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# Analysis of Value Chain Governance: Scenarios to Develop Small-Scale Furniture Producers

# Rika Harini Irawati<sup>1\*</sup>, Melati<sup>1</sup>, and Herry Purnomo<sup>1,2</sup>

<sup>1</sup>Center for International Forestry Research (CIFOR), Bogor <sup>2</sup>Department of Forest Management, Faculty of Forestry Bogor Agricultural University, Bogor

### Abstract

Furniture industry had shown a long chain of production to consumption, from raw material producers (tree growers), semi-finished producers, finished product producers, and retailers to exporters. Jepara as a centre furniture industry in Indonesia incorporates around 15,000 business units and provide livelihoods to approximately 170,000 workers. This sector contributes about 27% of Jepara's people domestic income. Small and medium furniture enterprises (SMEs) have significant roles in the furniture industry as production structures are characterized by them. Power and information imbalance throughout the furniture value chain have resulted in problems of uneven distribution of gains among actors of the industry. SME furniture producers have experienced an unfair value added distribution. Hence, development of SMEs is important for strengthening the industry and expected to result in a portion of value added distribution to them. We are trying to develop scenarios for SME improvement in the furniture industry in Jepara by identifying their problems and implementing Value Chain Analysis (VCA). VCA is an approach to describe SME producer relations with other actors in the industry and the governance type of their relations. Data is collected by interviewing selected SMEs from the association of small scale producers in Jepara to get detailed maps of their value chain. The research will produce future scenarios and intervention points to improve small-scale producer sustainability and better value added distribution among furniture actors. The scenarios will not only benefit selected producers but also the furniture industry of Jepara, and can be adopted for similar industries throughout Indonesia and abroad.

Keywords: furniture, value chain, governance, scenario, small-scale

\*Corresponding author, e-mail: r.irawati@cgiar.org

#### Introduction

Furniture has traditionally been a resource and laborintensive industry that includes both local craft-based firms and large volume producers. Teak and mahogany are among the most valuable tropical timbers used for furniture. In 1998 the Indonesian furniture industry experienced a boom and turned to mass production of low-value furniture for national and international markets. This trend seriously compromised the sustainability of mahogany and teak plantations, and more recently wood furniture industry is becoming increasingly competitive, with more producers entering the market and prices falling. Another consequence from that situation is the global market share reduced.

Furniture is a sector where SMEs have important roles, hence the decrease of furniture will increase poverty levels. In Jepara district, Central Java, furniture industry provided 27% of Jepara's people income. There are at least 15,000 furniture business units which employed about 177,000 workers. According to the previous survey in 2005, 92% of the existing business units are small scale (Roda *et al.* 2007). Improvement of furniture industry will increase quantity of jobs available and therefore reduce unemployment. Upgrading the industry will be able to improve the quality

of jobs and provide more voice and participation to workers and (small) employers.

The amount of value added in furniture value chain in total is very high, but the balance distribution of value added is questionable. Purnomo (2008) revealed that overseas stakeholders enjoyed more value added than the domestic stakeholders in the case of exported furniture. Furthermore, finishing and exporting companies receive bigger benefits than small-scale furniture producers and tree growers.

This study used the Value Chain Analysis (VCA) method and aimed at identifying the type of value chain governance between small scale furniture producers in Jepara, Central Java with their chain upwards and downwards; and explores the main problems faced by small scale producers to design scenarios in order to improve their ability to upgrade. The results will be used to design intervention scenarios to upgrade the furniture industry in Jepara.

### Method

Value chain analysis (VCA) describes activities that are required to bring a product or service from conception or design, through different phases of production, to delivery to final consumers and disposal after use. Figure 1 shows

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the simple wood furniture value chain, which from the forestry sector provides logs. Cut logs then go to the saw-mill. From there, sawn timber moves to furniture manufacturers who draw on design and branding skills from the service sector. Depending on which market is served, the furniture then passes through various intermediary stages until it reaches the final customer, who after use consigns the furniture for recycling.

The entry point for VCA in this research is the small scale producers. We identify the relation and the governance type between small scale furniture producers and other actors in the industry. Respondents are taken from the members of the association of small scale producers in Jepara who were chosen to become local champions and hopefully they can be the agent of change to all small scale producers in Jepara. The type of value chain will essentially determine the success of the intervention points of upgrading strategies.

## **Result and Discussion**

From the interview with respondents, we can draw the initial mapping of each selected producers. There are several types of chain can be described. We found similar types of chains which shown the relation between the producer upward and backward.

The first type of chain is as Figure 2. The small scale producers sell their products to exporters who also act as a finishing company and warehouse. The exporters have determined the product specification and the price. Some producers still have chances to negotiate about the product price. But still, they feel that the price is improper with the efforts and production costs.

Furniture producers who produce garden/outdoor products experienced this price problem. They are hardly negotiating with the buyers and at the end they forced to take the price given by the buyer even if the price were not covering all the production costs. The price problem emerges as a side problem of the marketing problem. The producers can not found a new market/buyer and they are passively waiting for buyer.

ILO (2006) proposed four types of value chain governances. There are the indicators for each type of value chain governance (a) market-based, indicated by many customers/many suppliers; repeat transactions possible but information flows limited; and no technical assistance; (b) balanced network, indicated by supplier has various customers; intense information flow in both directions; and both sides have capabilities and commitment to solve problems through negotiation; (c) directed network,

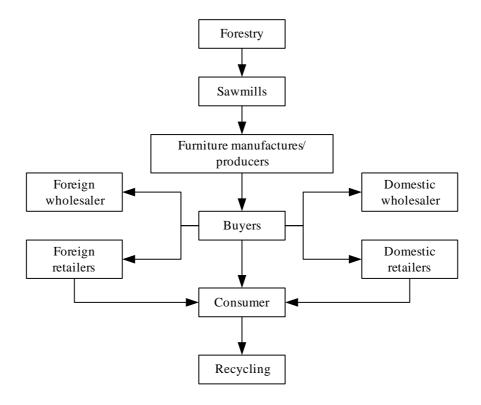


Figure 1 Simple value chain of furniture industry.

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indicated by main customer takes at least 50% of output; customer defines the product and provides technical assistance; and imbalance information; and (d) hierarchy, indicated by vertical integration; supplying establishment owned by customer; and very limited autonomy to take decisions at the local level.

Gerrefy *et al.* (2005) propose a more complete typology of value-chain governance. They are:

- 1 Markets. Market linkages do not have to be completely transitory, as is typical of spot markets; they can persist over time, with repeat transactions. The essential point is that the costs of switching to new partners are low for both parties.
- 2 Modular value chains. Typically, suppliers in modular value chains make products to a customer's specifications, which may be more or less detailed. However, when providing 'turn-key services' suppliers take full responsibility for competencies surrounding process technology, use generic machinery that limits transaction-specific investments and make capital outlays for components and materials on behalf of customers.
- 3 Relational value chains. In these networks we see complex interactions between buyers and sellers, which

- often create mutual dependence and high levels of asset specificity. This may be managed through reputation, or family and ethnic ties.
- 4 Captive value chains. In these networks, small suppliers are transactionally dependent on much larger buyers. Suppliers face significant switching costs and are, therefore, 'captive'. Such networks are frequently characterized by a high degree of monitoring and control by lead firms.
- 5 Hierarchy. This governance form is characterized by vertical integration. The dominant form of governance is managerial control, flowing from managers to subordinates or from headquarters to subsidiaries and affiliates.

According to Gerrefy *et al.* (2005), the relation between producers and exporters are captive value chain. It indicated by the exporters act as a main customer, defines the product and provides technical assistance and monitoring on producing the products. The producers are dependent much to the buyer and become a price taker. Some producers feel like they are being used by the exporter because the payment term was unclear and too many procedures. The common things happened in Jepara are producers paid by a post dated check or a just a billing note. They can claim for

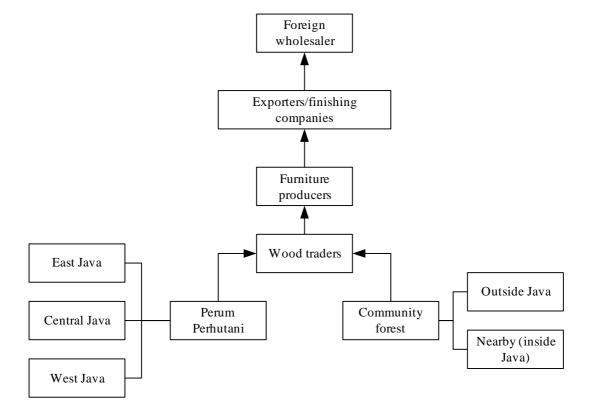


Figure 2 Type of furniture value chain connected producers to exporters.

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cash in the due date. But since the due date is too long, they sell the check and get the cash lower than as is proper. That's why most producers with this chain have problems with capital and marketing.

The relation between producers and wood traders in this chain are more market based type. The small-scale producers could freely buy wood form the wood trader. Usually producers tend to buy wood from the wood trader located nearby. When they had enough money they would seek retailers all over the regions. However, if they did not have sufficient funds, they would take credit from the closer wood retailers.

They will go to others places if they did not get the specification requested since there are so many wood traders around and outside Jepara. The same governance type also occurred on wood traders and the community forest farmer. But when the wood traders get supply from Perum Perhutani, the relation type become modular. It happened because Perum Perhutani has theirs own regulation to sell the timber. Perhutani had more control and power than wood retailers. So, pricing and quality were determined by Perhutani.

Another type of value chain governance between producers and other actors shown in Figure 3. In this chain,

furniture producers have a better bargaining position compare to the first type. They sell their products to domestic showroom which is closer to the end user. The relation between producers and the showroom is become balanced network (ILO 2006), indicates by the information flows on both sides and the price given by the producers and thru negotiation process. Even the products specification comes from the buyer, but there are no technical assistance or supervisory from them. The governance type between the showroom and end consumer is market based type. They were connected on the basis of market principles, since there were many of them. Nobody controlled the transaction or price.

Producers in this chain tend to keep up the quality and have a good relationship with their customers. In the name of quality, most of producers in this chain are using Perhutani wood, even the price are higher. Based on our observation, these kinds of producers already exist in furniture industry since many years ago. They are survive and even grown because quality is an emphasized. But still, after the global economic crisis, demand from their customers more or less decreasing.

The problem faced by them is the increasing of wood prices every now and then. Even they get higher price

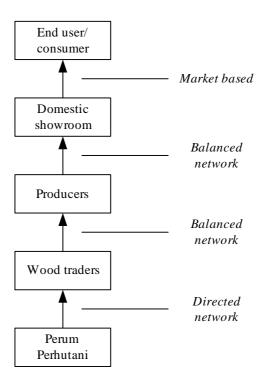


Figure 3 Type of value chain governance connected producers to showroom.

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comparing to the first type, thus they can not increase the product price. Hence, strengthen the capital is an important issue

One of the respondents told us that she wish to have her own showroom, so she can reach the market directly. Now, she spread the network and looking for information about the market and join the small scale producers association to have a chance to expand the new market.

The last type of the value chain governance found in this study is in Figure 4. From this chain we can see that producers are directly connected to the end user. They can directly negotiate the price, the product specification and information flows are not limited to both sides. The relation between this producers and the consumers are become market based type. The consumers can go freely to any producers who can comply with their request. They were connected on the basis of market principles, since there were many of them. Nobody controlled the transaction or price. In some cases, when the consumer become regular, the type of chain change to be a balanced network (ILO 2006) or according to Gerrefy *et al.* (2005) it become modular value chain.

Interestingly, these kinds of producers are using wood from community based agroforestry. This situation happened because they cannot afford to buy wood from Perhutani. But if the customer requested to use Perhutani wood, they will provide it. The relation between wood trader and tree growers in community based agroforestry are relational value chain. That was happened because wood trader had more power than the tree grower so the control laid by them. But, it has mutual dependence for both parties.

### **Discussion**

Value chain initiatives have vertical and horizontal dimensions. The vertical dimension is related to the different stages of the chain, while the horizontal dimension is related to the same stage of the value chains (ILO 2006). Recently, problems faced by furniture producers are related to marketing, capital and wood material. For upgrading strategies based on the problem faced, we proposed one scenario for horizontal dimension and three scenarios for vertical dimension.

The scenario for the horizontal dimension is **Small-scale** Association Scenario. This scenario suggests organizing small enterprises locally and then assisting them to access financial institutions and markets. Associations or cooperatives are common forms of this scenario. All respondents interviewed for this study are members of Jepara Small Scale Furniture Association (APKJ) which already established in December 2008. The visions of this association are to improve small-scale furniture producers' ability to be independent and have competitiveness in the global market, to empower the members of APKJ toward prosperity and for the advancement of the Jepara furniture industry. The missions are to improve small-scale furniture producers' skills for better bargaining position, to create fair market prices, and to facilitate access to credit. The respondents selected are proposed to be the local champions of APKJ. Selected local champions are hoped to be the agents of change to their surrounding and to give a lead to other producers in Jepara. APKJ itself hoped can do marketing actions as the problem faced by small scale producers is mostly on market. Market orientated actions

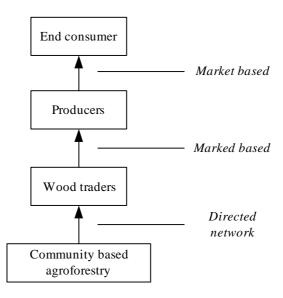


Figure 4 Type of value chain connected producers directly to end user.

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that could be done by APKJ are establishment of a web marketing portal, creation of a collective trade mark, and participation in exhibitions and fairs.

By joining the small scale association, scenarios for vertical dimension can be more easily approach. The first scenario proposed is Collaborating down the value chain in order to address systemic weakness and opportunities, where small-scale producers collaborate with wood traders and tree growers to address inconsistency in delivery time and product quality. Frequently, the inconsistency of delivery time is caused by unavailability of wood sources and wood stock. This scenario can increase the product economic scale, trust of buyers and value added. It can then increase the net income of small-scale producers. Through this scenario, power balance between small-scale business (small-scale producers, small-scale wood traders, and tree growers) and big players can be improved. They can have better bargaining position to negotiate with brokers and exporters due to better product quality and uniqueness. This scenario has been planned to be approach by the members of APKJ to collaborate with the farmers in one area in Jepara district to reforesting an implanted land. The purpose is to have enough wood stocks for APKJ members. This scenario may not be achieved in a short time. But still, it can be implemented and would benefit to the availability of wood sources.

The second vertical dimension scenario is the adding value and pursuing strategies to develop new higher value position in value chain or moving up scenario. This scenario encourages small-scale producers to move up to the higher stages in the value chain, e.g., to become furniture brokers or finishing companies or exporters. This scenario can give better value added and income to the small-scale producers. In the buyer-driven value chain, the higher stage generally has control over the lower stages. This scenario needs better self-confidence and skills. This requires training and knowledge on brokering, financing and overseas trading. By moving up, the small-scale producers can have more power than before. In addition, they can be recognized as old friends by other small-scale producers. In other words, they may find it easier to manage or develop network with the small-scale producers. APKJ can act as the broker for the members so the producers can get benefit from it. APKJ could also provide the training and share the knowledge to all the members since an association is easier to connect to other stakeholders than producers alone.

The next scenario is **network companies- collaborating along the value chain to produce new products or services through jointly owned network companies**. This scenario may lead to balanced relations, evenly distribute value

addition and strengthen competition with other furniture producing regions. APKJ plan to conduct by jointly owned network companies (with big companies association) and facilitated by the government to produce certified, ecolabeled or *green* furniture. Producing certified furniture products requires coordination between various stages in the value chain. This scenario can only be done by integrating competences of different members of the value chain, for instance, Perhutani or community based agroforestry for certified timber, small-scale producers for certified processing, and exporters for marketing to certain customers.

#### Conclusion

Most of the business units in furniture industry are small scale and they are highly dependent to the industry. Nevertheless, power and information imbalance throughout the furniture value chain, have resulted in problems of uneven distribution of gains among actors of the industry. Small scale furniture producers have experienced an unfair value added distribution. Hence, development of SMEs is important for strengthening the industry and expected to result in apportion value added distribution to them. VCA is an approach to describe SMEs producer relation with other actors in the industry and the governance type of their relation. There are three types of value chain governance found in this study, they are: market based, directed network, and balanced network.

There are four possible scenarios to be implemented to upgrade small scale furniture producers, i.e. small-scale association, collaborating down, moving up and create new product scenarios. The first scenarios already implemented by small scale furniture in Jepara. By forming this association, hopefully the others scenarios could be implemented thru coordinating with other stakeholders and facilitate by the government.

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