

: Enterprise formalisation: The case of informal wooden furniture microenterprises in Nairobi, Kenya¹

Rattiya S. Lippe

Thünen Institute of Forestry, Hamburg, Germany, rattiya.lippe@thuenen.de

Stephen Maina Kiama

Kenya Forestry Research Institute, Nairobi, Kenya, skiama@kefri.org

Veronica Alonso

Unique land use GmbH, Freiburg, Germany, veronica.alonso@unique-landuse.de

Thomas Buchholz

Strathmore Energy Research Centre, Nairobi, Kenya, tbuchholz@strathmore.edu

Paul Jacovelli

Unique land use GmbH, Freiburg, Germany, paul.jacovelli@unique-landuse.de

Jörg Schweinle

Thünen Institute of Forestry, Hamburg, Germany, Joerg.schweinle@thuenen.de

■ ABSTRACT

The present study aims at understanding the diverse nature of the informal wooden furniture microenterprises in Kenya (locally called “Jua Kali”) and their motivations to operate businesses in the informal economy. The respective information is a prerequisite for supporting decision-makers to facilitate the transition to formality. Our finding reveals that Jua Kali wooden furniture comprises two distinct profiles, i.e. survivalist and opportunity enterprises. Entry costs of registration and ongoing compliance, and the complexity of the registration process, are burdensome issues for Jua Kali to register their businesses formally. Lack of social protection is prevalent among Jua Kali wooden furniture and even more pronounced within those in the survivalist segment. The overall results imply that enabling Jua Kali conditions, such as reducing decent work gaps coupled with registration procedure simplification, can facilitate Jua Kali wooden furniture microenterprises toward possible formalization in the long run.

■ KEYWORDS

Enterprise formalisation, informal sector, wooden furniture, Kenya

¹ This study has been also accepted for the oral presentation at the FLARE meeting 2023.

■ 1 INTRODUCTION

The informal economy significantly contributes to employment creation and constitutes a substantial portion of the national economy in several developing countries. However, the nature of the informal economy as being largely unregulated can pose severe challenges to attaining environmental and social sustainability. Recent studies revealed that the informal economy could increase environmental degradation in the short and long run (Qayyum et al., 2021; Baloch et al., 2022). The unsustainable and escalating use of natural resources can further limit their availability for future generations and eventually undercut local economic growth and job opportunities (Poschen 2015). Though the informal economic activities can absorb the labour surplus, many of those who work in the informal economy still earn their livelihoods in conditions of decent work deficits. The adverse impact of informality on working conditions, inadequate social protection and denial of rights in the workplace can lead to marginalisation and inequality, which are counterproductive for workers to achieve social justice (Osiki, 2020).

The informal economy primarily comprises of informal employment in the formal sector and employment in the informal sector (ILO, 2018; Lippe et al., 2022). Approximately 81 percent of the global economic units, i.e. enterprises are informal and most of informal workforce are employed by these informal enterprises (ILO, 2023). Enterprise formalisation, as one of the most important policy-related approaches, can pave the way for formal employment and fulfil the agenda of decent work attaining sustainability development goals. Well-tailored formalisation strategies, however, necessitate a clear understanding of the diverse nature of informal enterprises and the drivers underpinning their decision choices.

We selected the informal wooden furniture sector in Kenya as our case study. Generally, the Kenyan informal sector plays a pivotal role in the labour market and national economy (Federation of Kenya Employers, 2021). For the case of the wooden furniture industry, Kenya stands as the leading exporter in the African region (Creapo Oy, 2015). The wooden furniture sector in Kenya has a competitive advantage in wood compared to South Africa and Asian countries (ibid). However, the informal wooden furniture business, locally called Jua Kali, represents over a third of total wooden furniture sales in Kenya (ibid). To understand the nature of Jua Kali wooden furniture microenterprises and drivers of informality, we pose two research questions, i) What is the segmentation and its characteristics of Jua Kali wooden furniture microenterprises? ii) What are the reasons behind their decision to operate the wooden furniture business in the informal economy? The next section presents the methodological approach followed by results and conclusions.

■ 2 METHODS

2.1 Data collection

The data for this study is based on a survey of Jua Kali wooden furniture enterprises in Nairobi, the capital city of Kenya. In response to the fact that a list informal wooden furniture microenterprise does not exist, the sample selection is designed to obtain representative samples of the target populations. Firstly, the five board regions of Nairobi are delineated

using Google Earth-assisted mapping (Figure 1) based on expert knowledge. Region 1, Dagoretti, is located in the western suburbs of Nairobi and approximately 10 km from the centre area. Region 2 is known as Langata and located in the south-east of Nairobi centre with about 7 km from the central area. Makadara & Embakasi East is the name of the third chosen region and on the eastern side of Nairobi. The fourth region is called Kasarani which is also located on the eastern side of Nairobi where also other kinds of informal settlements exist. The last region is Embakasi central which is about 12-15 km away from the city centre areas.

Secondly, our survey team visited the chosen regions to identify the streets and the number of Jua Kali wooden furniture microenterprises in each street. Subsequently, three streets per region were randomly chosen from a list of streets ordered by the number of microenterprises with equal probability of selection. In the last stage, a fixed sample size of four Jua Kali wooden furniture along the chosen street was systematically selected at regular intervals based on the business premise positioned in the respective street. The limitation to three streets per region and four Jua Kali wooden furniture per street results from the organizational aspects as well as the financial and temporal constraints. The respective design allows us to interview small wooden furniture businesses as randomly and as spatially dispersed as possible. Overall, face-to-face interviews were conducted with 60 Jua Kali wooden furniture from February to March 2023. A structure-questionnaire was employed during the survey. It encompasses four main modules to gather information on business formation, Jua Kali characteristics, registration status and business revenue and expenses.

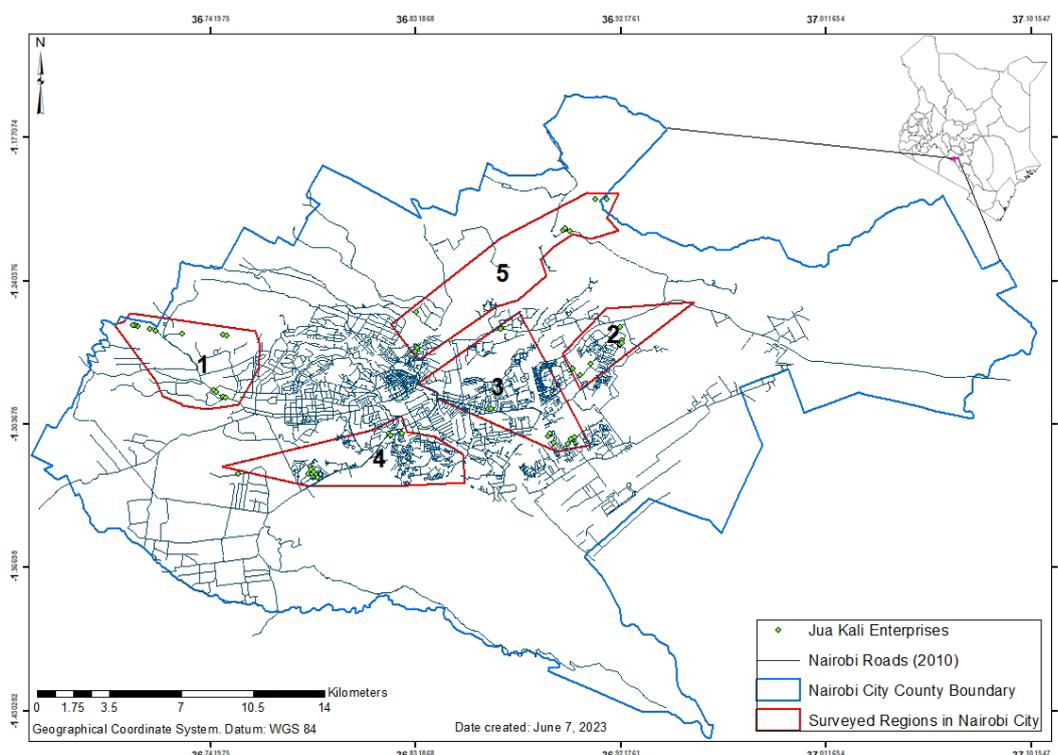


Figure 1. The chosen five regions in Nairobi for conducting interviews with Jua Kali wooden furniture microenterprises.

2.2 Statistical approach

The clustering technique is employed to determine the compositions in a target population, i.e. Jua Kali wooden furniture microenterprises, based on a series of attribute variables. We apply the Partitioning Around Medoids (PAM) or k-medoids because it is more robust in the presence of noise and outliers compared to other techniques such as k-mean (Michinaka et al., 2011). The literature shows that the ability to formalise the business depends on the profile of enterprises and their readiness (Gaarder and van Doorn, 2021). Accordingly, four relevant attribute variables are selected namely level of informality, annual business profit, access status to social security and size of the business (number of workers). The optimal number of clusters is chosen based on the maximal average silhouette width for the entire dataset, which can range from -1 to +1 (Kaufman and Rousseeuw, 2005; Lippe et al., 2021). We further checked the group mean difference between the final chosen clusters or segmentations of the Jua Kali wooden furniture microenterprises.

3 RESULTS

Figure 2 presents the overview of our samples, i.e. Jua Kali wooden furniture enterprises with regard to their business characteristics. As expected, the major business form of informal wooden furniture enterprises is sole proprietorship, accounting for 82 percent of the overall sample. Most of them either have no accounting or possess informal record on revenue and expense for personal use only.

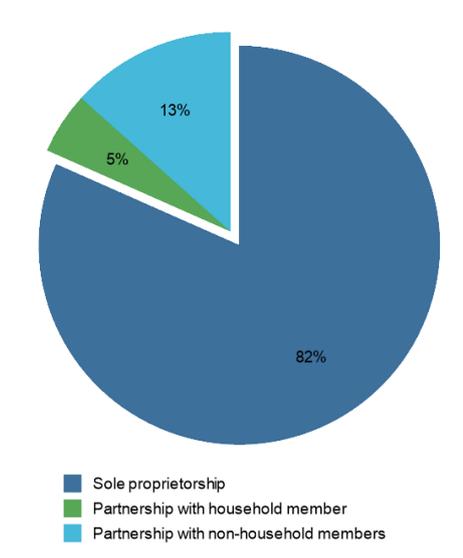


Figure 2a

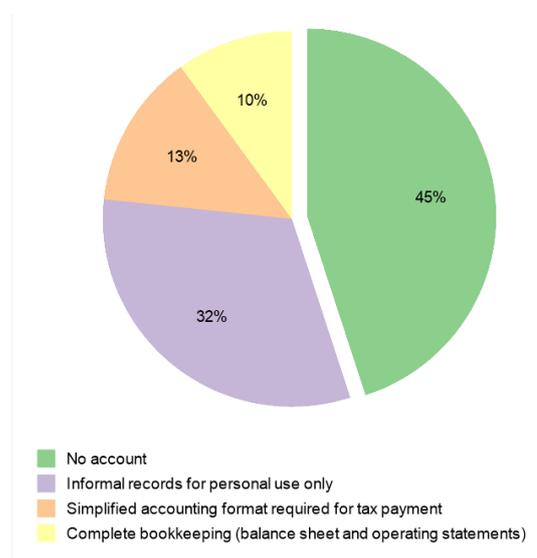


Figure 2b

Figure 2. Form of business (2a) and accounting record (2b)

According to the silhouette index, two is the optimal number of clusters in comparison to the other solutions. The overall average silhouette width is maximised at 0.77 implying that a strong clustering structure is found in our Jua Kali samples. The clustering result suggests that Jua Kali wooden furniture comprises two distinct profiles of informal enterprises, i.e. survivalist (cluster 1) and opportunity enterprises (cluster 2). The two-sample Wilcoxon rank-sum (Mann-Whitney) test further reveals that there is a statistically significant difference in the mean of each attribute variables among two segmentations of Jua Kali wooden furniture enterprises (Table 1).

Table 1. Clustering results and its attributes based on average score

| Attribute | Cluster 1 (N = 54) | | Cluster 2 (N = 6) | | Mann-Whitney test (P-value) |
|--------------------------------------|--------------------|--------|-------------------|----------|-----------------------------|
| | Mean | SE | Mean | SE | |
| Level of informality (Index) | 0.60 | 0.03 | 0.33 | 0.12 | 0.022 |
| Annual business profit (USD) | 5424.48 | 718.49 | 41622.68 | 21793.40 | 0.033 |
| No access to NSSF & NHIF (Index) | 0.94 | 0.02 | 0.17 | 0.17 | 0.061 |
| Size of business (number of workers) | 3.48 | 0.22 | 4.67 | 0.33 | 0.000 |

Note: SE denotes Standard Error. NSSF and NHIF refer to National Social Security Fund and National Health Insurance Fund, respectively.

In addition, we found that both segments of microenterprises conduct their business in the informal economy because of the co-presence of necessity and opportunity-driven motivations. About half of our interviewed Jua Kali confirm that the entry cost of formal registration and ongoing compliance is the most burdensome issue to formally registering their businesses. This is followed by the complexity of the registration process. Lack of access to social protection such as sickness and employment injury benefits is widespread among Jua Kali wooden furniture and even more pronounced among those in the survivalist segmentation.

■ 4 CONCLUSIONS

Understanding the nature of informality and its drivers can support policymakers in developing formalisation strategies that are fitted for the targeted enterprises. Hence, the present study aims to determine the segmentation of Jua Kali wooden furniture microenterprise and understand their diverse nature and motivations to operate their businesses in the informal economy. Using the surveyed data from 60 Jua Kali wooden

furniture microenterprises in Nairobi, we found two distinct profiles of these economic units, i.e., survivalists and opportunity entrepreneurs. As expected, most of Jua Kali are still survivalist entrepreneurs whose degree of informality is relatively high, whereas business profit and social security coverage are comparatively low. The findings shed light on the importance of reducing decent work gaps coupled with a registration procedure tailored to the characteristics of enterprises can enable conditions to facilitate the transition to formality in the long run.

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Acknowledgement

This study is a result of the research project WoodForWork. It was funded by the German Federal Ministry of Food and Agriculture through the German Federal Office of Food and Agriculture (BLE) due to a decision of the Deutscher Bundestag, Project number 28I-031-01.