

Proceeding Paper

# The Role of TVET Skill Development in Transformation of Informal Sector in Developing Countries: The Case Study of Skilling Uganda Program in Kampala Urban Area Uganda <sup>†</sup>

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**Abstract:** This paper explored the contribution of TVET skill development in the transformation of the informal sector in the Kampala urban area of Uganda using qualitative research with a systematic literature review. The included articles in this study were based on four criteria: (i) focus on informal sector in developing countries like Uganda, (ii) linked informal sector with TVET (skill training), (iii) published in English language, (iv) downloadable article. The Preferred Reporting Items of Systematic reviews and Meta-Analyses (PRISMA) framework was used to retrieve 40 articles at step one. In step two, reading and screening articles by titles and abstracts, 26 articles were excluded (16 for duplication, and 10 articles had no clear connection with IS and TVET). In the final step, 14 articles were retained for in-depth reading guided by research questions with content analysis used in data analysis. It was found that the informal sector is not fast-growing and large, but it contributes over 50% of Uganda's GDP and 20% comes from Kampala, which is the second-largest employer after agriculture providing over 70% of non-farm employment opportunities to vulnerable urban dwellers. Suggestions were discussed.

**Keywords:** informal sector; skills development; informal sector transformation; developing countries; BTNET; urban informal economy; skilling Uganda; TVET



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## 1. Introduction

Even today, the growth of the informal sector manifests in many regions and countries globally anchored on employment provision to thousands of unemployed youths, women, and other vulnerable groups of people [1]. According to the [2], this sector provides employment opportunities to more than 61% of the world's population [2]. Specifically, it is rampant in many Sub-Saharan African countries where it employs over 70% of the population in micro, small and medium household enterprises outside formal employment [3,4]. Although there is no concrete definition of the informal sector, however, this study adopts the ILO's Fifteenth International Conference of Labor Statisticians in January 1993, "that defines informal sector based on its characteristics such as all nonfarm production units without legal registration, no book of accounts and employs few employees or contributing family members" [5,6] (pp. 19–28).

In the context of Uganda, it refers to unincorporated businesses or enterprises (individual or partnership) not registered for tax or with a lack of complete books of accounts [7,8]. In addition to agriculture, the informal sector is a life changer through provision of employment opportunities, improved earnings, and poverty alleviation to rapidly increasing youthful population vis-a-vis the small size of the formal sector [9,10]. The study focused on the Kampala urban area because it is the largest city doubling as the capital city as well as the central commercial district in Uganda. Because of this, it hosts all categories of people across all regions of the country who seek better services and employment opportunities.

Kampala city as a central business district is divided into urban areas such as Kampala Central, Makindye, Rubaga, Nakawa, and Kawempe [11,12]. According to [11], the creation of formal employment opportunities within the city is not at pace with ever growing city's population escalating the rapid growth of informal sector activities.

These include self-employed people, casual and home care (domestic) workers, street and traditional market vendors, food vendors (restaurants and kiosks), boda-boda (motorcyclists) and taxi (matatu) drivers, metal fabricators, carpenters, barbers, shoe shiners, who engage in the production of goods and services partially for income generation and personal use. Additionally, studies by [7] (pp. 130–152), [12,13] reveals that the majority of IS employers and workers' education levels in Kampala was below post-secondary, i.e., they attained only primary education (46%), 25% attained lower secondary education and only 7% had attained diploma certificate and above indicating the role of basic education in Uganda. However, Uganda's basic education has been heavily criticized for being theoretical, only exam-oriented, and not preparing Ugandans with relevant practical skills needed in the labor market [14].

For instance, a report by [7,8] indicated that the lack of business-related skills such as managerial skills, entrepreneurial skills, customer care skills affected the productivity of this sector in Kampala and Uganda in general. Whereas a study by [15] revealed that improved trade openness reduces the growth of informal economy however, the author forgot that informal sector participants (employers and employees) are constrained by low levels of education with limited skills such as digital and information literacy skills, lack of access and affordability to modern technologies which affect the productivity level of the sector to appreciate internationalization enjoyed by formal sector in Uganda. Meanwhile, Uganda aspires to achieve classification as an upper middle-income country in 30 years since 2010 when Uganda's Vision 2040 was launched. However, with most of the working population, e.g., the youths and women engaged in the informal sector, their efforts to achieve their aspirations are diminished.

## 2. Skill Development through TVET and Informal Sector

Therefore, in this paper we argue that skill development through vocational training is a prerequisite to informal sector transformation [16]. With the insight that the transformation of the informal sector is a broad concept which entails dealing with obstacles of the sector, skill development is a key turning point in this transformation process. We base this argument on the purpose of vocational education and training which focusses on empowerment of people with relevant hands-on skills for productivity and efficiency in labor markets as potential employees or entrepreneurs based on human capital theory [17].

More so, through vocational education and training, informal sector workers can be empowered with marketable relevant skills such as digital or ICT skills to empower them to adopt new emerging technologies and business models, for example the use of e-commerce and online marketing platforms such as JUMIA leading into smart cities. This will improve the sector productivity, ease technology adoption, improve financial literacy, e.g., books of accounts (recordkeeping), access to the market through new marketing strategies, e.g., online marketing. Therefore, skill development through either formal, non-formal or informal training should target empowering such informal sector population with relevant marketable skills for transformation into formal sector. However, this requires a holistic assessment to categorize the production units of informal sector participants by level of education (no education, basic education, and diploma and above) to identify which business-related skills are relevant for each category and how vocational education and training can address them [6].

According to [18], several good practices were reported during the international conference proceeding on technical and vocational skills developments for the informal sector where TVET has been used as a potential conduit for the transformation of the informal sector. However, in this study a few cases will be used. First, a study by Rai on "Transfer of technical skills among collectivized Slum Adults strengthens Community

Actions for Slum Improvements" in India, indicated that through TVET, youths and adults from three Indian city slums formed Slum Improvement Committees to receive vocational training on slum counting, analytical skills and GPS mapping of number of slums, and computer skills such as uploading GPS maps on Google Earth. Already two slum GPS maps were uploaded which improved their identity and public service delivery in those slums as well as their permanent identities.

While in Swaziland, through Don Bosco skills center about 107 youths in Manzini Swaziland received vocational training in entrepreneurship skills such as practicing financial discipline, computer skills and marketing strategies short courses, e.g., automotive and bodywork repairs, (home) electrics, woodwork and metalwork, plumbing, dressmaking, upholstery, refrigeration technology, silk-screen printing and arts and crafts. After the training, these youths form business teams and cooperatives based on their field of expertise which enabled them to formalize their business operations through registration and employing other people in their communities. Furthermore, through TVET, Bolivian women engaged in pottery activities at El Alto Bolivia received vocational training in entrepreneurship, creativity, leadership which improved their business skills in planning, implementation and monitoring of their business ventures which enabled them to adopt new technologies available in the city.

Thus, this paper seeks to explore the role of skill development through Business Technical and Vocational Education and Training (BTVET)-skilling Uganda program in transforming informal sector in Kampala urban area in Uganda. The study was guided by the following two research questions (RQs): (i) what is the contribution of informal sector Uganda's economy? (ii) what is the role of BTVET-skilling program in transforming the informal sector in the Kampala urban area in Uganda?

### 3. Method

This study used a qualitative case study research approach because it could enable the researcher to explore various opinions, and experiences about the topic of study from already existing articles published locally and internationally. It applied a qualitative systematic literature review approach [19] to investigate the contribution of informal sector (IS) in Uganda as well exploring the role of vocational training program ("skilling Uganda") in the transformation of this sector in Uganda. This study analyzed documents such as statistical reports/briefs, newspapers, and journal articles regarding IS contributions, challenges as well as skill training for IS in Uganda obtained from national (especially Uganda Bureau of Statistics,  $N = 5$ , Ministry of Education and Sports,  $N = 1$ ) and international databases such like World Bank/WB,  $N = 3$  and ILO,  $N = 2$ ). These were complemented by journal databases such as Web of Science (WoS,  $N = 10$ ) and Google Scholar,  $N = 19$  all retrieved online.

Through the Preferred Reporting Items of Systematic reviews and Meta-Analyses (PRISMA) framework, the study used four inclusion and exclusion criteria of articles: (i) focused on informal sector in Uganda, (ii) linked informal sector with TVET (skill training), (iii) published in English language, (iv) downloadable article. By entry of keywords such as: informal sector OR informal economy AND Uganda, informal sector OR informal economy AND skill training AND Uganda, skill training OR development AND informal sector OR economy AND Uganda, informal employment OR work AND Uganda were used. A total of 40 articles were retrieved at level one of search by keywords, after screening level, reading articles by titles and abstracts, 26 articles were excluded (16 for duplication, and 10 articles had no clear connection with IS and TVET). Finally, 14 articles were retained for in-depth reading with guidance of research questions. The content analysis method was used to organize article data into codes and categories related to the central questions of the research.

#### 4. Research Findings and Discussion

##### 4.1. Contribution of Informal Sector to Uganda’s Economy

Based on the SLR analysis attempting to answer our RQ1, three themes emerged: IS definition, growth, and importance, and challenges as shown in Table 1. Our SLR revealed that 93% reviewed articles indicated that the informal sector is not just fast-growing, but also plays a significant role in Uganda’s economy [12,13,15,20–29]. IS was defined by characteristics such as working conditions, legal status, number of employees, etc. Growth was depicted by the percentage of employment opportunities created among vulnerable groups such as women, unemployed youths, school dropouts, people with disabilities (PwDs), nurturing entrepreneurial attitude, provision of raw materials and services for formal sector. While inadequate skills, low payment, low productivity, overregulation, bureaucracy, and limited access to financial services were major IS challenges.

Additionally, it was shown that IS comprised of micro small and medium enterprises (MSMEs) distributed in trade, services, and manufacturing with activities such as transport (boda-bodas/motorcyclists and taxis/matatus), markets and street vending, hawking, wholesale and retail sale trade, commerce in consumables, plastics, textiles, etc. Additionally, it contributes between 30 and 60% of the total country’s GDP, IS in Kampala urban area was indicated to contribute 20% of the national GDP [12,13]. For example, a study by [13] indicated that IS employs over 90% of urban youths, women, school leavers, and rural migrants in the Kampala urban area in Uganda.

This finding is supported by [3,4] who indicated that informal sector as great employer in developing countries. Similarly, a study by [30] indicated that informal sector is a signal for inadequate formation of employment opportunities by formal sector in developing countries which is true with Ugandan case.

**Table 1.** SLR summary of theme about IS contribution to Uganda’s economy.

Theme	Theme Description	Articles Reviewed	
		List of Articles	Percentage
IS definition	Unregistered enterprises, no employment contracts, avoiding taxes, micro enterprises, own account owners. “Jua Kali” (Swahili word for hot sun referring to typical outdoor working conditions of such entrepreneurs) Example: street and market vendors, carpentry, welders and crafts man ship, natural herbalists, food operation (sale and processing), fruit and vegetables sellers, kiosk grocery traders, clothe and shoemakers and Sellers, etc.	[13,23–25,31,32]	50%
IS growth, composition, and importance	About 85 to 87% of total employment (5.5 million) outside agriculture more so to urban poor like women unemployed youths, disabled people. Ugandan youths have strong entrepreneurial spirit exhibited in IS. IS dominated by micro small and medium enterprises (MSMEs) in services, trade, manufacturing It contributes 54% of total gross domestic product (GDP) It provides over 90% of employment to urban youths in Kampala	[12,13,15,20–29]	93%
IS challenges	Limited education, low wages, low productivity, high taxation for formal sector, overregulation, costs of registering new businesses, poor infrastructure like electricity, corruption, poor working conditions, low access to financial services, etc.	[15,21–23,28,31]	43%

#### 4.2. The Role of BTVET-Skilling Uganda Program in Transformation of IS in UGANDA

Due to the significance of the informal sector to Uganda's economy, the government of Uganda (GoU) was prompted to launch the skilling Uganda program under BTVET in 2012 with objective of addressing skill problem associated with BTVET as well as empowering Ugandans for self-employment. Through the Ministry of Education and sports (MoES) and support from World Bank, the government launched BTVET-Skilling Uganda program as a paradigm shift to equip Ugandans with marketable and relevant demand-driven skills with respect to labor market needs. This positioned private and employers affront the driver's seat in the training programs unlike the supply driven and institution-based training before.

To answer our research question two, we sought to understand what skill development is, process and its strategies targeting IS in Kampala urban area. During our SLR, we realized that very few (39%) studies linked IS and skill development, for example [16,23,24,29], other studies like [22], skill development through BTVET was a recommendation for curbing youth unemployment in Uganda and rest of studies concentrated on IS contributions and challenges. However, all these articles (except for two studies [22,29]) rarely depicted the picture of IS in Kampala or other urban areas but focused on IS in the whole country.

According to [16], skill development refers to individual and community empowerment with relevant marketable and employable skills for self-sustenance. This author argues that whereas skill development is essential for accumulating skilled labor force, weak formal education and training system compromises it. Skill development in Uganda is through BTVET involving formal, non-formal and informal training systems. Formal BTVET institutions both public and private regulated under MoES; non-formal training by faith-based organizations (FBOs), non-government organizations (NGOs) and informal training centers that fall under MGLSD.

*"The need for skills development is rapidly growing in Uganda creating knowledge and skills-based economy . . . ; inappropriate education and training that does not focus on innovation and creativity, entrepreneurship, science and technology as a holistic means to enhancing individual and national competitiveness."*

According to [16], formal BTVET provided by public and private institutions are academic and supply-driven without links to industries therefore they rarely address skills problem in Uganda contributing to informal sector growth.

*"BTVET is an overlapping three-tier system; involving craftsman level training offered by technical schools and institutes; technician level training offered by technical colleges; and graduate engineer level training offered by universities . . . . . ; the problem is the relevance of the acquired training in the global job market . . . . . ; failure for the educated to market their acquired knowledge . . . ."*

According to [22], skill development through vocational training is essential for raising competent skilled labor force for both formal and informal sectors as well as attracting foreign direct investment in the country which can boost descent job creation to dissolve informal sector challenges. However, the lack of updated equipment and demand driven curriculum make skilling training irrelevant for the trainees.

*"Vocational education and training are part of sustainable economic development. Where more skilled workers are available, companies can be more competitive . . . . . ; Uganda stand in a weak position in vocational education and training in practice with 67% of its population without any trade/technical skill . . . . . ; The education sector is often characterized as supply-oriented rather than demand-oriented, leading many in job mismatch of skills on the labor market . . . . ."*

In addition to the cited weakness above, [22] indicated the government strategies such as private sector foundation Uganda (PSFU) established through skilling Uganda strategic plan to provide relevant technical and soft skills in different sectors. PSFU as an apex body with 230 private business association and corporate bodies has an upper hand to advocate for work-based approaches to skills mismatch in Uganda. However, only 35% of

Ugandan firms provide formal training to their employees leaving large percentage into informal sector

*“Private Sector Foundation Uganda (PSFU) is the apex body that offers relevant technical and soft skills across different sectors. This institution consists of over 200 business associations, corporate bodies, and major public sector agencies. It serves as a focal point for private sector advocacy and capacity building . . . . . ; One approach to tackling a skill mismatch problem is to combine formal education with work-based training. For example, about one out three (35%) Ugandan firms offer formal training programs for their permanent, full-time employees.”*

Meanwhile a study by [27], investigated how vocational skill development through the Uganda Youth Development Link (UYDEL) was a major component to job creation for 770 marginalized youths in Kampala. UYDELan NGO has provided vocational training to marginalized youths aged 14–25 years for about 25 years in Kampala and neighboring towns like Mukono, and Wakiso. Through skills training, 770 youths trained in hairdressing electronics, motorbike mechanics, catering and bakery, plumbing, welding, tailoring, and knitting, jewelry making, and building and construction for 3 years (from August 2015 to 2018). It was revealed 57% of trainees were employed in the formal sector based on their field of expertise.

*“The youths after training in UYDEL vocational centers/safe space need to prove and show ability to apply limited range of knowledge and skills . . . . . , Overall, out of the 770 slum youths who were trained and reached during research survey, 75% were found working either employed (57%) or self-employed (18%).”*

Additionally, a study by [21] while investigating the role of science, technology, and innovation for informal sector, found out that work-based learning such as on-the-job training and apprenticeship were common training strategies for informal sector.

*“ . . . . . it has been established that most entrepreneurs and artisans acquire their Jua Kali skills through on-the-job training and apprenticeship; . . . . . through family ties or friendship with trainer. Training may range from six months to five years depending on the kind of trade or skill one is going in for.”*

While our findings align with [32,33], for example, a study by [32] acknowledged that one way for IS transformation is through skill development through formal and nonformal education as well as enterprise training like on-the job training, apprenticeships with strong involvement of private sector. However, our findings deviate in that formal training does not address the skills need of the informal sector, instead it just escalates its expansion. Similarly, [33] indicated that informal traditional apprenticeships were influential in skill development for IS in Senegal, and Ghana. Implication to this is that a holistic and intentional integration of education and training system (formal, non-formal and informal) with employment policies to target specific skills for specific sectors implemented through training programs for targeted groups, emphasizing traditional apprenticeship and skills recognition in IS.

Based on the study findings, we have the following recommendations to put forward: skill-need assessments should precede all training programs whether formal nonformal or informal to ensure skills matching and sector/area or geographical skills needs which will increase relevancy of skills provided. In addition, the provision of skill-training should be categorized based on trainee’s education attainment level, and finally, training programs should financial management and information literacy and digital skills to enable empower IS leverage in emerging technologies.

## 5. Conclusions and Recommendation

In conclusion, the informal sector makes a great contribution to Uganda’s economy in the form of employment opportunities, nurturing entrepreneurs, although with low productivity. Although a lack of relevant skills by Ugandan youths to favorably compete in the small formal sector contributes to their unemployment and increased participation in

informal sector especially in urban areas like Kampala, limited skills need assessment by skill training centers to contribute to the challenge. We also recommend a future study to conduct an empirical study with primary data evaluating skilling Uganda for the informal sector in the greater Kampala metropolitan area, and to use a diversified research sample including policy makers, BTVET providers, and informal sector participants across all major cities in Uganda.

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