material was *Cordia africana* in all cases except one, where the preferred input was *Pouteria adolfi-fredericii*. If the appropriate material from this species was not available on the market, others would be used such as *Podocarpus falcatus*, *Juniperus procera*, *Ficus spp.*, or *Grevillea robusta*. Imported lumber was also sometimes used, but it is unclear what type of wood this is or where it originates from. The furniture producers referred to these materials as 'Australia', for which Austria is probably actually meant, and 'Sweden'. All in all, the second chair model had a more sophisticated design and required woodworking techniques with a higher precision, thus also taking longer to make.

6.10 Prices and leading cost structures of small-scale furniture enterprises

The factors of production required were land, labour and machinery. Average monthly rent costs amounted to 125.11 USD (3,680 ETB). The highest average rent was observed to be in the sub-city Menaheria, whereas the lowest in the sub-city Bahil Adarash. The average weekly employee wage was found to be 15.67 USD (460.89 ETB), ranging from 4.25 USD (125 ETB) to 31.11 USD (915 ETB). Energy costs averaged at 15.84 USD (466.06 ETB) per month (see Table 16 in

appendix). The average buying price of the machinery used by the enterprise questioned is averaged in the following chart with reference to the age and type of machine.

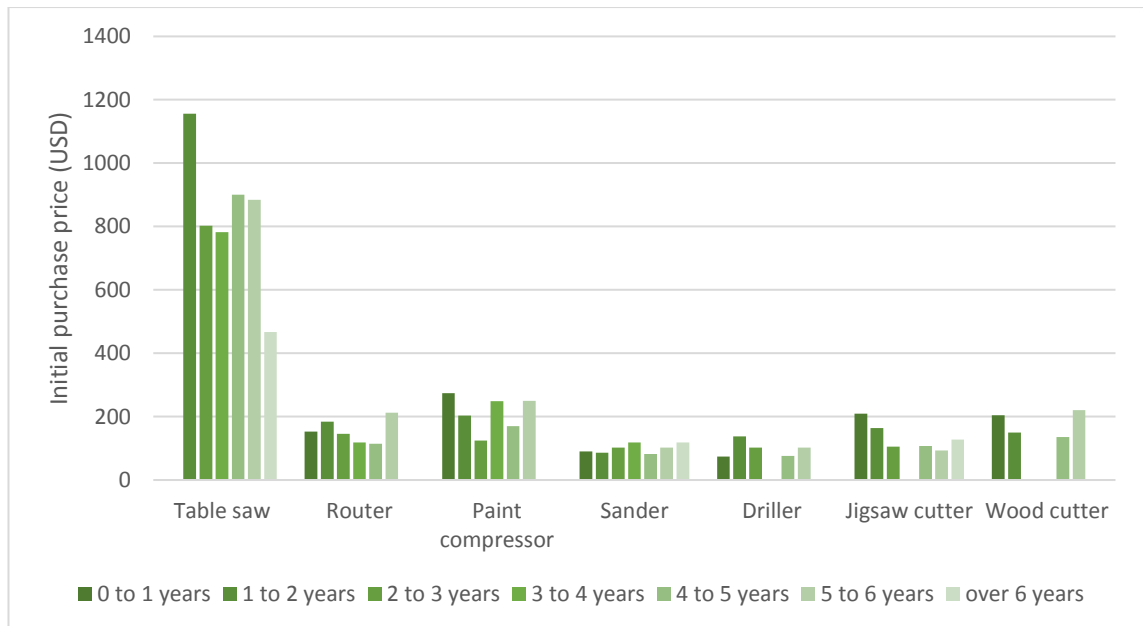


Figure 25: Purchase prices of machinery with reference to type and age of machine (40 respondents)

Table saws in particular were said to have become more and more expensive due to the growing demand for furniture. Many enterprises estimated the current value of their older table saw machinery to be higher than the initial buying price. Hand machinery was said to not last more than 5 years and mostly originated from China or Japan. For saw and sanding machinery, blades and sanding surfaces had to regularly be replaced.

The lumber was purchased in different dimensions, ranging from 1.2 m to 4 m in length, 20 cm to 30 cm in in width, as well as 4 cm to 10 cm in height. The price for the raw materials was determined through an assessment of the piece of wood and bargaining with the trader during the sales transaction. The price for *Cordia africana* averaged at 182.32 USD/m³ (5,362.88 ETB/m³). The price for MDF averaged at 302.74 USD/m³ (8,905.32 ETB/m³). The selling price of chair model one and two averaged at 11.90 USD (350 ETB) and 56.85 USD (1,672.22 ETB) respectively (see Table 16 in appendix).

6.11 Simplified value added calculations of a product unit

Wood-based input raw materials are the largest unit cost factor of furniture products (Tafesse et al. 2016). A CSA (2014) report found raw materials to make up 96% of total industrial costs among small-scale furniture makers in Ethiopia. Considering this and the complexity to accurately measure value for the given target group, this study conducts simplified value added calculation for a single product unit. The simplified value added is given by the revenue of one product unit minus the cost of wood-based raw materials of one product unit. The results

therefore merely depend on the enterprises' material efficiency, raw material costs and the pricing of the product, which are meant to act as indicators for technical skills, innovativeness, as well as market access. The following graph show the average value added of the two different chair models.

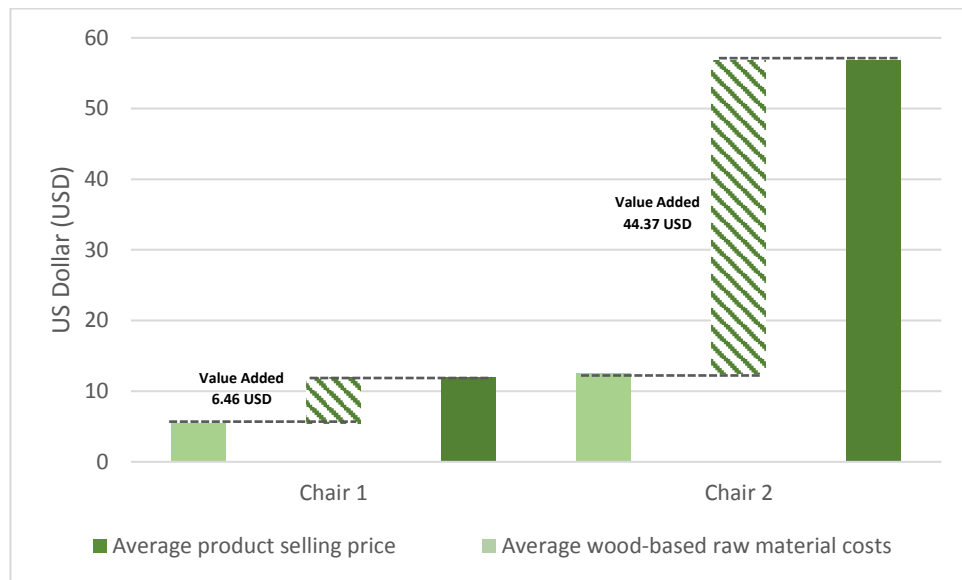


Figure 26: Simplified average value added for the two typical wooden chair models (34 respondents)

The average value added for the first and second chair model was found to be 6.46 USD (190 ETB) and 44.37 USD (1305.32 ETB) respectively (see Table 16 in appendix). The difference in value added between the two models is partially explained by differences in input levels of labour-time, production facilities, technical skill, but also the entrepreneur's social network that supplies some of these factors of production. Furthermore, consumer willingness to pay and the market linkages play an important role for the level of value added. Model one was popular amongst consumers with a lower purchasing power. Households in rural areas were said to commonly have this typical chair model. Furniture traders and wholesalers often bulk purchased this model and transported them to markets closer to rural areas. Model one also did not show to vary much in terms of the creativity of its physical structure. It was purposely designed for a fast and low-cost production.

Model two on the other hand displayed a higher creative variation in terms of its structure. Enterprises differentiated their technical skill and precision with such a model, by which design, weight, raw materials, stability, and durability acted as important differentiating features. Often, enterprises displayed a model for customers to get an impression of these skills as such chairs were often produced based on customer-specified orders. The following diagram depicts differences in average value added per mass (kg) of input raw material (wood and MDF) depending on the resource the enterprise exchanges within its social network as well as the support service it has or had access to.

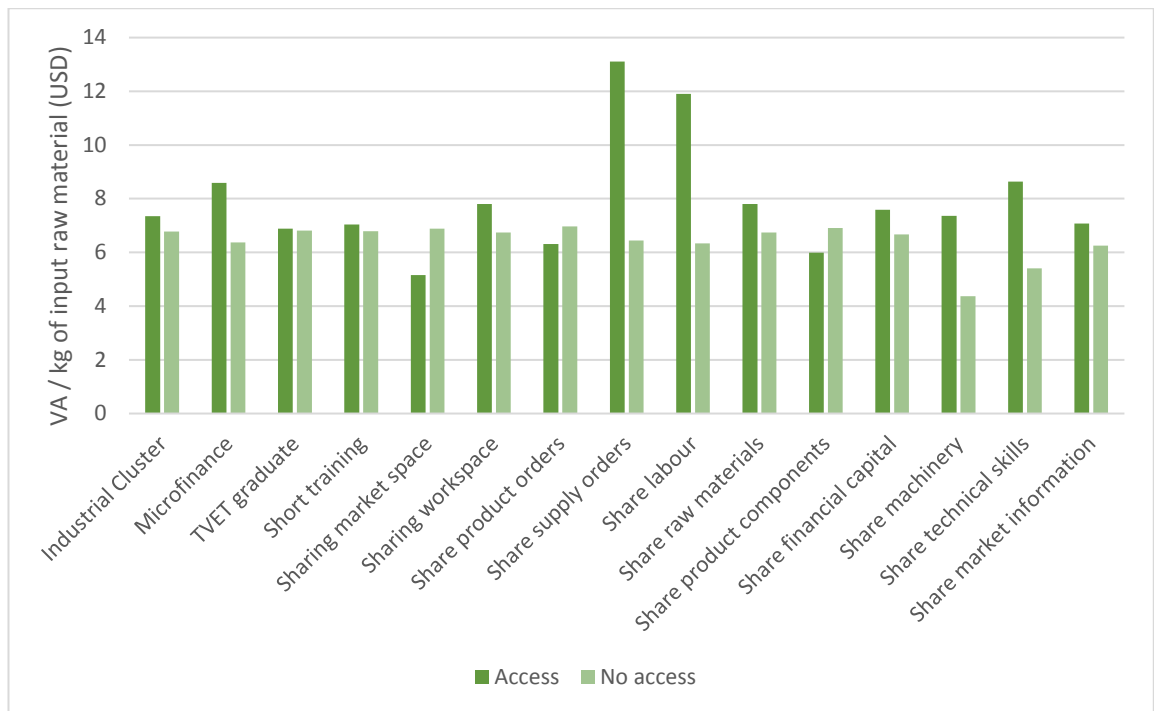


Figure 27: Average value added (VA) per kg of utilized input material with reference to existing collective actions and available support services (34 respondents)

Noticeable differences can especially be observed for enterprises sharing raw material purchases as well as labour. As this simplified value added calculation highly depends on raw material costs, the difference when comparing enterprises that share supply orders with those that do not, can be explained by available price premiums when bulk purchasing raw materials. Sharing labour can bring in the skills of the labour working on the product. Skilled labour supports a resource efficient production as well as contributes to the innovative design of the product.

Some entrepreneurs had little experience in woodworking and thus somewhat depended on the skills of the hired labourers to differentiate products. The same goes for the sharing of technical skills. Sharing machinery also enabled a higher value added. For one, this allowed enterprises to have access to machinery that minimized the accumulation of by-products. On the other hand, having a wider range of machinery permits certain product design to be implemented better and thus, widens the spectrum of product features.

6.12 Value chain governance structure

The value chain governance structure explains the internal and external rules and forces that mediate the vertical value chain dynamics (Trienekens 2012; Springer-Heinze 2018b). Currently, demand for furniture in Ethiopia is high and this demand is predicted to continue to grow rapidly (MEFCC 2017). The value chain position of small-scale enterprises was observed to be confined to a regional level, whereby growing domestic demand is partially satisfied. The emergence of many small-scale furniture enterprises throughout Hawassa indicate a level of continuation of

this development, whereby their established and preserved access to this demand is supported by sales avenues discussed previously. Legally, furniture products can be sold for profit with the availability of a business license. Furniture enterprises commonly receive customer-specified orders and only once this order is available does the enterprise seek to purchase the appropriate raw materials, which indicates that production is mostly market-pulled (Kaplinsky and Morris 2001).

Yet, many small-scale enterprises diversified their sales avenues by, for example, setting up separate market spaces or fostering relationships with furniture retailers and other buyers. The overall complexity of such enterprise-to-buyer transactions are low due the current positive trend of furniture demand. Nevertheless, expanding sales volumes highly depends on the enterprises ability to set up the appropriate sales avenues, and linking producer capabilities with the right customers. For example, if poorly located, an enterprise would need a separately located market space to build up a higher market presence.

Raw material supply is widely accessible for the furniture enterprises in Hawassa. There are two centralized lumber market spots, where multiple lumber wholesalers sell their products. The furniture enterprises can therefore easily deviate from one supplier to another. The fact that most enterprises are located close to these markets allows transportation and communication costs to remain low. Lumber traders, who were said to source wood mostly from small-scale farms in rural areas, supplied the centralized markets and wholesalers in Hawassa, but also were sometimes observed to have a direct linkage to the furniture producers. Lumber wholesalers were seen to have a wider range of vertical relationships with multiple lumber traders. The lumber wholesale cooperative located at Hawassa's new market also engaged in direct trading with tree-growers, thereby diversifying their supply access. The collective structure of the wholesalers also allows them to have a secured access to crucial resources, such as financial capital or market information, thereby stabilizing business operations.

As suppliers and buyers are close to where production occurs and market information is commonly shared horizontally, there is no directly linked upstream or downstream value chain actor that over-powers the furniture enterprises in terms of access to information. Supply and product pricing occur through bargaining but is bounded by the buyers' and sellers' transparency towards market information. As a whole, the governance type of small-scale furniture enterprises' value chain position can be framed as a market type. The complexity of gaining access to supply and demand is low due to its geographical confined nature as well as the transparency of information. Enterprises are not locked in vertical relationships with suppliers or buyers and regularly switch to relationships with other actors due to low transaction costs (Gereffi et al. 2005).

Differences across enterprises' vertical structure were more strongly comprehensible in relation to other input markets, such as obtaining machinery, financial capital, industrial supplies or even skill training. Enterprises' differentiated themselves by their internal ability and capability to overcome the misallocation of such supply markets (horizontal differences explained in the next segment). This occurred by making effective use of horizontal social networks or past woodworking experience. In turn, enterprises were able to make further use of existing market opportunities. The competitive and exploitative market dynamics of the small-scale furniture sector in Hawassa were thus considerably driven by the scarcity of inputs, such as machinery or financial capital, and the linked diversity in internal assets utilized to overcome such market failure.

6.13 Value chain access structure

Assessing the access structure similarly seeks to identify elements that guide the overall value chain constellation in terms of its means, relations, and processes (Ribot and Peluso 2003). Understanding the access structure especially gives insight into the intention behind horizontal relationships among value chain actors of the same value chain node. A social network can be considered a resource itself but can also facilitate the access to certain resources, such as knowledge or capital. In some cases, it may help explain differences in value added among horizontal value chain actors (Ribot 1998). In order to derive benefits from furniture products as well as maintain and control the associated value chain position, the small-scale furniture enterprise requires access to certain factors of production, such as land, labour and capital, as well as to market linkages and social networks.

Land in Ethiopia is wholly under government ownership. Nevertheless, Ethiopian citizens have the right to own private property on the nation's common land. Land for furniture production is either accessed through property rights or renting agreements with the owner of the property, which gives the enterprise the legal right to use a site for the production of furniture. Yet, these property rights are not exclusive, as the government is able to evict anyone if the land is required for government purposes (Grant et al. 2020). Enterprises can also gain property access rights by means of applying for spots in the government's cluster development program. For production sites in industrial clusters, enterprises pay a subsidized rent fee or gain access to the production premises for free, but the property and land rights remain in the hands of the government. Overall, access to working premises is one of the leading challenges for such manufacturing enterprises, due to high costs, unsuitable constructions, as well as its scarcity in urban settings (Ali 2012).

The labour market was not observed to be formalized and organized among small-scale furniture producers. Labourers simply came by the production site to inquire about open positions.

Temporary workers were either known to enterprise leaders or were sought through social networks of woodworkers. Workers were said to be widely available. The challenge was found more in acquiring skilled labour that did not require much training and could even support the enterprise in its skill development. Maintaining access to skilled labour was possible through strong social capital as well as with favourable working conditions and labour wages.

At the point of enterprise start-up, access to initial financial capital is essential. This supports the access to working premises and physical assets, such as machinery, needed to start production. Financial capital was observed to be accessed through financial institutions, strong social network ties with woodworkers, family networks, or through savings from previous employment. Financial institutions, such as the OMI, required a business license, a savings account with the necessary savings balance, and one of four collateral types. Maintaining the access to financial credits involved a regular and timely payment of interest instalments.

Access to machinery was readily available at local industrial supply shops. Yet, these were mentioned to be costly, qualitatively low and limited in terms of its selection variety. A challenge was specified to be the maintenance, repair and availability of spare parts for machinery. Handling and maintaining machinery required a certain level of technical skill. It was often observed that woodworkers would help each other or share labour in order to repair broken-down machinery. Technical skills were also important for the furniture processing techniques. Woodworking skills of entrepreneurs were gained through trainings at TVET colleges or through training and experiences at other enterprises where the entrepreneur was previously employed. Nevertheless, dynamic market condition requires the woodworker to adapt and continuously learn new skills. This solely occurred through the entrepreneurs' social network with other woodworking enterprises.

Social network also facilitated the access to market information, input materials, machinery, and market linkages. This was a way for enterprises to overcome market failures and information discrepancy. The relationships can be categorized into different statuses, including friendship and kinship, business ties, professional homophily, as well as proximity (e.g. neighbours). The maintenance of social ties came with the relationship's longevity, trust-level, and frequency of interaction. Social capital with woodworkers at the stage of business start-up was often seen to be available due to pre-established relationships, which occurred during a previous employment at another furniture enterprise. Neighbouring woodworking enterprises and woodworker homophily relationships emerged out of curiosity for each other's work and lasted depending on reciprocity, mutual interest, and the general approach towards the relationship. Altogether, it becomes clear that an effective constellation of appropriate land, labour, and capital access,

as well as engaging in social networks at different stages of enterprise development is crucial for enabling an expanded collection of benefits from furniture production.

6.14 Challenges faced by small-scale furniture enterprises in Hawassa

In order to be in a position to select an appropriate upgrading strategy, a value chain analysis incorporates an assessment of actor challenges and their underlying causes. Small-scale furniture producers in Hawassa are exposed to a variety of challenges, as is typical with many emerging enterprises in developing countries. The small-scale furniture enterprise leaders were asked to state the challenges that hinder the development of their business. The most frequently mentioned overarching challenges are shown in the following figure.

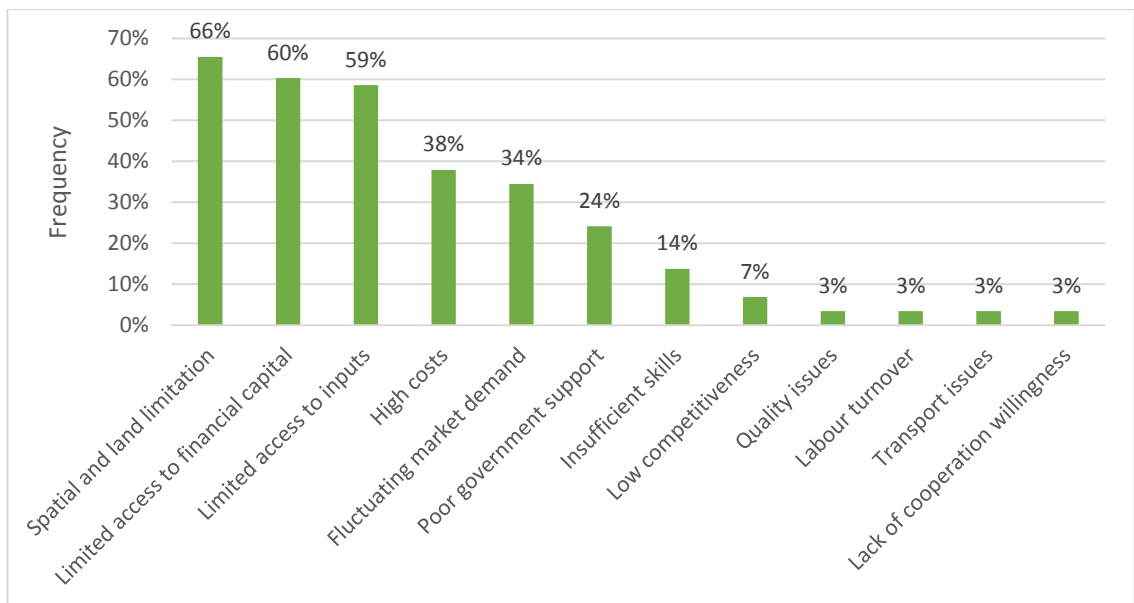


Figure 28: Challenges faced by small-scale furniture enterprises in Hawassa (multiple answers possible, 54 respondents (enterprise leaders), n=197)

The most frequently mentioned challenge was the limitations imposed by land and production premises limitations (66%). This primarily concerns the state and spatial limitations of the production site but it was also pointed out that it is challenging to set up a marketing area on which products could be displayed. To a minor extent, storage space was mentioned as a spatial challenge, especially for those enterprises that favoured bulk purchasing of raw materials. It was frequently observed that space intended for the production was confined and therefore unsuitable for larger production outputs.

For some enterprises, production took place in the front yard of a residential home underneath a construction of *Eucalyptus* poles and plastic tarps. The confined space induced many enterprises to spread the production out onto the street. During the rainy season, this was particularly challenging as products could not be stored or processed outside. Even the premises itself was often not sturdy enough to prevent leakages. Production was often observed to be

halted during periods of rain. Dry weather accelerated production processes such as drying raw lumber or painted components. If products could not be sold, these would pile up on the production site and obstruct certain processing activities.

Several enterprises had the desire to renovate the premises but were prevented to do so by municipality officials. The municipality declared that once such premises are subject to any changes, the intention of the renewal needs to be for residential purposes. This allegedly is meant to drive manufacturing activities outside of urban areas and into industrial districts. The growing urban population is also driving up the rent costs for small-scale enterprises (Grant et al. 2020).

It was also observed that neighbouring residents generally had a low acceptance towards the furniture production activities due to noise and sawdust pollution. Municipality officials were said to visit some of these enterprises and inquired on the enterprises' ability and willingness to move the production site to a more suitable area. It was often promised that government land would be provided in the near future.

A few of the questioned enterprises were located on government provided properties, namely in industrial clusters located outside of the urban centre of Hawassa. These enterprises named the wider spaces and the isolation of the production site as a main advantage of moving to the industrial cluster. Productivity was said to be higher, as workers could move around freely with little obstruction and could also produce during the night. The disadvantage of moving was that these enterprises lost a large part of the customer base they had access to in an urban setting. The output was mainly for government facilities. Rarely did cluster-based enterprises produce for individual furniture end-users, due to the remoteness of the cluster. It was mentioned that a separate marketplace in the city would be a way to counter this, but this also would have to be provided by the government as these enterprises were still at early stages of development and could not afford separate market display areas.

The second most frequently mentioned challenge was limited access to financial capital (60%). This was frequently mentioned to be the main restriction for business development, as lack of such capital obstructed investment in various factors of production. Enterprises in less desirable locations sought financial capital to open market display areas and diversify market linkages. Limited financial capital also challenges the production of advanced customer orders or large orders, as raw and industrial input materials are costly and the advanced payments for such orders were minimal. Insufficient funds also prevented enterprise to stock up on certain materials, such as MDF, when market prices were low.

Furthermore, the procedure and requirements for financial bank loans was seen by many enterprises to be too complex and time-consuming. Enterprises often attempted to receive microcredits but failed either due to not being able to fulfil collateral or saving requirements or because many gave up due to the complex and stagnant bureaucracy or corrupt government officials. The process was often perceived as not being worthwhile. Those that were able to gain access to microcredits had difficulties paying back the high interest instalments.

The third most frequently specified challenge was the limited access to certain production inputs (59%). More specifically, enterprises were concerned with limited access to machinery (34%), energy (17%), raw materials (12%), and skilled labour (10%). Machinery available on the domestic market were of low quality and appropriate spare parts were said to be hard to find, which shortened their lifespan. Machinery of a higher quality require a large sum of financial capital, also because transportation costs are high as these can only be acquired through importers in Addis Ababa. Also, during the power outages, the enterprise had to stop production processes that required electricity, thereby delaying production. Lumber supply fluctuations also had an unfavourable impact on enterprise operations.

The lumber assortment on the market was less diverse during the rainy season, as this is a period when farmers are more reluctant to sell their standing trees due to gained profits from other agriculture produce that are in season such as coffee. Also, prior and during fieldwork, political unrest linked to the Sidama people's independence aspirations impacted transport routes throughout the Sidama zone. Police checkpoints were more frequent at the time, meaning lumber traders without transporting licenses were more cautious.

High enterprise costs were also a frequently mentioned challenge (38%), especially in regards to rent (15%), taxes (12%), industrial inputs, such as MDF (12%) and paint (7%), and domestic (9%) and imported (7%) wood. Furthermore, fluctuating market demand was another frequently mentioned concern (34%). This was mainly thought to be related to the current unstable political situation of the region. Following that, multiple enterprises were burdened by poor government-provided business development services (24%).

In this regard, government departments are said to be subject to high labour turnover and limited capacity, which lengthens and encumbers enterprises' efforts for access to business development services. The cluster development program was also criticized for its selection process as well as the low impact it actually has on enterprise development. Gaining access to spots in an industrial cluster was indicated to be facilitated by ethnocentrism and bribes. Once selected for the cluster development program, enterprises had easier access to microcredits. These credits were, however, often misused for private investments, which hints towards the main issue of enterprises with access to development service, namely incited rent-seeking

behaviour and the lack of commitment towards the growth of the business. It meant that the majority of the furniture enterprises that moved to the industrial cluster did not achieve their business development targets.

The success rate for enterprise to graduate to a medium-scale production level after 5 years from an industrial cluster was perceived to be below 10%. The few that were able to benefit from the agglomeration of similar manufacturing enterprises, have an increased awareness of the benefits and approaches of sharing strategies. For this, the provided trainings are said to play only minor roles and were generally said to provide enterprise leaders with limited new knowledge. All in all, government-provided business development services are seen to be good on paper but its implementation process has a lot of room for improvement.

Other challenges mentioned but which were of lesser relevance were insufficient skills (14%), low competitiveness (7%), quality issues (3%), labour turnover (3%), transport issues (3%), as well as the low willingness to cooperate of other furniture enterprises (3%). The lack of competitiveness was primarily mentioned in conjunction with biddings for larger government orders. Small-scale enterprises compete for these orders in the same pool with larger enterprises, which are usually favoured due to their ability to offer low prices, a certified skilled workforce as well as sufficient production capacity.

6.15 General perception and desires for furniture enterprise upgrading

6.15.1 Desired upgrading scenario

Most of the enterprises questioned had the desire and goal to grow their business to an industrial scale (78%). This desire was primarily grounded in the unfavourable conditions many enterprises were in and the longing to improve one's situation. Growing to this scale meant expanding the value of physical assets, such as machinery and property for production and marketing, as well as creating more job opportunities. The rest of the enterprises questioned focused their efforts on having a positive impact on society, stabilizing income from the enterprise, operating it as a side-business, formalizing, and functional upgrading. Functional upgrading meant incorporating products with a wider range of components, such as metal components.

The reduction of negative externalities was also perceived as key for improving the overall process of the value chain. For the wider external environment of the furniture value chain, enterprises appealed for a more stable and unified political environment. The ongoing ethnic conflicts and the disrupted political order caused unfavourable market conditions and blocked supply chains. Enterprises were challenged with fluctuating lumber supply and acknowledged that their existence depended on a stable and economical supply of lumber. Some enterprises

argued that it was the government’s responsibility to secure and diversify wood production and supply markets. Due to the apparent market and government failures that were observed, collective action appears to have the potential to facilitate many of the desired upgrading scenarios. Several collective action scenarios were discussed with enterprise leaders.

6.15.2 Acceptability towards recommended collective action upgrading strategies

The enterprises were asked whether they would be willing to engage in several potential forms of collective action. For the most part, the following chart depicts a positive perception towards collective actions.

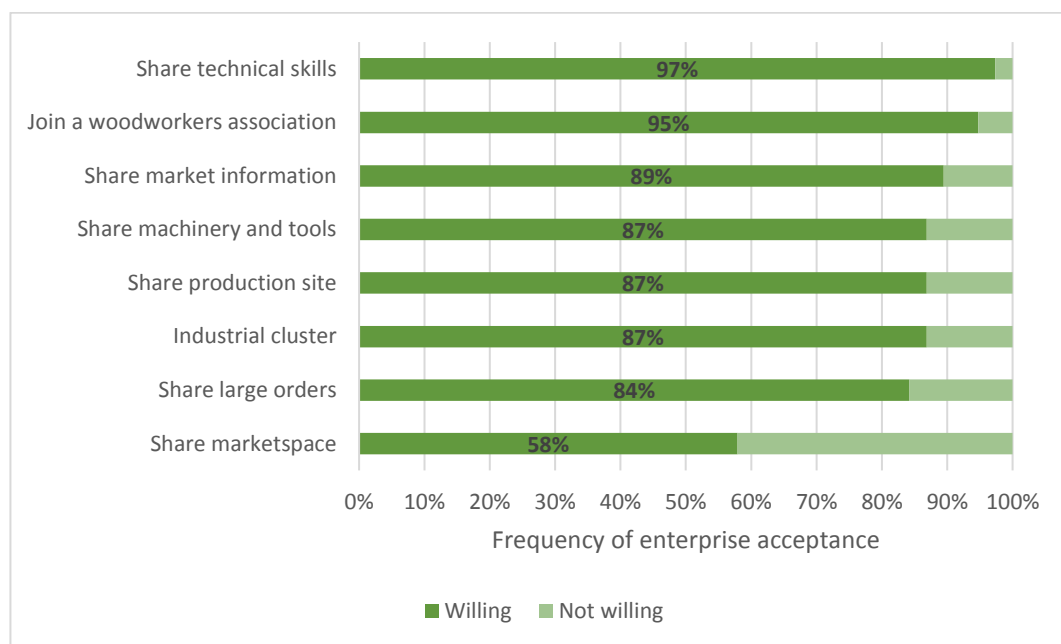


Figure 29: Enterprise acceptability towards potential forms of collective action (40 respondents)

Enterprises were observed to be especially willing to share their technical skills. Technical skills included techniques applied in woodworking as well as technical know-how in regard to utilized machinery. The discussion on this subject gave the impression that entrepreneurs had a strong sense of pride in their work and wanted to share this with others. The interest in woodworking techniques also drives curiosity and enthusiasm towards other woodworkers’ products. It was generally agreed that sharing skills with other woodworkers was the main source for innovation in this sector in Hawassa. This again shows that the ‘woodworker homophily’ is a strong facilitating factor for inter-enterprise networks. It also partially explains the high willingness to join a woodworker association.

Moving the business to an industrial cluster was seen with varying degrees of scepticism due to a fear of losing customers in the city. Sharing large orders was also accepted to a lesser extent, mainly because of the lack of faith in the production capacity of others. Sharing a marketplace

was said to be highly unusual and unlikely due to a risk of out-selling each other but also because it would cause complications in the tax collection process.

6.16 Enterprise perception towards collective action upgrading strategies

After the initial interview sessions, which gave a good overview of the current situation of the small-scale furniture enterprises in Hawassa, several forms of formal horizontal collective actions were identified as potentially relevant upgrading strategies. Industrial clustering, cooperative enterprises, and woodworking associations were discussed with the enterprise leaders to capture their perception on benefits, risks, and facilitating factors towards such upgrading options.

6.16.1 Benefits

In general, the frequency of mentioned benefits towards the overall notion of engaging in recommended horizontal collective actions, namely cooperatives, business associations and industrial clusters, was observed to be distributed as shown in the following figure.

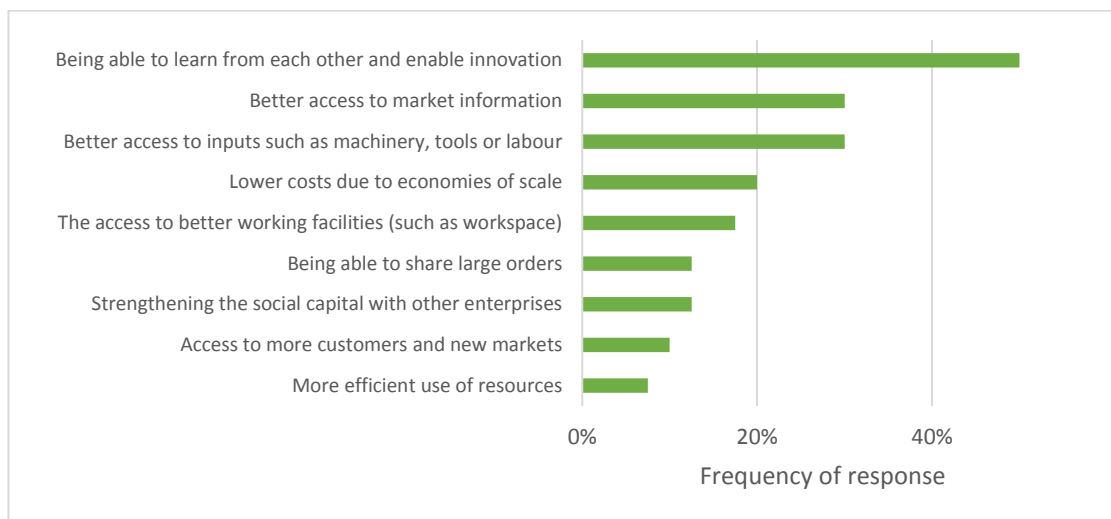


Figure 30: Enterprises' perceived benefits towards formal collective actions (multiple answers possible, 40 respondents, n=76)

All suggested forms were perceived to result in better access to capital, such as machinery or financial capital. Many of the questioned enterprises were at early stages of development and could not progress past subsistence. The lack of financial capital hindered asset extension, which again, in turn, hindered increased financial income from markets. Having formalized social ties was perceived as a way to overcome development barriers caused by the lack of initial starting capital. For some, strengthening the social capital was also an important development opportunity that was perceived to emerge from the discussed formalized collective action options. Formalization would support accelerated trust-building, as it somewhat guarantees fairness and secures the role of the participants within the formalized relationship (Macqueen et al. 2006).

Furthermore, the collective action options were also seen as a way to widen the market reach of the enterprises. Through trust building and a higher diversity in partnerships, enterprises anticipated a higher chance at gaining access to customers or possibly receiving and sharing larger orders. Participating in bids for government orders, for example, could take place in a more coordinated manner. A collective organization of small-scale operations with respect to order biddings could strengthen their bidding power and thus, their competitiveness with larger enterprises. A wider network was also seen to enable a more diverse inflow of market information, which would allow enterprises to foresee and react to certain market trends.

Cooperative enterprises were mainly seen as beneficial due to the increased likelihood of gaining access to government support services. Spaces in industrial clusters were mainly pursued for the access it provided to appropriate production premises but also favourable because the proximity to other enterprises could drive innovation. This emerges as frequent interaction allows for quality and production methods to be compared and collectively developed. In general, shared learning was observed to be the most frequent motivation for enterprises to be willing to engage in collective actions.

6.16.2 Risks

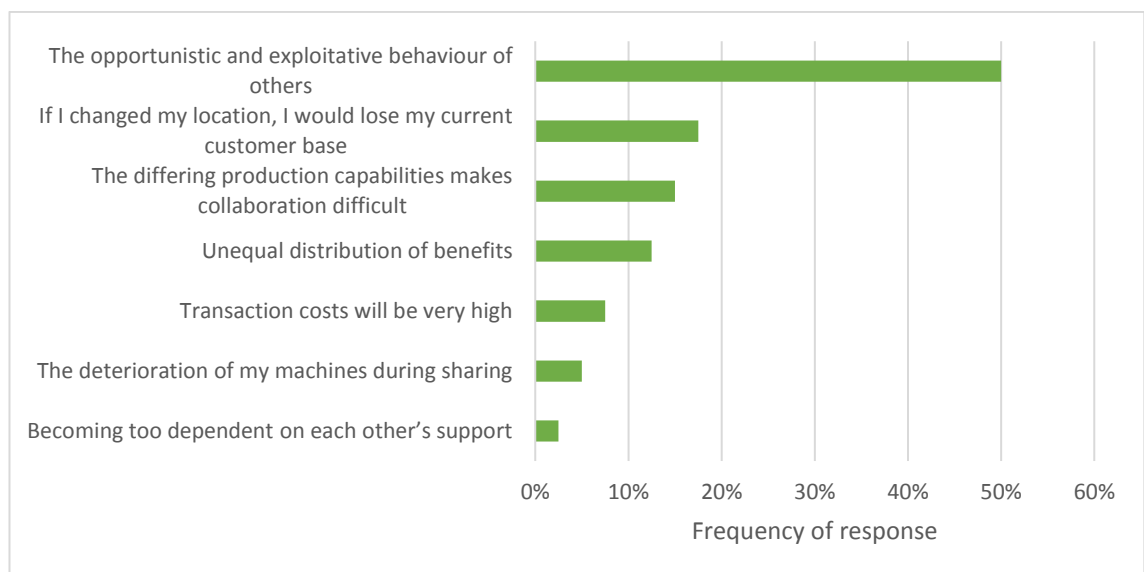


Figure 31: Enterprises' perceived risks towards formal collective actions (multiple answers possible, 40 respondents, n=44)

The greatest risk in intensified forms of collective action was perceived to be the opportunistic and exploitive behaviour of other participants. Not being able to trust others in this aspect would make collaboration difficult. The lack of trust was said somewhat to stem from the insecure and dynamic nature of the supply and demand markets of the sector, but also emerges due to heterogeneous personal and enterprise characteristics as well as cultural backgrounds. The lack of faith in stable market conditions substantiated a precarious and individualistic spirit amongst

susceptible actors of the furniture sector and propelled competitive horizontal relationships. This became somewhat visible when assessing the value chain governance and access structure.

Some speculated that other enterprises would use sensitive information or shared innovation to be able to outperform and possibly eliminate similar furniture producers. Differing skills and the perceived incapability of others was said to make collaboration difficult as it, for one, propelled competitive practices, but also diminished the confidence in each other. Heterogeneous production skills and capabilities would make transaction costs higher for collective actions that require a certain degree of uniformity amongst participants, such as sharing production orders.

Inadequate concurrence was also a reason for cooperative enterprises to rarely develop as intended. Adding to that, cooperative enterprises indicated that power disputes, low familiarity, and opposing characters have resulted in cooperative member inequality and member departures. Such conducts bring about a superior member that extricates other members from decision-making processes. Furthermore, in some cases, cooperative members lacked a sense of responsibility or the means to contribute equally to cooperative liabilities. The interest payments on financial credits should occur equally across cooperative members. Being able to rely on cooperative members at such instances becomes key to cooperative enterprises' successful development.

For other organisational structures, such as an association, the lack of common understanding, or miscommunication in general, was also perceived as a possible hindrance. Individualistic behaviour was said to be likely to emerge, making a strong common purpose and the common understanding of that purpose crucial. Members should thereby value benefits for the group. Internal organisational structures should further discourage individualistic rent seeking and ruinous competition.

By moving to industrial clusters, enterprises were concerned they would be highly dependent of government orders and thereby could lose their freedom to explore and choose certain market linkages. The proximity to other enterprises also allowed for the heightened awareness of e.g. order opportunities or favourable interest rates accessible to other enterprises. This provoked a feeling of discontent towards extension services, as these were perceived to be unevenly distributed amongst the enterprises located in the clusters. Another distrust was linked to the limited timeframe of 5 years associated with the access to industrial cluster spots. Several believed the support services were incapable or inadequately developed in order to support enterprises past the development phase in the industrial cluster.

6.16.3 Desired facilitating factors

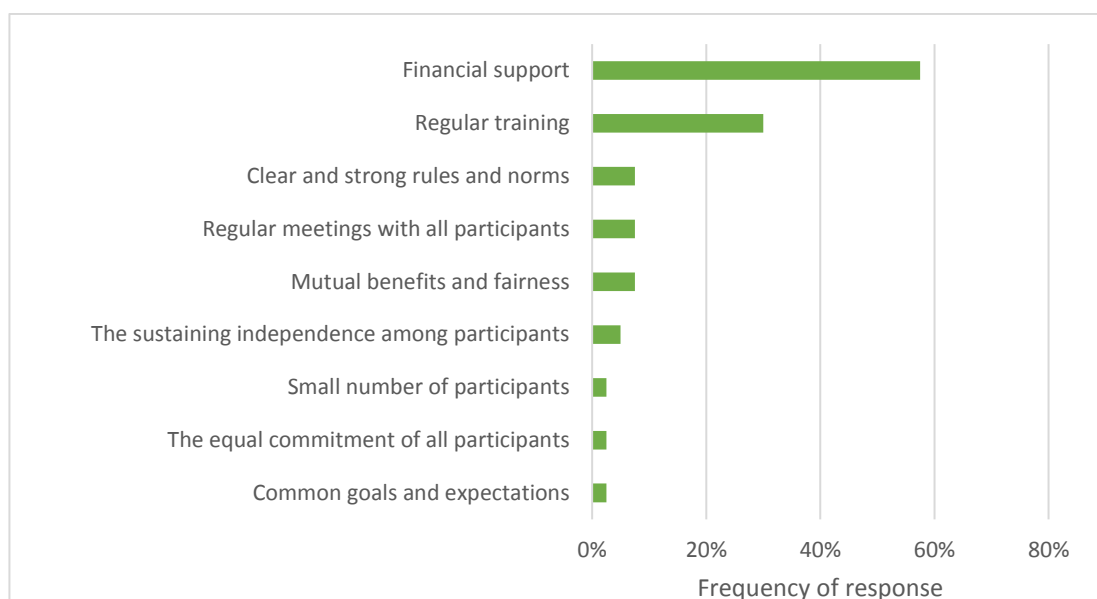


Figure 32: Enterprises' desired facilitating factors towards formal collective actions (multiple answers possible, 40 respondents, n=49)

The enterprise survey revealed several insights into desired success factors that, if applied, could somewhat guarantee described benefits as well as avoid possible risks associated with engaging in formalized collective actions. Overall, stronger and more effective government support was an overlying matter. The course to access support services was seen to have many bureaucratic and unprofessional obstacles, which prevents many enterprises from pursuing such services. Access to support services was often indicated to be facilitated by ethnocentrism, kinship, and bribes between support-seekers and extension agents. It was further stated that support services such as trainings were qualitatively low or misallocated. Some enterprises that received trainings perceived the content as irrelevant or reiterative, others wished they had gained skills through trainings that would have helped them e.g. to repay microcredits on-time.

It was further mentioned that the current selection process allows enterprises with objectionable means and a lack of commitment to gain access to support services. In principle, wider support for cooperative enterprises intends to allow for an inclusive development for the unemployed and less fortunate. Yet, many enterprises establish cooperatives with family members who do not actively participate in the enterprise operations, simply to have the status of a cooperative enterprise and have a higher chance at getting access to e.g. microcredits. Rarely were enterprises organized in cooperatives where cooperative members were active in the operations and decision-making or where the benefits were distributed equally. The constellation of the cooperative members was said not to be assessed by extension agents. Having the status of a cooperative enterprises was often adequate.

Furthermore, many tend to misuse the benefits, by e.g. using microcredits for private investments or selling government-provided property to receive short-term rents, which demonstrates a lack of commitment towards the development of the enterprise. Thus, it was stated that cooperative enterprises should be further assessed in terms of the member characteristics. These characteristics should also be seen as a more critical aspect when job creation agents establish cooperative enterprises with a group of unemployed individuals. Factors that commonly effect the success of such collective actions, such as heterogeneity of endowments i.e. differing and specialized skills of individuals or the homogeneity of identities and interests, need to be considered (Agrawal 2001; Kebede 2017).

In addition, the follow-up and auditing procedure was perceived to be ineffectively applied and thus, incapable to react to the misuse of provided resources or stagnating enterprise development caused by an unproductive application of provided resources. Enterprises should be audited regularly, mainly in terms of product quality as well as the bundle of available assets. If such a procedure is followed, stagnating enterprises could then be matched with the appropriate support services and incentives. Relevant entrepreneur trainings could e.g. evolve new confidence and understanding towards the enterprise's development, which stimulates an internal motivation to direct provided resources for enterprise development purposes. Such activities can then link to external incentives such as an eased access to microcredits due to the observable positive progress.

Also, trainings should incorporate specific skill development with regard to establishing and managing cooperative enterprises. Some enterprises expressed that experiencing sharing mechanisms, collective decision-making or trust-building approaches and methods during trainings would be helpful. Overall, the selection, provision and follow-up process of support services required a more systematic approach.

Financial support as well as regular trainings were the two most frequently indicated desired success factors. This did not come as a surprise, as most enterprises questioned were at early stages of development and often solely depended on the knowledge gained from past experiences to guide enterprise operations. Also, limited financial capital restricts many enterprises to establish or join an association or commence a process of establishing a cooperative enterprise.

For an association to emerge, enterprises would require an external supporter and facilitator. For now, no strong external pressures were observed to be present for a self-organized association to emerge. A self-organized association would require a large bundle of small enterprises to invest time and financial resources into its establishment, for which, at this point, external pressures as well as internal resources were not sufficiently available.

Another important success factor stressed by several enterprises was the fair distribution of benefits that materialize while organizing collectively. A fair distribution could be further enabled through a strong common understanding of the purpose and expected outcomes of the collective action. Furthermore, internal systems and rules within the collective action framework would need to clearly define and govern fair distributions of benefits. Members need to have a binding commitment towards the organization but also should be incentivized through other means, such as through social participation, to proactively engage in collective activities.

7 A collective action upgrading strategy for small-scale furniture enterprises in Hawassa

The small-scale furniture producers in Hawassa are exposed to a variety of challenges that stagnate their development and thus, their ability to enable sustainable and widespread societal benefits. Barriers that stand in the way of development need to be unlocked and higher value-adding activities need to be supported and rewarded. Their value chain position essentially requires an upgrading strategy.

First, this segment will summarize the relevant empirical results. Then, as indicated in the conceptual framework, the upgrading strategy is determined by matching empirical findings with success stories identified in literature. This serves as a basis for the next segment, in which the selected upgrading strategy, namely a business association, will be conceptualized in detail, whereby the precise components are determined by intersects of empirical and literature findings. The coupling approach brings the future upgrading scenario closer to its functional reality.

7.1 Discussion of preceding findings

All the observed challenges faced by the surveyed enterprises in Hawassa emerged due to market and government failures. Especially input markets are currently incapable of supplying appropriate land, capital, and raw materials in a stable manner. Enterprises were especially observed to struggle with gaining access to suitable production premises. This was observed in this study but also confirmed by studies ordered by the government of Ethiopia (Gebreeyesus et al. 2018; CSA 2014). Hawassa's urban scape is experiencing rapid population growth, driven to a great extent by rural-urban migrations. The property market is turbulent and the shelter supply gap is causing a construction sector boom that is expanding the city rapidly (Grant et al. 2020).

Nevertheless, properties are merely purposed for residence. Local municipalities were observed to hinder furniture enterprises in adjusting and renovating their production premises, with the reasoning that their production sites should be intended for residential purposes and that appropriate land for production would be provided in the near future. The competitive property

market challenged the enterprises with high rent costs and the difficulty in acquiring property ownership that may act as collateral for financial credits. The city's attempts to drive small-scale enterprises into industrial districts was somewhat unsuccessful due to the lack of alternative properties and the enterprises' lack of willingness to move into these areas. Most enterprises thus remained at their confined production sites. This caused further obstruction when forced to spill their production out onto the streets in addition to contributing to pollution through paint fumes and sawdust.

The alternative properties that were available in industrial districts were hard to access. As part of Ethiopia's industrial cluster development program, Hawassa only had one relevant cluster with approximately 20 spots for small-scale manufacturing enterprises. Gaining access required enterprises to be proactive in an application process. Enterprises thereby refrained from participating due to complex bureaucracy, bias and high labour turnover of government extension agents, as well as corruption. Furthermore, enterprises operating in these industrial clusters were highly dependent on government orders and lost the linkage to city-centre markets after moving to the industrial districts. Enterprises that did re-locate rarely achieved the intended development from micro and small enterprises to a medium sized operation within the span of 5 years. This was attributed to the lack of internal commitment towards the enterprise's development as well as the weak role of extension agents in distributing support services and monitoring development progress.

Other inputs such as financial capital and appropriate machinery were also challenging to access. The access to microcredits required collateral such as property or guarantors, which were observed to be rarely available. Appropriate machinery and spare parts were expensive and difficult to find on the domestic market. These were crucial assets for small-scale enterprises to accelerate their initial growth stages and therefore stalled growth when inaccessible.

Wood raw material supply gaps were noticeable by enterprises due to the limited availability of high-quality wood as well as through price fluctuations and its overall increment. Upstream value chain actors were thereby especially challenged in acquiring transport licenses or confronted by inappropriate storage facilities. The low quality of lumber compelled many furniture producers to use imported wood. Yet typically, the small-scale furniture actors in Hawassa narrowed their raw material supply focus on a limited number of tree species (e.g. *Cordia africana*), which is also somewhat associated with their limited knowledge of alternative and suitable supply sources of wood. Enterprises were often observed to engage in horizontal social networking to bypass imperfect market conditions or engage in social learning.

Horizontal relationships facilitated by common interests in woodworking and proximity were characterized by high levels of trust, engagement frequency, and abundance. Stronger ties in

particular enabled free access to machinery, market information and technical skills. Friendship, kinship and business relationships were nevertheless more frequently observed. These all enabled the sharing of machinery. Friendship relationships also facilitated the access to market information and the sharing of technical skills. The average tie strengths were higher as the enterprise developed, indicating that the longevity of the relationship also plays an influential role. Enterprises engaged in the sharing of technical skills and machinery demonstrated greater resource efficiency and had a higher average value added.

Horizontal social networks were often utilized for market access but generally, enterprises had difficulties in maintaining sustainable market linkages. For one, this was associated with the unstable political environment of the region but also observed to be linked to insufficient entrepreneurial skill, enterprise location and technological capacity. Enterprise leaders mostly relied on their past experiences to manage their business and develop their products. Technical skills were rarely gained through formal education programs but stimulated mainly through horizontal social networks and observable market conditions. Limited technical skills stagnated innovation whereas limited business, marketing and financial management skills restricted profitability and market access. Larger orders were rarely received and produced due to limited production capacity and low competitiveness in order biddings.

Vertical value chain coordination occurred to a lesser and weaker extent in the form of supplier credits or advanced payments from customer orders. Limited advanced payments and poor saving habits hindered many enterprises in further establishing market linkages due to narrow financial buffers. The spot market nature of enterprise supply and demand markets allows actors to easily switch to from one vertical relationships to another, impeding strong vertical relationships from developing.

Access structures to labour were essentially informal and finding skilful labour was difficult. Many workers learned skills on the job and wages for these were observed to be very low. Furthermore, limited financial management skills and inability to document sales made annual tax levels unfavourable, as tax collectors probably over-estimated payable taxes. Only a very limited number of enterprises were observed to have received short training sessions in soft skills such as financial management.

Furthermore, government support services were poor in recognizing the misuse of government-provided benefits or the stagnating development of supported enterprises. The status of cooperative members was not observed to be assessed in the selection process for support services, which encouraged false motivations in establishing cooperatives. Enterprises were also often said to misuse microcredits for private investments or had difficulties in paying interest instalments. Enterprises lacked the awareness of long-term benefits of enterprise investments

or had limited knowledge in financial management. Capable government support services could react to such circumstances with giving the concerned enterprises access to e.g. trainings in order to improve their skills as well as shift and restore enterprise motivation and confidence.

Overall, the preceding summary is a result of what this explorative study partially set out to do, namely to assess the situation of small-scale forest-based processing actors. Taken together, the collection of the listed challenges prevents the assessed small-scale furniture enterprises from reaching higher value-adding value chain positions. The profound desires to develop and grow towards industrial scale operations are thus, to a great extent, impractical.

Those that do advance to somewhat enable widespread benefits and sustainable development overcome market and government failure by making appropriate use of social networks or government-provided development services. Social networks that encompass relationships with high levels of trust and frequent interactions enable enterprises to benefit from sharing machinery or technical skills. On the other hand, effectively using development services such as microcredits and production sites in industrial clusters helps enterprises expand their production capacity and capability.

7.2 The relevance of a business association as a collective action upgrading strategy

It is clear that the furniture sector is recognized as a high value adding manufacturing sector imperative for the economic development of Ethiopia (MEFCC 2017). Government-provided enterprise development services are guided by economic trends of certain sectors and thus, have placed an emphasis on the furniture sector as part of the nation's wider economic growth strategy (Haile Gebremariam et al. 2009; MEFCC 2018a). Yet, the status quo assessment of the small-scale furniture producers in Hawassa has revealed that diverse development services are applied asymmetrically and rarely have an effective impact on enterprise development.

Furthermore, the rapid growth and expansion of the furniture sector outweighs the capacity of government provided services. The intentions behind favouring the support of cooperative enterprises are well conceptualized. Those that apply the strategy rightfully benefit from a distribution of risks across cooperative members and a collective solution-oriented enterprise environment supported by strong social connections. Yet, weak rules for the allocation process and missing subsequent follow-up services create false incentives towards and a false utilization of development services. This even encourages rent-seeking behaviour and a low internal business development commitment of the entrepreneurs, which is not in line with the intended ideological impact of Ethiopia's 'development state'.

The summary of observations bring about several conclusions. For one, horizontal social networks need to be enhanced in order to overcome resource scarcity of markets and thereby

enable a fairer distribution of sector-based benefits through sharing mechanisms. For this, enterprises may require a 'space' in which these can work towards developing social networks that incorporate an effective balance of strong and weak ties. Strong ties will in particular support the development of functional cooperative enterprises but also enable sharing of critical resources at different stages of development. Trust, longevity, and contact frequency are thereby important features of strong ties.

On the other hand, government-provided enterprise support services need to be improved with regard to its quality as well as its allocation and monitoring process. Entry points for microcredits, industrial clusters and trainings need to be eased by raising awareness of requirements and supporting the procurement of missing requirements. A wider and more effective access to these services will help enterprises overcome land and capital limitations, skill barriers, and market fluctuations. At the same time, enterprise incentives for gaining access to these services need to be guided by a clear-cut selection criteria and linked to a responsive follow-up service, which can somewhat guarantee a higher allocation and use efficiency.

Overall, an assessment of the value chain governance and access structure found that government and market failure, for one, sprouted beneficial social networks, but on the other hand, also limited an extended emergence of such networks, as instable market conditions forged mistrust between enterprises. A business association has the potential to provide the ideologies and structures that diminishes pre-assumptions of exploitive intentions behind enterprise relationships and, at the same time, undertake action directed at government and market failures.

Several success stories found in literature have shown that business associations can facilitate such upgrading (Doner and Schneider 2000; Inkoom 2014; Purnomo et al. 2014). For one, associations can act as platforms for horizontal enterprise networking, and furthermore, enable an amplification of sector interests as well as permit a central communication and transaction avenue that improves interactions with supporting value chain actors. Woodworking associations in Anloga, Ghana, were successful in negotiating favourable conditions during a government-induced relocation process of many small-scale furniture producers. The central representation allowed woodworker interests to be heard and communication across interest groups to be effective, which ultimately lead to public-private consensus and a smooth relocation process that all participating actors agreed upon (Inkoom 2014). A small-scale furniture enterprise association in Jepara, Indonesia, supported its members in gaining access to support services such as trainings and financial credits. Enterprises members were thereby able to expand their market reach and improve their development performance (Purnomo et al. 2014; Melati et al. 2013).

In both cases, associations were guided by a strong common purpose and made use of the members' homophily in woodworking to develop homogeneous preferences. An orientation towards a group purpose and a provided platform for consensus opportunities allowed a strengthening and diversification of internal network structures. Moreover, the centrality and collective fortitude of grouped small-scale furniture producers empowered these to have a greater impact on direct and supporting value chain actors, such as government institutions, which helped shape favourable market conditions (Inkoom 2014; Purnomo et al. 2014; Doner and Schneider 2000).

A business association and its potential impacts is thus a possible and suitable upgrading strategy for small-scale enterprises in Hawassa, Ethiopia. Such a form of collective action is also recommended by government reports (MEFCC 2017, 2018b). The situation of these enterprises was observed to be similar to those of the assessed success stories in the sense that they are challenged with spatial limitations, difficulties in acquiring access to development support services, and the exposure to unfavourable market conditions.

The challenges make their value chain position vulnerable and insecure, which speaks for an institutional collective action as a resilience measure. Organizing and coordinating activities within the realm of a business association has the potential to enable assisted access to support services such as trainings, microcredits and production premises, as well as to shape the policy environment by voicing challenges that emerge due to government and market failures.

The enterprises questioned for this study showed a high acceptance towards joining a woodworker association. This was especially because of the homogeneity of interests in woodworking and the fact that the enterprises shared similar challenges and therefore, had an understanding for one another's situation. This homogeneity is also mirrored in their high willingness to share technical skills as well as the strongly perceived benefit of being able to learn from each other. A strong homophily aspect helps overcome certain differences and allows a stronger individual orientation towards a common purpose, thus diminishing the likelihood of individualistic and opportunistic behaviour.

Furthermore, many strong relationships already exist, which would support a successful establishment of an association. These enterprises also make up a high density of the sector in Hawassa but at the same time sum up to a relatively small group of around 300 enterprises (Degefu 2018). Both are features of successful associations as has previously been mentioned (Doner and Schneider 2000). In order to visualize a woodworker association as an upgrading strategy for the small-scale furniture enterprises in Hawassa, the following segment will detail features and potential success factors that should be considered during its establishment.

8 A small-scale furniture enterprise association in Hawassa

It was found that for an association to emerge amongst small-scale wooden furniture enterprises in Hawassa, an external facilitator would be required for the establishment process. For now, external pressures are not sufficiently present for such an institutionalized form of collective action to emerge out of self-organization. An external facilitator should thereby guide the potential members through a participatory development process of the association. The participatory development should involve a wide range of interest groups but especially involve the potential members in the development of the association's institutional architecture. Collectively developing the internal purpose, norms, and rules will enable a wider acceptance and adherence towards such criteria (Doner and Schneider 2000; Coles and Mitchell 2011). Similar to the case of the APKJ, the association development process should be led by a team of key stakeholders, researchers, regional authorities, and regional extension agents (Purnomo et al. 2014). These actors should also initially play important leadership and staff roles of the association but eventually be replaced to certain extent by representatives of the potential members themselves (Doner and Schneider 2000).

Initial financial support was found to also be necessary, as many of the potential members will not have the initial financial capital to support the development of the association. External supporters providing financial starting capital need to therefore recognize the benefits of initiating such collective action (Coles and Mitchell 2011). Government authorities and extension services will particularly benefit from lower transaction costs of the interaction with a sector that is otherwise widely distributed across many small-scale individual businesses. This would somewhat counter the given limited capacity of the extension services in Hawassa.

The association could additionally take over certain support service activities, such as the support in the requirement procurement process, or monitoring the use of certain services. Government could thereby also have a better overview of the economic contributions and performances of such sectors and could thus make wider use of visible economic opportunities (Doner and Schneider 2000). Fundamentally, developing such an association is strongly in line with the ambitions of Ethiopia's 'development state' strategy (Chinigò 2019).

According to Ethiopian law, an association is termed as a society and is defined as "*an association of persons organized on non-profit making and voluntary basis for the promotion of the rights and interests of its members and to undertake other similar lawful purposes as well as to coordinate with institutions of similar objectives*" (Federal Democratic Republic of Ethiopia 2009, p. 4542). It can engage in income generation activities under the conditions that the profits are "*used to further the purposes for which [...] the society was established*" (Federal Democratic Republic of Ethiopia 2009, p. 4564). All in all, it is clear that the exact and effective

configuration of the association will only emerge during the participatory development process. Nevertheless, a few recommended structural elements will be depicted based on observations of the conducted VCA and success factors discussed in literature.

8.1 Association's common purpose

There are multiple different functions that can be fulfilled by such an association. The AKPJ was seen to support members in gaining access to development services, such as financial credits and trainings, whereas woodworker associations in Anloga, Ghana, functioned to reduce public-private transaction costs and represent interests in front of authorities to push for rights and improvements. Another example is the Aruaru Association of Furniture Makers (AAFAM) in Brazil, which internally *"formed a permanent committee for group purchase of timber and other materials; organized the sharing of equipment among members; shared information about opportunities to purchase secondhand equipment"* (Tendler 1998 as quoted by Doner and Schneider 2000, pp. 267–268) and enable access to government contracts to collectively produce large orders, for e.g. schools, which was possible due to the government's trust in the association's institutional strength (Doner and Schneider 2000). Yet, as Macqueen et al. (2006) points out, it might be more useful for the common purpose to have a restricted focus at the start and then wider functions in the long-term, once the association builds capacity and trust amongst members. A simple initial purpose allows wider initial acceptance and understanding. This should then be allowed to evolve over time with the participation of the members (Macqueen et al. 2006; Doner and Schneider 2000).

The initial common purpose should also be of substantial interest to the potential members in a way that reflects common values and generates common incentives. A strong common interest is one of the most crucial elements of a well-functioning association (Macqueen et al. 2006; Coles and Mitchell 2011; Doner and Schneider 2000). The small-scale furniture enterprises in Hawassa had a strong pride in their work and saw themselves fortunate to be engaged in woodworking activities. Studying their social networks showed that most were participating in horizontal sharing activities and were openly prepared to further engage in such activities. One strong endeavour was the sharing of technical skills, which helped enterprises learn from each other and innovate.

The homogeneous interests in woodworking and the linked gratification that propelled such skill sharing granted the actors to look past certain differences and consolidate problem-solving. In several instances, enterprises helped one another because they found honest satisfaction in seeing other furniture makers succeed and overcome certain challenges that are commonly felt by developing enterprises in this sector. Therefore, the common purpose of the association

should frame woodworking as the common interest and the development of small-scale furniture operations as the common goal.

Generally, the development obstructions most widespread amongst potential members (questioned enterprises) were market failures and the difficult access to enterprise development services. Both these issues are related to the external framework of furniture value chains and the indirect actors that govern this framework. For the case of Hawassa, Ethiopia, these actors are regional extension agents and authoritative figures, as well as national policy makers. The association should therefore collectively represent small-scale furniture enterprises in Hawassa to influence government policies as well as ease public-private interactions through centrality in order to ensure the sustained development of its members.

For one, this means campaigning for improved market conditions by voicing member interests in the policy environment, precisely by:

- A strengthened negotiation position for property rights, especially in regard to production premises.
- The voicing of technological requirements and its linked market to push for an improvement of domestic innovation management as well as for a higher efficiency of (global) machinery supply chains.
- Campaigning for sustainable domestic wood supply chains.
- Improved linkages to formal labour markets, especially to skilled workers from TVET colleges.

Second, the association would further support and enable the access to enterprise development services, such as trainings, industrial clusters, microcredits, and government contracts, which can be accomplished by:

- Supporting members in the procurement of access requirements, such as business licensing, cooperative enterprise establishment, or collateral for financial credits.
- Enabling effective communication between small-scale furniture enterprises and business development service providers.
- Managing the allocation and distribution of support services to its members.
- Monitoring the use of support services and responding to inconsistencies.
- Acquiring and managing government contracts, which e.g. incorporate large orders, thereby acting as a central guarantor and providing quality control services.

Achieving the common purpose requires suitable internal structures and activities, which will be detailed in the following segments.

8.2 Internal structure of association

The internal structures are best developed with the participation of the members, as this has been observed to increase member compliance with structures and rules (Doner and Schneider 2000). Nevertheless, based on this study's status quo assessment of potential members, several critical elements are discussed as follows.

8.2.1 *Internal governance structure*

The overlying and core component of the association's organization structure should be the active members. The active members could thereby be sub-grouped into sub-cities or even *Kebeles*, depending on where their enterprise is located. The sub-groups could be represented in a steering committee, for which potential steering committee members volunteer as candidates and are elected by all active association members. Coordination, communication and management is done by grouped facilitators, which could initially consist of researchers, extension agents, key local authoritative figures, as well as key stakeholders. Eventually, once the internal association architecture develops, members characterized with strong leadership skills can be voted into facilitator roles.

The facilitator group and the steering committee internally coordinate communication and interactions with representatives of extension services and the political environment. These also can interact with an advisory board, which could consist of elders or representatives of medium or large-scale enterprises that were previous members as micro and small-scale enterprises. Furthermore, three groups or task forces that support the facilitator group are recommended on the basis of diverse success factors mentioned by Macqueen et al. (2006), namely a procurement support group, a monitoring task force, as well as a response team. The support groups are mainly engaged for the members' improved access to business development services. The precise activities and role of all association actors is discussed in the "Activities" chapter.

8.2.2 *Member registration and requirements*

Members should be required to go through a membership application process. Suitable members are leaders of micro and small enterprises that are engaged in wood-based furniture making and who are located in the district of Hawassa Town. Possible requirements are a business license as well as an inspection of the production premises by the monitoring task force. Micro and small enterprises are categorized based on the criteria presented in Table 6. Once member registration is complete, the member should be required to pay a regular membership fee. Members that do not pay the required fee, do not regularly participate in association meetings, or do not further engage in committed operations within the wooden furniture production sector, may be subject to expulsion. The exact procedures for membership

accession and withdrawal would be determined by the association bylaws. Any procedure would have to be agreed upon through a majority vote of members (Macqueen et al. 2006).

8.2.3 Voting system

The voting system should follow a one vote per member arrangement, as member characteristics will be rather homogeneous due to the regional, enterprise scale and sectoral focus of the association. This makes certain member aggregations less likely and voting results to be more in line with member interests. Having equal voting rights also effectively encourages an ideology of fairness (Doner and Schneider 2000; Macqueen et al. 2006). Voting should be applied for the election of certain association actors as well as during association decision-making processes. These will be held in the presence of the active members at regular meetings.

8.2.4 Communication system and meetings

In order to allow for transparency, operational efficiency as well as low transaction costs, several considerations need to be made in terms of the association's communication system. It would be best if the association had a central location where meetings could be held. The facilitator should regularly meet with steering committee members, and from time to time a general assembly should be held that invites all members of the association.

Furthermore, in order to be transparent about association activities, a communication platform needs to be in place, where members can be informed about association spending and finances, member concerns, the distribution of benefits, and diverse decision-making processes. Steering committee members thereby also play a role in distributing information to the members in the representing sub-groups. The central location should also be used for new members to gain access as well as for extraordinary meetings that need to take place (Macqueen et al. 2006).

8.2.5 Association rules

Association rules will effectively take shape during a participatory development process. Yet, association rules should enable fairness in the distribution of benefits, member consensus opportunities, adaptable association structures and rules, transparency of information, equal rights in voting procedures, conflict resolution and effective sanctions, as well as the description of actor roles.

The procedures of distributing benefits will differentiate depending on the precise association service. Benefits emerging from voiced member interests will be felt more in the long-term and in relation to the broader economic setting of the enterprises and thus, cannot take on an internal distribution procedure. An organized procedure of distributing benefits can however occur with regard to the member's access to demand-based business development services.

Depending on the requirements of members, trainings or workshops could be organized or access to production premises in industrial clusters could be requested. This then also depends on the capacity of government extension agencies to provide the requested services. Government-based large furniture orders, for e.g. schools, are demand-dependant from the side of the government, whereas its fulfilment depends on the capacities of the producing enterprises. Access to micro-financial services are in most cases continuous and members thereby only need to be supported in the procurement of microcredit requirements. Overall, it is clear that access to these services require an allocation procedure. It is the association's task to enable a degree of fairness during distribution.

Once the availability of government orders, trainings or spots in industrial clusters are communicated to members, those that are interested could register for its potential access. The requirements and capacities could then be initially inspected by the monitoring task force. Further selection can then be based on member compliance with association rules, the past frequency of access to support services, or prioritizing more vulnerable members.

If at this point the member demand still outweighs the service capacity, room for member consensus should be provided. This first allows members to coordinate internally who will gain access to the service in question. If consensus is not reached, selection could continue by means of lotteries or a first-come-first-served method. Members who thereby do not get the chance of access could be compensated by e.g. guaranteeing a higher access chance during the next opportunity. If conflict arises, the involved members should be linked to the response team for conflict resolution. The side job of the procurement support group is to enable a wider range of enterprises that are able to fulfil the requirements of available development services.

Members should also be able to voice their concerns, either in regard to their enterprise-level market condition or to the internal structures and procedures of the association. This can occur at general assemblies, but also in coordination with steering committee representatives. The assemblies should for one, act as a 'room' for members to discuss and arrive at consensus on actions towards prioritized concerns, and second, host a voting for action options. Internal structures and rules should be continuously adaptable based on member preferences. General assemblies should also be used for the election of association actors as well as for the member involvement in general association decision-making processes.

8.3 Association activities

8.3.1 Association development activities

The establishment and evolutionary process of the association must occur with the close participation of its potential members. Initial structures are recommended to be established by

an external facilitator, but nevertheless on the basis of studying potential members and their preferences (Purnomo et al. 2014). Once initial structures are in place, the active members should have frequent opportunities to contribute and evolve the association's architecture and rules. This, for one, increases member compliance with the association manifestations, but also adds to the resilience of the association during shifts towards autonomy, as members understand the structures very well and are better able to oversee operations independent from external support (Doner and Schneider 2000; Macqueen et al. 2006). It will also be important to incorporate an administrative body that oversees and documents development changes, organizational structures, as well as finances.

8.3.2 Activities for influencing the policy environment

Members should also be able to raise and discuss issues regarding their market conditions. As individual small-scale enterprises, the expression of issues may be more easily ignored by higher powers. Yet, when coming together and agreeing on certain issue that impact the collection of those individuals equally, a collective expression of these issues before the policy environment is more difficult to ignore. Members could come together and vote on specific enterprise challenges and subsequently agree on an action plan to overcome the corresponding challenge. Association facilitators would then implement the action plan by lobbying and negotiating the action plan by interacting with relevant policy representatives.

8.3.3 Activities for improved access to business development services

These activities will depend on the precise business development service, which include microcredits, enterprise trainings, spots in industrial clusters, and access to government order contracts. There are several microfinance institutions located in Hawassa, such as the Omo Microfinance Institution or the Sidama Microfinance Institution. These offer a continuous service of provided microcredits to, amongst others, micro and small enterprises. In this regard, the main difficulties of small-scale enterprises are the fulfilment of microcredit requirements as well as poor saving habits. As a member of the association, one should be supported, for one, in the procurement of these requirements, and second, in a potent build-up of required savings and the subsequent consistent payment of interest instalments.

The procurement team, together with the association facilitators, could e.g. negotiate and acquire government guarantees or property rights that may act as credit collateral. The association could also establish internal networks among members, which could lead to the formation of common bonds that could be used as collateral. Member enterprises could also be assessed in terms of their financial stability, enterprise development commitment, and saving habits. If the monitoring task force judges members to be unfit for microcredit access, these enterprises could be linked to the procurement support group, which would help the enterprises

gain access to trainings in e.g. financial management. For difficulties arising from paying interest instalments, the response team could be mobilized for problem-solving.

Internal networking could also facilitate the formation of cooperative enterprises, which are generally favoured in the distribution of all types of government-provided business development services. Cooperative enterprise development processes could emerge, whereby association members with strong similar interests and values as well as heterogeneous skills can be linked up. In regard to such smaller groups, homogeneous interests and values enable trust-building, whereas endowment diversity enables innovative enterprise development (Kebede 2017; Chinigò 2019). The procurement support group could facilitate this process, whereas the monitoring task force can oversee progress and the harmony status of cooperative members. In case of conflicts, the monitoring task force could activate the response team for conflict-resolution measures. Generally, the advisory board and elders could contribute support to conflict-resolution processes (Macqueen et al. 2006).

For enterprise trainings, the facilitators should closely work together with local TVET colleges for gaining access to and organizing trainings for members. For this, the monitoring task force could for example do an internal assessment of member training needs. Furthermore, members could express feedback after receiving trainings, which could then be communicated to trainers for future improvements. For spots in industrial clusters, the facilitators should be in contact with the extension agents of the cluster development program (CDP). The internal monitoring structure of the association could thereby support extension services in monitoring development progress of member enterprises that are participating in the CDP. Stagnating development can thereby be countered with e.g. prioritized access to other business development services.

Government order contracts have been observed to be distributed to similar furniture associations, such as the AAFM in Brazil, as the association can coordinate the production of large orders across multiple small-scale enterprises as well as act as product guarantor (Doner and Schneider 2000). The facilitators could negotiate contracts and subsequently distribute ordered production volumes across selected members. The monitoring team could assess member production capacity and conduct quality insurance inspections in order to ensure that the product meets contracted expectations. Production delays could be avoided by, for example, coordinating bulk purchasing and storage of supplies. Also, associations could allow the collective participation of its members in government biddings of large orders. With the backing of the association, small enterprises can be more competitive due to coordinated pricing offers or association insurances.

The recommended association features are summarized in the following model.

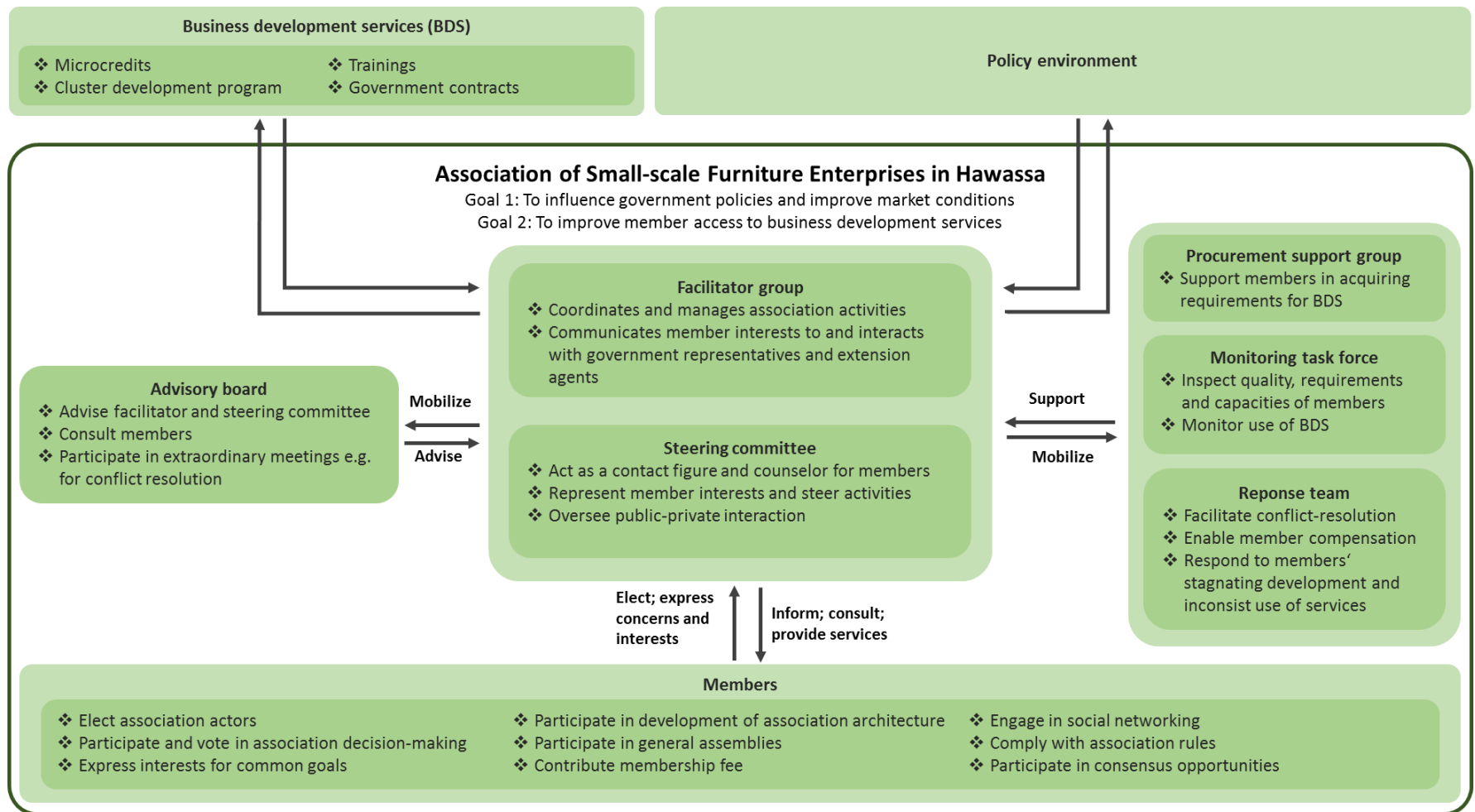


Figure 33: Recommended structure and activities of a potential association of small-scale enterprises in Hawassa, Ethiopia

8.4 Potential impact of establishing an association of small-scale furniture enterprises in Hawassa

All in all, the recommended structure presented in Figure 33 was produced on the basis of a status quo assessment of some potential members as well as literature review of business association success stories and linked success factors. The structure especially aims to enable valuable selective benefits for potential members and effective internal procedures, which are guided by an equal voting system, a degree of flexibility in adjusting the internal structure as well as rules, transparency, and widespread consensus opportunities. The association thereby embodies a needed interdependence among members for its functioning, which is, in combination with a strong common purpose and member benefits, an important factor for success. Member interdependence for the association's functioning is reflected in the ability of members to reach agreements, the voting system, as well as the membership fee (Doner and Schneider 2000; Macqueen et al. 2006).

The main benefits for its members will be the optimized access to information and the improved transaction with its external legal and support environment. This also lowers transaction costs for government figures. For example, tax collectors and extension agents were said to still physically go from one enterprise to another to disseminate or collect information. Communication channels are narrowed and centralized with use of a steering committee and a facilitator group. Issues regarding government and market failure can thus be more effectively voiced, essentially aiming to improve the otherwise unheard challenging conditions of small-scale enterprises.

For now, the access to sector-based information and to business development support services are associated with high transaction costs. Access to diverse information required a costly and time-consuming perpetuation of social ties. Access to extension services was observed to be burdened by selection bias, a high labour turnover of extension agents, and inefficient bureaucratic processes. Costs of acquiring either of these often go beyond the gains or capacities of individual small-scale enterprises. Collective action under the umbrella of an association has the potential to optimize the distribution of information as well as the transaction with influential indirect value chain actors. Overall, the challenges addressed by the common purpose of the association are widespread across the potential members studied. Not participating would probably force a small-scale furniture enterprise to further endure costly and unfavourable market conditions (Doner and Schneider 2000).

The participatory nature of the establishment and development process of the association will also have an impact on the nature of the inter-enterprise relationships. Allowing for high transparency as well as the adjustment of association rules and structures with participation of

the members, the aim is to establish homogenous preferences amongst members and an increased orientation towards the common purpose. The internal structures should specifically aim to allow members equal opportunities of development through the fair distribution of association-related benefits. Member interdependence, the trust and acceptance towards internal association structures, as well as the heightened collective orientation towards business development thereby has the potential to diminish distrust between enterprises and ruinous competition in an unstable market context (Doner and Schneider 2000).

Such coordination is especially relevant for the insecure product and factor markets that link to small-scale furniture enterprises in Hawassa. Coordinating activities within furniture-maker supply and demand markets will also benefit forest-based value chains as a whole. These thereby improve vertical relationships, pressure for change in the external dimension, and horizontally adopt resource efficiency measures by sharing skills and resources as well as coordinating resource use. It therefore has the potential to drive up the value for native wood, convey the strong need for sustainable wood supply sources, and work towards social inclusion and resource efficiency for small-scale wooden furniture producers. Furthermore, the association has the potential to provide its members with a resilience buffer in case of shocks felt as a collective but also on the individual level.

9 Critical analysis

This explorative study applied an extended approach of a value chain analysis by adding features of participatory action research methods. It essentially allowed the study to not only recommend an upgrading strategy for the studied actors but also develop a model of the potential strategy. Modelling value chain upgrading scenarios is recommended by VCA guides (Mitchell 2011; Springer-Heinze 2018a) but has so far rarely been applied in studied literature.

On the one hand, this adds to the study's originality and value, thereby providing an approach that has the potential to add to the success of institutionalized collective action. Many associations and social networks of small enterprises have been studied in different contexts. This study made the attempt to combine such previous learnings with empirical findings to bring a hypothetical collective action model closer to its potential success path. On the other hand, its contemporary status puts this methodology at an early stage of academic and empirical development. The conducted research thus lacked a strong theoretical background, which led to limited research guidance and instead imposed its adaptive and explorative approach. Based on the results of field research, the methodology had to be continuously adapted and often generated inconsistency in the collected data. This also partially led to sample size differences.

In the existing literature there is limited agreement and comparable methods on how to select and measure the potential success of future collective actions, its potential impact, as well as the variables that determine potential success and impact. This study therefore aimed at collecting data with a high variation of variables, of which some were found to contribute a larger role and others a minor role towards the achievement of the research objectives.

The literature gap inflated the limited focus on important variables that would have otherwise allowed these to be studied in a more detailed and organized manner. The value-added calculations, for example, took on a very simplified approach due partially to prolonged interview lengths as a result of the augmented collectable variables. The heterogeneous value chains of individual enterprises would have required an extended research stay in order to study value added in greater detail. In general, several circumstances challenged the temporal research agenda, including the regional political situation, the rainy season, as well as coordinating interview appointments with enterprises and the interpreter, all of which essentially hindered a wider sample size.

Two major critique points concerning the association model also need to be discussed. For one, the potential members were not studied in regard to their ethnic, cultural or religious background. These variables were purposely excluded on the account of recommendations of local experts. It was said to possibly cause heated discussions or a misconception on the actual purpose of the study, and thus would make data collection difficult and inaccurate. At the time, the population of the Sidama zone were subject to or part of political unrests due to the Sidama people's federal independence aspirations. This caused inter-ethnic conflicts and violence between those living in the Sidama zone.

Homogeneity in cultural, ethnic and religious circles has been observed to be an important success factor for collective actions due to pre-existing shared norms and beliefs (Agrawal 2001; Macqueen et al. 2006; Kebede 2017). In Ethiopia, societies take on a more collective sense for ethnocentrism or cultural norms (Kebede 2018). It has been observed that social capital among entrepreneurs in Ethiopia is supported through ethno-linguistic similarities, which allows an easier build-up of trust (Kebede 2017). Having insights on these aspects could have further enabled a foresight of potential groupings, success, and conflicts, which would have therefore endowed the planning of potential structures that could counter or make use of such aspects.

A second point is that the model suggests the need for initial external support from government representatives, which includes the endorsement of leadership and organizational roles. It thereby assumes that these actors are strongly in line with the common goals of the recommended association. Nevertheless, ethnocentrism, selective bias, as well as corruption of

government officials and extension agents were significant concerns of the studied enterprises. Such attributes of government actors involved in the establishment of the association have the potential to delude the common purpose. Organizations in similar contexts have been observed to be misled by exploitive government incentives. In Ethiopia, the selective and exclusive behaviour of government officials are main reasons for the stagnating achievements of the nation's 'development state' strategy (Chinigò 2019). It is therefore questionable if a sustainable road to autonomy is possible for the case of small-scale furniture enterprises in Hawassa.

A strong degree of independence or autonomy from external interests is an important success factor for achieving the purpose of such organizations. Yet, the status quo assessment of the potential members in Hawassa demonstrated that these lack the initial capacity and the strong common orientation to self-organize, thus making initial external support necessary. The association development therefore requires a smooth public-private power handover process as well as a strong common purpose that motivates members to proactively maintain association structures. In such cases, similar associations dissolved after external support was revoked (Macqueen et al. 2006).

Furthermore, government officials initially involved need to perceive its establishment and eventual autonomy as strongly beneficial. These are detectable in the resulting improved transaction with important economic actors, overall economic development, or the improved operations in regional development planning, such as more efficient processes in city or infrastructure planning. Being able to measure such benefits will also strengthen arguments for financing the start-up of the recommended association.

10 Recommended association development steps

Based on the overall findings of this study as well as key insights gained from a study by Purnomo et al. (2014) that describes an external participatory implementation process of an association of small-scale furniture producers, recommendations can be made for future development activities for the potential association of small-scale furniture makers in Hawassa. The recommended action points are listed as iterative procedural steps.

1. Now that the situation of small-scale furniture enterprise has partially been described and a potential upgrading strategy has been formulated, further research needs to focus more on the potential functionality of the recommended association model as well as on its potential impact. The potential functionality should be more widely assessed in terms of the willingness of small-scale enterprises and linked determinants. Such a study could indicate certain characteristics of potential members that would contribute to the establishment and functioning of an association. Also, the horizontal social network can be potentially studied in a more detailed matter in order to further identify facilitating and averting conditions of horizontal cooperation. Focus group discussions amongst

enterprises can be a useful tool to get further insights on the interaction and group dynamics between relevant small-scale furniture makers. The functionality can also be assessed with regard to the potential facilitators, which could mean to, for example, study capacities and enabling conditions of relevant government officials. Such methods will enable the association to be more precisely detailed.

2. With a detailed model of an association, its potential impact on potential members, relevant markets, society, or government income may be assessed in a more effective manner. The potential costs as well as the potential outcomes can be summarized and examined in cost-benefit analyses.
3. The results of these studies can act as a strong argument for the establishment of an association and can be presented to relevant government officials and potential members as an initial step of its establishment. For this, relevant stakeholders that would potentially act as establishment facilitators need to be identified. Furthermore, key representing stakeholders of small-scale furniture enterprises need to also be determined.
4. With relevant stakeholders, initial internal association structures, rules, financing options, management, and potential headquarters would be discussed. Based on the consensus reached by these actors, the association structures can be formalized.
5. Due to research conducted on the association, a certain degree of awareness on the potential woodworker association will already have spread through the horizontal network of small-scale enterprises. Nevertheless, the facilitator group should initiate an awareness effort to make the association widely known across potential members.
6. Once a stable member base is established, internal association development activities as well as provisional services can be initiated.
7. Further research could then monitor the association's impact and indicate whether it meets its intentions. On the basis of this research, recommendations for further improvements of the association can be made.

11 Conclusion

Due to the given wood supply uncertainty in Ethiopia, this master thesis set out to explore the circumstances and potentials of a wood-based processing sector. Precisely, survey research was conducted on small-scale furniture enterprises in Hawassa, as these were seen to be particularly vulnerable in the midst of turbulent market conditions. A focused value chain analysis was initially applied to gain insights into general characteristics, product flows, network ties, supporting activities, value adding and cost structures, governing forces, as well as perceived challenges.

It was found that Ethiopia's growing domestic demand for furniture was also evidently detectable in Hawassa in the sense that its urban-scape is meanwhile characterized by a high abundance of furniture producers. The majority of these operate on a small-scale, working in extremely confined spaces and having to deal with a large array of challenges. Production premises were mostly makeshift set-ups and production lines often poured out onto the street. Small furniture enterprise often caused disturbances with spatial obstructions for traffic and

pedestrians as well as with sawdust, paint fumes, and noise pollution. Local authorities were concerned with the sectors rapid development and tried to limit their expansion within densely populated areas by restricting renovation measures. Furthermore, industrial clusters were established to offer manufacturing enterprises workspaces outside the city. Such support programs were nevertheless limited in terms of capacity and perceived to be poorly implemented mainly due to a selection bias of extension agents but also somewhat unfavourable due to the potential loss of customers in the city. Overall, furniture enterprises had limited options for improving the production conditions.

Adding to this, enterprise-linked formal input markets were volatile, meaning essential resources such as machinery, wood raw materials, financial credits, and industrial materials were often difficult to access. Small-scale furniture enterprises were often observed to engage in horizontal social networking in order to overcome issues of market failure and gain access to scarce and costly resources. Certain intangible assets, such as technical skills, that were also poorly accessible through e.g. formal training institutions, were also frequently distributed across such network ties. Strong and sustainable network ties were seen to be characterized by high levels of trust and frequent engagement, and were primarily established and maintained due to homogeneous interests in woodworking.

With these issues in mind, the study advanced to explore potential upgrading strategies by surveying the enterprises' upgrading desires and, particularly, their perception towards collective action upgrading options. The potential of collective actions for enterprise development was reinforced by several success stories reviewed in secondary data, the pre-established relationships between the questioned enterprises, as well as by their high acceptance and strongly perceived benefits of presented collective action upgrading scenarios.

A potential business association amongst small-scale enterprises in Hawassa especially came to light and thus was further detailed and modelled. Such an association would serve to improve the enterprises' access to business development services, enable their challenges to be collectively heard within the policy-making arena, as well as to the potentially further facilitate beneficial forms of horizontal collective action. An association model was constructed, characterized by an equal voting system, transparent communication measures, rules for a fair distribution of member benefits, and a flexibility in adjusting internal structures. The association thereby specifically aims to put a value on the woodworker homogeneity, the collective and participatory build-up of the association by its members, and a common purpose that offers internal selective benefits but also is beneficial to externally impacted actors. Essentially, the modelled association has the potential to improve public-private transactions as well as facilitate horizontal coordination, which possibly enables improved market conditions and

access to business development services. The small-scale furniture sector can therefore enable a more equal development, further coordinate the distribution of critical resources, be heard as an important sector of forest-linked value chains, and expand as one of Ethiopia's crucial bio-based economic sectors.

All in all, this thesis pursued an upgrading strategy that has been widely discussed but rarely pursued empirically within the framework of value chain research. In addition to a value chain analysis of small-scale furniture enterprises, it unfolded a concrete vision of what a potential upgrading strategy may look like and how it would best function. The presented institutional form of horizontal collective action was thereby suited to the context at hand by making use of research from past case studies in similar contexts. Ultimately, this brings the upgrading strategy closer to a successful reality.

Nevertheless, the topic on collective actions remains somewhat underexplored, especially in the context of developing manufacturing enterprises in emerging economies. It seems that the research spotlight specifically on business association for small enterprises development has somewhat extinguished, even though current global trends of rapid population growth and resource scarcity highly require such forms of cooperation to enable inclusive social and economic development. Multiple new approaches to economic thinking that consider worrisome global developments stress the need for diverse cooperation mechanisms and a distancing from the harmful nature of market competition (Raworth 2018). As such, today's conflicting and turbulent world could certainly benefit from the collaborative and resistant virtues envisioned in diverse forms of collective action.

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Appendix

Table 12: General elements that guide the development procedure of establishing and supporting enterprises on the basis of registered unemployed

Steps	Activity
1	Registering unemployed and confirming that are unemployed
2	Helping them form a business and orientating them on small scale enterprises
3	Grouping them based on admired training interest and sending list to training colleges (TVET colleges)
4	Providing credit access based on savings (savings-based credit)
5	Mobilising their savings
6	Providing advisory services
7	Access to production and market spaces
8	Selecting a model cooperative
9	Creating market linkages
10	Follow up, to check that credit is used for the target purpose
11	Introducing new technology related to their production by cooperating with TVET college
12	Reviewing and improving business plan to check strengths and weaknesses
13	Delivering information services
14	Helping them to conduct accounting and auditing business through bookkeeping
15	Transforming business to new or other level based on auditing results and reports
16	Providing secure access to water and electricity
17	Licensing through follow up services
18	Follow up: helping enterprise enhance productivity and quality
19	Access to entrepreneurship training
20	Transformation from survival to profitable entrepreneurship (those who hire and employ) and thus, supporting livelihoods through enterprise development

Table 13: Development criteria for wood and metalworking enterprises

Criteria	Micro Enterprise		Small Enterprise	
	Beginner	Developing	Beginner	Developing
Total assets (ETB)	50,000-75,000	75,000-100,000	100,000-500,000	500,000-1,500,000
Annual Sales (ETB)	50,000-75,000	75,000-100,000	100,000-500,000	500,000-1,500,000
Profitability	Profitable for at least 3 successive years, 15% of profits towards business.	Profitable for at least 3 successive years, 20% of profits towards business.	Profitable for at least 3 successive years, 15% of profits towards business.	Profitable for at least 3 successive years, 20% of profits towards business.
Sales avenue	30% of sales through non-government established market linkages	35% of sales through non-government established market linkages	30% of sales through non-government established market linkages	35% of sales through non-government established market linkages
Business network	2 business formal relationships established in 1 year	-	2 business formal relationships established in 1 year	-
Marketing	3 successful promotional activities	-	3 successful promotional activities	-
Productivity	50% of production capacity is in operation	-	50% of production capacity is in operation	-
Training	50% of enterprise members have completed vocational training	75% of enterprise members have completed vocational training	50% of enterprise members have completed vocational training	-
Financial liabilities	Credit from government is repaid in a regular manner. Rent and annual tax is paid timely and regularly.			

Table 14: Members and roles of the New Market wood wholesaler cooperative

Position		Frequency	Tasks
Core members	Leader	1	Leadership; overseeing activities
	Protocol	1	Administration; taking notes of daily business activities and meetings
	Cashier	1	Treasury; to do bookkeeping, to register daily in- and out-flow of cash
	Auditor	1	To analyze cost and revenue
	Controller	1	To control activities of other members, to distribute tasks
Committee members	Purchaser	5	Product purchasing; going with other members who are able to bargain and together with someone from the core members

Table 15: Leading cost structures of questioned small-scale enterprises in Hawassa

No.	Rent costs per month (USD)	Energy costs per month (USD)	Employee weekly wage (USD)	Taxes for 2018 (USD)
1	Owned	10.20	6.80	203.98
2	237.97	17.00	7.77	237.97
3	271.97	27.20	17.00	305.96
4	50.99	6.80	10.20	217.57
5	34.00	15.13	20.40	200.58
6	Owned	30.60	17.00	271.97
7	101.99	17.00	25.50	67.99
8	237.97	23.80	15.86	339.96
9	67.99	13.60	4.25	849.90
10	101.99	34.00	6.49	577.93
11	271.97	11.33	31.16	407.95
12	Owned	17.00	13.60	203.98
13	50.99	17.00	6.80	169.98
14	101.99	34.00	9.44	339.96
15	67.99	17.00	NA	200.58
16	316.16	15.30	13.60	169.98
17	101.99	20.40	25.50	288.97
18	169.98	20.40	5.67	220.97
19	407.95	27.20	25.50	169.98
20	67.99	6.80	22.66	NA
21	50.99	17.00	17.00	101.99
22	169.98	17.00	14.17	203.98
23	67.99	6.80	20.40	81.59
24	101.99	17.00	5.95	NA
25	101.99	6.80	16.32	NA
26	67.99	10.20	22.66	271.97
27	101.99	8.50	10.20	27.20
28	101.99	17.00	17.00	NA
29	84.99	10.20	14.57	271.97
30	67.99	17.00	17.00	NA
31	220.97	NA	11.33	339.96
32	67.99	6.80	17.00	NA
33	67.99	17.00	11.90	339.96
34	84.99	NA	23.80	NA
35	67.99	10.20	17.00	237.97
36	67.99	6.80	17.00	271.97
37	Owned	3.40	NA	NA
38	Owned	17.00	17.00	458.95
39	118.99	NA	25.50	NA
40	101.99	NA	14.45	84.99
Average	125.11	15.84	15.67	262.54

Table 16: Major material input quantities, material costs, product price and product value added of a functional unit

No.	Chair model	Lumber input (kg)	Lumber input (m ³)	MDF input (kg)	MDF input (m ³)	Labour time (h)	Lumber costs (USD/product)	MDF costs (USD/product)	Product price (USD)	Value added (USD)
1	2	35.20	0.0640	14.40	0.0192	2.67	6.80	5.67	54.39	41.93
2	2	16.50	0.0300	10.80	0.0144	4	8.50	4.89	56.09	42.71
3	2	14.67	0.0267	17.28	0.0230	8	1.81	5.10	34.00	27.08
4	2	13.20	0.0240	7.20	0.0096	4	3.06	2.83	50.99	45.10
5	2	13.20	0.0240	14.40	0.0192	8	5.10	5.10	34.00	23.80
6	2	59.40	0.1080	28.80	0.0384	8	7.65	10.20	67.99	50.14
7	2	13.20	0.0240	10.80	0.0144	8	2.21	4.67	61.19	54.31
8	2	19.80	0.0360	17.28	0.0230	4	6.46	8.16	50.99	36.38
9	2	41.25	0.0750	NA	NA	2	14.02	NA	93.49	79.47
10	1	44.00	0.0800	NA	NA	0.75	4.08	NA	8.50	4.42
11	1	52.80	0.0960	NA	NA	1	4.08	NA	17.00	12.92
12	2	17.60	0.0320	14.40	0.0192	16	4.42	5.10	34.00	24.48
13	2	11.00	0.0200	10.80	0.0144	8	1.36	4.25	34.00	28.39
14	2	16.50	0.0300	10.80	0.0144	24	11.90	4.36	84.99	68.74
15	2	26.40	0.0480	14.40	0.0192	16	6.12	5.67	34.00	22.21
16	2	31.68	0.0576	14.40	0.0192	8	6.12	5.67	50.99	39.21
17	2	33.00	0.0600	14.40	0.0192	8	5.10	5.10	67.99	57.79
18	2	17.60	0.0320	12.34	0.0165	8	20.40	4.37	54.39	29.63
19	2	17.60	0.0320	14.40	0.0192	8	2.38	7.37	50.99	41.25
20	2	26.40	0.0480	14.40	0.0192	32	5.44	5.10	50.99	40.46
21	1	44.00	0.0800	NA	NA	8	6.80	NA	8.50	1.70
22	2	15.92	0.0320	NA	NA	8	10.20	NA	61.19	50.99
23	2	26.40	0.0480	10.80	0.0144	24	20.40	4.04	67.99	43.56
24	2	24.75	0.0450	8.64	0.0115	3	12.75	3.33	59.49	43.41
25	2	13.20	0.0240	14.40	0.0192	16	6.80	7.37	40.80	26.63
26	2	26.40	0.0480	10.80	0.0144	24	6.12	5.10	39.66	28.44

27	1	33.44	0.0608	NA	NA	8	6.80	NA	13.60	6.80
28	2	6.60	0.0120	10.80	0.0144	8	4.93	5.10	50.99	40.97
29	2	13.20	0.0240	7.20	0.0096	12	2.55	2.46	67.99	62.98
30	2	24.75	0.0450	8.64	0.0115	8	9.18	4.59	101.99	88.22
31	2	35.20	0.0640	5.40	0.0072	8	7.48	1.91	101.99	92.60
32	2	39.60	0.0720	10.80	0.0144	8	5.61	4.25	28.90	19.04
33	2	88.00	0.1600	10.80	0.0144	8	20.40	3.61	67.99	43.98
34	2	13.20	0.0240	10.80	0.0144	16	8.50	5.10	50.99	37.40
Average	Sum	27.23	0.0496	12.51	0.0167	9.92	7.51	5.02	51.56	39.91
	Chair 1	43.56	0.0792	NA	NA	4.44	5.44	NA	11.90	6.46
	Chair 2	25.05	0.0456	12.51	0.0167	10.66	7.79	5.02	56.85	44.38

Table 17: First questionnaire for small-scale furniture enterprises in Hawassa

Questionnaire 1

General information

Enterprise name		Education	
Interviewee		Enterprise legal status	
Location		Enterprise Age	
Age		Phone #	
Gender		Property owner?	
No. of employees (Full-time/ temporary)		Financial accounting?	

At what level of development is your enterprise?

- Absolut beginner (Total Assets < 50,000 ETB)
- Micro ent. : Beginner (TA 50,000-75,000 ETB) or Developing (TA 75,000-100,000 ETB)
- Small ent. : Beginner (TA 100,000-500,000 ETB) or Developing (TA 500,000-1,500,000 ETB)
- Medium enterprise (TA > 1,500,000 ETB)

History

- a. How did you come to this business?
- b. Can you describe significant events of your upgrading process?

Value chain structure

Supply (e.g. at production gate, new/old market)	
Transport	
Value adding operative activities (e.g. cutting, grinding, assembly, painting, drying) [With what machinery/tools? Where?]	
Marketing (Where? How is the price set?)	
Customers (e.g. end-users, government, schools, organisations, retailers, wholesalers)	

Government support

- a. Do you (or did you ever) receive government support? (e.g. training, funding, workspace, cluster development program)
- b. If in government established cluster:

- i. How do you interact with the other enterprises?
- ii. Do you share? (please specify/characterize)

Collective action

- a. Is your enterprise engaged in any of the following collective actions? Please specify and describe.

Vertically	
Contract with supplier	
Contract with customer	
Informal CA with supplier	
Informal CA with customer	
Selling of by-products	
Horizontally	
Sharing market space	
Sharing workspace	
Sharing storage space	
Sharing product orders	
Sharing raw material orders	
Sharing inputs	
Skills/Learnings/Information	
Association	

Other?

Challenges

- a. What are challenges that hinder enterprise development? Please specify and describe.

Limited access to financial capital	
Space/land limitation	
Storage	
Market	
Production	
Limited access to inputs	
Labour	
Raw material	
Machinery	
Tools	
Energy	
Quality issues	
Labour turnover	
Transport issues	
Market demand	
Supply fluctuations	
Insufficient skills	
Technical	
Management	
Marketing	

Other?

Motivation: What are your desires for the future regarding your enterprise? Thank you for your time.

Table 18: Second questionnaire for small-scale furniture enterprises in Hawassa

Second questionnaire

Value chain / product life cycle / enterprise resources

1. Supply

1.1. What wood raw materials are purchased?

Wood raw material	Price of raw material	Pieces / week	Transport cost

1.2. What type and how much wood is needed for e.g. one chair?

Input	Quantity (Unit)

1.3. What is the price of this product? How long does it take to produce one?

2. Production

2.1. What are physical assets used in these production steps?

Physical asset	Price at purchase (ETB)	Age

2.2. How much do you pay your employee (Full-time equivalent/week)?

2.3. How is your production and market space characterized?

Land type	Rent / month (ETB)

2.4. Does your enterprise have any other fixed costs (e.g. taxes, energy costs)?

Type of cost	Costs per month (ETB)

3. By-products

3.1. How are your by-products utilized?

3.2. What are they sold as? Firewood Bedding

3.3. To whom are they sold? Wholesaler End-users Other woodworking enterprises

3.4. Do you have a strong vertical relationship with the buyers? Yes No

4. Market

4.1. If products are ordered, do customers pay in advance? How much?

5. Intangible assets

5.1. How important do you judge the following practices for your business?

	Major importance (5)	(4)	(3)	(2)	Of no importance (1)
Technical skills					
Business management skills					
Teamwork					

6. Financial capital

6.1. Do you receive financial credits? Yes No; Source and collateral:

Collective action potential

7. Horizontal social capital

7.1. How many other similar enterprises do you know? None 1-5 6-10 11-15 >15

7.2. Do you cooperate with them in any way? Yes No; **Why? Why not?**

7.3. How frequent? 5 – Very frequent 4 3 2 1 – Not frequent

7.4. How would you judge your level of trust for these enterprises? **Why?**

5 – Very trustworthy 4 3 2 1 – I don't trust them at all

8. Perception

8.1. What collective actions would you be willing to engage in with other enterprises?

Collective action	Yes	No	Comment
Cluster with other enterprises			
Share production site			
Share display area			
Share large product orders			
Share machinery and tools			
Share technical skills			

Share market information			
Association			

8.2. What do you think are the benefits of collective actions, precisely clustering, associations and cooperatives?

Being able to learn from each other and enable innovation	
Better access to inputs such as machinery, tools or labour	
Better access to market information	
Lower costs thanks to economies of scale (e.g. bulk purchasing)	
The access to better working facilities (such as workspace and storage space)	
More efficient use of resources	
Strengthening the relationship with other enterprises	
Access to more customers and new markets	
Being able to share large orders	
Other:	

8.3. What do you think are the risks of mentioned collective actions , precisely clustering, associations and cooperatives?

The deterioration of my machines during sharing	
Unequal distribution of benefits	
If I changed my location, I would lose my current customer base	
Becoming too dependent on each other's support	
Transaction costs will be very high	
The opportunistic and exploitative behaviour of others	
The differing production capabilities makes collaboration difficult	
Other:	

9. Success factors

9.1. What factors are important for the successful facilitation of such mechanisms?

Trustworthy and strong facilitator/coordinator	Financial support	
Common goals and expectations	Regular training	
Mutual benefits and fairness	Clear and strong rules and norms	
The equal commitment of all participants	Small number of participants	
Regular meetings with all participants	The sustaining independence among participants	

Thank you for your time!