Assessing Skills Supply and Youth Employability in Kenya: secondary school education graduates training (miss-) match with Mumias Sugar Company labour market needs

Stephen O. Odeber & Simala IK Associate Professor of Education Planning, Masinde Muliro University of Science and Technology,

Kenya.email:sodebero@mmust.ac.ke,sodebero@yahoo.co.uk,mobile:+254722995895

### **Abstract**

In recent years concerns have arisen about growing disparities between education and labour market needs with new focus on the roles of both quantity and quality of human capital in the development process. This study assesses skills supply and youth employment at Mumias Sugar Company in Kenya, identifying skills gap as one of the major challenges that face labour market growth in the country. This study is guided by Labour Market Analysis Approach (LMA). LMA refers to measures of education and training requirements that are used to translate occupational classifications into skills requirements. LMA identifies and continually adjusts to current short-term needs.

The study adopted demand and supply theories as espoused by Livingstone who believes that supply-demand theories provide better explanations of educationemployment relations and uses them to argue that underutilization of knowledge and underemployment will be most common among those with the least power, including younger people. These theories also hold that demand – the number and types of jobs available - is influenced by "competition, technological innovation, and conflicts between employers and employees over working conditions, benefits and knowledge requirements" (Livingstone, 2002) and that the supply of labour is altered by changes in population, household needs and legislation. At the same time, the demand for education increases as people seek the knowledge, skills and credentials needed in a changing society. To understand labour market needs at Mumias Sugar Company, data was collected on openings, placements and un/employment rates so as to provide information which was analyzed for insights into shortages and/or surpluses. Shortages were reflected in high levels of un/employment and salary scales. The data also contained concrete information about the skills and qualifications that the sugar company is looking for in certain positions which contribute to occupational profiles. Particularly, profiles of employees who are secondary school graduates were studied

so as to understand the skills they possess and were triangulated against skills required by the company. Interviews were held with secondary schools graduates working at Mumias Sugar Company in various positions to know a great deal about the scarcity or abundance of both soft and hard skills and hiring practices. Findings indicate that specific skills prioritised by MSC for employment include fabrication of bolts, and other machines that could be used at the plant. This is especially in the factory where breakdowns are common and some of the parts that breakdown may not be accessible easily yet they need urgent repair and maintenance. Direct and intense interaction between the workers and machines is emphasised in order to fully understand the behaviour of the machines and fellow workers. The study concludes that whereas the hard skills such as literacy and numeracy which are emphasised in secondary school curriculum are desirable in Mumias Sugar Company, they cannot guarantee one any formal employment. This is because such skills were found important only for further tailor made training.

Key words: employer, supply, Mumias Sugar Company (MSC), skills, employment, training, market needs.

# Background

Today Kenya faces youth employment challenges which, if not addressed, threaten economic development and social stability. Youth employment has become a major policy issue in the country with the focus on labour market needs and youth employment skills especially for secondary school graduates and higher unemployment rates in both urban and rural areas. In recent years concerns have arisen about growing disparities between education and labour market needs with new focus on the roles of both quantity and quality of human capital in the development process (see ILO,1995&1999; Vision 2030). It is within this context that this study assesses skills supply and youth employment at Mumias Sugar Company in Kenya, identifying skills gap as one of the major challenges that face labour market growth in the country. The study looks at policy options necessary to improve employment opportunities for secondary school graduates.

A fast changing labour market country context that takes account of the impact of technological revolution and increasing young population requires a reshaping and mobilisation of labour market programmes and services to meet current and future needs of enterprises and individuals. Currently, main challenges facing Kenya include the need to: raise skills levels of the labour force (both employed and unemployed) to improve employability and secure and maintain employment in line with objectives of Vision 2030; avoid potential skills mismatch by ensuring that secondary school students receive training in skills relevant to the needs of enterprises of existing job opportunities or those that will arise from replacement needs, start ups and expansions; and facilitate improved access to training, education and employment service provision for young Kenyans in schools

This study acknowledges the importance of skills to the economic and employment reform agenda in Kenya in terms of matching skills profiles to labour market needs, raising investment in human capital at secondary school level and adapting secondary education and training system to meet emerging challenges. It calls for a renewed endeavour to build employment pathways to young people and reduce youth unemployment and also stresses the importance of improving the matching of labour market needs and adapting secondary education and training systems in response to new competence requirements. By proposing an initiative which aims at providing a more coordinated approach, it is hoped that the findings will make key contributions to the identification of labour market trends and skills shortages at both sector and national levels, and within both short- and long-term perspectives and also contribute to the increase of employment and the reduction of both frictional and structural unemployment for young people.

#### **Research Problem**

Kenya faces labour market demand and supply problems. The most important characteristic of employment in the country is that a high percentage of the job-seeking population are secondary school graduates who have little chance of gaining formal sector employment. Yet, skills development is a critical element in achieving the economic goals which the country has set for herself (see Kivuva, 2002; Republic of

Kenya,1988, 2005a,b,c; 2007). Although the Government is aware of this fact, it has not fully succeeded in taking advantage of emerging opportunities by matching the demand for labour with new skills and by creating an adaptable young workforce that can adjust to changing labour market conditions and needs. A major public policy concern that has emerged in recent years is whether there is a good match between the skills and knowledge that are supplied to the labour market and the skills and knowledge employers require (Abagi & Owino, 2000; Ferej, 2000). From the perspective of school leavers entering the labour market, the issue is the extent to which they are able to find employment that uses their skills. From the employer perspective, the concern is whether they are able to find suitably skilled staff from among secondary school graduates. This research uses the Mumias Sugar Company to analyse the relationship between the two.

The study focuses on demand-supply issue at Mumias Sugar Company (MSC) as a youth labour market, and if and how well the knowledge and skills that secondary school graduates gain are utilized on the job. The findings will raise concerns about labour market needs and about whether the skills and knowledge gained by young secondary school leavers are fully used in the jobs they find. There appears to be a mismatch between what secondary school graduates are being trained for and the requirements in the job market. While recognizing the variety of challenges facing Kenya, the common problem in the country is that investments in education and training are not yet resulting in satisfactory levels of productive employment.

## **Purpose for the Study**

The goal of this study was to assess skills supply and youth employability in Kenya in general, but with a narrower focus on secondary school education and training in meeting labour market needs. The aim of the study was to critically examine secondary education graduates training (mis-) match with Mumias Sugar Company labour market needs. More specifically, the research undertook to:

- i) Identify employment skills needed by Mumias Sugar Company;
- ii) Identify the core skills possessed by secondary school graduates;

#### Rationale for the Research

Kenya has a high educated secondary school graduate population (Amutabi, 2003; Makau, 2000). Debate among policy and decision makers over how to tackle youth employment challenges in the country has been characterised by significant frustration. Secondary school education and training do not seem to result in the creation of more jobs nor materialise into anticipated employment benefits (Ikiara & Ndung'u, 1997). It is not certain that young people are able to fully contribute their skills and abilities to growth and development through gainful and meaningful employment. Much of existing research in Kenya deals largely with the training side of the labour market (see Haji, 2007; Manda, Mwabu & Kimenyi, 2002). A majority of studies have examined issues related to providing young people with skills and knowledge for their future careers (GoK, 2002; Manda, 2004). The increasing demographics, effects of climate change on the economy, impact of information technology and communication, and global transformations in general, have made labour markets and the adaptation to socio-economic changes even more imperative.

However, there is opportunity for the country's future skills supply and labour market needs to be transformed. Thus, this study focused on the relationship between supply and demand needs in the youth labour market in Kenya with a focus on Mumias Sugar Company. The company was chosen because it is representative of the formal employment sector and owing to the role it plays in economic development of the country. Moreover, the company has now resorted to retraining secondary school graduates in its employment in an expensive apprenticeship programme that is affecting its profit base. Thus, the research is interested in assessing the match between skills and labour market needs as one of the main factors for youth unemployment in the country and how to ensure that secondary school education and training improve their capacity to generate more and better skills attuned to present and future labour market needs. The study will make recommendations for improving the connections between the demand and supply sides of youth labour market in Kenya, including greater support for vocational options in secondary school; developing better bridges between secondary school educational paths; and strengthening partnerships between secondary schools and employers in the design and delivery of programs and career information.

# **Methodological Approach**

This study was guided by Labour Market Analysis Approach (LMA). LMA refers to measures of education and training requirements that are used to translate occupational classifications into skills requirements. LMA identifies and continually adjusts to current short-term needs (Canadian Council on Learning, 2007). Labour market analysis can take four different forms: Public Employment Services/Job Advertisements; Key Informant Interviews; Employer Surveys/Household Surveys; and Enrolment Data and Tracer Studies (Psacharopoulos, 1991). All the four forms were used as a supplement to increase the accuracy of projection techniques, as well as their applicability to national and sectoral projections.

Data on secondary school training and skills development and labour market needs at Mumias Sugar Company used in this report was sought from various sources. The Workplace and Employee Survey (WES) was designed to explore a broad range of issues relating to Mumias Sugar Company as an employer and her employees. The survey was aimed at shedding light on the relationships among competitiveness, innovation, technology use, and human resource management on the company side and skills, technology use, training, job stability, and earnings on the employee side. The survey frame of the workplace component of the WES was created from the information available from MSC.

To understand labour market needs at Mumias Sugar Company, data was collected on openings, placements and un/employment rates so as to provide information which was analyzed for insights into shortages and/or surpluses. Shortages were reflected in high levels of un/employment and salary scales. The data also contained concrete information about the skills and qualifications that the sugar company is looking for in certain positions which contribute to occupational profiles. Particularly, profiles of employees who are secondary school graduates were studied so as to understand the skills they possess and were triangulated against skills required by the company.

Interviews were held with secondary schools graduates working at Mumias Sugar Company in various positions to know a great deal about the scarcity or abundance of both soft and hard skills and hiring practices. Because the sugar company makes hiring decisions, it provided information on skills needs, and the types of jobs that are expanding and contracting. In-depth information was gathered from Mumias Sugar Company and her employees by way of surveys and interviews. This information provided details that are necessary to supplement data already gathered.

### Theoretical framework

The relationship between learning outcomes and labour market needs have been analyzed by among other scholars Livingstone (2002) who identifies three groups of theories: supply-side, demand-side, or a combination of the two. Supply-side theories, such as "human capital" theories, suggest that more education gives workers the "intellectual capital" needed for a more productive economy. That is, as the level of education rises the demand for those skills rises and contributes to economic development.

Supply-demand theories emphasize relationships among education, employers and state agencies. Employers and some employee groups may raise entry criteria when there is an oversupply of employees, and thus use formal education to screen admission to jobs. This leads to the idea of a "credential society" in which job entry can be controlled by groups with the power to increase qualifications. These theories would also argue that both an undersupply of qualified applicants and greater productivity could lead to changes in job performance requirements.

Demand-side theories hold that employees and employers react to trends, rather than influence them, and the theories might be either optimistic or pessimistic. Optimistically, demand-side theories argue that the educational system needs to produce workers with the complex analytical skills needed by a "knowledge-based economy." Pessimistically, the theories argue that underemployment and unemployment will result as modern production systems lead to deskilling of job requirements or automation.

Livingstone believes supply-demand theories provide better explanations of educationemployment relations and uses them to argue that underutilization of knowledge and underemployment will be most common among those with the least power, including younger people. These theories also hold that demand – the number and types of jobs available – is influenced by "competition, technological innovation, and conflicts between employers and employees over working conditions, benefits and knowledge requirements" (Livingstone, 2002) and that the supply of labour is altered by changes in population, household needs and legislation. At the same time, the demand for education increases as people seek the knowledge, skills and credentials needed in a changing society. Thus, in Livingstone's analysis, there are always "mismatches" between employers' requirements and the supply and qualifications of job seekers. The use of education as a screen or filter applies most obviously and appropriately to specialized occupations, whether they are trades or professions. However, employers use education as a filter for non-specialized occupations as well. In any case, the aims of education are broader than a specific occupation and broader than imparting basic knowledge and skills to youth.

Referring specifically to the mobility involved in finding a match between worker and employer, Sofer (2000: 11) observed that there is no unanimously accepted single theory of that mobility. She goes on to note that alternative theories to explain supply and demand have developed largely because of the lack of relevant information on training and the characteristics that lead to a good match.

This study observes the linkage between secondary school education skills supply and the needs of Mumias Sugar Company and seeks to identify key policy issues that need to be addressed for education to contribute to positive labour market outcomes. It argues that educational outcome at secondary school level such as knowledge, skills and certificates, determine employability at the company. A general versus technical or vocational educational track has strong repercussions on labour market needs. Certificates attained and grades completed after secondary education often remain among the key determinants of labour market outcomes because school graduates who

have an adequate skills and knowledge have more chances of ending up employed at Mumias Sugar Company. The mix between skills supply and employability is conceptualised diagrammatically as follows:

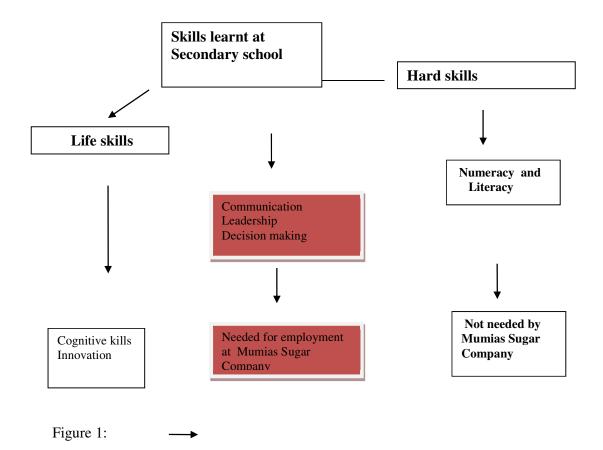


Figure 1: Organogram of skills supply and employability at MSC

Figure 1 outlines three various perspectives that are used to explain relationships between skills learnt at secondary school and labour market needs at Mumias Sugar Company.

# Significance of the Study

The current unemployment situation of young people in Kenya is worrisome. Yet the young people are the future of the country. The country faces major challenges in generating sufficient employment to meet the aspirations of its rapidly growing population. Failure to tackle these now will entail substantial social and economic costs in the future. However, there are several practical ways to address the challenges.

Generally, this research is about making it easier for secondary school graduates to get the right skills and competences and to be able to use them in the appropriate jobs. By bringing the worlds of education, training and work closer together, this study focuses on effective skill development and effective skill utilisation. Enhancing relationship between skills provision and employment will ensure the responsiveness of education and training systems to the needs of the labour market.

This study is premised in the fact that employers have the potential to play an important role in the school-to-work transition, by helping students make more informed choices about their learning and career pathways. Employers can contribute in many ways about career opportunities, and by mentoring young people. Education policies and employer practices could help more young people in Kenya make an informed choice about learning pathways leading to a career and improve the level of utilization of skills in the labour market. As Kenya's demographic situation changes and more young people enter the labour market, the rate of growth of the labour force will increase. Sound human capital development policies for Kenya's youth will become increasingly important so that the country does not waste the youth's potential.

Specifically, the study argues that secondary school education policies need to be seen within a broader macroeconomic context if it is to contribute to national economic growth. The *World Development Report 2007* suggests that although curricula and teaching methods have remained largely unchanged in developing countries over the years, employers are increasingly demanding strong thinking, communication, and entrepreneurial skills—demands which are largely un-met by educational systems in developing economies including Kenya. Both general and core competencies and skills have become increasingly valuable in labour markets that are characterized by change and in which there is a constant need to adapt to new developments in technology and working methods.

## **Research Findings**

# **Employment skills needed by Mumias Sugar Company**

Specific skills prioritised by MSC for employment include fabrication of bolts, and other machines that could be used at the plant. This is especially in the factory where breakdowns are common and some of the parts that breakdown may not be accessible easily yet they need urgent repair and maintenance. Direct and intense interaction between the workers and machines is emphasised in order to fully understand the behaviour of the machines and fellow workers. The interaction also helps the worker to detect the common faults and understand trouble shooting machines, appliances, and the logical but urgent solutions. Machine operations in many instances require concentration and quick decisions that can stem huge losses. This is only possible when the worker has experience with the running of the machines, servicing and detection of trouble shooting, malfunctions detection in the sugar plant and power generation points. As one of the respondents succinctly observed:

However well you are trained, without interaction with the machines and power generation, you can take an extremely long time trying to detect malfunctions within the factory. This can occasion the factory huge losses. On the contrary, an experienced person may simply take minutes to detect the fault and will save the company from incurring huge losses. In essence interaction with machines helps one to identify strategic points. [Lf 1]

This view was supported by another respondent who is one of the senior managers of the company and who entered the company through apprenticeship. He viewed secondary school curriculum as being rich in theory. He observed that the school curriculum builds the basics which are important for further training. However, he noted that such basics only, cannot earn the graduates a job in their company. He comments:

In apprenticeship, you reach a level where the sound only can wake you up from your sleep because you can detect that something is wrong. Meanwhile, for lay persons, they will think you are crazy seeing you agonize over a perfectly running and productive plant.

(sic) [Lf2]

Asked about critical skills required for employment, the respondents noted that premium is placed on practical skills in mechanical engineering, electrical skills, fabrications, and production engineering. However, knowledge of such skills is not a guarantee for employment; rather, a surety to employment is intense interaction with the plant and other workers to the level of becoming part of the system. Such interaction is the source of smooth succession in retirement, resignation, interdiction, dismissals, leave of absence, deaths, promotions, and other forms of attrition.

#### **Conclusions and recommendations**

From the findings of the interviews, it does emerge that whereas the hard skills such as literacy and numeracy which are emphasised in secondary school curriculum are desirable in Mumias Sugar Company, they cannot guarantee one any formal employment. This is because such skills were found important for further tailor made training. On the contrary, life skills such as cognitive thinking, innovation and decision making were found critical to the company's existence and therefore important for employment. However, from the respondents' perspective, the life skills were gained only through intense interaction with the machines and other workers within the company. In essence then, it means that schools only play a complimentary role to the employers by providing hard skills in numeracy and literacy which the company relied on to train their staff for employment at Mumias Sugar Company.

## **Interviews** [coded in the text]

Lf1. Interview with one of the employees with MSC, June 30<sup>th</sup> 2012 [12.30-1.00 pm]

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