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Analysis of Power Relations on Timber Value Chain in Liwale and Ruangwa Districts, Tanzania

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Abstract
The study intended to investigate power relations among dominant institutions guiding timber value chain in Liwale and Ruangwa districts, Lindi. It adopted across sectional research design whereby qualitative methods of data collection were used. The main objective of this study was to analyze power relations that underlie timber value chain and identify actors on the value chain. Specifically, the study determined the existing power relations on the timber value chain in Liwale and Ruangwa districts. Data were collected through key informant interviews, focus group discussions, and observations to answer the research questions and then analyzed using a DEDOOSE platform. The results indicated that, there were several actors in the timber value chain, including timber dealers, customers, village communities, Village Natural Resource Committees (VNRCs), district governments, forest officers, NGOs, and government agencies. Also, there are three levels of value addition which are community, district and national levels. These were associated with the customer demand from within the specific community, district and national wise. Apart from that the dominant institutions guiding timber value chain were the Tanzania National Forest Policy and the Forest Act which provide a timber value chain framework. Also, institutional, supportive and strategic power relations were the type of power relations that were identified to be underlying timber value chain. Furthermore, power struggles were observed to be existing among the Tanzania Forest Service (TFS) agents and the Forest Officers mainly on the issue of the revenue collected. The study recommends that, all actors in the timber value chain should play their roles in a way that they do not compromise the ability of other actors attain their goals. Also, to solve the issue of power struggles between the TFS and the local government Forest Officers then amendment of rules and regulations should be done.

Keywords: *Timber value chain, power relations, dominant institutions, sustainability, Tanzania.*

1.0 INTRODUCTION

Timber value chain is a concept used to describe the entire spectrum of activities that contribute quality to timber products (Zamora, 2016). Each node within this chain comprises of various actors, responsible for executing essential activities at their respective points. These actors collectively form a network, ensuring the successful formation and a targeted market reach of a particular product (Arvola *et al.,* 2019). To achieve this success, governance plays an important role.

Similar to social relations, value chains also feature leading firms or individuals who influence other actors in the chain to adopt specific behaviours (Lolila *et al.*, 2021). For the chain's sustainability, a delicate balance of power among actors is necessary. This equilibrium ensures that every participant in the chain remains steadfast in performing relevant activities. Consequently, power relations in the value chains dictate resource management, access rights and crucial decision-making processes (Mbeyale *et al.*, 2021).

With the rapid growth of Tanzania's economy, the demand for timber and timber products has increased (Martin, 2021), resulting in the decline of natural forests and the promotion of industrial and non-industrial timber plantations (URT, 1998). Previous researches have investigated the timber value chains based on non-industrial and industrial plantations (Arvola *et al.,* 2019; Martin, 2021). However, this paper focuses on timber value chains that source their timber from natural village land forests reserves in Liwale and Ruangwa districts, Tanzania.

In Tanzania, forest management is carried out through Participatory Forest Management (PFM) (URT, 2002), which falls under two categories: Joint Forest Management (JFM) and Community-Based Forest Management (CBFM) (URT, 2002). Under JFM, the government owns and manages the forest while sharing benefits with the community. In contrast, CBFM which is the focus of this study, grants ownership, usage, and management rights to local communities (URT, 1998). In the CBFM approach, the local people have the authority to decide who can access their forest resources and make significant decisions on their behalf.

Timber value chains typically involve various actors, including the government (village and district level), middlemen, tree growers, customers, transporters, non-governmental organizations, and timber dealers (Lusambo *et al.,* 2021; Martin, 2021). In Liwale and Ruangwa districts, the timber value chains consist of village and district governments, timber dealers, villagers, non-governmental organizations, and other individuals. Each actor wields different forms of power in the forest utilization process. When power is imbalanced, conflicts arise among actors and hinder the development of the timber value chain (URT, 2004).

The high potential of forest resources in Mikunya, Lichwachwa, Nandenje, and Likombola VLFRs has led to the emergence of various actors with distinct interests. The balance of power among these actors has becomes a significant challenge. Power relation balance, defined as the asymmetries between two actors in their relative ability to exert power over others (Rolin, 2020), restricts benefits to certain stakeholders, such as timber dealers who face suppression due to established practices. Consequently, the growth of the CBFM is hampered (Held *et al.,* 2017; UN, 2021). This study aimed at investigating power relations among dominant institutions that guide the timber value chain in Liwale and Ruangwa districts. The process involved the identification of actors in the timber value chain, analysing existing power relations, and understanding power struggles within the study areas.

The understanding of power relations along the timber value chain, which sources timber from VLFRs in Lichwachwa, Mikunya, Nandenje, and Likombola, is crucial for promoting sustainable timber value chains. Additionally, it contributes to promoting equity among communities and other stakeholders involved in the value chain. The findings of this study aids in endorsing a balanced power relation among timber value chain actors in Liwale and Ruangwa districts.

2.0 METHODOLOGY

2.1 The study area

The study was conducted in Liwale and Ruangwa districts, Tanzania (Figure 1). The districts are endowed with natural forests which are characterized by dry Miombo tree species, dense forests and wet Miombo with some highly valuable timber species of *Brachystegia sp.*, *Julbernadia sp.*, and *Pterocarpus angolensis*. Liwale and Ruangwa are characterized by two rainy seasons annually, from November to January and March to May respectively. Annual precipitation ranges from 600-1000 mm.

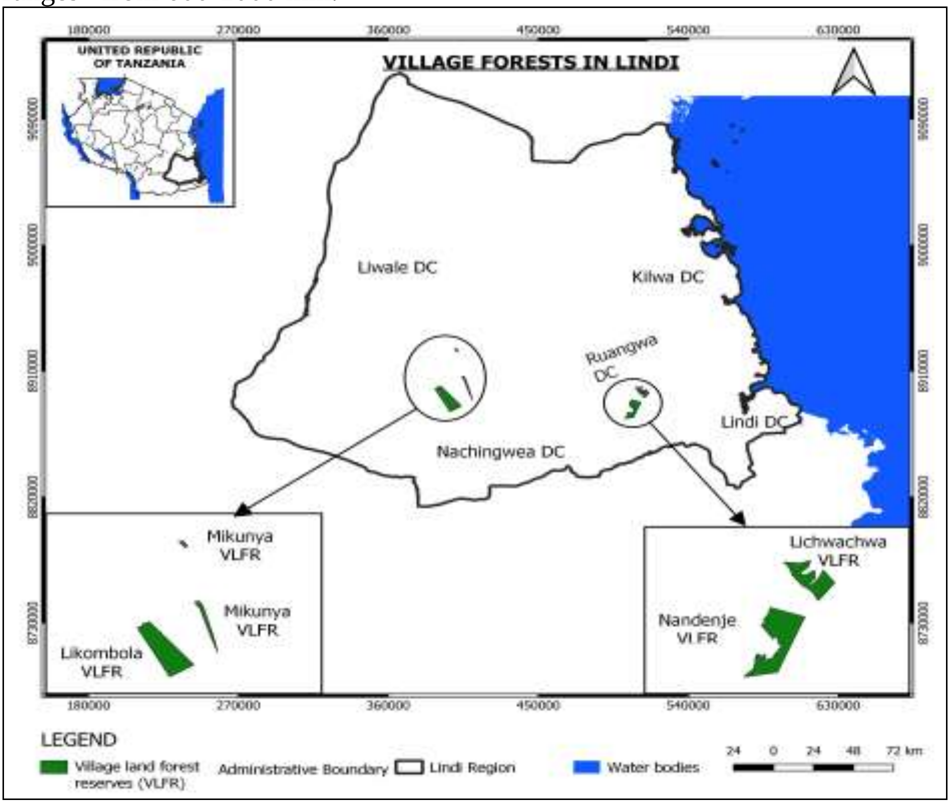

Figure 1: Map showing the study locations and the VLFRs.

2.2 Sample Selection and Data Collection

A purposive sampling approach was employed to select participants for this study who are working along the timber value chain in Liwale and Ruangwa districts. The sample for this study included 40 timber dealers. The sample of timber dealers was obtained from a list of names provided by the district Forest Officer in Liwale and Tanzania Forest Service (TFS) agency in Ruangwa district. Data were collected from four villages in Liwale and Ruangwa districts, which are Mikunya and Likombola in Liwale district and Nandenje and Lichwachwa in Ruangwa district. Data was collected through key informant interviews, focus group discussion and the researcher's own observations. To guide the collection of primary data from timber dealers, Forest Officers, Tanzania Forest Service (TFS) agents, village leaders and village residents, a checklist of open-ended question was used.

Prior to the beginning of each interview and focus group discussion, each respondent was given a thorough explanation of the study, including how their identity would be secured and how the data they provided would be used and verbal free and informed consent from each participant was required. Participants were also informed that they could leave the study at any moment and have their personal information erased.

It should be noted that the majority of the participants for this study were men, as is common in rural African communities (99%). The evert weakness for this study is the lack of women narratives on the timber dealing activities involvement, which should be addressed in future research designs.

2.3 Data analysis

Qualitative data were analyzed by first transcribing all the recorded key informant interviews and focus group discussions. Then, the researcher had to get familiar with the data by reading and re-reading the data. A process that resulted in removing data that was out of scope for this study. The data were uploaded into a DEDOOSE platform form, and the labeling process began whereby paragraphs and sentences were labeled. The conveyed labels held a precise significance for each paragraph and sentence, effectively culminating in themes and sub themes when grouped together. These themes and subthemes encapsulated the essence pertaining to the research questions. Data on the distribution of timber which led to the formation of timber value chain levels were further analyzed in R-studio to form a social network and the igraph package was employed to analyze the data.

3.0 Results

The data collected came up with five themes which were noted to resonate throughout the interviews and focus group discussions that were conducted in order to answer the research questions of the study. Identifying actors, levels of value addition, the dominant institutions that guide the timber value chain and power relations underlying the timber value chain are the key themes that were analyzed after data were analyzed. Thereafter the following are the results.

3.1 Identified actors and nodes along the timber value chain

A number of actors were identified (Table 1) to interact along the identified nodes in the value chain of timber (Figure 2). In (Figure 3) a map of their interaction at different nodes is shown.

Table 1: Actors along the timber value chain in Liwale and Ruangwa districts

SN	Actor	Category of Actor	Role and position of actors in the value chain
1	Timber dealers	Primary	Key actors in the timber value, they take the risk of utilizing the forest resources and take timber to the market.
2	Customers	Primary	Determine the type of timber to enter and quality the market.
3	Villagers from Lichwachwa, Likombola, Nandenje and Mikunya villages.	Primary	Primary decision makers on who gets access to the village land forest reserve. Manage the forest resources. Decide who gets the VNRC membership.
4	Village Natural Resource Committee (VNRC)	Primary	Responsible for making sure that the timber dealers get the right amount of timber as indicated on their permits.
5	District government	Secondary	Decision making body, which decides on the number of timber dealers to get license to harvest from forests within the district depending on the resources available.
6	Forest Officers	Secondary	Ensure that timber that is moving out of their jurisdictions is graded.
7	FORVAC program	Secondary	Provide financial support, technological support and facilitate capacity building to communities around the forests in order to enhance timber value chains.
8	Tanzania Forest Service Agency	Secondary	Responsible for offering licenses to the timber dealers.
9	Mpingo Conservation and Development Initiative (MCDI)	Secondary	Provision of technological support to promote value chain activities. Offered a mobile machine for timber processing in Lindi.
10	Tanzania Forest Conservation Group (TFCG)	Secondary	Provision of training on forest conservation.
11	The Community Forest Conservation Network of Tanzania (MJUMITA).	Secondary	Provision of training on forest conservation.

Source: Primary data collected in 2022.

Figure 2 Illustrates the nodes found in the timber value chain in Liwale and Ruangwa districts as well as the activities carried out at each node.

Figure 2: Identified nodes along the timber value chain.
Source: Field data collected in 2022

Forest management was the first node identified in the study areas. The actors found in this node were the villagers responsible for managing the forests. This is also done with the help of forest officers of the respective district. The forest officers are responsible for building capacity among VNRC members to better manage forests. In support of this one of the forest officers was quoted as saying:

> *"Through CBFM the communities living around the forest are 100% responsible for the management of the forest; all we do is equip to them with the necessary conservation knowledge."*

Production was the second node identified, with timber dealers being the major players in this particular node. They are responsible for timber logging of various tree species depending on market demand and their customers' choice as well as, what is stated in their harvesting permits. Most timber dealers have been quoted.

> *"We harvest Millettia stulhmanii (*Mpangapanga), *Afzelia quanzensis* (Mkongo) *and Pterocarpus (Mninga) hardwoods for that are what our customers prefer."*

This was supported by the forest officers who were quoted as saying

> "*Millettia stulhmanii* (Mpangapanga), *Afzelia quanzensis (*Mkongo) and *Pterocarpus* (Mninga) *species are preferred mostly in our forests, although all timber species are almost of the same quality."*

Processing is the third identified node in which timber is processed and then distributed various markets. The distribution of timber on different markets depends on the demand for timber products in each respective market. The last node identified was consumption, where consumers with different preferences were contacted. It was observed that, most of the timber is distributed to different destinations for furniture manufacturing and construction use.

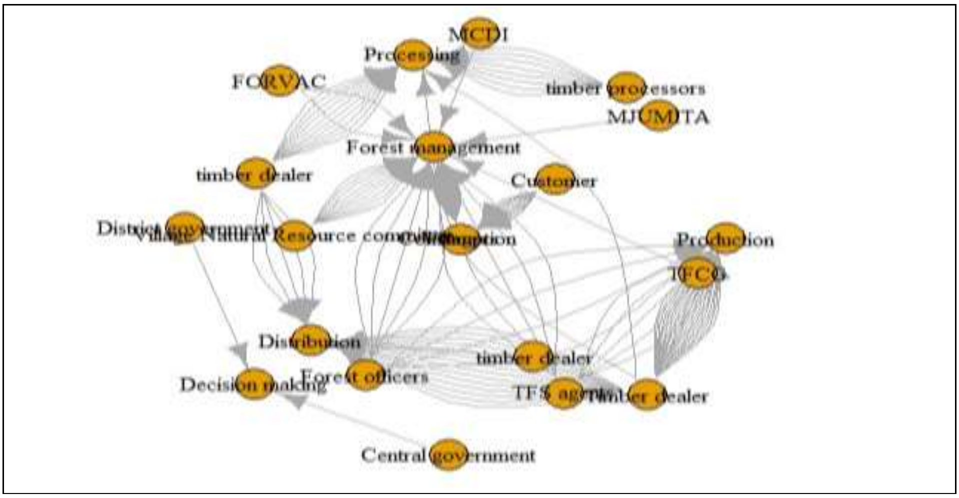

Figure 3: The value chain map of identified actors in the timber value chain. **Source:** field data collected in 2022

Note: Arrowhead indicates the interaction of actors at a node, while the tail indicates the actor.

3.2 The levels of the timber value chain based on the distribution of timber

Based on the findings from the focus group discussions with timber dealers, the study shows different levels of value addition on timber, as presented in Table 2. These levels are primarily influenced by two main factors. The first factor being the significant influence exerted by certain actors within the value chain, such as NGOs and the government. Due to their power and authority, they are able to influence and shape the different levels of the timber value chain. The second factor that contributes to the variation in value addition levels is customers' demand. Timber is routed to areas where customer demand is high, leading to increased value addition activities. Conversely, less timber is distributed to areas with lower demand, resulting in comparatively lower levels of value addition in such locations.

Table 2: Levels of value chain addition on timber

SN	Level of value chain	Scale	Characteristics
1	Community level of timber value chain	Small	Fewer customers and financial constraints.
2	District level of timber value chain	Medium	Customers are not many that there are fewer furniture making industries in the districts. Most of the people working at this level are financially depending on themselves
3	National level of value chain	Large	There are a lot of customers, who are found outside of the Lindi region. And the social capital and financial capital is larger compared to the previous levels.

Source: Field data collected in 2022

A social network analysis (Figure 4) conducted on the distribution of timber based on customer demand supports the determined levels of value addition in Liwale and Ruangwa districts.

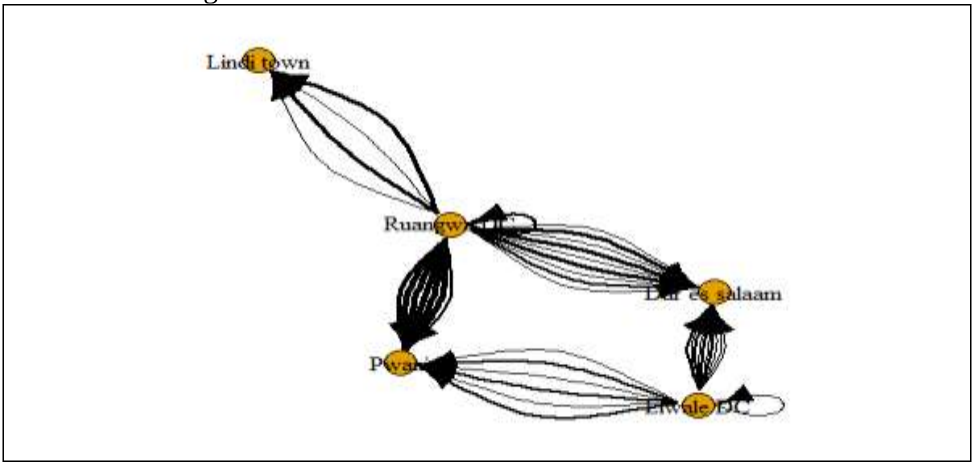

Figure 4: Source and destination of timber products
Source: Field data collected in 2022

Note: Arrowhead indicates the product's destination, while the tail indicates the timber source. Arrow width indicates the timber product's extent (magnitude) from the source to the destination involved in the value chain.

The first level of value addition on timber is at community level. This involves a group of people working in the villages where there are VLFRs. They manufacture furniture and other timber products which are sold to the people in the village to meet their basic household and office needs. Findings from the key informant interview that was conducted in Likombola village with the village chairperson revealed that, there are community furniture making groups that were supported by FORVAC and MCDI technically.

> *"There are community groups supported by the FORVAC program and the MCDI technically, and they are very good at what they do for example the Likombola Furniture Group."*

The second and third levels of value creation are the district and national levels. District level value added activities were noted to be carried out on a small scale in the study areas. Most of the people, who work at this level, are the timber dealers themselves. Finally, the national level of value addition, in which there are many people working there, they collect timber produced from the village forests. These can be found in towns and cities like Dar es Salaam. All of the timber dealers who participated in this study stated that they had customers outside of the Lindi Region.

3.3 The dominant institutions that guide timber value chain in Liwale and Ruangwa Districts

The dominant institutions that guide value chain in Liwale and Ruangwa districts; include the rules and regulations which are mainly presented in a National Forest policy (1998) and the Forest Act (2002). They are established by the central government. In addition to that, there are by-laws which are specific to the study areas; they are provided in the five-year management plan. Furthermore, there are agencies like the Tanzania Forest Service (TFS) Agency.

The interviews conducted among timber dealers in Liwale and Ruangwa districts, are in support of this whereby, all of the timber dealers were referring to the rules and regulations that are provided in the government documents. For instance, there are rules and regulations that are guiding timber value chain at different nodes. In the production node, the timber dealers were quoted saying: -

> *"You cannot legally log trees from the forest without having a license from Tanzania Forest Service."*

That alone is not enough therefore; a timber dealer has to attend the village assembly in the village of interest. Where the villagers would hear him/ her out. And then decide whether the person can work in their village or not. It is then possible for the same villagers to do away with their initial decision.

The Tanzania National Forest policy (1998) provides a basis in which the international community and the NGOs can work with the communities around the forest in order to increase the productivity of the forest. The policies provide technical and financial framework to support the timber value chain. One of the forest officers in Liwale acknowledged that:

> *"It was very hard for us to perform our works when the LIMAS program phased out for the support that the central government offered did not satisfy the needs to meet the supportive functions to the people in villages."*

The members of the Village Natural Resource Committee in Mikunya also affirmed the same. Whereby, one of the members in the VNRC was quoted saying:

> "*When the LIMAS program phased out, we could not carry on with the activities that we hoped we could have done concerning our forest resources"*

These all have brought a conclusion that, the dominant institutions are the established rules and regulations.

3.4 Power relations underlying timber value chain in Liwale and Ruangwa districts

Table 2.3 summarizes the results on the existing power relations that underlay timber value chain in Liwale and Ruangwa districts.

Table 3: Power relations that underlie timber value chain

SN	Type of Power relation	Area of Manifestation
1	Institutional power	This is exercised by the Village and District Governments. Which perform their duties as cited by the Government Notice that: "*The District Committee chaired by the District Commissioner shall be responsible for receiving, considering and determining applications for endorsement and issuance of harvesting license of forest produce"* The village authority was noted to be working hand in hand with the district government. This implies that they cannot decide on their own on who gets the access to utilize forest resources unless the district government decides through the annual meeting done once a year. *"It is the district government which decides the number of timber dealers that are to be involved in the timber business for a year in our village forests depending on the resources available"*
2	Supportive power	From the data collected for this study, it was portrayed by NGOs like MCDI, MJUMITA and TFCG and also the FORVAC Program. They provide technical and financial support to promote sustainable utilization of the forest resources. And most important they conduct workshops aiming at building capacity of the timber traders. In February 2022, during the time for data collection, there was a workshop prepared by MCDI with the aim of building capacity of the people working in the forest sector in Liwale including the timber dealers.
3	Strategic power	This was manifested by the timber dealers. They all have desires on what they want to achieve in their businesses. According to the key informant interviews that were done 95% of timber dealers seemed determined to do anything to get their timbers to towns. 5% of the 95% even complained of about the inspectors at the checkpoints to be standing firm on the rules and the regulations. This is also portrayed by the village government and the district government, especially during the preparation of the harvesting plan. Which is in accordance to the management plan of the respective production forest and the district harvesting committee is responsible for reviewing applications and their endorsement.

Source: Field data collected in 2022 and the 2004 forest regulations.

3.5 Power struggles among actors in the timber value chain in Liwale and Ruangwa Districts

Power struggles were observed to be existing among the TFS agents and the forest officers operating in the study areas. Whereby, there was a tension between the two parties concerning the revenue collected from the timber dealers, especially on the fines and penalties that have been imposed. Some of the TFS agents who were interviewed on the issue pointed fingers to the forest officers to be going against the regulations which instruct the revenue collected from the fines and penalties to be directed to the government. Instead, the forest officers have been misdirecting for the revenue to be going to the local government.

4.0 DISCUSSION

Customers play a great role in timber value chain. Timber dealers harvest the common species of hardwoods which were a preference to their customers. The most preferred species were the *Millettia stuhlmannii* (Mpangapanga), *Afzelia quanzensis* (Mkongo) and *Pterocarpus angolensis* (Mninga). This confirms the results of the study done by Sturgeon (2008) and Loconto (2016) who portrayed that customers have power to influence what type of commodity goes to the market. However, these markets' responsiveness to customers' demands could not be aligned with sustainable practices. Therefore, could lead to species extinction.

Additionally, the role of international community and NGOs as key actors in the timber value chain prompts reflection on the nature of their involvement. Similarly, Martin (2021) reports that, the international community and NGOs through the operating programs offer help in promoting the development of timber value chain through the provision of financial and technical support. However, their involvement could be vested with dependency dynamics apart from empowering the local communities.

Furthermore, the established rules and regulations by the state which are the Tanzania National Forest policy (1998), the forest regulations and the National Forest Act (2002) were found to be the dominant institutions that guide the timber value chain. Similarly, a study by Mulokozi (2021) on power dynamics among actors in the groundnuts value chain found similar results. However, these regulations have been suppressing interests of some actors for instance, the timber dealers whose fees charged for different requirements to engage in the business, have been increasing over the years.

Also, the study reveals the existence of three distinct types of power relations within the study areas which were institutional, supportive and strategic power relations. Whereby, institutional power is manifested by the district government and village government through the Village Natural Resource Committee which are in place to make sure that the rules and regulations are followed to promote sustainable value chain of timber. This confirms a study done by Dallas *et al.*

(2019), which revealed that the local governments in which the raw materials are found have institutional power relation in value chains. Supportive and strategic power relations on the other hand, are manifested when the NGOs and partner's developmental programs in collaboration with the district forest officers, provide technical and financial support towards sustainable utilization of the forest resources. In addition to that, timber dealers manifest strategic power relations when they are determined to do everything in their power to excel in their businesses. A study by Mbeyale *et al.* (2021) found similar results, but these actors could in one way or the other be serving their hidden interests and not being truly collaborative hence, unsustainable management of resources.

Lastly, the issue of power struggles among actors in the timber value chain in the study areas which existed between the Tanzania Forest Service (TFS) agency and the local government forest officers on the issue of revenues collected from the fines and penalties. Raises the issue of accountability and transparency whereby, the revenues could not be directed towards sustainable management of forests rather for some people gains. In the light of Norman Long's theory (1984) on actor interface, which elucidates the inherent power struggles within institutional environments were compelled to critically analyze the structural inequalities and systematic barriers that underpin the timber value chain.

5.0 CONCLUSION AND RECOMMENDATIONS

Power relations cannot be avoided in the development of timber value chain. Understanding power relations among actors along the timber value chain is an important step towards the improvement of the timber sub-sector. Actors in the chain however should play their roles as guided in the National Forest Policy, in a manner that they do not prevent other actors in chain from pursuing their goals and desires.

It is therefore recommended that, actors along the timber value chain should play their roles in a manner that, they do not compromise the ability of other actors to accomplish their goals. The government should consider increasing financial and technical support to the sector and the people working at the community level on the value addition. This will help in achieving the Sustainable Development Goal (SDG) number one which aims to end poverty in all its forms everywhere. The support in such forms will also help in implementing some of the important activities when programs like FORVAC have phased out. There should be a balanced phasing out strategy right from the establishment of these programmes. Lastly, in order to solve the power struggles between TFS and the local government forest officers, the regulation on the revenue collection should be amended to ensure that the local government also get some percentage.

6.0 DISCLOSURE STATEMENT

I Mary Magiri, declare that I have no conflicts of interest or financial relationships that could be perceived as influencing the research presented in this paper. The research paper titled "Analysis of Power Relations along the Timber Value Chain in Liwale and Ruangwa Districts, Tanzania" is an original work conducted with the utmost integrity and adherence to ethical principles. I have followed the guidelines and regulations set forth by my institution and the relevant governing bodies throughout the research process.

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REFERENCES

Arvola, A., Malkamäki, A., Penttilä, J. and Toppinen, A. (2019). Mapping the future market potential of timber from small-scale tree farmers: perspectives from the Southern Highlands in Tanzania. *Small-Scale Forestry* 18(2): 189–212.

Dallas, M. P., Ponte, S. and Sturgeon, T. J. (2019). Power in global value chains. In *Review of International Political Economy* 26(4): 666 – 694.

George, W. (2006). Transformational leadership. *Journal of Political Science* 28: 69–77.

Held, C., Paul, J., Techel, G., Leif, N., Watum, G. and Wittmann, N. (2017). Tanzanian Wood Product Market Study Final report for the Forestry Development Trust Tanzanian Wood Product Market Study.

Loconto, A. (2016). Value chains and chains of values: *Tracing Tanzanian Tea Local Agri-food Systems in a Global World*. *Market Social and Environmental Challenges*. (Edited by Arfini, F., Mancini, M. C. and Donati, M.), Cambridge Scholars, UK. pp. 1 – 24.

Lolila, N. J., Mchelu, H. A., Mauya, E. W. and Madundo, S. D. (2021). Lumber recovery and production rates of small-scale mobile sawmilling industries in Northern Tanzania. *Tanzania Journal of Forestry and Nature Conservation* 90(3): 74–83.

Long, N. (1984). *Creating Space for Change: A Perspective on Sociology of Development.* Atlantis Press, USA.18pp.

Lusambo, L. P., Nyanda, S. S. and Mhando, D. G. (2021). Profitability analysis of tree growing in the Southern Highlands of Tanzania. *International Journal of Forestry Research* 2021:1 – 10.

Martin, R. (2021). Institutions, governance, and upgrading in non-industrial private forestry value chain in the Southern Highlands of Tanzania. Thesis for Award of PhD Degree at Sokoine University of Agriculture, Morogoro, Tanzania, 203pp.

Mbeyale, G. E., Lusambo, L. P. and Lowland, K. (2021). Power relations between upstream and downstream common pool resource users: Winners and Losers in The Uluguru Mountains. *Tanzania Journal of Forestry and Nature Conservation* 90(3): 156–167.

Mulokozi, G. G. (2021). Power dynamics among actors in the groundnut seed value chain: A case of Kongwa and Kiteto Districts, Tanzania. Dissertation for Award MSc Degree at Sokoine University of Agriculture, Morogoro, Tanzania, 93pp.

Peters, B. K. G., Avenant, P. S. J. and April, K. A. (2016). Power relations and complex organisational development. *International Journal of Complexity in Leadership and Management* 3(3): 218.

Rolin, K. (2020). Standpoint theory as a methodology for power relations. *Hypatia* 24(4): 218 – 226.

Sturgeon, T. J. (2008). From commodity chains to value chains: Interdisciplinary theory building in an age of globalization. *Frontiers a Journal of Women Studies* 110–135.

UN (2021). *The Global Forest Goals Report*. United nations, USA. 114pp.

URT (1998). *National Forest Policy*. Ministry of Natural Resource and Tourism, Dar es Salaam, Tanzania. 69pp.

URT (2004). *Forest Regulations*. Government Printers, Dar es Salaam, Tanzania. 86pp.

URT (2019). *Forest Sustainable Utilization of logs, Timber, Withies, Poles or Charcoal Regulations.* Government Printers, Dar es Salaam, Tanzania. 14pp.

URT (2022). *Forest Regulations*. Government Printers, Dar es Salaam, Tanzania. 19pp.

Zamora, E. A. (2016). Value chain analysis: A brief review. *Asian Journal of* Innovation and Policy 5(2): 116–128.