

Research Application Summary

Establishment of current and emerging trends in agricultural labour markets in Kenya

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Abstract

Agriculture is one of the important sectors in sub-Saharan Africa and improvement of labour force is essential for the development of the sector. The objective of this study was to establish current and emerging trends in Agricultural Labour Market in Kenya and within the East African region through the vacancies advertisements in mass and electronic media. A study covering a 3-year period was executed by analysis of advertised agricultural positions in the mass and electronic media, from the private and public sectors concerning the requirements and qualifications that are required in agricultural labour market. The advertised positions for agricultural labour markets considered institutions of higher learning, national agricultural research institutions, international agricultural research organizations, private sector and public sector between 2012 and 2014. The positions requirements were categorized into BSc, MSc and PhD in agricultural economics, agricultural engineering, food technology and agronomy related disciplines. The study results indicate that computer skills requirement including ability to use internet and internet related applications for technical information increased from 6.7% in 2013 to 12.1% in 2014. About 30% of advertised vacancies required an additional management and organization skills, and about 12% of advertised vacancies in research organizations required ability to layout and manage experiments. This study results indicate dynamism in agricultural labour market and the need to tailor agricultural training in institutions of higher learning for labour market needs.

Key words: Agricultural labour market, East Africa, job skill requirements, Kenya, management and organization skills

Résumé

L'agriculture est l'un des secteurs importants de l'Afrique subsaharienne et l'amélioration de la main-d'œuvre est essentielle au développement du secteur. L'objectif de cette étude était d'établir les tendances actuelles et émergentes du marché du travail agricole au Kenya et dans la région de l'Afrique de l'Est à travers les annonces d'offres d'emploi dans les médias de masse et électroniques. Une étude couvrant une période de 3 ans a été réalisée par l'analyse des positions agricoles annoncées dans les médias de masse et électroniques des secteurs privé et public concernant les exigences et qualifications requises sur le marché du travail agricole. Les postes annoncés pour les marchés du travail agricole

sont provenus des établissements d'enseignement supérieur, les institutions nationales de recherche agricole, les organisations internationales de recherche agricole, les secteurs privés et les secteurs publics entre 2012 et 2014. Les exigences relatives aux postes ont été classées en baccalauréat, Maîtrise, et doctorat en économie agricole, ingénierie agricole, technologie alimentaire et d'autres disciplines liées à l'agronomie. Les résultats de l'étude indiquent que l'exigence de compétences informatiques, y compris la capacité d'utiliser des applications Internet et Internet pour l'information technique, est passée de 6,7% en 2013 à 12,1% en 2014. Environ 30% des postes vacants annoncés nécessitaient des compétences additionnelles en gestion et organisation. Des postes vacants annoncés dans les organismes de recherche ont nécessité la capacité de mettre en place et de gérer des expériences. Les résultats de cette étude indiquent le dynamisme du marché du travail agricole et la nécessité d'adapter la formation agricole dans les établissements d'enseignement supérieur pour le marché du travail.

Mots clés: marché du travail agricole, Afrique de l'Est, compétences professionnelles, Kenya, compétences en matière de gestion et d'organisation

Introduction

Agriculture is one of the important sectors in sub-Saharan Africa and improvement of labour force is essential for the development of the sector. In terms of the sectors share of Growth Domestic Product (GDP) contribution, during the last decade there have been a sectoral shift away from agriculture into other industries. In Malawi however, 60% of youths prefer to engage themselves in agriculture sector/activities because the current increasing trend of unemployment created no other option of employment (Malawi Labour market Profile). Agriculture has fewer barriers to entry for survival compared to other businesses. In Uganda the agricultural sector is by far the largest employer among all other sectors and it absorbs 75% of the labour force that contributes 24% to the GDP. The agricultural sector employs 61% of Kenya's workforce (Skilled and non-skilled) and contributes 30% to its Gross Domestic Product. Therefore agriculture is the largest sector in Kenya. Overall, unlike most of East-African neighbouring countries, the sectorial shift away from agriculture in Kenya is less significant.

In South Africa, employment patterns and trends reveal that 79, 000 workers were employed in the Agriculture sector over the period 2008 to 2013 compared to Community and social services (575, 000) and Finance (213, 000) which absorbed the largest workforce. Within this period, labour force categorized as skilled agriculture was among those that showed a significant decline of 42,000 (Statistics South Africa, 2013). The changes in agricultural labour market in South Africa was as follows: -104,000, -50,000, -21,000, -52,000, - 44,000, and -79000 in 2008, 2009, 2010, 2011, 2012 and 2013, respectively, with an average decline of -79,000 for the period 2008-2013. Thus, skilled agriculture employment lost 42,000 employees in South Africa. The objective of this study was to determine the dynamics and requirements of the agricultural labour market in Kenya.

Methodology

Information used in this study was obtained from advertised vacancies in the mass media, from the private and public sectors concerning the qualifications that are required in agricultural labour market in Kenya. In the first part of the analysis, information on local, regional and internationally advertised positions in agricultural and agricultural related positions were examined. This information was collected from various media sources. The information was used for analysis of the current trends in the requirements in agricultural labour market. Information was collected over a 3-year period (2012-2014). The data collected were categorized according to the level of education required (BSc., MSc. and PhD). In each category of education, the requirement such as computer skills, interpersonal communication, ability to communicate to the farmers and layout of experiments were considered. Positions suitable for BSc, MSc and PhD graduates in Agriculture and agricultural related areas were considered for this analysis because they constitute key positions for agricultural sector labour market worldwide. In the second part, information was obtained from higher learning institution in terms of curricula in agriculture and agricultural related disciplines. The courses offered to agricultural students were examined and analyzed as related to the dynamics in the agricultural labour market. Finally, the requirements for various vacancies from the private sector employing agricultural postgraduate students were examined. Private sectors that employ agricultural postgraduate students included Non-Governmental Organizations (NGOs), flower and horticultural firms, private farms, high schools, middle level colleges and Universities. The skills and knowledge requirements for positions available in these sectors were analyzed.

Results and Discussion

Trends in Agriculture Labour market. Several requirements were noted to be key aspects in the advertisements. These included knowledge of computer operation which was previously not considered as an essential requirement; both oral and verbal communication skills were found to be essential; and ability to interpret the information in the agricultural labour markets was a key job requirement.

From the analysis, the knowledge on computer operation using various softwares such MS office, data processing, organization, storage and statistical softwares for simple and complex analysis was essential in most of the positions advertised in agricultural labour market and this requirement increased during the period 2012 to 2014 (Figure 1). Computer skills requirement including ability to use internet and internet related applications for technical information increased by 6.7% in 2013 to 12.1% in 2014.

It was evident that most of the operations in agriculture labour market in one way or another required postgraduates to be able to use computer for communication, data management, data analysis and reporting. Of the jobs advertised in 2014, it was mandatory in 33% of the advertised vacancies that candidates should have computer skills for daily operation. The increase in proportion of the advertisements with requirements for computer skills

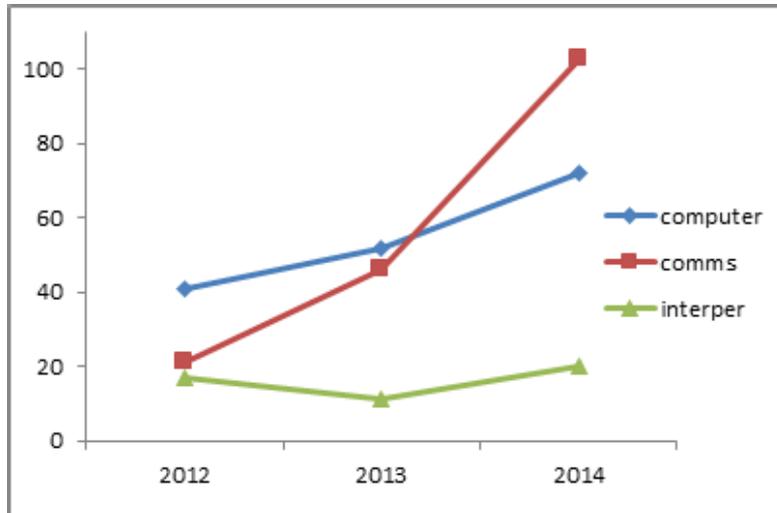


Figure: 1 Trends in computer, communication and interpersonal skills requirements for agricultural labour market between 2012 and 2014.

underscores the need to change the curricula for agriculture in the universities to include computer operation skills in the respective disciplines in agriculture and related faculties. For positions offered to MSc and PhD holders, some of the international advertisements placed a mandatory requirement for the knowledge of computer, statistical analysis, and use of data base in molecular/agricultural related fields.

Communication within and outside the organization are very critical elements in relaying information to clients (farmers, students, policy and other actors). In addition to operation of the computer, communication and interpersonal skills requirements has become increasingly essential since 2012, recording increments of 14.7% in 2013 and 33.5% in 2014 (Figure 2). The capability to manage organization and being a team player in an organization are other important features looked into when employing postgraduate students in agricultural labour market. Although the magnitude of the requirements of these features in the labour market were lower compared to the others, there is a general increase in the demand for these skills as from 2012 to 2014 (Figure 2).

About 30% of the positions advertised required individuals who are capable of monitoring and evaluating projects and having planning and organization skills. The requirements for these skills was relatively low as compared to the requirement for technical aspect of computer operation and communication skills probably because they are required mostly at managerial level.

The requirements for project management, data analysis, monitoring and evaluation skills increased from 2012 level by 9.6% in 2013 and 17.3% in 2014. Organizing and planning skills requirements also increased by 14.3% in 2013 and remained constant in 2014. Team player skills requirements increased by 8.06% in 2013 and 11.29% in 2014.

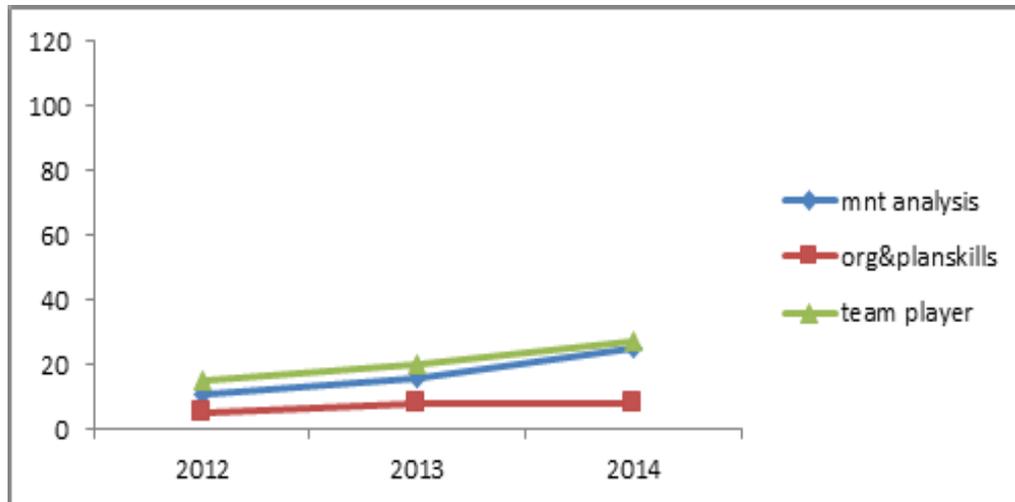


Figure 2. Trends of project management, data analysis, monitoring and evaluation skills requirements from 2012 to 2014.

The analysis further revealed that the requirements for experience in working with farmer groups dropped from 2012 level by 100% in 2014. The decline in this requirement was probably due to high number of postgraduates from agricultural disciplines graduating from the public universities in Kenya, presumably some with exposure to working with farming communities. However, with regards to laying out experiment, the skill requirement increased by 12% between 2013 and 2014. Setting up an experiment/studies in social studies and for qualitative analysis was observed to be essential in NGOs, national research institutes, international research institutes, and public and private institutions.

Mobility within an organization in order to perform duties is one of the key issues that is currently picking up as one of the requirements for employment in agricultural sector. It was noted that driving skills requirement increased from 5.7% (2013) to 11.4% in 2014. This requirement was essential in private sectors, NGOs, and regional and international positions in Africa because of flexibility of driving regulations compared to restrictive rules imposed by the public institutions. As such, this was not a requirement for all the advertised positions from public sector and parastatal organizations since the governments do not allow public officers to drive unless designated to do so.

The trends within the higher learning institution. Development of curricula tailored to suit the labour market is very essential in virtually all the higher learning institution. Computer practical skill or internet related courses are at rudimentary stage hence not widely offered at both under-graduate and postgraduate levels. This has contributed to the production of graduates that do not fit well in the labour market. Some of the courses are included in the curricula, but due to lack of infrastructure and facilities, it has been difficult to impart practical computer skill to the large number of students per class. Post graduate students do not have computer facilities provided for by the universities. This necessitated

students to purchase personal laptops. The internet facility available in the university (Egerton University) is not as efficient as expected to cater for the students population. From the labour market, it is expected that the postgraduate students are conversant with simple windows operating system, database management and statistical software to analyze both quantitative and qualitative data in an organization. This has created a gap between knowledge required by the labour market and the knowledge given to the postgraduate students. Consequently, Egerton and other Kenyan universities should address this gap.

The basic organization skills, monitoring and evaluation courses are not included in the majority of postgraduate programs offered in Kenyan universities. If they are, it is only for a limited number of those pursuing socio-economic related courses. As such, students rely on the acquired undergraduate knowledge, if at all they were taught and this has created a gap between the university knowledge imparted and the expectation of the labour market. The experience of working with farmers should be gained if the postgraduate students secure place for internship. But this option is not included in the curricula. Lastly, establishment and management of experiments are taught at both undergraduate and postgraduate levels. It is expected that experience from executing experiments at postgraduate level form the foundation for management of studies and experiments especially in the research stations.

Dynamics of Private Sector. The private sectors which include NGOs is increasing becoming a major employer of graduates since public sector has scaled down its recruitment. In addition, private sector actually expect efficiency at higher level compared to the public sector. It is essential for an employee to self-drive rather than depending on the hired driver. Most universities do not include driving courses in their curricula. Thus most postgraduate students go to private institutions to obtain driving lessons. It would be important for universities to partner with the private sector in order to equip the students with driving skills and meet the demand from the labour market.

Recommendations

With the dynamic changes of the agricultural labour market, it is desirable to reform university training to provide for especially computer based/e-learning training that incorporates aspects such as data management. Also since most of agricultural students undergo training in farm power machinery, it would be advantageous if the universities linked up with private sector to aid postgraduate to enhance their driving skills. Because of dynamics of technology and agriculture labour market, universities should establish linkages with non-governmental organizations, and private and public sectors so that upon completion of postgraduate studies, students can be placed for internships in various places to gain experience and learn some of the techniques on job.

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