

Research Application Summary

Evaluation of constraints in use of electronic agricultural information resources at selected institutions of Higher Learning in Kenya

Kamar, N.J.¹, Owour, G.² & Tabu, M.³

¹Faculty of Agriculture, Department of Crop, Horticulture and Soil Science, Egerton University, P. O. Box 536, Egerton, Kenya

²Faculty of Agriculture, Department of Agricultural Economics, Egerton University, P. O. Box 536, Egerton, Kenya

³Faculty of Agriculture, Department of Crop Science, Egerton University, P. O. Box 536, Egerton, Kenya

Corresponding author: gowuor2001@yahoo.com

Abstract

This study aims at identifying the constraints in use of agricultural electronic resources in academic institutions and their contributions to development in agriculture. Limited access to agricultural e-resources has led to poor research output and at times duplication of efforts in agricultural and related sciences and scanty publication and dissemination.

Key words: Academic institutions, agriculture, agricultural development, e-resources, Kenya

Résumé

Cette étude vise à identifier les contraintes dans l'utilisation des ressources électroniques agricoles dans les établissements universitaires et leur contribution au développement de l'agriculture. L'accès limité aux ressources électroniques agricoles a conduit aux résultats de recherche pauvre et au dédoublement dans les sciences agricoles et connexes, et la publication et la diffusion sont rares.

Mots clés: Les établissements d'enseignement, l'agriculture, le développement agricole, les ressources électroniques, Kenya

Background

Agriculture is a key sector in Kenya contributing about 30 % of the Gross Domestic Product (GDP) and accounts for 80% of national employment, mainly in the rural areas (Ministry of Agriculture Kenya, 2009). The growth and sustainability of the agricultural sector is dependent on precise, relevant and timely agricultural information relating to agricultural educational resources. This information is generated by researchers and academia through research. The role of libraries and information centers in organizing, availing and disseminating relevant agricultural information to researchers and academia is thus critical. In agricultural institutions use of e-resources is through agricultural databases such as the Programme for the

Enhancement of Research Information (PERI), Access to Global Online Research in Agriculture (AGORA) and Online Access to Research on Environment (OARE). This has helped to alleviate the challenges of accessing research literature for scholars in academic and research institutions to some extent. Utilization and use of agricultural e-resources depends on information communication infrastructure, availability of funds, skilled library staff, access policies as well as user navigation and access skills. However, the available e-resources are not even appreciated as a valuable source of current information and their usage remains very low. This is attributed to the lack of awareness on their availability and inadequate user access and navigating skills among most library clients in academic institutions that has affected the research and output from agricultural industries.

Literature Summary

Agricultural e-resources just like other e-resources in other fields are initiatives that aim at leveling the playing field in access to scientific and other information in low-income countries, so that they are better equipped to solve their own problems in these sectors, leading to more likely achievement of the United Nations Millennium Development Goals (MDGs) (Lwoga, 2007). There are various factors that contribute to low usage of agricultural e-resources. Changes in conditions of acquiring knowledge and professional skills based on both human and technical factors are key contributors (Brophy, 2004). These factors include lack of trained and experienced staff in ICT, low computer ownership, widespread lack of access to internet connection, low speed available and high connection costs (Capiez, 2005). Cost implications create constraints to use of agricultural electronic databases (Odowole, 2006). Other constraints include lack of content, scarcity of skilled labour, and absence of intermediary organizations that would facilitate organizational linkages to e-resource databases (FAO, 2004). Poor orientation with the Internet, long web addresses and poor searching mechanisms are also some of the constraints (Shamsul, 2009).

Study Description

The study is being conducted in three academic institutions in Kenya offering advanced degrees in agriculture and who subscribe to agricultural e-resource databases. These institutions utilize agricultural e-resource to support research and teaching. One institution represents private institutions while two institutions represent public institutions. The study targets academic staff and post-graduate students in the faculties of agriculture at the selected institutions of higher learning.

- Research Application** | The results will be a basis for recommendations to improve access and utilization of agricultural e-resources for improved agricultural research, productivity and development.
- Acknowledgement** | This study is jointly funded by the Regional Universities Forum for Capacity Building in Agriculture (RUFORUM) and SCARDA-ECA.
- References**
- Brophy, P. and Craven, J. (Eds.). 2004. Libraries without walls 5: The distributed delivery of library and information services- Proceedings of an international conference held on 19-23 September 2003, organized by the Centre for Research in Library and Information Management (CERLIM), Manchester Metropolitan University, London: Facet Publishing.
- Capiez, A. 2005. Constraints of electronic publishing in developing countries: Spc's Experience in the Pacific Islands accessed on 24 / 03/ 2010 [Online] Available <http://elpub.scix.net/data/works/att/0311.content.pdf>
- FAO (Food and Agricultural Organisation), 2004. Georgia: ICT infrastructure and use in agriculture in natural resources management and environment department SD dimensions accessed on 26/03/2010 [Online] Available http://www.fao.org/sd/dim_kn4/kn4_040902a1_en.htm
- Lwoga, E. *et al.*, 2007. Building science information fluency in African universities: How libraries and researchers are benefiting from improved access to science scholarship accessed on 24/03/2010 [Online] Available <http://www.ifla.org/iv/ifla73/index.htm>
- Oduwole, A. and Sowele, A. 2006. Utilization and impact of The Essential Electronic Agricultural Database (TEEAL) on a library services in a Nigerian university of agriculture In: Program Electronic Library and Information System 40 (2):157- 167. 2006. Available <http://www.emeraldinsight.com/Insight/viewContentItem.do;jsessionid = E18B34432F91080BBB6406ADECA27447?contentType=Article&hdAction=lnkhtml&contentId=1554542>
- Price Water House Coppers, 2006. Agriculture: A brief overview of the agricultural sector in Kenya. Accessed on 22 / 07/ 2009 [Online] Available <http://www.pwc.com/ke/en/industries/agriculture.jhtml>
- Shamsul, 2009 Digital information system accessed on 24/03/ 2010 [Online] Available <http://infosciencetoday.org/digital-information-system/electronic-information-resources-access-and-use.html>