

## Upgrading Wood-Based Industries: Harnessing the Social Network of Small-Scale Furniture Producers and Their Institutions

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### Abstract

*Furniture is a major export commodity in Indonesia with a total value of USD 1.96 million in 2007. Jepara District is one of the key location for wood furniture production with 15,271 furniture related business units employing 176,469 workers. However, inefficiencies and power imbalances throughout the furniture value chain have resulted in overharvesting and uneven distribution of gains among the industry's actors. In contrast to price-setting international furniture retailers, small-scale producers enjoy the least value from their products. In order to increase added value and competitiveness, small-scale furniture producers have made efforts to upgrade by harnessing their social network and institutions. This paper describes small-scale furniture producers' efforts to upgrade by utilising their social network and institutions in Jepara. Data was collected through in-depth interviews with members of the small-scale furniture producers' association. The research provides insight into the nature of social networks and information flow and develops future scenarios to upgrade. The scenarios will not only benefit the furniture industry in Jepara, but may also be adopted for similar industries throughout Indonesia and the world, and potentially improve many people's economies and livelihoods.*

*Keywords: wood-based industry, furniture, small-scale, social network, institution*

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### Introduction

Furniture has become a major export commodity for Indonesia, with an export volume of 898,000 tonnes and a total value of USD 1.96 million in 2007 (ASMINDO 2008). Contrary to Indonesia's economic downturn following the Asian economic crisis in 1997, the furniture industry experienced a boom as the marked depreciation of the Rupiah raised the export competitiveness of local enterprises (Loebis and Schmitz 2005).

Furniture industries in Central Java, particularly Jepara grew rapidly after the crisis. Up to 15,271 furniture related business units and 176,469 workers became involved in the wood furniture industry in Jepara alone (Roda *et al.* 2007). As a consequence of the region's newfound prosperity, the social life of the people and the sustainability of wood plantations were affected. Inefficiencies throughout furniture production and distribution chains have created major concerns about overharvesting and low incentives for furniture producers (Purnomo *et al.* 2007). There is no doubt that Jepara is now experiencing an economic slowdown, with 30% of furniture workshops closing down since 2005 due to lack of orders and low prices (Prestvik 2008) and fluctuating export values in recent years.

Local and central government, the local business community and donor agencies have all made efforts to overcome problems facing the furniture industry. Small-scale furniture producers in particular, have been targeted

by programmes to increase added value and competitiveness. The furniture producers' association in Jepara has also played a major role in improving its members' bargaining power and livelihoods. By utilising its social network, the association has better access to market information than individual producers do. It functions as a safety net for small-scale furniture producers and helps them to survive.

Established in 2008, the Jepara Small-scale Furniture Producers' Association (Asosiasi Pengrajin Kecil Jepara; APKJ) has collaborated with government trading offices, design schools and related institutions to support programmes aiming to improve the livelihoods of furniture producers. Facilitated by the Center for International Forestry Research (CIFOR) and sponsored by the Australian Centre for International Agricultural Research (ACIAR), the APKJ is part of a five-year action research programme entitled 'Mahogany and teak furniture: Action research to improve value chain efficiency and enhance livelihoods'. With support from the Jepara District Government, the project is currently building on the capacity of APKJ members to enhance business management practices and production techniques as well as opening access to new and better markets.

This paper is based on research conducted in Jepara in 2009 and describes the upgrading efforts of APKJ small-scale furniture producers through the utilisation of their

social network and institutions. The research gives insight into the nature of social networks and information flows and aims to develop future scenarios to enhance positive collaborations within small-scale producer institutions and improve their livelihoods.

**Method**

Data collection involved direct observation and in-depth interviews with members of the Jepara Small-scale Furniture Producers’ Association. With up to 100 members, ranging from active small-scale businesses to those who have entirely stopped production, the association has elected 15 top producers-titled ‘local champions’-to become role models for other members. These local champions are a select representative from five groups of furniture specialties: indoor mahogany, indoor teak, garden furniture, and relief and sculpture. Besides interviewing local champions, we also interviewed board members such as the secretary, vice secretary, and deputy chairman who run the organisation on a daily basis.

We observed social interactions between local champions and board members to identify the roles and status that make up their social network. Types of interactions observed included social groupings as well as bonding and bridging roles. We also identified types of information and communication flow in relation to market access, certification and workshop opportunities. Data collected included sources of information, modes of its dissemination and its target recipients. The data was then

used for network analysis to identify the nature of social interaction and its contribution towards the current state of collaboration within the institution. Based on these results, modelling simulations were then developed for creating scenarios to improve social network efficiencies for the benefit of all members.

**Results and Discussion**

**General relationships within the social network** The Jepara Small-scale Furniture Producers’ Association consists of several board members and a majority of general members. The chair and board members were chosen during an annual meeting, where selected candidates were expected to serve for three years. The board consists of a chair and deputy chair, a secretary and vice secretary, a treasurer, four main coordinators in charge of human resources, raw materials, finance and marketing, as well as a ground officer who is in charge of five groups of furniture specialties: indoor mahogany, indoor teak, garden furniture, relief and sculpture (Figure 1).

In the case of APKJ, all board members including the chair work voluntarily, with the exception for the secretary who was hired directly by CIFOR to facilitate and supervise dealings within the organisation. This special circumstance has placed the secretary in somewhat of a dual position; members respect him as a donor representative, but nonetheless envy him for his paid work. He is, however, responsible for a lot more tasks than other board members. Besides handling daily secretariat issues, he also has the

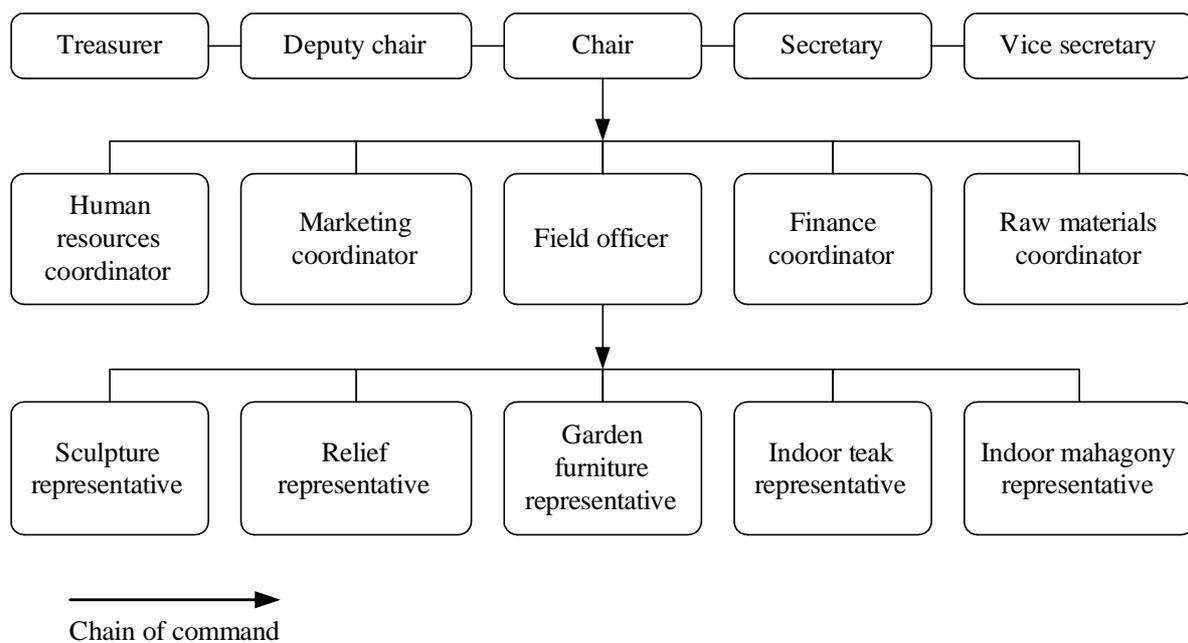


Figure 1 The organisational structure of APKJ.

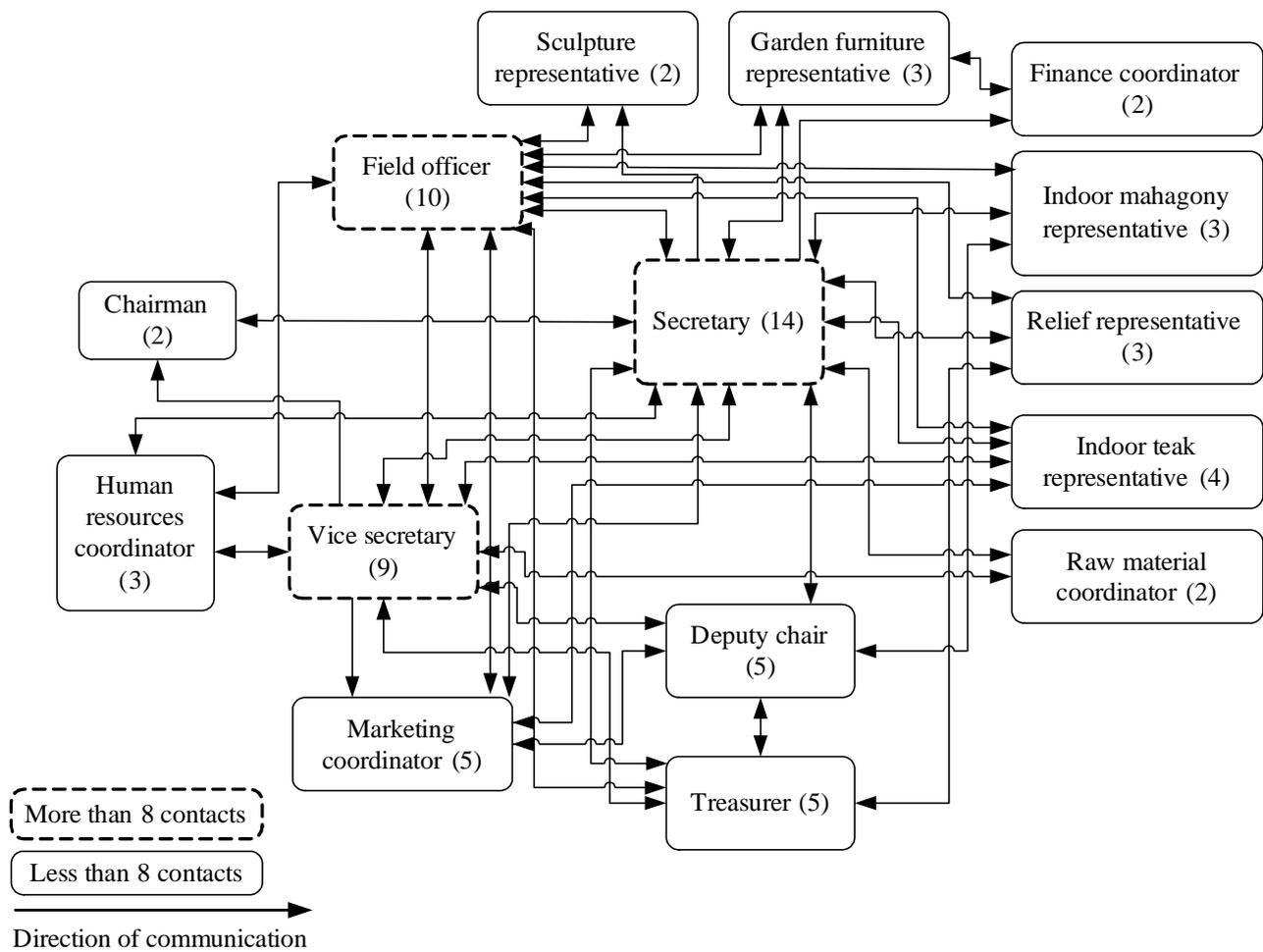


Figure 2 Social groupings within the APKJ board.

role of informal mediator of interpersonal issues between members, acts as a spokesperson for external matters and bridges communications between the association and donors. With a bachelor’s degree in product design, and previous work experience with foreign furniture exporters, he is fluent in English and French and is relatively easygoing compared to other members when dealing with government officials, donors and foreign buyers.

In contrast, the chairman, a vocal and pompous man, active in most social organisations and once a vote gatherer for a large nationalist political party, seems to struggle to keep up with his expected role as a leader. With most of his winning votes coming from loyal party colleagues during the APKJ chair election, none of the appointed board members were in favour of him, and as a consequence, he has little support. He left school at an early age to pursue a career in woodwork, but his furniture business has suffered from limited orders in recent years. With his limited English and somewhat ostentatious manner, other members often consider him unsuitable to deal with external matters.

Board members, particularly the deputy chair and the vice secretary display an open dislike towards the chair and prefer to keep communication with him to a minimum.

Instead they have formed a close-knit group with other board members. The secretary remains neutral and tries to bridge their differences by talking to both sides separately asking each to put aside their differences and collaborate positively for the sake of the association.

Social groupings within the APKJ board (Figure 2) revolve mainly around the secretary who has close links with every member. Second to him is the vice secretary and field officer, whose responsibilities require them to keep close contact with almost all members of the board. In contrast, as a result of his unpopularity, the chairman seems to have very little contact with other board members. On occasions, board members even choose to exclude him from important meetings, concerned he might disrupt the sessions. The secretary, with his capacity to maintain good relations with everyone, steps in and manages to bridge the gap between the chairman and other board members. If the secretary is absent from meetings, no one else seems able to fill his mediating role, and tension is almost inevitable.

The diagram shows interaction between APKJ board members, and counts the number of people each individual keeps contact with. With 15 board members, the number 8 was used as a median to indicate the number of contacts for

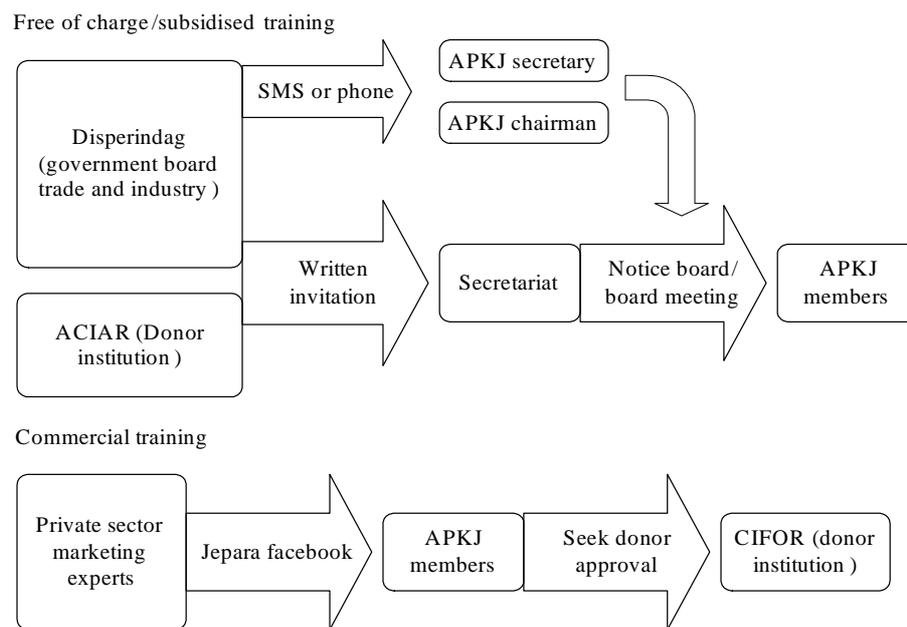


Figure 3 Information flow on training opportunities.

each member. Those with less than 8 contacts (indicated by blue boxes) are deemed to have limited access to organisational information, while those above 8 (red boxes) have broader access and are sources of information for other members.

The association members not on the board are largely unaware of the tensions between board members, and have little general information on association agendas such as training, market access and certification opportunities. Information on these three agendas is mostly disseminated between APKJ board members.

**Information flow: training** The APKJ secretariat usually receives information on free workshops and training opportunities through official correspondence from local government offices such as the board of trade and industry. Informal invitations through mobile text messages or telephone calls are usually followed by a formal invitation letter. Information on workshops is usually posted on the secretariat notice board or taken to monthly board meetings to decide which members will attend training. So far, two APKJ members have attended invitational training; the secretary attended an e-commerce workshop while the chair took part in a workshop on promotion and marketing. Since few members are IT literate, the secretary, who had had previous experience running a business through a self-owned company website, was chosen to attend the e-commerce workshop. The secretary and the chair were both expected to transfer the skills and knowledge learned from the workshops to their fellow APKJ members, but methods of dissemination have not been agreed upon. The training modules are currently kept at the APKJ secretariat for member only access.

Commercial marketing training events organised by local and regional marketing experts are widely communicated through the Jepara Facebook social networking utility website; the main virtual communication channel for Jepara internet users. Evidently, the widespread use of the website to link small-scale producers with various business opportunities has encouraged members of the APKJ to become more IT literate over the past year. In contrast to the workshops provided free of charge by local government offices, commercial training is relatively expensive and usually subject to approval from CIFOR; the main financial donor for APKJ day-to-day operations. As no commercial marketing training has been approved since the secretary attended the local government e-commerce workshop, members interested in attending such workshops have to provide their own funding.

A new ACIAR project is also in progress to improve small-scale furniture producers' production techniques through ongoing technology training and mentoring. Five APKJ local champions from the indoor and outdoor furniture groups have been selected for training expected to commence in the near future. Members hope that in the long run, technology used in training will be affordable and accessible to small-scale producers.

**Information flow: market access** Information on market access, usually opportunities to attend exhibitions, is commonly passed on verbally, with a written invitation following shortly afterwards if the invitee shows interest. Informal invitations received by the APKJ depend heavily on interpersonal relations between members and government officials, the district promotion centre, the exporters' association and its cooperative, as well as the

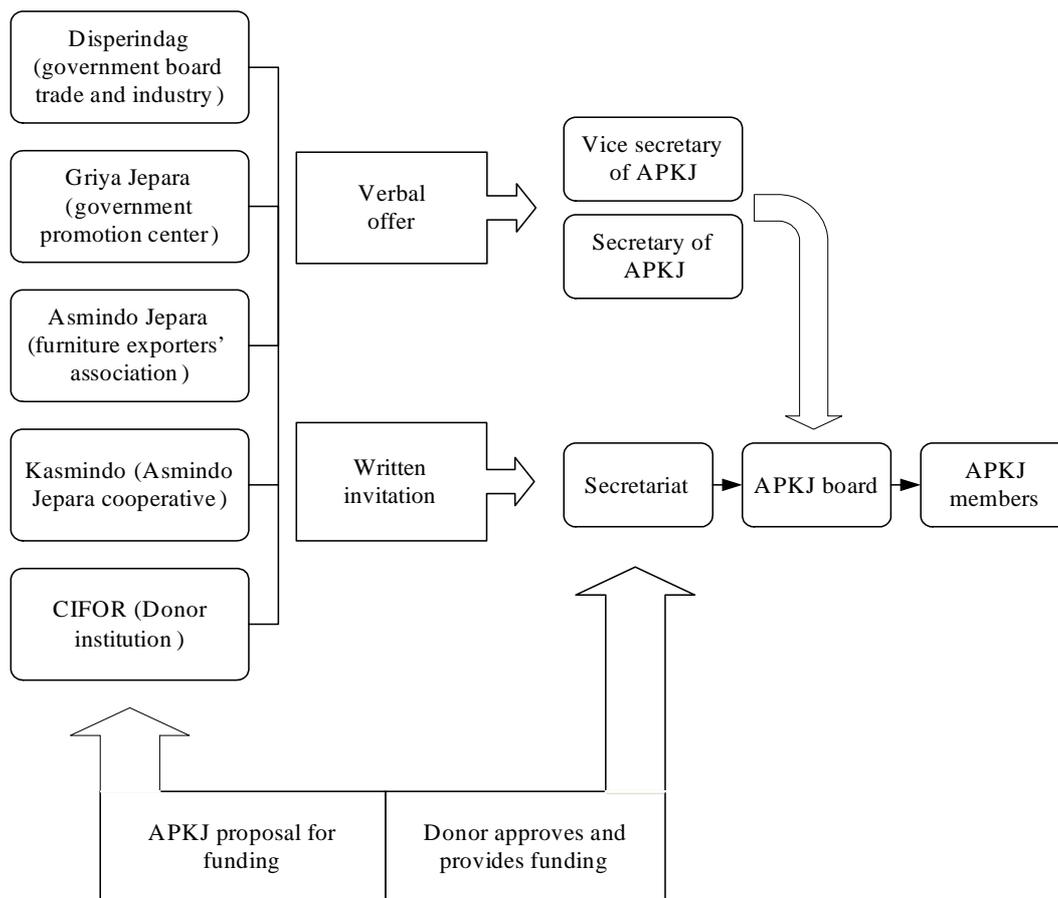


Figure 4 Information flow on market access.

donor institution (Figure 4). Exhibition offers vary from free space at the local promotion centre in Jepara to subsidised commercial booths at international trade shows in Jakarta. Still in its infancy, and with minimal funds, the APKJ usually submits funding proposals to the board of trade and industry, the exporter association and CIFOR to cover transportation and accommodation expenses. In the hope that exhibition attendance will open up new markets and generate income for financing attendance at future exhibitions, the APKJ has so far attended one exhibition with two more scheduled this coming November. Members are still familiarising themselves with profit sales, as the first exhibition generated zero returns.

**Information flow: timber certification** The local furniture scene has shown growing interest in timber certification. No APKJ members have used certified timber, but most are keen to know more about it and its potential for added value. Following a series of informal meetings between CIFOR and the Jepara District Government, a plan to engage APKJ and ASMINDO (the local exporters association) in organising a certification event is now underway (Figure 5). The Jepara board of trade and industry will provide the location, and CIFOR the certification trainer. Acting as

organising committee, APKJ expects its members to join a certification scheme and become role models for other small-scale producers in Jepara.

Based on findings, 3 issues have emerged concerning the social network of small-scale producers and the capacity of their institutions. Firstly, the gap between structural and personal relations of APKJ board members; secondly, the nature of information flows within the association; and lastly, optimising APKJ's functions by developing scenarios to balance relations and disseminate information.

As outlined above, personal relations between APKJ members are quite strained. With their different characters and backgrounds, board members are still trying to familiarise themselves with their new colleagues. Outspoken characters like the current chairman tend to be shunned by the majority of board members; while accommodative people such as the secretary try to bridge gaps between opposing sides. In spite of the chairman's efforts to improve his attitude, most members are reluctant to change theirs, which makes it difficult to move forward. The mediating role only seems to work when the secretary is present, proving that the peaceful relations between the board are dependent on him. In order to foster better

collaboration, members need to build positive attitudes, while the chair learns to empathise.

The lack of communication resulting from relations among board members impacts greatly on information flows and the overall effectiveness of the association. As most information enters the APKJ through the secretary and vice secretary, its dissemination to other members, and especially the chair, relies heavily on the secretary. The vice secretary doubts the chairman’s leadership and often leaves the chair clueless on APKJ developments. Apparently, when information is transferred to other members, no one else wants to inform the chair either, so the secretary is left to do the job. The chairman, sensing his isolation, responded once by discreetly attending a training invitation supposedly directed at other APKJ members, only later telling his colleagues. This situation has intensified distrust and tension between members and threatens the association’s future.

It is evident that communication flows within the first tier of APKJ board members (chair, deputy chair, secretary, vice secretary and treasurer) is facing problems, with minimal contact between the chair and other members. Information flow from the first to the second tier (human resources, marketing, finance and raw materials coordinators, and ground officer) depends primarily on the secretary and vice secretary. Information from the second to third tier (sculpture, relief, garden furniture, indoor teak and indoor mahogany group representatives) usually flows

through the field officer. Group representatives in the third tier are then expected to transfer information to other members of the APKJ under their respective groups.

Interestingly, in the case of market access, information regarding exhibition plans tends to be kept from the chair. Other members from the first, second and third tiers can be well informed about the plans, but the chair seems to be the last to know about any developments. With limited information, the chair often acts according to his own will, adding more miscommunication between members.

A diagram of the association’s structure, giving information on the number of personal relations between each member is shown in Diagram 6. The numbers also indicate how much information a member possesses: the larger the number, the more likely the person is to be a source of information; while a lower number indicates the person is more of a recipient. Based on the top-down chain of command, ideally information should come from first tier members, and flow to the second and third tiers. Therefore, first tier members should possess the most information, and engage themselves in multiple personal relations with other members.

A functional structure would see first tier members possessing the highest numbers of relations, with numbers decreasing gradually in each of the lower tiers. Ideally, members from the lower tiers should provide feedback to

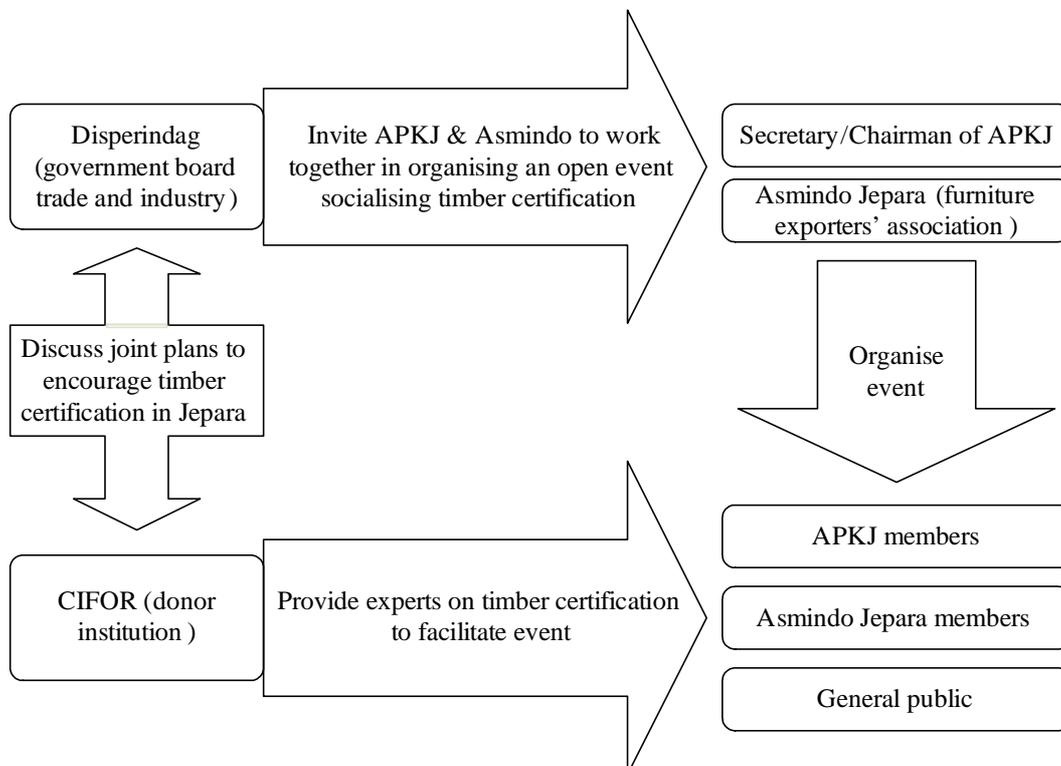


Figure 5 Information flow on timber certification.

the upper levels, enabling information to be distributed evenly.

However, in the case of APKJ, not all first tier members, and particularly the chairman, engage in such personal relationships. As the diagram suggests, the key persons in the first tier acting as information sources are undoubtedly the secretary and vice secretary. Compared to the chair, his deputy and treasurer are much better connected to others, excluding him from important association matters. Second tier members are relatively better informed, especially the field officer whose responsibilities require him to connect with all first and third tier members. Third tier members are mostly well connected with others, indicating a good flow of information from the level above.

Feedback from the lower tiers is mostly channelled through the field officer to the secretary and vice secretary. Unfortunately, information rarely reaches the chair, forcing him to make his own decisions, which often result in further miscommunication and conflict between members. This was the case when the chair felt his deputy had no interest in organising an event and decided to assign the vice secretary to the task. Thinking he was still in charge, the deputy chair felt irritated on discovering he had been replaced. In another instance, the chair also took matters to his own hands; feeling left out in APKJ matters, when a training opportunity landed straight in his lap, he immediately attended it himself without informing the others.

Information blocks are closely related to key persons within the social network possessing most of the information. It is evident that key persons within APKJ are

the secretary and his vice secretary. Neither has problems disseminating information to the lower tiers, and feedback always returns accordingly. As decision making within APKJ should be discussed between the five members of the first tier, information blocks have clearly disrupted the process. Blocks are evident between the chair and most members. His only source of information is the secretary. Unfortunately, effective decision making cannot rely solely on the secretary’s mediating role, since positive collaboration with other members is an essential part of the process.

It is vital to balance relations, distribute information evenly and encourage feedback between members in order to create effective decision making and improve the functions of the association. To achieve this, trust among members must be encouraged; not an easy task, but possible nevertheless. One scenario to build trust and positive collaboration is to involve all members in a team building workshop, focusing on the importance of team work, communication, and trust. It would also be beneficial to encourage the chair to attend a leadership and organisational management training workshop to enhance his skills and attitude in order to build other members’ trust in him.

Another scenario would be to apply a reward and punishment system in which APKJ members are required to maintain positive collaboration as a prerequisite to receiving funding from donors. This way, members would be reconditioned to behave positively towards each other, to share information and provide feedback on an even basis. A donor representative, in this case the secretary, could supervise and report on the daily outcomes of the system,

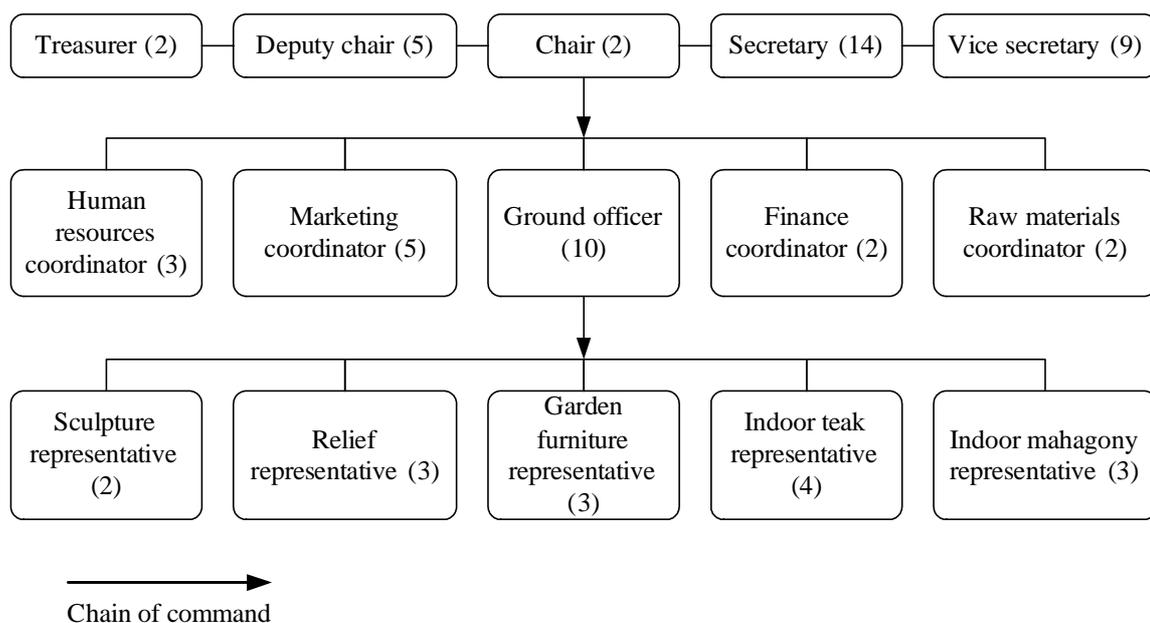


Figure 6 Structural and personal relations within APKJ.

and the donor may respond accordingly: approving funding if collaboration proves fruitful, or withholding it until improvements can be shown.

Team building and leadership training will be a good investment for future collaboration within APKJ, though its effectiveness and continuity will have to be tested. A reward and punishment system, meanwhile, is more coercive and materially based. Using only such a scenario will likely fail to achieve long lasting results, and only run for as long as there is donor interference. Although the first scenario is preferable to the latter, both could be applied together to achieve a better impact. Team building and leadership training could be a means to improve trust and collaboration, while a reward and punishment system could play a part in monitoring and evaluation. In the long run, besides strengthening collaboration, these scenarios could create a working standard for members to build financial independence, to stand on their own feet and be ready to operate without donor assistance.

### Conclusion

Inconsistencies between structural relations and personal social networks can be a challenge to organisational management in small-scale furniture producer associations. Trust among members must be encouraged to ensure active information flow and feedback, to connect everyone and shape better collaboration. Key persons within the association can also play an active role in mediating between, and disseminating important information to all members. Scenarios for improvement include team building and leadership training for association members and the chair, as well as a reward and punishment system that obliges members to maintain positive collaboration in return for

donor assistance. With a strong network and hard work, independence from donors can be achieved in the long run. The livelihoods of actors within the wood-based furniture industry in Jepara can be improved by strengthening the social network of small-scale furniture producers and their institutions. The scenarios and lessons learned from Jepara may also be adopted by similar industries throughout Indonesia and the world, focusing on the importance of strong social ties in improving economies and livelihoods.

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