

Barriers of the Recognition of Informal Construction Workers towards Improving Their Skills; The Case of Recognizing Prior Learning (RPL) Programme in Tanzania

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Abstract The study aimed at assessing the barriers of recognition of informal construction workers through RPL programme towards skills development; specifically, by identifying the stumbling blocks on recognition of informal construction workers in the rules and procedures of RPL programme; examining barriers towards skills development of informal construction workers to be recognized under the RPL programme, and proposing strategies towards improving the recognition of informal construction workers, through RPL programme. This descriptive research strategy used both qualitative and quantitative approach. Its research design based on random sampling techniques and the questionnaire survey. The targeted population sample included 68 randomly selected informal construction workers, drawn from currently enrolled candidates under the RPL programme, and is subdivided into two occupations by stratified sampling techniques i.e. Masonry/Bricklaying (MB) and Carpentry/Joinery (CJ), out of which 46 (68%), responses were obtained. Based on the ranking of factors with Relative Importance Index (RII), the study revealed the general barriers of recognition of informal construction workers, which included; worker's perception of wastage of time, unstructured cooperation with private sector, poor knowledge of benefits of RPL certificates, lack of RPL awareness, and lack of adequate VETA centres. It concludes that; the awareness of the RPL programme is not well established; qualification standards (class standards) set, do not match the occupational standards (field standards) acquired by workers; complex process; and minimum age requirement being too high. The study recommends that; general awareness and recognition processes should be improved; information about the portfolio evidence for works which are not specified in the module should be clear, and generated to reduce the time and expenses during the enrolment; knowledge about the benefits of RPL certificates should be provided; VETA should help the workers to find a job through a dual apprenticeship program; have national target for number of informal construction workers to access recognition opportunities; contractors should use informal construction workers with RPL certificates; promotion of knowledge management and sharing; and an increase in VETA centres, especially in rural areas, must be done.

Keywords Informal Construction Workers, Skills, Recognition, Prior Learning, Programme, Tanzania

1. Introduction

The term informal construction sector, is used as reference to employment situation, with little or no regulation and protection, to informal construction sector workers and their jobs. In recent decades, it has gained popularity in developing countries such as South Africa, Nepal, India, Kenya and Tanzania [21]. Basically, the urban informal

sector, apart from being the main source of job growth in most countries in Africa, it employs 66% of the labour force, which is the largest workforce, that contributes 60% of the Tanzanian economy [36]. Moreover, the Tanzania's construction sector has been experiencing unprecedented growth, caused by; an increase in government budget allocation to infrastructure development; the increase in private investment in real estate and cement production; as well as an increase or growth on informality in construction activities attributed by; failure in land delivery systems and rapid urbanization the leads to informal settlements, informal construction system, informal labour and employees not directly protected by labour laws, and informal sector enterprises [17].

Furthermore, [17,18,21,22] assert that; the informal

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construction sector in Tanzania comprises of; large number of unorganized, unregistered and unregulated contractors, whom mostly are trained informally and paid low salaries; high rates of accidents; unprotected individuals and small enterprises that supply labour and contribute in various other ways to the output of the construction sector. Besides, the construction industry faces serious challenges related to its workforce, which includes; lack of proper training as well as limited technical vocational and managerial skills to informal construction workers, employability and skill mismatch (skill paradox) [1].

All these issues can be solved if they are formalised, trained, registered and regulated, given the fact that; construction is one of the primary provider of work in urban areas [22]. Several initiatives have been taken to address these concerns, though still facing barriers, to support the solution. [8] asserts that; Tanzania’s Vocational Education and Training Authority (VETA), through the project of social dialogue process, developed a programme of

formalizing informal construction workers, where informalities on skills are formalized in order to improve the quality of informal construction workers and their product in the construction industry. This was achieved by; Tanzania initiating a Recognition Prior Learning (RPL) programme, as a result of a 2010 research, on ensuring the formalization and upgrading of informal construction workers.

RPL, is basically a process of assessing and certifying, the skills and knowledge of a person, in order to meet standards of the formal construction industry. [16,26] have also defined it as a process of evaluation of those skills and knowledge acquired through life experience, allowing them to be formally recognized by the qualification systems. It is a central aspect of lifelong learning.

The standards to be met are as specified in the National Qualification Frameworks(NQF), *which is a national instrument for development and classification of qualification, according to a set of criteria level of learning and skills.*

Table 1.1. National Qualification Framework (NQF) and associated qualification titles

NQF Levels	School Sector	Technical and Vocational Education and Training (TVET) Sector*		University Education Sector	Professions	Lifelong Learning
		Vocational	Technical			
10			Doctorate Degree	Doctorate Degree	←	Articulation – Horizontal and Diagonal Articulation credits, credit transfer, RPL, also additional qualifications that facilitate mobility and access.
09			Master (Technology) Degree	Master Degree Postgraduate Certificate, Postgraduate Diploma	Professional Level 4 ←	
08		Vocational Bachelor Degree	Bachelor (Technology) Degree	Bachelor Degree	Professional Level 3 ←	
07		Higher Vocational Diploma	Higher Diploma	Higher Diploma	Professional Level 2 ←	
06		Ordinary Vocational Diploma	Ordinary Diploma		Professional Level 1 ←	
05	Advanced Certificate of Secondary Education	Advanced Vocational Certificate	Technician Certificate		Technician Level 2 ←	
04	Certificate of Secondary Education	Vocational Certificate	Basic Technician Certificate		Technician Level 1 ←	
03		Basic Vocational Certificate			←	
02		VET Level 1 ↑	↑	↑	↑ ←	
01	Certificate of Primary Education				←	

Source: NQF (March, 2010). Final Draft Report, Tanzania Commission for Universities (TCU); and University Qualification Framework (UQF), 2012, Tanzania Commission for Universities (TCU), modified by Authors, (2020).

Table 1.1, shows vocational trainings starts from NQF level 2 upwards. Majority of participants of this study are those who have completed primary education (standard seven) i.e. NQF level 1. A few candidates have attained NQF level 4 i.e. O-level secondary education. This programme may benefit those candidates who left school without a formal school leaving certificates, as for the case of South Africa [27]. It is developed in order to guide the development of national education and training system, which is well integrated with the structure and process. The RPL programme, is also proposed as among a mechanism to

facilitate meaningful articulation, between skills qualifications in different tracks, especially to the workers who informally acquired their skills. It provides educational opportunities to those who did not have them during the first staged of life [16]. It used to admit into the system, those who do not meet the full entry requirement for the target programmes, without forcing them to go back to begin again.

The emphasize on the need of the RPL programme is also, revealed in a study by [10], related to availability of construction skills in Tanzania, at management and operatives level, which indicated that; in both levels, some

skills are obtained informally. Furthermore, [15] adds that; about 60% of workers are obtained in informal ways, without employer neither enquiring their training background, nor testing the competence of skilled workers. Likewise, in 2016, VETA, through RPL programme, certified a total number of 57 workers in the construction field [11], this means that; 57 workers were formalized 2016, although the number is small compared to the number of informal construction workers joining the industry each year, hence the need for expansion and smooth running RPL programmes.

1.1. Problem Statement

In many developing countries like Tanzania, construction works or activities make use of three main resources, i.e. materials, equipment and/or plant and labour (e.g. informal construction workers), which engage a variety of skills ranging from specialized professionals to operatives, who translate drawings into a physical object i.e. a building, a roads etc. at a define duality and quantity [10], with informal construction workers making a good contribution. The contribution of informal workers has been growing at a higher rate, due to the increase in demand for public and private development; and these workers are highly important in the construction industry, because it is a labourer oriented industry due its nature of works [10], and it affects a number of expectations, and quality of works [8]. Despite the growth of informal workers, who basically have varying informality skills [10], their balance against formal workers must be established, so as to suppress the problems of informality in the economy. Thus, basing on this view, the Government of United Republic of Tanzania, through VETA, which is a self-governing government agency, decided to formalize the informal construction workers under RPL programme, in order to achieve the balance in the construction industry. But, still, the RPL programme output has not been highly achieved, as per the expectation, due to the fact that; the number of informal construction workers formalized per year, is small compared to the approximate number of informal workers joining the industry each year [11]. Hence, this study focuses on assessing the barriers on recognition of informal construction workers through RPL programme towards skills development; specifically, by identifying the stumbling blocks on recognition of informal construction workers in the rules and procedures of RPL programme; examining barriers towards skills development of informal construction workers to be recognized under the RPL programme, and proposing strategies towards improving the recognition of informal construction workers, through RPL programme.

2. Literature Review

Apart from being used for academic references; the study findings are vital in proving awareness on the objective itself, and an overview from workers of the rules and procedure for eligibility to be recognized through RPL programme. Also,

its knowledge is significant to the government on recognizing strategies that may be employed, in order to improve the programme under VETA, while proceeding to add other occupations under the programme. The ultimate goal, is to improve the existing framework, towards improving trade skills for informal construction workers. The study covered the informal construction workers working on Masonry/Bricklaying (MB) and Carpentry/Joinery (CJ), located in Dar-Es-Salaam, Tanzania. MB and CJ are the only occupations/ trades related to construction industry, covered by the programme currently, and it is anticipated that; success of these selected trades, will establish a base for future expansion of other building trades. The study was conducted in Dar-Es-Salaam, Tanzania, due to availability of a large and reasonable number of construction projects; informal construction workers; as well as Dar-Es-Salaam being the first region to host the programme.

2.1. Construction Industry in Tanzania

Construction industry in Tanzania as per [5, 6, 17, 25,]; is an economic investment which includes real estate, transport, infrastructure, and other civil works such as water supply. The industry comprises of the regulated and unregulated parts, termed as a formal and informal sectors. This informal sector plays a large role on labourer provisions since the industry is labour intensive industry; whereas the sector as grown in size contributing between 60% - 80% of employment opportunity and to the economy.

2.2. Informal Sector

The term informal sector is defined basing on the employment situation, and on economic enterprises. Basing on employment situation; the informal sector is used on describing employment or livelihood generation, within the developing country. Meanwhile, basing on economic enterprises; the informal sector is defined as small enterprises, which are not registered according to national, and local government regulation; while operating with little capital, using mostly local resources, simple technology and buying and selling in an unregulated and competitive market. [19] asserts that; in the construction industry, the term informal sector, refers to not only unprotected and unregulated individual and enterprises engaged in construction activities, but also informality of contract between building owners, and workers, as some building in the informal system, may have planning permission.

2.3. Informal Construction Workers

Writing by [17,22], enlighten that; informal construction workers in the Tanzania context, are any individuals or groups who are not registered, or officially recognized by the government, characteristically unprotected and unregulated with no formal contracts working on verbal agreements. Moreover, they assert that; the mode of payment of the informal construction workers is mostly on basis of

piecework, their social securities are minimum, with no legal framework, and sometimes no health benefits/facilities provided under given assignment or formal contract of employment. In this system, building owners procure materials and hire them to construct, or repair the whole or part of the building. They are cheaper, hence helping the construction firms, in cutting down the cost, given the fact that; most of the construction works is seasonal, and keeping workers on a permanent basis when there are no works is costful. According to [22], informal construction workers, move around to active construction sites, and are hired by the owner or gang leaders (foremen) in charge of the construction on casual basis. Employment on a particular site may last from one day to one month or more depending on the amount of work, availability of material and funding. In some cases, work stalls and the workers have to move around different construction sites with anticipation of getting a job as they wait for activity to start again on the previous site. Moreover, [17] expounds that; in most cases, they informally acquire skills through imitating from their family and friends, and they do not acquire official recognition to enable them to proceed with formal education from higher institution learning, to secure jobs and be regulated by national and local government regulation with full protection from employment and labour related Acts.

2.4. VETA and the RPL Programme

The Vocational Education and Training Authority (VETA¹) is an autonomous government agency established an Act of Parliament in 1994 (Cap 82 revised edition 2016) with its function as specified in section 4 (1) of the Act. Its main objective is to oversee The Vocational Education and Training system in Tanzania by coordinating, regulating, financing and providing of Vocational Education and Training in Tanzania. VETA, focuses on improvement of the VET system in order to support national social economic development through improvement of equitable access to VET, quality VET provision, employability of VET graduates, and enhancement of VET management capacity and financing. Skills development has been a major policy agenda in several countries and there is a lot of emphasis on the promotion of vocational education and training (VET) programs [1], due to the fact that driving a national economy depends on sufficient and skilled labors, and skilled labors are improved through the training of vocational-skills, [35]. [20], asserts that; in the improvement of quality and access to VET, VETA has taken various efforts including the establishment of Regional Vocation Training and Service Centres (RVTSC), Kipawa ICT, VETA Hostel and tourism training institution and district vocational training centres (DVTC). In Dar-Es-Salaam for example, these efforts enable an increased enrolment of trainees from 77,051 in 2005 to 189,687 in 2017 but there were limited chances in VET centres to meet the increased demand. It can be noted that;

only a few were assessed and certified as depicted in Table 2.1 below. Moreover, in establishing itself firmly, VETA decided to establish various programmes to increase access so as to meet growing demand. These programmes were;

- a) Dual apprenticeship,
- b) Skills Enhancement Program (SEP),
- c) Integrated Training for Entrepreneurship Promotion (INTEP), and
- d) Recognition of Prior Learning (RPL).

Dual apprenticeship programme is a training system at workplace running with collaboration with industries through an exchange of students between training centre and industries. It was initiated to help youths to easily get employment through vocational training at a workplace, whereas occupations involved are motor vehicles, electronics and hotel management. The need to incorporate other trades such as Carpentry and Masonry is necessary. Skills Enhancement Program (SEP), provide training to employees from different companies by updating and upgrading skills due to change in technology. Integrated Training for Entrepreneurship Promotion (INTEP), is an employment-oriented program which focuses on training people who are unemployed, underemployed and those who are working in the informal sector.

RPL is the only programme for assessment and recognition of skills acquired informally at the workplace, whereby skills are assessed, the gaps are identified, and training programme is organized to fill the gaps, [20]. The first research conducted in 2010 by VETA for initial initiation processes of the RPL programme, managed to establish standard tools and guidelines to run the programme [11]. Two (2) occupations from the construction industry certified under RPL during the first phase of RPL, were Masonry/Bricklaying (MB) and Carpentry/Joinery (CJ). These research paper is therefore based on these two occupations. Other occupations were Motor Vehicle Mechanics (MVM), Food Preparation (FP) as well as Food, Beverage Services and Sales (FBSS). The second phase is yet to be rolled-out, and it includes; Electrical Installation (EL), Design Sewing and Clothing Technology (DSCT), Plumbing and Pipe Fitting (PPF), and Welding and Metal Fabrication (WF). From February, 2017 to November, 2018 with support from the Prime Minister's Office (PMO), VETA managed to conduct a Recognition of Prior Learning Assessment to all regions of Tanzania mainland (A total of 3989 candidates were assessed). Details of this phase' assessments are as indicated in Table 2.1, hereunder;

VETA, is expecting to add new fields, after rolling out of the occupations mentioned under Table 2.1 below. In relation to construction industry, VETA is also planning to develop RPL assessment tools for Information Communication Technology (ICT), Refrigeration and Air Conditioning (RAC), Renewable Energy (RE).

¹ www.veta.go.tz. (accessed on Thursday, January 23, 2020).

Table 2.1. The RPL phase assessment from Feb, 2017 to Nov, 2018

SN.	Occupation	Enrolled	Assessed		Passed		Failed	
			No.	%	No.	%	No.	%
01.	Masonry and Bricklaying (MB)	9,819	1,540	16.0	1,424	92.0	116	8.0
02.	Motor Vehicle Mechanics (MVM)	4,555	809	18.0	722	89.0	87	11.0
03.	Carpentry and Joinery (CJ)	5,163	1,059	20.0	960	91.0	99	9.0
04.	Food Production (FP)	2,104	437	21.0	361	83.0	76	17.0
05.	Food and Beverage Services and Sales (FBSS)	749	144	19.0	113	78.0	31	22.0
	TOTAL	22,390	3,989		3,580		409	

Source; URT, (2018).

A more comprehensive study can therefore be carried out in future involving more trades in construction industry. Other fields are Animal Husbandry (AH), and Agro Mechanics (AGM). Depending on availability of fund, the assessment may include Motor Cycle Mechanics and a range of occupations from Mining Sector.

The RPL Programme which is also known as Recognition [29], is a process by which a person's existing skills and knowledge regardless of how they have been acquired are assessed and certified. [30,31], defines RPL as "an assessment process of the informal or formal learning of an individual so as to determine the extent to which that individual has achieved the required learning outcomes, competencies, or standards to make him/her eligible to apply for admission to a specified degree programme". Moreover, it is the process used by regulatory bodies especially in training institutions around the world, to evaluate skills and knowledge acquired informally for variety of purpose. For example in Tanzania under VETA, the programme was initiated for academic achievement purpose [30,31], employment purpose, updating and upgrading of skills following rapid change of technology, to increase labour forces especially to labour-intensive industries like construction industry and to reduce the problems of informality in economic development. VETA promotes awareness, and ensures easy accessibility of the programme through marketing and website.

The RPL general assessment terms, according to assessor guidebook by [32,33]; are as follows

a) **Assessor**:- Is a qualified and registered expert who acts as a vocational teacher or field supervisor, responsible for evaluating the application form and portfolio submitted by a candidate, discuss and guide the person in overcoming shortcomings and in preparing for the final assessment also to conduct the final assessment of the skills and knowledge of a candidate.

b) **Facilitator**:- This is a qualified and registered RPL expert who will be the first point of contact for a candidate, the facilitator is providing information about RPL to the candidate, making an initial assessment about suitability for a particular qualification, and guiding the person in completing the application and collecting evidence for the portfolio.

c) **Moderator**:- Is a qualified and registered expert acts as a vocational teacher or field supervisor who will moderate assessment tools, methods and results.

d) **Assessment Tools**:- These are instruments that will be used by assessors to assess the skills and knowledge of candidates against a set of criteria or standards. These are developed to ensure that the certificate acquired through the RPL process is not considered inferior.

e) **Assessment**:- Assessment is a process in which the candidate and the assessor work together to gather evidence to enable the assessor to make a decision on the candidate's competence.

f) **Assessment Methods**:- Assessment methods are techniques used to gather different types of evidence. This may include questioning, direct observation, structured activities, third-party feedback, portfolios and review of products.

g) **Assessment Process**:- These are processes and documents to consider when planning and conducting RPL assessments. It includes the assessor's guide information such as purpose, personnel, context, competency standards, assessment tools and methods and the evidence plan.

h) **Full Qualification**:- These are existing VETA qualifications that a learner/candidate earns after successfully completing a training programme.

i) **Unit of Competence**:- This is a description of the job or work function that one needs to perform such as dismantling, Roofing a house, making blocks, wiring and supervising others in the workplace, and the standard of performance and knowledge required.

j) **Competency/Competence**:- This is a Combination of knowledge, technical skills, understanding, problem solving and attitudes that can be demonstrated in the workplace. To be deemed competent you are assessed against the relevant units of competence.

2.5. Benefits of RPL

RPL as the programme offers many benefits to both formal and informal groups of workers, employers, government, training agencies and society in general. Some of the benefits of the RPL programme as discussed by [7,11,29] includes;-

For Individuals:- Gives opportunity to get formal education and training programmes which give them legal status for lifelong learning like joining in higher institution learning.

- The workers get great access to job mobility and employment,
- It helps in the formalization of the economy and gives better job opportunity since workers acquire qualified professional,
- Eligibility or access to apply for government tenders and financial services for businesses, thus improving business potential,
- Improved security in operating environment through self-worth, confidence and respect,
- Improved technical and commercial in skills and knowledge as many individuals may require upgrading of their skills and knowledge in order to meet the standards,
- Duplication learning on what they already knew is minimized, hence RPL saves workers time and resources,
- It motivates students to continue with their studies,
- It improves worker's confidence self-esteem and motivation to learn, and
- It develops workers independent study skills through evidence gathering.

For Employers:- Having qualified and certified workers, this helps any organization to meet the demand of its market in the competitive economy.

- RPL offers employers an opportunity to convert the investment they made in training programmes into credit for their employees,
- Workers with upgraded skills and knowledge would be more productive and innovative due to change in technology, and It improves worker's self-esteem and promotes a positive learning culture,
- Employer's cost of identifying training needs is reduced,
- The employer is easily determined if the employees need additional training, and
- RPL simplify training needs to companies.

For Educational Institutions;-

- It brings the opportunity of work and learning together,
- Its offer staff development within the institution, RPL requires professionals to act as teachers, facilitators, assessor and moderators,
- RPL can act as a marketing tool to educational institutions since many workers with informal skills and knowledge will be attracted and convinced to join the programme for recognition purpose,
- It brings together academic and VETA together, and
- It attracts more experienced workers to higher education hence it providing flexible learning opportunities.

For Society;-

- It promotes equity and social inclusion as it provides a second chance to disadvantaged persons (who are informally acquire their skills) to acquire formal qualifications.

2.6. Eligibility Condition for RPL

Any informal workers with a minimum of 17 years are eligible for RPL, if and only if he/she has at least three years of training, or working experience in the relevant fields such as; masonry and bricklaying (MB) and carpentry and joinery(CJ). Some occupations require more years in work experience than others depending on the complexity of the competency of the tasks. VETA will provide specific entry requirement for each occupation [29]. Even if a candidate does not qualify or do not meet the minimum requirement, it is still beneficial to seek advice from RPL facilitator who can advise on how and what you need to do to qualify for RPL in future.

2.7. Quality Assurance

This is a mechanism to ensure credibility, transparency and consistency in policy, legal and regulatory framework, institution framework for RPL, active engagement of employer and workers, RPL guidelines, development of standards and assessment tools and methods. It further safeguards portfolio evidence, credibility of RPL centres, training of facilitators, assessors and moderators, grading skills of candidates, moderation of assessment, RPL information, provision of skills upgrading, internal cooperation and research monitoring evaluation.

2.7.1. Assessment Tools and Methods

VETA is responsible for the development and implementation of the RPL guidelines, tools and methods. These should meet formal and informal economy and VETA curricular to ensure quality in the PRL processes, and to avoid inferior consideration of certificates provided under the programme. According to [29], the assessment tools and methods should be;

- Valid to assess the desired competencies to candidates,
- Reliable and consistent such that, if various assessors use the same assessment tools and methods should get the same results,
- Transparent on assessment tools, methods and standards to candidates, assessors and moderators,
- Equitable and flexible in term of time, place and method,
- Manageable and achievable in term of time and resources available and
- Fair enough to allow for an appeal.

2.7.2. Portfolio of Evidence

Where candidates are required to provide evidence,

evidence gathering needs to comply with the rules of evidence [29], which are;

- Valid to covers key competencies of a qualification,
- Sufficient to allows for assessors to make decisions on the level of competency,
- Contemporary, and Real (candidates own work).

The evidence in the portfolio, may consist some or more of the information as per the general guidelines [29]; job/work descriptions, skills logbooks, videos and/or photographs of work activities, formal statements of results and certificates sample of work produced, written testimonials from managers, owner, employers or worker's associations or any other evidence that is valid, sufficient, authentic and current.

2.8. RPL Processes

These are the processes for candidates to follow in order to be certified although these processes and organizations vary among the countries. The core of RPL involves two key processes which are counselling and facilitation and assessment and certification, but these key processes are supported by some mechanisms results to five(5) processes,

- a) Awareness Generation,
- b) Facilitation,
- c) Screening of an Application,
- d) Final Assessment, and
- e) Certification and Feedbacks.

Henceforth, this study has also shed some light and concerns that hinder of influences the RPL processes.

2.8.1. Awareness Generation

This is the process of publicity on the information about RPL to the potential candidates, employer and other stakeholders. Publicity and awareness are promoted by VETA using different models such as; websites, social networking, group information meetings conducted at workplaces and education institution, brochures, other publicity materials, and media. They publish information about what is RPL, what its benefits are, whom to contact, as well as the process, estimated costs, timeframe, eligibility requirements and assistance available.

2.8.2. Facilitation

This is sometimes referred to as counselling and facilitation, whereby in this processes, the candidates interested in the RPL, obtain detailed information and orientation from the facilitator at a VETA centres [2]. The facilitator is responsible for the initial assessment of the candidate's eligibility and guides them in complete RPL procedures particularly on a collection of evidence, that helps a candidate in deciding for application and qualification to apply for RPL. The Candidates are provided with information such as; application form, competency

standards for the occupations (modules of employable skills), eligibility condition for the occupations and nature of evidence required for the portfolio if the assessors use evidence that confirms the individual's claims to recognize skills and competency. Forms of evidence appropriate for RPL are;

- a) Direct evidence which involves direct observation; oral questioning; and demonstration of specific skills,
- b) Indirect evidence which involves assessment of qualities of a final product; review of previous work undertaken; and written tests of underpinning knowledge, and
- c) Supplementary evidence which involves third party, such as testimonials from employers; reports from supervisors; work diary or logbook; and examples of reports or work documents.

There are many assessment methods and techniques for gathering evidence [2]. Some of them are explained in Table 2.2 below;

Table 2.2. Assessment methods and techniques for gathering evidence

SN.	Assessment Method	Example
01.	Observation	▪ Real work activities at workplace
02.	Questioning	▪ Self-evaluation form ▪ Interview & Written questionnaire
03.	Review of products	▪ Work samples/products
04.	Portfolio	▪ Testimonials/references ▪ Work samples/products ▪ Training record & Assessment record ▪ Journal/work diary/logbook ▪ Life experience information
05.	Third-party Feedback	▪ Interviews or documentation from the employer, supervisor, peers or client
06.	Structured Activities	▪ Project, Presentation & Demonstration ▪ Progressive tasks ▪ Simulation exercise such as role-plays

Source; URT, (2016),

The assessment methods as presented in Table 2.2 above are not just randomly selected by a candidate when he/she selects method for gathering appropriate evidence, rather there are seven stages that must be followed sequentially as per [32,33], namely;

- a) Identifying unit(s) of competency to cluster for assessment,
- b) Developing competency profile,
- c) Identifying evidence requirements,
- d) Reviewing and selecting assessment methods,
- e) Selecting assessment tools,
- f) Recording evidence matrix, and
- g) Developing assessment plan.

Table 2.3. The key stages adopted for the Recognizing Prior Learning (RPL) programme

Clustering units of competence	This is the processes where candidate’s general training should be divided into a number of non-overlapping competencies, to reflect real work activities or specific job role, to be assessed, and it varies across all training packages, since these training packages can contain different skills sets.	Developing competence profile	Provides an overall picture of a competent person in action, as per URT (2016). It can be a checklist, a written description of the work activity, a list of the characteristics of a competent worker, or a job description for an individual performing the activity. The result of a study by [27] revealed that; the advantage of mature learners with experience is that they gain knowledge through experiential learning in authentic learning contexts, as such the bring lived experiences and practical knowledge to the academic context.
Evidence requirement	this is the third stage, where evidence relevant to the job or work activity, expected to be assessed, is required to determine the competence, and the evidence must reflect not only skills, but also knowledge and language used in the competency profile.	Reviewing and selecting assessment methods	Appropriate selection of assessment method, involves consideration of resources and facilities, student’s needs, the nature of the work activities to be assessed and other assessment materials such as information on projects, case studies, simulation activities, and checklists for third-party evidence, self-evaluation forms or portfolio requirements
Selecting assessment tools	After selection of assessment method, assessment tools are designed in form of document that contains specific questions or activities developed from the assessment method to be used for assessment, procedures for conducting and recording assessment process, information on project and checklist.	Recording evidence matrix	This is a chart recorder, which ensures that; all the evidence gathered through these tools; meet the critical and mandated requirements of the unit(s) of competence [32, 33].
Developing assessment plans	Provided to candidates at the start of the assessment process. It should contain the following information: what will be assessed? The methods that will be used when the assessment will occur? Where will the assessment take place? The criteria for judgment decision? Or any supplementary criteria used to make a judgment on the level of performance.		

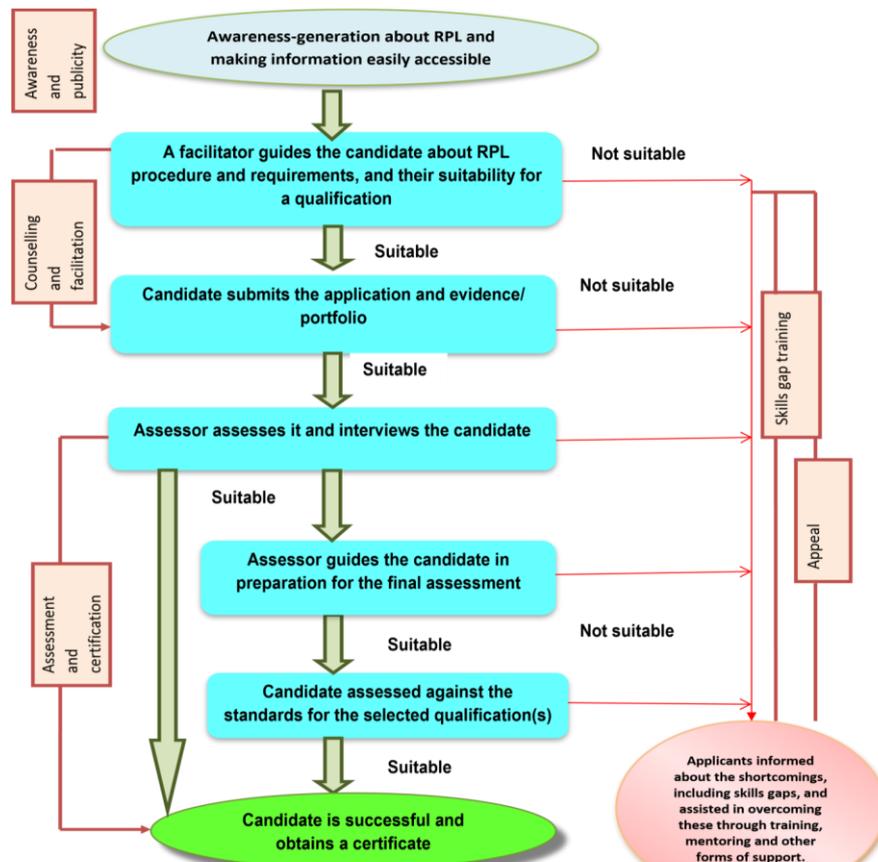


Figure 2.1. The RPL programme flow chat, (Source; Adopted from by VETA, (2014).)

2.8.3. Screening Application

This is the selection of candidates for final assessments. Firstly, candidates should submit the application form, and the prescribed fee to facilitator, at VETA Centre. Then the facilitator will send the application form, and evidence to the assessor in a specific occupation, to find out the suitability of the candidate for the applied occupation and units. Later, the candidate is called for an interview and clarifications. In case of satisfaction of portfolio, knowledge and experience of a candidate, he or she will be advised about the nature of final assessments, grading system and other relevant information, but if an assessor is not satisfied with the collected evidence then candidates will be required to collect additional evidence or upgrading skills in some area before applying.

Grading of Skills of Candidates:- workers who have received training through a non-formal system are recognized into three grades under this programme;

- a) Grade A; 91% to 100%
- b) Grade B; 81% to 90% and
- c) Grade C; 75% to 80%.

This means that; the lowest grade for candidates to be

considered pass or successful, is 75%. Below that; a candidate is not considered successful, and they will not be legible for recognition.

2.8.4. Final Assessment and Feedbacks

The final assessment is done to candidates, and the suitable time and place for assessment will be informed as summarized in a process shown in figure 2.1.

The assessment will be done by using prescribed assessment tools/methods, and by a team of assessor (normally 2 people), and another member from the industry, jointly do the final assessment for a particular occupation. Skill gap training is done if necessary, and it is the gap between learning acquired on the job and qualification standards. According to [14], the skill gap is the difference between an employee's or potential employee's current skills versus the skills necessary to meet or exceed the expectations of the job. Feedbacks are assessment decisions reported to candidates, whether they are successful or not. For those candidates who are not successful, they will be informed about reassessment opportunity, and appeal processes will be provided.

Table 2.4. General Barriers to the Success RPL and Problems of its Implementations Internationally

SN.	Countries	Barriers to the Success and Implementation of the RPL Programme
01.	Africa	<ul style="list-style-type: none"> ▪ RPL requires the development of innovative methods for assessing skills and knowledge of a person, including a portfolio of evidence, which is different than the traditional methods, informal education and training system. The efficacy of these approaches in different conditions, particularly in the informal economy is not well established. Besides, assessors in formal training systems are also not very familiar with such approaches, ▪ Ineffective involvement of employers and workers in the design and implementation, ▪ Current practices for RPL, such as a portfolio of evidence could be time consuming and expensive, which could be a constraint for workers in the informal economy, particularly bearing the cost of RPL, ▪ Poor coordination between learning institutions and authorities, which restricts access to RPL, certified candidates to formal education and training programmes, ▪ Poor RPL support systems for developing standards, assessment tools and methods, training and development of RPL experts, and monitoring and evaluation, ▪ Lack of trained RPL experts such as facilitators, assessors, moderators and developers, ▪ Inadequate institutional capacity to implement RPL, ▪ Inflexibility in formal qualifications and competency standards, which require a candidate to be an expert in a broad range of skill areas, but the workers, particularly in the informal economy, may specialize in a narrower range of skills areas, and ▪ Ensuring the credibility of the RPL certification and equivalence with formal qualifications.
02.	Australia	<ul style="list-style-type: none"> ▪ Poor understanding of the RPL process, requirement, method and benefits at management level, ▪ Inappropriate assessment methods used by assessors, ▪ The RPL processes consume time, ▪ Poor training to assessor and facilitator on me to support the applicant with special needs, ▪ The RPL is costful, ▪ Lack of financial support for RPL candidates, and ▪ Lack of awareness of and accessible information regarding RPL.
03.	USA	<ul style="list-style-type: none"> ▪ RPL is viewed as time-consuming, and it is resisted in academic institutions in the USA,
04.	Canada	<ul style="list-style-type: none"> ▪ Lack of awareness of PLAR to the society, ▪ Poor support from organizations since there is no credit transfer among organizations, institutions and provinces, ▪ PLAR services are not easily available and affordable, ▪ Lack of national standards hence results in less effective of the programme, ▪ Lack of PLAR resources, expertise and time, ▪ There is no proper funding for the programme, and ▪ Lack of consistent PLAR terminologies and principle practice.
05.	Other Countries	<ul style="list-style-type: none"> ▪ Lack of link between RPL and higher education institutions, especially in the United Kingdom, ▪ Lack of awareness of the benefits of RPL programme and its usefulness, and ▪ Lack of RPL professionals.

Source; Janakk, (2011) modified by Author, (2020).

2.8.5. Appeal Processes

Refers to a process which allows candidates to challenge an assessment decision reported to them, as well as enabling them to be re-assessed. Candidates have to pay a reasonable non-refundable fee which discourages playful appeals, but it should not prohibit appeals altogether. The assessor should provide clearly time period for complaining and appeal (which is within thirty (30) days of the release of results), and a fair timeline for them to have complaints and appeals resolved.

2.9. Candidate's Guide Towards RPL

This is the standard qualification document for RPL candidates only. Apart of RPL general guideline, VETA published another guideline for candidates only, which explains how candidates get skills and competencies recognized. It explains, a place where candidates obtains information about the programme, categories of evidence appropriate for RPL, what should a candidates do to get assessed?, how and what should be prepared by a candidates, steps to be followed, submission time for the application, cost involves, possible time for the RPL processes and advantages of certification. Before filling self-assessment form at VETA, candidates should identify which area of competency knowledge and skills which is suitable for him or her to apply for RPL.

One of the steps in the process is to identify learner's profile. This was ironed in a study by [27] which revealed that; having the learners profile helps to identify specific characteristic of RPL candidates in terms of personal attributes, learning context, knowledge and skills gained through a process of personal development, successful candidates who will be able to provide relevant evidence, confirmed by the third party as competent, and has performed to the required standards on RPL are awarded modular certificate. This gives a candidate respect among peers and customers and/or employees, provides opportunity to get decent employment in formal companies and/or organizations, gives access to contract bids according to his/her levels of competency. It also makes it easier to register a company and provides opportunity to be enrolled in formal trainings of their wish. Table 2.4 highlights general barriers viewed in various parts of the world. These are compared with specific barriers in Tanzania and discussed further in section 4.0.

In short, extant literature shows that; adult learning theories seem to overlap and share common themes, these includes the role of previous experiences active involvement of adults in their learning process, complex roles & responsibilities, ability for critical reflection and RPL [27]. This study however, focuses on barriers towards RPL.

2.10. The Human Capital Econometric Model

[1] used the standard Mincer's earnings/wage function, also known as the human capital earnings function, to estimate the returns. It can be expressed as follows:

$$\ln W_i = \alpha + \beta \text{edu}_i + \delta_1 \text{exp}_i + \delta_2 \text{exp}_i^2 + \varepsilon_i \quad (1)$$

where W is daily wage, edu is the number of years of schooling completed, exp is labour market experience in years, exp^2 is experience squared and ε is a random disturbance term. In the standard earnings specification, the coefficient (β) on education variable is interpreted as the average rate of return for an additional year of schooling. It can be noted that most of informal construction workers in this particular study have more experience than formal education.

The wage Equation (1) can be augmented to account for vocational education and for other socioeconomic variables:

$$\ln W_i = \alpha + \beta \text{voc}_i + \delta X_i + \theta \lambda_i + \varepsilon_i \quad (2)$$

where voc is a dummy variable which takes the value 1 if the individual has completed vocational education (or diploma courses) after elementary education and the value 0 if he or she has completed general secondary (secondary or higher secondary levels) education, X is a set of control variables and λ is the inverse Mills ratio. The dummy variable (voc) can be used to examine the returns to general secondary and to vocational education. A positive (negative) and significant β coefficient in the above equation will indicate that the returns to vocational education are significantly higher (lower) than that for general secondary education.

Review of results in the study by [1] indicated that the coefficient on vocational dummy is positive and statistically significant at the 1% level of significance in both the rural and urban sectors. This shows that the returns to vocational education are significantly higher than that to general education. There is a sense that efforts to eliminate barriers towards recognition of prior learning should not be underrated.

3. Methodology

In line with [12,13] writings; the methodology used in this designed descriptive research design study, was case study survey. Also, the study used both qualitative and quantitative approach, which made it easier in determining the intended objectives, samples and design of the study, as well as ranking the rules, procedures, barriers and strategies of recognition of informal construction workers through RPL programme.

3.1. Data Collection Methods

Generally, both primary and secondary data collection, were done using multiple sources of evidence. Questionnaire survey was used to collect primary data from various certified and non-certified construction workers in Masonry/Bricklaying (MB) and Carpentry/Joinery (CJ) occupation trades, under the RPL programme, in which the respondents answered the questions on their own [9]. Some of the questions were close ended and others were open ended to the respondent to attest their own opinion, and give more information regarding barriers and challenges of the RPL programme. Furthermore, secondary data concerning

the rules, procedures, barriers and strategies of recognition of informal construction workers through RPL programme, were collected from literature review via published and unpublished books, journals, newsletters, magazine papers, webpages, articles, papers, guidelines and related national qualification frameworks(NQFs). All respondents had different years of experience in the construction industry.

The questionnaire was divided into four(04) parts; first part, inquired on general information about respondent; second part, canvassed information on rules and procedures which acted as barriers for informal construction workers to be recognized under VETA through RPL programme; third part, covered other barriers of informal construction workers to be recognized under VETA through RPL programme; and the fourth part, covered strategies on improving the recognition of informal construction workers under RPL programme. Closed-ended questions were used as they are very convenient for collecting factual data and are simpler to analyze because the range of potential answers is limited, [9]. The pilot study was carried out to mark better the quality of

the questionnaire and improve reliability of the questions with the use of 5-point likert scale, the respondents were asked to respond to each statements, by indicating which statement is Most Relevant(SR) = 5; More Relevant(MR) = 4; Relevant(R) = 3; Less Relevant(LR) = 2; Not Relevant(NR) = 1, so as to identify rules and procedures, examine barriers and propose strategies of recognition of informal construction workers through RPL programme. This type of scale has been found to be acceptable in other construction management research.

3.2. The Study Population and Sample Size

The study sample population included certified and non-certified construction workers in Masonry/ Bricklaying (MB) and Carpentry/Joinery (CJ) occupations, under the RPL programme, in Dar-Es-Salaam, Tanzania as shown in Table 3.1. The two filed were selected due to the fact that; they are the only trades, the were the first to be certified under the RPL programme.

Table 3.1. Population of Masonry/Bricklaying (MB) and Carpentry/Joinery (CJ) workers, who are certified, and who are not certified under RPL in Dar-Es-Salaam from 2016 to November, 2018

SN.	Occupation	Enrolled	Assessed		Passed		Failed	
			No.	%	No.	%	No.	%
01.	Masonry/Bricklaying(MB)	9,850	1,571	16.0	1,455	93.0	116	8.0
02.	Carpentry/Joinery(CJ)	5,189	1,085	21.0	986	91.0	99	10.0
	TOTAL	15,039	2,656		2,441		215	

Source; URT,(2018).

Basically, respondents were randomly selected so that each unit of the population had identical chances of being selected, and the sub-population of MB and CJ were drawn with homogeneous characteristics than the total population. Furthermore, the study sample size was selected by the method of proportional allocation, under which the sizes of the samples from different subpopulation. The size of sample should be optimum, neither large nor small [12,13]. The Total Sample Size (n) for this study, was calculated using the following formula, as per [4];

Sample Size Calculator (nc) will be:-

$$nc = \text{Distribution of } 50\% \times \frac{1 - \text{Distribution of } 50\%}{(\text{Margin Error}\% \div \text{Confidence Level})^2}$$

Whereby; nc = Sample Size Calculator

$$\text{Thus, Sample Size Calculator (nc)} = 0.5 \times \frac{1 - 0.5}{(0.10 \div 1.65)^2}$$

$$\text{Sample Size Calculator (nc)} = 68.06$$

True Sample Size (n) will be:-

$$n = \frac{\text{Sample Size Calculator} \times \text{Size of Population}}{\text{Sample Size Calculator} + \text{Size of Population} - 1}$$

- Whereby; N = Size of Population = 15039,
- n = True Size of Sample,
- e = Margin Error (e = 10%) i.e. 0.10,

- Z = Confidence Level (Z = 90%) = 1.65, and
- nc = Sample Size Calculator.

$$\begin{aligned} \text{Thus, True Sample Size (n)} &= \frac{68.06 \times 15039}{68.06 + 15039 - 1} \\ \text{True Sample Size (n)} &= 68 \end{aligned}$$

Henceforth, the total sample size for the study was 68 certified and non-certified construction workers in Masonry/Bricklaying (MB) and Carpentry/Joinery (CJ) occupations, under the RPL programme, in Dar-Es-Salaam, Tanzania. Meanwhile, the population was divided into sub-population sample size (S), as depicted in Table 3.2 in which;

$$\text{Sub-population Sample Size (S)} = (n) \times (Pi)$$

Whereby; n = Total Sample Size, n = 68.

Pi = The proportion of population included in sub-population i

Table 3.2. Sample size divided into a sub-population

SN.	Occupation	Enrolled in the RPL	Sample Size
01.	Masonry/Bricklaying (MB)	9,850	45
02.	Carpentry/Joinery (CJ)	5,189	23
	TOTAL	15,039	68

Source; Author, (2020).

3.3. Respondent's Response Rate

The study targeted 68 respondents, whereby a total of 48 response from various construction workers who acquired their skills and knowledge informally were obtained, representing 68% of the response rate as seen in Table 3.3. This is the reliable responses rate for data analysis as per [3] who insists that; any response of 50% and above is adequate for analysis.

Table 3.3. Response Rate

SN.	Respondents	Number	Percentage
01.	Responded	46	68%
02.	Did not respond	22	32%
	TOTAL	68	100%

Source: Author, (2020).

3.4. Data Processing and Analysis

Both qualitative and quantitative data were analyzed, whereby qualitative data were examined and analyzed manually, through contents analysis, and categorized according to the way they relate to the research objectives and questions. Quantitative data were analyzed and computed by using SPSS, baes on the variables of the study. Relative Importance Index (RII) was then adopted to identify critical stumbling blocks, barriers and strategies for the improvement of the RPL programme, and then finally factors were ranked accordingly. The higher the value of RII, the more important was the barrier of recognition of informal construction workers.

$$\text{Relative Importance Index (RII)} = \frac{\sum W}{(A) \times (N)}$$

Whereby; N = Total Number of Respondents (TNR).

Weight given to each barrier by the respondents, using 5-point Likert scale, in which; Most Relevant(SR) = 5; More Relevant(MR) = 4; Relevant(R) = 3; Less Relevant(LR) = 2; and Not Relevant(NR) = 1.

A = the highest weight = 5

4. Results, Analysis & Discussion

Main parameters used for investigation in this study were to identify the stumbling blocks on recognition of informal construction workers with regards to the rules and procedures of RPL programme; examining barriers towards skills development of informal construction workers, and proposing strategies towards improving the recognition of informal construction workers, through RPL programme.

4.1. The Stumbling Blocks on Recognition of Informal Construction Workers in Rules and Procedures of RPL Programme

This question, aimed at reviewing the rules and procedures for RLP processes, and to find out how these

rules and procedures, affect the general recognition process of informal construction workers. The question based on the guidelines for RPL processes including a general guideline for RPLA, assessor's guideline for RPL, guideline on how to get candidate's skills and knowledge recognized, in order to review the rules and procedures for RPL processes, and found out its impacts on recognition process of informal construction workers who acquire their skills and knowledge informally. Basically, the study reviewed the following;

Firstly, according to the guidelines for RPL programme, any informal construction worker is eligible for recognition, only if he/she has a minimum of 17 years, with 3 years of learning or working experience. The RPL programme, is assessing and certifying skills and knowledge regardless of how they have been acquired. This means that; about 15% of the informal construction workers out of 93.33% of the informal workers have been given a chance to be certified, since their education background is not considered, but also the age criteria set in the guideline is reasonable. It also allows workers with majority age according to the employment and labour relation Act.

Secondly, the RPL programme is conducted in sequential processes which are; (a) awareness, (b) facilitation, (c) screening, (d) final assessment and (e) feedbacks and certification. This means that the programme is conducted in a logical order by starting with awareness generation through VETA website, fliers and through media and for those who are ready to join the programme gets more information about the whole RPL process to the facilitator. The eligible applicants are screened at first, to determine in which area, they are competent to be assessed and recognized, the workers are supposed to fill the assessment form with three Modules of Employable Skills (MES) and he/she is advised to gather evidence where necessary for the final assessment (test). Few months after test, the results are published and those who have passed, are awarded the certificate for recognition. What is not clear here is that, the certificate has not been equated to the existing NQF levels.

Thirdly; for those applicants/informal workers found not eligible for the recognition, they are informed about the outcome of not being recognized, and the way to overcome it. This means that; even if an informal worker is found not to be eligible for the first time, he/she has another chance of being recognized after, either by learning a short course of his/her area he/she wishes to be competent at VETA, or back to the "street/vijiwe", to get more experience for him/her to be reconsidered for certification.

Fourthly; the gap/skills upgrading course, before certification of any applicant, VETA is providing skills upgrading course on theoretical coverage of specific field/module, crosscutting skills (life skills, sense of quality assurance and contract making), health and safety training, skills on the proper use of materials, tools and equipment. This means that; an informal worker acquires the formal theoretical knowledge, before their certification under the RPL programme.

Lastly; appeal process for candidates who are not satisfied

with the results, whereby the programme ensures fairness and transparency to its applicants and allow the candidates to be reassessed whenever he/she does not satisfy with the assessment decision.

Apart from the processes, the study ventured on how the rules and procedures affect the enrolment or registration of candidates, hence acting as the barriers of recognition of informal construction workers from the rules and procedure

of the RPL.

Results from Table 4.1 show that; in the rules and procedures of RPL programme, two factors were revealed to act as critical barriers of recognition of informal construction workers on both MB and CJ occupation. The first factor was, awareness of the programme not being well established, ranking first with a RII of 0.66 and 0.80 for MB and CJ, respectively.

Table 4.1. Barriers influencing rules and procedures in the enrollment or registration of RPL candidates, towards recognition of informal construction workers

SN.	Factors acting as a Barriers on Recognition of Informal Construction Workers on Rules and Procedures of RPL Programme.	Masonry/Bricklaying (MB)				Carpentry/Joinery (CJ)			
		TNR	RII	Mean	Rank	TNR	RII	Mean	Rank
01.	Awareness of the programme is not well established	31	0.66	3.32	1	15	0.80	4.00	1
02.	Insufficient time and expenses during evidence gathered, and required for competence proof as a pre-requisite for joining the programme	31	0.38	1.96	2	15	0.51	2.53	2
03.	Qualification standards (class standards) set do not match the occupational standards (field standards) acquired by workers.	31	0.35	1.74	3	15	0.39	1.93	3
04.	Complex process and lack of mechanism to identify RPL candidate's profile	31	0.32	1.58	4	15	0.35	1.73	4
05.	Minimum age requirement being too high	31	0.30	1.48	5	15	0.33	1.67	5

Source; Author, (2020).

Table 4.2. Barriers towards skills development to informal construction workers to be recognized under the RPL programme

SN.	Barriers of Informal Construction Workers to be Recognized under VETA through RPL Programme	Masonry/Bricklaying (MB)				Carpentry/Joinery (CJ)			
		TNR	RII	Mean	Rank	TNR	RII	Mean	Rank
01.	High cost for RPL to candidates	31	0.33	1.65	10	15	0.41	2.07	8
02.	Poor participation stakeholders such as employers/ contractors and the private sector in general	31	0.34	1.71	9	15	0.35	1.73	12
03.	No cost-sharing and a sustainable, equitable funding mechanism for RPL	31	0.34	1.71	9	15	0.35	1.73	12
04.	Insufficient numbers of competent RPL professionals	31	0.39	2.53	7	15	0.43	2.13	7
05.	Lack of integration of the RPL with policy, legal and regulatory frameworks for education and training systems	31	0.32	1.58	11	15	0.36	1.80	11
06.	Accommodating candidates with disabilities	31	0.31	1.54	12	15	0.27	1.33	15
07.	The literacy level of candidates	31	0.46	2.29	6	15	0.47	2.33	6
08.	Resourcing of RPL	31	0.32	1.58	11	15	0.37	1.86	10
09.	Language in which RPL processes and assessment are conducted	31	0.32	1.58	11	15	0.35	1.73	12
10.	Difficult to translate candidate's learning being assessed in terms of qualification or part qualification outcomes and assessment criteria and in providing relevant evidence	31	0.30	1.45	13	15	0.36	1.80	11
11.	The effect of residency clauses of higher education institutions on access	31	0.28	1.39	14	15	0.28	1.40	14
12.	Lack of competence	31	0.39	1.97	7	15	0.40	2.60	9
13.	Lack of confidence and fear of failure	31	0.50	2.58	5	15	0.49	2.36	5
14.	Low RPL awareness and effective vocational guidance and counselling service to RPL candidates	31	0.59	2.94	3	15	0.56	3.20	4
15.	Shortage of training centres including workshops	31	0.37	1.84	8	15		2.80	9
16.	Limit of number of candidate as per annum	31	0.30	1.48	13	15	0.32	1.60	13
17.	Poor government support such as protection by employment and labour relations Act	31	0.46	2.32	6	15	0.32	1.60	13
18.	Workers perception of wastage of time	31	0.90	4.51	1	15	0.65	3.23	3
19.	Poor knowledge of benefits of RPL certificates	31	0.72	3.58	2	15	0.74	3.70	1
20.	Lack of VETA centres in rural areas where there are many informal construction workers than formal construction workers.	31	0.52	2.61	4	15	0.68	3.40	2

Source; Author, (2020).

Moreover, insufficient time and expenses during evidence gathering, and requirement for competence proof as a pre-requisite for joining the RPL programme, was another critical barrier ranked second with a RII of 0.38 and 0.51 for MB and CJ, respectively. Other factors affecting rules and procedures for both MB and CJ included; qualification standards (class standards) set which do not match the occupational standards (field standards) acquired by workers, which was ranked third, complex process which was ranked fourth, and minimum age requirement being too high, which was ranked fifth.

4.2. Barriers towards Skills Development to Informal Construction Workers to be Recognized under VETA through RPL Programme

Findings as seen in Table 4.1, revealed four most critical barriers on recognizing informal construction workers in relation to skills development, determined from MB and CJ occupations. The critical barriers determined from MB occupation were; workers perception of wastage of time which was ranked first with RII of 0.90; poor knowledge of benefits of RPL certificates, which was ranked second with RII of 0.72; low RPL awareness and effective vocational guidance and counselling service to RPL candidates, ranked third with RII of 0.59; and lack of VETA centres in rural areas where there are many informal construction workers than formal construction workers which was ranked fourth with RII of 0.52. For the CJ occupation, the critical barriers included; poor knowledge of benefits of RPL certificates, which was ranked first with RII of 0.74; lack of VETA centres in rural areas where there are many informal construction workers than formal construction workers, which was ranked second with RII of 0.68; workers perception of wastage of time, which was ranked third with RII of 0.65; and low RPL awareness and effective vocational guidance and counselling services to RPL candidates, which was ranked fourth with RII of 0.56.

Furthermore, more comments were made by respondents from MB and CJ in open-ended questions, on the four most critical barriers on recognizing informal construction workers in relation to skills, as follows

- **Complex process and lack of mechanism to identify RPL candidate's profile;**- tracing candidates who have not undergone formal process, poses the need to understand specific characteristics of RPL candidates, thus requiring some sort of screening. Understanding candidates' personal attributes, knowledge, skills gained informally during the process of personal development prior to admission to the RPL programme matters. This is because, they have different needs and responsibilities than students who have just completed formal education [27]. All respondents showed to have peculiar profile in their CV's and have experienced different challenges.

- **Workers perception of wastage of time;**- 88% of the respondents claimed that; informal construction workers, decide not to enrol under the RPL programme because, they feel like it is a wastage their time in relation to their family

responsibilities. This is in accordance with the study by [27] that established similar scenario, where participants had mentioned a variety of emotions because of dysfunctional relationship and context, reflecting negative experiences. Moreover, they availed that; sometimes when the announcements on the new phase of RPL programme enrolment are made, they found themselves having construction works/tenders to do, and they cannot sacrifice their works/tenders which is the source of their income/earning for the sake of certification, given the fact that they are the bread earners. Thus, the time for enrolment lapsed without most of them being registered for recognition. Additionally, some of the enrolled applicants failed to be assessed for recognition and certification because, during the time of assessment, they found themselves having the works/tender to do.

- **Poor knowledge of benefits of RPL certificates;**- 73% of the construction workers showed to believe that, a certificate is for life learning purpose only, and since they do not have dreams to continue with learning, they ignored the importance of being certified, while claiming that; their employment circulation is a self-employment, and there is very rare chance of meeting a client who wants a certified worker to do his/her job. In fact the PRL certificates awarded to these informal workers, give an equal chance as formal workers to proceed up to highest education level, since the National skills qualification frameworks (NQF) for vocation and technical education, the RPL certificate is considered an articulation for these informal workers to be awarded certificates of competence up to level III under VETA, where the VETA awarding system has been merged with that of the National Council for Technical Education (NACTE) to form a single system of vocational and technical awards. What is still not clear is the credit system. According to [23] in Tanzania, credits are sued to reward the incremental progress of learners, facilitating student transfer, recognizing prior learning and contributing of the definition TZQF qualification standards. Absence of the Tanzania Qualification Authority is also one of the barriers toward recognition of prior learning.

- **Awareness of the RPL programme is not well established;**- The study revealed that; 84% of the were affected by the lack of awareness on the RPL programme, due to the mode of advertisement used. In most cases, the RPL programme advertisement are made through VETA website, fliers, newspapers such as The Citizen², etc. This means of advertisement, as the way to create awareness is not friendly to informal construction workers, since their perception is dominated by job seeking ideology, and not skills learning, as well as certification issues. Thus, they spend little/no time browsing on education/vocational training websites, or reading educational issue on

² on Friday, May 22,2015, they reported on RPL programme initiation process; on Tuesday February 02,2016 they reported on the development of guidelines and RPL plan; and on 2017, they reported on the workers who succeeded under the RPL programme and were certified.

newspapers, although some of the respondents, revealed that; they have heard about the programme regardless of the means of advertisement, but they do not know if the programme intends to give them the formal education through the skills qualification framework set by the government under vocation an technical education where for those workers who do not have any formal education background have been given a chance of prior assessment, and if these workers seem to qualify, their skills are recognized through RPL certification. These RPL certificates give the workers eligibility for them to acquire the certificates of competence under VETA, where the competency certificates are awarded under three levels, and the level III is the highest level of education under VETA. If a person has been successfully awarded the level 3 certificate of competence (NQF level 4), he/she is considered the same as a person with a form 4 certificate of ordinary secondary education, which is a minimum entry requirement for Basic Technician Certificate or Technician level 1, which may even leads them to Doctorate Degree or level 10 of education. In accordance with the NQF final draft of March 2010, and UQF of August 2012, and Quality Assurance Internal Guidelines & Minimum Standards for Provision of University education in Tanzania, Second Edition of June 2014, the two lower levels are basic vocational certificates (level 2) i.e. NQF level 3 and VET level 1 (i.e. NQF level 2).

▪ **Lack of adequate VETA centres in rural areas where there are many informal construction workers than formal workers;**- 91% of the respondents, reported on that; the programme is under VETA and other authorized vocational institutions like DONBOSCO, and these vocational centers are few compared to demand of people, which is in line with [29]. Thus, some informal workers wishing to be recognized, do fail to achieve their target, due to the either; absence of these vocational institutions in their locality, or being located far away from their home/job place, hence becoming time-consuming and expensive for them to go for RPL registration and recognition processes.

▪ **Non-realization of benefits Skills Development Levy (SDL);**- Various charge SDL which is collect by a Tax Authority (TRA for Tanzania) under the Vocational Education Act and Income Tax Act. The aim of this levy is to increase investment in education and training for the workforce. Various Skill Development Levies Acts revealed that; the levy grant scheme initiative intends to encourage a planned and structured approach to learning and to increase employment prospects to job seekers. The levy rate differs from country to country. In Tanzania, the rate applicable of SDL is 4.5%, of total emoluments paid to employees monthly, [28]. Mutual benefits between employers/contractors and VETA on the use of SDL will increase morale for collaborations toward recognition of RPL to informal construction workers.

As pointed in previous section 2.9, the authors made effort to review previous barriers in various parts of the world as summarized in Table 2.4. A number of additional barriers have been noted as summarise in Table 4.2. Barriers that

reappeared to be common included; lack of innovative methods for assessment criteria, such as portfolio of evidence, poor collaboration between various stakeholders (employers and workers in the design and implementation process). Others include time and cost constrains in the overall RPL programme which should have been bearable, as it is subsidized by the SDL. Other barriers were revealed to be the current challenges especially those ranked 1 to 4, and considered to be critical affecting the RPL programme.

5. Conclusions & Recommendations

5.1. Conclusion

The study concludes basing on specific objectives, that; the awareness of the RPL programme being not well established; qualification standards (class standards) set, not matching with the occupational standards (field standards) acquired by workers; process being complex, with insufficient time and expenses during gathering evidences required for competence proof as a pre-requisite for joining the RPL programme; perception; RPL programme being not well established as well as lack of VETA centres in rural areas; and minimum age requirement being too high, continues to be the barriers on the recognition of informal construction workers through RPL programme.

5.2. Recommendations

Basing on the conclusion drawn, the study recommends basing on the strategies proposed to improve the recognition of informal construction workers under the RPL programme as seen in Table 5.1.

From Table 5.1, the study revealed three important strategies that can be employed on improving the recognition of informal construction workers, under the RPL programme; these include,

Improvement of the advertisement program;- which was ranked first with the RII of 0.78, and agreed by 23 (50%) respondents, as the most relevant strategy for the improvement of recognition of informal construction workers, under the RPL programme. Example, these can be achieved by the fact that; most informal construction workers operates in the informal economy, while living and working in the informal settlements (e.g. Mlakuwa, Makongo, Goba, Changanyikeni, Tandare, Kawe Ukwamani, Buguruni, Kigogo, Mbagara, etc.), thus, the advertisement can be done by means of stationery and mobile loudspeakers and megaphones, as well as electronic digital billboards, which has also proved to be a friendly way of advertising the RPL programme, as it is easy for them to get information, even if these workers do not get time to read newspaper, or without perusing VETA websites. The study also revealed other friendly means of advertising, which employ the means of printing fliers, and pinning them on electric poles around their working place, gluing them on passenger bus stop as works promotion advertised in their area. Furthermore VETA could make advertisement through TV. It is not

necessary for VETA to use all these means of advertisement at once, and throughout the year, but at least on an interval basis during enrolment period, to save the advertisement cost.

Table 5.1. Strategies to be taken to improve the recognition of the informal workers under the RPL programme

SN.	Strategies to Improve the Recognition of Informal Construction Workers through RPL Programme	T N R	Respondents: Masonry/Bricklaying(MB) and Carpentry/Joinery(CJ)										RII= $\frac{\Sigma W}{A*N}$	RANK
			SR		MR		R		LR		NR			
			N	%	N	%	N	%	N	%	N	%		
01.	Improvement of the advertisement program	46	23	50	10	22	4	9	3	7	6	12	0.78	1
02.	Building awareness about the RPL programme, and providing effective vocational guidance and counselling services to RPL candidates	46	16	35	9	20	9	20	5	11	7	14	0.70	2
03.	The increase of VETA capacity especially in rural areas	46	10	22	10	22	6	13	10	22	8	21	0.60	3
04.	Promoting knowledge management and sharing	46	3		6		2		9		26		0.39	6
05.	Developing effective and efficient assessment tools and methodologies appropriate to the context of targeted groups	46	2		4		5		16		19		0.40	5
06.	Ensuring the active participation of all stakeholders, particularly social partners in the development	46	9		1		7		10		19		0.47	4

Source; Author, (2020).

Building awareness about the RPL programme, and providing effective vocational guidance and counselling services to RPL candidates;- this was ranked second with the RII of 0.70. The RPL programme's awareness is a big challenge not only to VETA, but also to other countries [1]. The awareness publications, advertisements and discussion counselling about the RPL programme, should be built to both candidates and stakeholders like employers. Awareness is generated mostly to assessors and facilitators [1]. The candidates should be aware of the process, methods of assessment, the cost involved, acceptability to employer and the benefits of the certificates for effective success of RPL programme, and this can be achieved by organizing national conferences and stakeholders' workshops, as well as involving informal worker's leaders from their "vijiwe" or "magenge"³ to do publicity. But also the general awareness about the skills qualification framework in Tanzania such that; the link of the RPL towards the highest education (Doctorate Degree) should be given to this work in order to give them not only chance to have their skills recognized but also a chance to proceed with formal education.

The increase of VETA centres;- This was ranked third with the RII of 0.60, whereby most respondents, view the increase of centres especially in rural areas as; the first strategy to simplify access to VETA during RPL process, to reduce time spend during RPL enrolment since some of the workers decided not to be enrolled due to movements and time spent during the RPL enrolment process. The population of informal workers in rural areas is large compared to urban areas, although there is a lack of VETA centre. Thus, the increase will favour an increase the number of recognized workers. Moreover, the construction of VETA

centre in rural areas, will favour an increase on the enrolment, due to easiness on access, specifically for those who are aware of the RPL programme, hence reducing the cost of travel to the urban area for recognition. Sometimes the implementation of this strategy as one means of improving recognition of informal workers might be difficult since it requires a serious governmental institutional framework reform and fund. Alternatively, this can be achieved by the government by encouraging the private sectors like DONBOSCO to invest in vocational training construction in rural areas so as to expand the recognition centres. The government may encourage these private sectors by; reducing investment tax, grating tax exemption, and offering subsidies or incentives to these sectors and improving RPL advertisement, improve the productivity of recognized workers and even help the workers on job seeking as a means of motivates informal workers who on other sides act as customers to investors.

From open-ended questions, also the study revealed more strategies, which includes; information about the portfolio evidence for works which did not specify in the module should be clear generated to reduce the time and expenses during the enrolment; providing knowledge about the benefits of RPL certificates; VETA should aim at helping the workers to find jobs, through a dual apprenticeship programme so as to motivate the recognition of other informal workers; and contractors should use workers who have gone through the RPL programme and certified.

Other recommendations made by respondents from MB and CJ in open-ended questions for an effective recognition, implementation and scaling up the RPL programme, included the following;-

Knowledge management and sharing;- by involving partnership with international development agencies in order to develop tools, build capacity, benchmark and share/exchange the experience, alongside strengthening the

3 "Vijiwe" or "Magenge"; - are spots or a specified areas within a community in an urban or rural centre, where of most informal construction workers spend their time daily, waiting for any paying construction day work, e.g. masonry, carpentry, welding, painting, earthworks, concrete works, etc.

cost and funding sharing of the RPL programme between the government, employers and candidates, in order to ensure sustainability and equitable funding mechanism of RPL, as it is expensive.

Maintaining the availability in terms of number and capacity of RPL professional/experts;- i.e. assessor, facilitator and developer, was also revealed, alongside maintaining a strong partnership between public institution, private sector and the candidates. Lastly, have in place national targets for number of informal construction workers to access recognition opportunities, annually.

REFERENCES

- [1] Agrawal, T., & Agrawal, A., (2017); "Vocational Education and Training in India: a Labour Market Perspective", in the Journal of Vocational Education & Training, Published by Routledge, Taylor & Francis Group, ISSN-print: 1363-6820, ISSN-online: 1747-5090, (<http://dx.doi.org/10.1080/13636820.2017.1303785>), 21 Pages.
- [2] Aggarwal, A., (2015); "Recognition of Prior Learning: Key Success Factors and the Building Block of an Effective System", Geneva, Switzerland: International Labour Organization (ILO) Publication, ISBN:9789221296164; ISBN:9789221296171, (https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---ifp_skills/documents/publication/wcms_625895.pdf), 40 Pages.
- [3] Babbie, E.R., (2002); "Survey Research Methods", Published by Research Gate.
- [4] Fluid Survey Team, (FST), (2014); "Calculating the Right Survey Sample Size", Published in the Fluid Survey University and Survey Monkey, via (<http://fluidsurveys.com/university/calculating-right-survey-sample-size/>), Retrieved on Saturday, July 20,2019.
- [5] Foulkes, A., & Ruddock, L., (2019); "Defining the Scope of the Construction Sector", Salford Centre of Research and Innovation, University of Salford, Salford, United Kingdom (UK), (<http://www.irbnet.de/daten/iconda/CIB16522.pdf>), Retrieved on Wednesday, April 10,2019.
- [6] Hyari, K.H., (2005); "Introduction to construction Industry" Research Gate, (http://www.researchgate.net/publication/292401396_introduction_to_Construction_Industry), Retrieved on Friday, May 25,2018.
- [7] Janakk, L., (2011); "A Management Model for the Recognition of Prior (RPL) at the University of South Africa", Published Master of Education Management Thesis, University of South Africa, 166 Pages, (http://uir.unisa.ac.za/bitstream/handle/10500/5801/thesis_janakk.l.pdf?sequence=1&isAllowed=y).
- [8] Jason, A. (2008); "Organizing Informal Workers in the Urban Economy; The Case of the Construction Industry in Dar-Es-Salaam, Tanzania", In the Habitat International, Volume 32, Page 192 to 202, Published by Elsevier LTD, (DOI:10.1016/j.habitatint.2007.08.009).
- [9] Jongo, J.S., Tesha D.N.G.A.K., Kassonga, R., Teyanga, J.J., Lyimo, K.S., (2019); "Mitigation Measures in Dealing with Delays and Cost Overrun in Public Building Projects in Dar-Es-Salaam, Tanzania", in the International Journal of Construction Engineering and Management (IJCEM), Vol. 08, (3), Page 81 to 96, (DOI: 10.5923/j.ijcem.20190803.01).
- [10] Kikwasi, G.J., (2011); "An Evaluation of Construction Skills in Tanzania", in the Journal of Engineering, Construction and Architectural Management, Volume18, Issue (02), Page 127 to 139, Published by Emerald Group Publishing Limited, ISSN: 0969-9988, (<http://doi.org/10.1108/09699981111111111>).
- [11] Kawiche, J., (2017); "Motives Towards Formalization of Skilled Labourers and Barrier for Productivity Intensification in Building Project Dar-Es-Salaam", Unpublishes Undergraduate Bsc. Building Economics Dissertation, Department of Building Economics, ARDHI University, (ARU).
- [12] Kothari, C.R., (2014); "Research Methodology, Methods and Techniques", 3rd Revised Edition, New Delhi, Bangalore, Chennai, Guwahati, Hyderabad, Jalandhari, and Kolkata, India: New Age International (Pvt) Limited Publishers.
- [13] Kumar, R. (2011); "Research Methodology: A Step by Step Guide For Beginners", 3rd Revised Edition, New Delhi, India, Los Angeles and Washington DC, USA, London, United Kingdom, Published by SAGE Publication Pvt LTD.
- [14] Lukindo, L.D., (2014); "Addressing Skills Gap Through Apprenticeship: Status of the Plot", In A Paper Presented During the Vocational Education and Training Authority (VETA) Forum in Arusha, December 2014, Page 10 to 11.
- [15] International Labour Organization(ILO), (2001); "The Construction Industry in the Twenty-First Century: Its Image, Employment and Skills Requirements", Geneva, Switzerland, 68 Pages. (https://pdfs.semanticscholar.org/2741/f2f0e7989f6bb30081ed817698a109ac48d8.pdf?_ga=2.262695180.122763233.1563602458-339894083.1545142831).
- [16] Miguel, M.C., Ornelas, J.H., & Maroco, J.P., (2015); "Recognition of Prior Learning: the Participants' Perspective", in the Journal of Studies in Continuing Education, Published by Routledge; Taylor & Francis Group, ISSN-print: 0158-037X, ISSN-online: 1470-126X, (<http://dx.doi.org/10.1080/0158037X.2015.1061491>), 17 Pages.
- [17] Mkenda, B.K., & Aikael, J. (2014); "Informal Construction Employment, Earnings and Activities; A boon or bane for Tanzania", the Tanzania Economic Review, Vol. #04, Issue 01 & 02, Page 01 to 23, (<http://journals.udsm.ac.tz/index.php/ter/article/download/460/627>).
- [18] Mlinga, R.S., & Lema, N.M., (2007); "Informal Contractors in Tanzania; their Characteristics & Reason For Informality", (<http://www.irbnet.de/daten/iconda/CIB8923.pdf>), Retrieved on Saturday, July 20,2019.
- [19] Mlinga, R.S., & Wells, J., (2002); "Collaboration Between Formal and Informal Enterprises in Construction Sector in Tanzania", In the Habitat International, Volume 26, Page 269 to 280, Published by Research Gate, (DOI: 10.1016/S0197-3975(01)00048-0).
- [20] Moshi, E.Z., (2014); "Overview of VETA in Tanzania During Last Five Years: Achievements, Challenges and Future Plans", Vocational Education and Training Authority (VETA), Dar-Es-Salaam, Tanzania.
- [21] Mselle, J., & Alananga, S., (2017); "Knowledge Incubation in

- Informal Construction Practices in Tanzania: A Critical Review of the Literature”, in the International Journal of Construction Engineering and Management, Vol. 06, Issue (03), Page 63 to 77, (DOI: 10.5923/j.ijcem.20170603.01).
- [22] Mwemezi, B.R., (2018); “Administration of Agreement Practice in the Informal Construction Sector: A Case of Goba and Madale, Dar-Es-Salaam”, in the International Journal of Construction Engineering and Management, Vol. 07,(01), Page 22 to 28, (DOI: 10.5923/j.ijcem.20180701.02).
- [23] National Qualifications Framework (NQF), Tanzania Commission for Universities (TCU), Final Draft Report, March, 2010, Published by Government Printers, Dar-Es-Salaam, Tanzania.
- [24] Quality Assurance, General Guidelines & Minimum Standards for Provision of University Education in Tanzania, 2nd Edition, Tanzania Commission for Universities (TCU), June, 2014, Published by Government Printers, Dar-Es-Salaam, Tanzania.
- [25] Ross, A., & Williams, P., (2013); "The UK Construction Industry; An Overview", Published by JohnWiley & Sons LTD., 41 Pages.
- [26] Rothboeck, S., Comyn, P., & Banerjee, P.S., (2018); “Role of Recognition of Prior Learning for Emerging Economies: Learning From a Four Sector Pilot Project in India”, in the Journal of Education and Work, Published by Routledge, Taylor & Francis Group, ISSN-print: 1363-9080, ISSN-online: 1469-9435, (<https://doi.org/10.1080/13639080.2018.1473560>), 16 Pages.
- [27] Snyman, M., & Van Den Berg, G., (2018); “The Significance of the Learner Profile in Recognition of Prior Learning”, in the Journal of Adult Education Quarterly, Vol. 68, Issue (01) Page 24 to 40, (<https://doi.org/10.1177/0741713617731809>), Published by SAGE Publication Pvt LTD.
- [28] Tanzania Revenue Authority (TRA); (2019); <http://www.tra.go.tz/index.php/skills-development-levy-sdl>; retrieved on 09th September, 2019.
- [29] United Republic of Tanzania (URT), (2015); “RPL to Benefit 5,000 Artisans in 2016”, Published by Vocational Education and Training Authority, (VETA), (<http://www.veta.go.tz>), Retrieved on Sunday, May 05,2019.
- [30] United Republic of Tanzania (URT), (2017); “Guideline and Procedures for Recognition of Prior Learning”, Tanzania Commission for University, (TCU), (http://www.tcu.go.tz/documents/RPL_guideLine), Retrieved on Tuesday, February 06,2019.
- [31] United Republic of Tanzania (URT), (2017); “Guideline for Recognition of Prior Learning Assessment (RPLA)”, Published by Vocational Education and Training Authority, (VETA), (<http://www.veta.go.tz/assets/upload/91742-GUIDLINE-FOR-RECOGNITION-OF-PRIOR-LEANING>), Retrieved on Thursday, April 19,2018.
- [32] United Republic of Tanzania (URT), (2016); “A Guide to Get My Skills and Competencies Recognized”, Published by Vocational Education and Training Authority, (VETA), (<http://www.veta.go.tz/assets/uploads/75d85-A-guide-to-get-my-sl=kills-and-competencies-recognised.pdf>), Retrieved on Saturday, May 05,2018.
- [33] United Republic of Tanzania (URT), (2016); “Assessor Guide to Recognition of Prior Learning”, Published by Vocational Education and Training Authority, (VETA), (<http://www.veta.go.tz>), Accessed on Saturday, May 05,2018.
- [34] University Qualification Framework (UQF), Tanzania Commission for Universities (TCU), August, 2012, Published by Government Printers, Dar-Es-Salaam, Tanzania.
- [35] Wang, X., Wang, X., & Huang, Y., (2018); "Chinese Construction Worker Reluctance Toward Vocational Skill Training", in the Journal of Engineering, Design and Technology, 18 Pages, Published by Emerald Publishing Limited, ISSN: 1726-0531, (<https://doi.org/10.1108/JEDT-06-2018-0100>).
- [36] Wangwe, S., & Mmari, D., (2013); “Promoting Micro and Small Enterprises for Inclusive Development; Managing the Transition from Informal to Formal Enterprises”, a Draft Working Paper, presented at REPOA 19th Annual Research Workshop held at the Ledger Plaza Bahari Beach Hotel, Dar-Es-Salaam, Tanzania; April 09-10, 2013, 31 Pages.