Capacity of Technical, Vocational Education and Training Trainers on Manpower Development for Realization of Sustainable Development Goals in Western Kenya

Chepkoech S, Khatete L, Wanjala G

Kenya embraced TVET as a key driver to Human Resource Development to facilitate her ambitious conformity to Sustainable Development Goals in her plan dubbed Kenya Vision 2030 agenda, where economic growth rate was projected to have a two digit level of 12 percent by 2012 and to be maintained or be exceeded thereafter. As such, various reforms were initiated at TVET institutions among them being ensure adequate supply of qualified Trainers to enhance of relevance of TVET Training. This study aimed at establishing the capacity of TVET Trainers to produce quality manpower to enable Kenya meets her target. The study examined Trainers capacity in terms of the qualifications, areas of specialization, staffing and continuous professional development. The study was grounded on theoretical foundations of Human Capital Theory. Correlation research design was used for the study. One hundred (100) heads of department, 10 principals and 2 Human Resource Managers of two major companies in the study region that offer internship opportunities to Trainers were involved in the study. Questionnaires, interview schedule and document analysis guide were principle instruments for data collection. The study established that majority of Trainers were university graduates posted by Teachers’ Service Commission. However, they lack foundation in Technical Training which is a critical component of TVET; the institutions were poorly staffed with over 60 percent of Trainers employed by Board of Management. Trainers rarely upgraded their skills with teaching mostly based on their historical competencies. The study concluded that TVET institutions were ill prepared to facilitate manpower development in line with country’s economic development aspirations. The study recommends for fully implementation of various reforms outlined in various government policy documents on Trainers that were to enhance development of relevant skills among Trainers.

Keywords: Sustainable Development; Trainers; Tvet; Capacity

1. Introduction

1.1 Background to the Study

The World Commission on Environment and Development (WCED) (Brundtland Commission) defines Sustainable Development as ‘development that meets the needs of the present without compromising ability of the future generations to meet their own needs’. Sustainable Development (SD) is a triangular interplay of three elements; economic performance, social stability and cohesion and environmental stability (ENEP, 2002). The United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro Brazil in 1992 identified capacity building that encompasses the country’s human, Scientific, Technological, Institutional and resource capabilities to be the solution to challenges of SD.

Technical and Vocational Education and Training (TVET) has been identified to be critical element in enhancement of capacity development. For instance, Developments in TVET have been identified as very significant explanatory variable that has contributed to East and South Eastern Asian countries’ (seven Tiger countries) economic growth (Khatete and Selina, 2018 quoting World Bank, 1991). The approach advanced and supported knowledge-based economies and skills development that respond modern and emerging technological advancement which have remained the major drivers in the economic developments in those countries. Agrawal, Kerre and Yan (2011) attributes Singaporean favorable global development in 1960s to 1980s ahead of emerging industrial Tigers like Korea, China and India to her prowess in encouraging and supporting knowledge-based economies, industry-related skills development that respond to modern and emerging technological advancement. At the heart of this industrial development are revolutionary products of education such as; technological innovations; Research and Development (RD), science and technology parks; and business incubators (UNESCO, 2004).

Buoyed by evidence from developed countries such as South Korea, Technical Education and Training (TVET) is back on global education agenda due the role it plays in enhancing skill formation which is a key ingredient of SD (Asian Development Bank, 2013). A return of TVET on development agenda is partly a reaction to emerging skills divide between developed and least developed countries with least developed countries lacking further behind particularly in Sub-Saharan Africa and South Asia. There is evidence to show that many African countries have embraced TVET to be a key component in their development and poverty reduction strategy and has such initiated various reforms to promote relevance of TVT. For instance, Tanzania has formed vocation education training authority (VETA) to align TVET with skills demand and Sierra Leon has developed youth action plan as an agenda to alleviate youth unemployment in its second poverty reduction strategy (PRSP11) 2008-2012 (AU, 2007). Reforms in TVET are aimed ensuring that they achieve not only human resource in terms but the human resource of high quality in line with country’s’. The reforms initiated have been in areas like Curriculum reforms and ensuring provision of adequate teaching and learning resources.

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In Kenya, the desire to achieve high economic status and high quality life for her citizens has been the government’s long standing objective since independence as reflected in various Strategic Plans and government policy documents (RoK, 1964;1988;) and the latest Kenya Vision 2030 (RoK, 2007) which aims at making Kenya to be an industrialized middle income country with high quality life for her citizens by the year 2030 with economic growth rate expected to have hit 12 percent per annum by 2012 and be exceeded or maintained thereafter. This status was expected to be achieved by ensuring that TVET produces critical manpower to key sectors that had been earmarked to be critical for envisaged economic development,. Wholesale and Retail Trade, Tourism; Agriculture and Livestock Manufacturing, Business Process, Outsourcing / IT Enabled Services (ITES), Oil and Mineral Resources and Financial Services.

To ensure attainment of manpower, among the reforms initiated at TVET institutions is ensuring provision of supply of adequate and well trained Trainers to enhance quality training in order to spur contrary’s desired level of economic development. The type of skills developed is determined among other variables the quality of Trainers which would determine the degree to which knowledge and technologies can be transferred and absorbed by the Trainees (Mujumdar, 2010) that affects capacity of the state to build up its indigenous industries and to compete in World markets with their goods and services (Amsden, 1992).

The new globalized and knowledge society has generated new demands, Structures and Systems, new skills and knowledge are required to adapt to evolving nature of social and economic process all of which have registered strong impact on Economy, Technology and Environment. The knowledge society has emphasized the value of knowledge rather than material products (Majumdar, 2010). There is increased value of intellectual capital and creation of workers for knowledge intensive jobs. The economy has changed from manufacturing economy to service economy in developing and developed countries around the world. There is Technological change from low Technological (Manual intensive) to high Technology (Cognitive intensive). New technological trends are sweeping across the world reshaping all aspects of work at all levels and in all types of industries. With obsolescence and Technological advancement such as ICT revolution are happening at a rapid pace, it difficult to retain skills so far invented. This calls for improvement of skills to cope with emerging demands. This trend suggest increasing pressure for education systems to visualize the types of work that will soon emerge and prepare students for Technologies that are yet to be invented and equip Trainees with knowledge and skills that would help them prosper in first changing work and life environment.

**Skills for Sustainable Development**

Majumdar (2013) observes that the current conventional production and consumption patterns are unsustainable since they follow a primarily economic track ignoring both environmental and social sustainability. The increasing complexity of work and their characteristics of being more and more knowledge and information-intensive require higher order thinking (HOT) skills set and attributes integrate critical thinking, creative thinking, innovation and problem solving, abstract reasoning, analytical skills and information processing altogether. Not only do these HOT skills set strengthen mental potentialities, they also help in framing logical mind. These include, are analogous thinking, sequential thinking and interpersonal thinking skills.

Winzler in her address titled ‘advancing the Greening TVET (GTVET) agenda: Issues and challenges in UNESCO-UNEVOC Regional Forum on Advancing TVET for Youth Employability and Sustainable Development held Abucha, Nigeria, 17-18 September 2013 observed that; despite Decade of Education for Sustainability Development (DESD), the education responsiveness lacks behind the qualification of needs of labour market. As such there is a strong demand for green skills and knowledge that should be integrated into existing occupation or replace outdated qualification in line with job requirements and emerging green economies-oriented towards economic sustainability, profitability and social inclusion.

New Technological, Economic, Social and educational developments have significant impacts on TVET education. Continuous technological improvement and advancements has made difficult to retain skills applicable in various field of work putting pressure to education system to keep up the pace of skill development considering that obsolescence and technological advancements are happening at a fast pace (Majumdar, 2013). This calls upon TVET educators and policy makers to look for best and most relevant teaching and learning methods, teaching and practices in TVET for effective adoption and integration of TVET into classrooms.

Wan and San (2010) state that the desired changes and innovations call for competent Trainers who are able to adapt themselves to these changes as well as deliver quality education since the new practices have created impact upon the knowledge and skills in the precarious nature of employment. Increasingly the implication in changes the world of work of TVET point to the direction of life-long learning and recurrent Technical and Vocation Education. Such direction calls for continuous professional development of Trainers and mode of curriculum delivery. These include; having capacity building programs for TVET educators to equip them with knowledge on emerging needs of the world of work aimed at building their mind set in terms of education approaches, Structures, Technical Systems and innovative teaching and learning methods. This can be achieved through; having regular industrial attachments, coaching and mentoring programs, professional development and innovations.

Aduda (2003) contends that the Trainer should possess higher qualification to effectively execute the training duties. To achieve the desired competency, instructors need to be up-skilled in order for them to deliver skills for sustainability (COAG 2009). Up-skilling involves trainers undergoing in new teaching and delivering techniques, in order to develop some specific skills for Sustainability.

According to UNESCO (2009), relevant pedagogical approaches transfer the appropriate sets of knowledge, attitudes, values and behavior; develop people’s capacities
and opportunities to engage with sustainability issues so that they themselves can determine alternative ways of living. Whether it is refocusing education on the acquisition of knowledge, skills and values or building capacity, what is crucial is that TVET is able to develop learners to be better prepared for coping with the rapid technological changes in the new green economy and simultaneously enable individual transformational change towards sustainability. The new role of Trainers’ demands a new way of thinking and understanding of the new vision of learning process. Learners will have more responsibilities of their own learning as they seek out, find, synthesize, and share their knowledge with others. The skill training should cover expert skills, didactic-methodological know how and knowledge of the respective sustainability policy context (ILO/CEDEP, 2011).

Wan and San 2010 while contributing to importance of TVET, observes that Training and Development activities for Teacher Development is expensive, never the less they are vital elements to accommodate and sharpen TVET

International Labour Organization (ILO, 2000) identifies qualities of good Teachers and Trainers as those who meet a certain number of professional criteria, tangible and intangible, including: Extensive knowledge in one or more subjects or fields of learning; a high degree of functionality in ICT and technological processes; general understanding and ability to share larger economic and social realities with students; capacity to impart generic learning skills to students through their instruction and organization of learning processes; ability to function collaboratively in a team; research, reflection and change as necessary in teaching practice (teacher as learner); ability to communicate and empathize with students; and Capacity to innovate and impart innovation in learning. These are qualities which can be attained through continuous professional training of Trainers.

Though the government has identified TVET as a key driver for manpower development and advocated for various reform measures, the contribution of the TVET to envisaged state of development heavily rely on the adequate implementation of reforms governing the operations in the sector to enhance the relevance of TVET. The extent to which provision of adequate and competent Trainers at TVET institution as part of the promised reforms by the government had been implemented is what informed this study.

The study aimed at assessing the capacity of Technical Vocational Education Trainers to influence manpower development to promote Sustainable Economic Development based on evidence from Public TVET institutions in Western Kenya.

The specific objectives of the study were to:

- Establish the impact of the capacity of Trainers at TVET institutions as reflected by their areas of specialization influences manpower development for promotion of sustainable economic development.
- Determine how the adequacy of Trainers at TVET institutions influences manpower development for promotion of sustainable economic development.
- Find out how continuous profession development of Trainers at TVET institutions influences manpower development for promotion of sustainable economic development.

2. Research questions of the Study

To help in examining the objectives set, the following research questions guided the study:

a) How does professional qualification of Trainers influence manpower development for promotion of Sustainable economic Development?

b) To what extent does the adequacy of Trainers at TVET institutions impact on manpower development for promotion of Sustainable economic development?

c) How does continuous professional development of Trainers at TVET institutions influence manpower development for promotion of Sustainable economic Development?

It is anticipated that the findings from the study may be beneficial to several stakeholders. First, the study sheds light on how Professional qualification, adequacy and continuous professional development of Trainers influences manpower development of Trainees giving concrete evidence to planners and other policy makers a guide in development of programs. Secondly, study recommendations may form a basis on how to improve TVET institutions’ service delivery particularly on the training of Trainers as a way of enhancing human resource development. Thirdly, since parents are vital part of education paradigm as they play a role of provision of financial resources to their children, the findings of the study will enlighten them in evaluating viability of their investment, enabling them to demand for quality Training of their children. Fourthly, Trainees are greatest beneficiaries for any particular finding can influence other factors under study to adjust to their needs. Lastly, any and all these may serve as a reference point for future studies.

Due to limitation of time, the researcher did not cover all aspects that affect human resource development such as effect of Trainers remuneration on human resource development. The study was therefore limited to guidance as outlined in research objectives. As such, the finding of the study may be generalized with caution. Secondly, a number of respondents could not be found even on appointment, forcing the researcher to make several trips until they could be found. This ended up increasing the cost of the study.

The study was carried out in Ten Public TVET institutions in Western Kenya. The study concentrated on critical components of Trainers; professional qualifications, adequacy and continuous professional development. Respondents were Trainers, heads of departments and principals of technical institutions.

This study was grounded on theoretical foundations of Human Capital Theory (HCT) advanced by among others; Schultz (1961); Becker (1964) and Weisbrod (1966). The
theory is grounded on three basic assumptions. First, labor skills are durable and malleable. Secondly, the current productivity contributes to current earnings and affects future productivity and thirdly there is a positive link between amount of schooling and individual earning. According to Becker, Human Capital is useful in production process as it increases workers’ productivity in all tasks, though possibly differentially in different tasks, organization and situations. The HCT theory advocates for investment in education just as capital is invested in business to generate returns.

To achieve Sustainable Development, Trainers at TVET institutions are charged with the responsibility of imparting skills to Trainees to develop skills to propel the country to the status of a medium industrialized nation. Since investment in Training of Trainers is critical to ensuring that Trainers possess critical skills, this theory was found to be relevant for the study.

However, Fritz (1982) questioned the ability of investment in education neither alone promoting country’s economic development considering that education is not homogeneous good, neither an output nor input in other factors of production processes. He noted that much depends on the quality of Trainees, Curriculum offered and the state of the economy in which the educated plan to work and earn a living.

Conceptual Framework

The variables in the study were conceptualized as seen in the figure 1:

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                  Professional Qualification of Trainers
                     | Adequacy of Trainers
                     | Continuous Professional development
Development of desired skills as reflected through employability of TVET graduates
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**Figure 1: Conceptual Framework**

The Conceptual framework of the study is based on the fact that Trainers at TVET institutions are critical in facilitating skill development. Trainers are evaluated in terms Professional qualifications, adequacy and continuous professional development. The conceptual framework envisages the effect of various aspects of Trainers on trainees’ skill development towards the realization of Sustainable economic Development. This is reflected in skills acquired and employability of graduates of TVET institutions.

3. Methodology

The correlation research design was used in this study. Several researchers Moore, (1983), Cohen and Manion (1983) and Saunders; Lewis and Thornhill (2007 say that correlation research design is suitable for studies where random assignment of subjects to treatment and manipulative control of independent variable is not possible. This design made it possible for the researchers to determine the relationship between TVET institutions and other variables which cannot be manipulated on the impact of the institutions on human developments for the realization of the Kenya Vision 2030. This design was appropriate for the study as it enabled the researcher to gather facts on Capacity of TVET Trainers in preparation quality manpower for realization of Sustainable economic development goals.

The study was carried out ten (10) TVET institutions in Western Kenya. The study targeted 100 Heads of Department, 10 principals and 2 Human Resource Managers of two Major companies in study region that offer internship opportunities to Trainees. Data was collected through Questionnaires, interview schedule and document analysis. Questionnaires were distributed to all HoDs and while interview was carried out with 10 Principals of TVET and the 2 Human Resource Managers. Gall, Borg and Gall (1996) points out that questionnaire are appropriate for studies since they enable collection of information that is not directly observable as they inquire about feelings, motivation, attitudes and accomplishment as well as experiences of individuals. Questionnaire was chosen on the basis of these strengths. Interview schedule with principals was used to triangulate information captured through questionnaires.

4. Findings

4.1 Questionnaire Return Rate

A total of 100 questionnaires were 100 Heads of Department (HoDs) out of which 90 HoDs responded, representing response rate of 90 percent.

4.2 Demographic characteristics of the Respondents

Demographic information was sought of the Trainees and HoDs in terms of their gender and age. This segmentation offered the researchers insights that would have been missed by only looking at the aggregate data. There were 55.6 percent male and 44.4 percent female of the HoDs and 80 percent male and 20 percent female Principals. From the data it was noted that the government policy on gender mainstreaming had been implemented in the study institutions for HoDs as it had met the basic minimum of 30 percent representation (RoK, 2010). However, it is was more likely that appointment for position of principal was basically on experience but not gender rule as at least 30 percent representation had not been met.

On age, the HoDs were above 36 years of age. This is because for one to be appointed as HoD, one need to have served for some period of time as a Trainer before qualifying for interviews for the position, a situation that is worsened by delay in employment by Teachers Service Commission upon graduation by a teacher. This finding implied that the respondents had varied exposures to education management issues and were in a position to respond to the issues of HoDs administrative performance as enquired by the research tools.
4.3 Trainers at Study Institutions

Trainers are a critical element in the training process. The study sought to determine how qualifications of the trainers’ impact on the human labour development capacities for the promotion of Sustainable Development. The information sought was in terms of: professional qualification, continuous professional development and adequacy.

4.3.1 Professional Qualification of Trainers

The study first sought to establish if there is any correlation between Trainers academic qualifications, professional development and skill development as represented by performance. The results are presented in Table 4.1

<table>
<thead>
<tr>
<th>Table 4.1: Regression Analysis showing Relationship between Qualification of Trainers and Skill Development</th>
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<tbody>
<tr>
<td>Model</td>
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<tr>
<td>-------</td>
</tr>
<tr>
<td>(Constant)</td>
</tr>
<tr>
<td>Adequate Trainers promote quality skills</td>
</tr>
<tr>
<td>Trainers with highest academic qualifications are more effective</td>
</tr>
<tr>
<td>Regular in-service courses increases effectiveness Trainers</td>
</tr>
<tr>
<td>a. Dependent Variable: PERFORMANCE</td>
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</tbody>
</table>

From Table 4.1, the following regression equation can be developed:

\[ Y = 4.388 + ax1 + bx2 + cx3 \]

Where \( a = -0.106, b = 0.972, c = -0.041 \)

Therefore \( Y = 4.388 - 106x1 + 972x2 - 0.041x3 \)

From the regression equation above, it can be deduced that level of academic qualification of Trainers accounted for 94.5 percent (94.5%) of Trainers academic attainment as reflected by Trainees mean scores in the national examination. Therefore there is a strong correlation between Trainers level of academic qualification and skill development.

The study therefore sought to find out the level of prequalification of TVET Trainers. The findings are shown in Table 4.2

<table>
<thead>
<tr>
<th>Table 4.2: Highest Academic Qualifications of Trainers at TVET Institutions</th>
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<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>Frequency</td>
</tr>
<tr>
<td>Percentage</td>
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</table>

From Table 4.2, the majority of trainers 80.8 percent had a minimum qualification of first degree and above. Even though the data may indicate that trainers were of high academic qualifications, it was important to know their areas of specializations. It was established that majority of them (60%) were teaching business related courses and ICT. Based on these findings, it is apparent that most Trainers are in departments which do not fall within the mandate of TVET. Agrawal, Kerre and Yan (2011) observed that Singapore competed globally and favorably ahead of emerging industrial tigers like Korea, China and India because of her prowess in encouraging and supporting knowledge-based economies, industry-related skills development that respond to modern and emerging technological advancement.

During the interview with the institution principals on where the trainers come from, it was established that of they said that trainers are usually posted by the Teachers’ Service Commission recruited by or Board of Managements from a pool of university and college graduates. It was further established that majority of University graduates which were not technically grounded to impart the much needed technical skills in Trainees in line with demands for Sustainable Development aspirations.

This was confirmed by the employers through the human resource officers as one commented:

"...the major problem of the TVET graduates is that most of them do not seem to have knowledge on the use of modern equipment and machines, we have to train them a fresh. Some even do not have basic knowledge and theoretical understanding of the engineering knowledge."

The situation was mainly linked to lack of appropriate equipment and trainers who lacked practical exposure disadvantaging trainees especially when confronted with technology that was too advanced for them to operate. These findings are in agreement with Changilwa, Akala and Wambua (2016) on their study on “The Challenges Facing Effective Implementation of Artisan and Craft Courses in Catholic Sponsored Community Colleges in Nairobi, Kenya” where they found out that inadequacy of teaching staff and the teaching and learning resources needed for carrying out practical sessions during teaching of skills was a major obstacle in skill development.

4.3.2 Continuous Professional Development

Beside prequalification skills, continuous professional development through measures such as furthering education is critical in enhancing Trainers relevance in view of ever changing skills demand. The study sought to establish Trainers furthering their education as a way of professional development. Data was captured through document analysis. The findings are given in Table 4.3

<table>
<thead>
<tr>
<th>Table 4.3: Document Analysis’s Revelation of Trainers Pursuing Further Studies</th>
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<tr>
<td>Current Qualification</td>
</tr>
<tr>
<td>M.Ed.</td>
</tr>
<tr>
<td>B.Ed.</td>
</tr>
<tr>
<td>B.Sc</td>
</tr>
<tr>
<td>Higher Diploma</td>
</tr>
<tr>
<td>Diploma</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>
Findings from Table 4.3 reveal that that only thirty (30) (4.6%) out of 650 trainers were pursuing further studies at various levels. The number of Trainers pursuing further studies was too low, a situation that may implied that majority of Trainers were imparting skills in Trainees based on their historical competencies. This findings concurs with findings of Ngure (2013) who stated that Trainers acknowledged that they do not update their skills frequently enough to match technology at the workplace since the government did not provide clear in-service programs for them and the only option left for them to advance their training was to pay for it, resulting in myriad training levels and instruction depending on the motivation of each individual trainer. As if to confirm this finding during interview with Principals, majority of principals (7) attributed the situation of low numbers of Trainers pursuing further studies mainly to inability of Teachers Commission (TSC) to appreciate those who pursue further studies through monetary rewards in form of salary increment. One principal stated; ‘...why should one waste resource pursuing further education when the employer does not recognize such effort? Why not invest the money in productive venture that can support your family?’

Sandholtz, Ringstaff and Dwyer (1997) contend that teaching and learning in the era of digital revolution, climatic change and knowledge society has presented paradigm shift in teacher education and practices. They observe that there is rapid development of technologies presenting short life cycle of technologies so far invented making continuous professional development a must if Trainers are to remain relevant.

4.3.3 Adequacy of Trainers at Study Institutions
The study first sought to establish the influence of adequacy of Trainers on skill development as reflected by students’ performance. The findings are given are reflected in Table 4.4

<table>
<thead>
<tr>
<th>Table 4.4 Component Analysis showing Influence of Adequacy of Trainers on Academic attainments</th>
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<tr>
<td><strong>Total Variance Explained</strong></td>
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<tr>
<td><strong>Component</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
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<tr>
<td>4</td>
</tr>
</tbody>
</table>

| Extraction Method: Principal Component Analysis. |

Where 1= Adequacy of Trainers, 2=Highest Academic Qualification, 3=In-service Courses, 4=Mean scores

From Table 4.4 on component analyses, adequacy of Trainers accounted for about 82 percent (82%) of education attainments. It may be concluded that staffing of TVET institutions with adequate and qualified manpower is critical for skill development. The study therefore sought to find out the adequacy of Trainers at study institutions. Data was captured through the interview with principals. It was established that all Institutions had shortage staff of over 60 percent. This was best captured from response of one principal;

...staffing is the major problem I am facing. Out of a staff of 105 Trainers, only 42 Trainers are employed by Teachers Service Commission. This means that I have to shoulder a burden of 63 Trainers who are employed by Board of Management. I need at least one million five hundred thousand shillings towards salaries alone. Though this is substantial sum of money, the Trainers are underpaid because some secondary schools pay their teachers more than what we do.

It emerged adequacy of Trainers was one of the major challenges facing TVET institutions. On inquiry from principals on how the institutions were coping with shortage of Trainers, it emerged that all institutions had resorted to Part-time Trainers to bridge the deficit who accounted for at least 55 percent of the Trainers. Pre occupation with part time Trainers is likely to compromise skill development.

Before drawing final conclusions, it was necessary to find out whether the sample taken was adequate to be relied on. Therefore, KMO measure of Sampling Adequacy and Bartlett’s Test of Sphericity were done. The results are shown in Table 4.5

<table>
<thead>
<tr>
<th>Table 4.5 Showing Results KMO Measure of Sampling Adequacy and Bartlett’s Test of Sphericity</th>
</tr>
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<tbody>
<tr>
<td><strong>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</strong></td>
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<tr>
<td><strong>Bartlett’s Test of Sphericity</strong></td>
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KMO measure of sampling adequacy is an index for comparing the magnitudes of the observed correlation coefficient to the magnitudes of the partial correlation coefficients. The KMO values range from 0-1. The closer the values are closer to 1, the better the indicator that the analysis of the variable is good, hence reliable. Ford, MacCallum and Trait (1986) recommended a minimum value of 0.6. Therefore the test passed the minimum standard for testing sample adequacy.

Bartlett’s Test is used to test the null hypothesis that the variables in population correlation matrix are uncorrelated. As shown in Table 4.5, the observed significant level is 0.000, this is small enough to reject the hypothesis. It was concluded that the strength of the relationship among the variables was good. Therefore it can be concluded that the sample was adequate and the strength of the relationship among the variables was good to come up with reliable findings.

5. Conclusion

Majority of Trainers had high academic qualification. However, majority were in Business and ICT, areas that lie outside the mandate of TVET. Similarly, majority of Trainers were not engaged in areas that could enhance their professional skills, as such advancement in their studies. As such, teaching was mostly based on their historical competencies. Staffing of study institutions was poor with
institutions mostly relying on Part time Trainers. The study concluded that TVET institutions were ill prepared to produce quality manpower to meet Kenya’s Sustainable economic development dubbed Kenya Vision 2030 as evidenced by the state of Trainers.

6. Recommendations for Study

The study recommends for fully implementation of various reforms at TVET institutions advocated in various government policy documents that were aimed at enhancement of Quality Training among them being provision of adequate and competent Trainers.

References


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