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IMPACT OF SOCIAL MEDIA ON AGRICULTURAL EXTENSION IN KENYA: A CASE OF KESSES DISTRICT

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ABSTRACT: *The introduction of social media and web 2.0 applications has opened up a platform that agricultural extension officer's, farmers, agricultural institutions and non-governmental institutions utilize to disseminate and exchange agricultural information. The objective of the study was to assess the use of social media as a source of agricultural information with reference to farmers in Kesses District. The study adopted a descriptive survey and the major data collection tools were interviews from farmers who use social media platforms. The study purposively sampled farmers in Kesses District and data was analyzed both descriptively. From the analysis, it is evident that there is immense need for agricultural information among farmers in Kesses District. The study reveals that farmers in Kesses District have diverse source of agricultural information for example the internet, social media and extension services. Majority of farmers approach the use of social media in agricultural information seeking with a positive attitude, pointing to the assumption that social media is largely beneficial and convenient as a source of agricultural information. Among the most common challenges faced include poor network access, power outages, and costly charges when accessing the internet. This study recommends that information centers can be established in Kesses District whereby farmers can obtain agricultural information online and that social media should be fully utilized to provide; feedback, complement extension programs, access local and international markets and complement communication campaigns whose goal is to bring about agricultural development.*

KEYWORDS: Social Media, Extension, Information, Agriculture, Farmer, Kenya

INTRODUCTION

Social media has become a powerful tool that connects millions of people globally from the comfort of our homes, social media is revolutionizing the way business is carried out bringing new ways of communication and exchange of information across the globe. Social media is now a mainstream form of communication around the world, and continues to grow in popularity with the increase in the number of smartphones, and the ease of use.

Social media is becoming a very important tool in farming because it has the ability to connect with farmers and agribusiness people from around the world over large geographical distances. The benefits of this can be as large or as small as the farmers choose, depending on how much time we wish to spend on it. Social media plays a very important role in enhancing interactions and information flows among different actors involved in agricultural innovation and also enhance capacities of agricultural extension and advisory service providers.

The power of social media is in the features that allow it to be applied to a whole range of applications that involve interactions between people (Chui, et al., 2012). It also has removed the limitations of geographical distance from users, which enables a platform that shares knowledge and culture, and can play a part in the economic and political power. It also allows

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businesses and organisations direct access to consumers and their genuine thoughts, giving up to date and relevant information on trends and preferences (Chui, et al., 2012).

Social media has become so popular because it taps into one of humans most basic natural needs – forming groups and sharing information, providing entertainment and communicating. In a sense, it goes back to the days of storytelling, where everyone in a group has the opportunity to add to the story or share another point of view, except now you can do that globally.

The number of extension workers in Kenya has been decreasing drastically while the number of small scale farmers has been increasing therefore creating the need for innovative services to address this gap (Gakuru et al., 2009). Compared with agriculture sector in developing countries, agriculture is becoming increasingly knowledge intensive. As agriculture systems become more complex, farmers' access to reliable, timely and relevant information sources becomes more critical to their competitiveness. Information must be relevant and meaningful to farmers, in addition to being packaged and delivered in a way preferred by them (Diekmann, Loibl & Batte, 2009).

Farmers constantly manage and adapt their farm businesses in order to remain competitive in a changing world. This is done by among other ways, fine tuning existing practices and technologies or by adopting innovations, such as novel products, technologies or practices. Where there are a number of alternatives, it is necessary for the farmer to choose which innovation, or suite of innovations, will provide the most benefit and best meet the needs of the farm business.

Complex decision undertaken by farmers requires the collection of a range of information from a number of sources that individual farmer have their favored information sources which they can access depending on the specific information being sought.

Most people use the internet for personal communication through email, e-commerce and access to information. The internet and the World Wide Web are a remarkable invention that allows access to an almost infinite storage of information. After initial skeptism some leaders of media industries proclaimed the internet to be the universal information highway and were bullish on its development.

They imagined the benefits of interactivity as an unparalled platform for delivering their content (whether information, entertainment, opinion or advertising) almost effortless and without the costs associated with printing and broadcasting. The new media would be interactive, with instant feedback from consumers as well as a constantly updated treasure trove of information (Dennis &Merill, 2006).

Social media and agricultural extension in Kenya

Social media is increasingly being used as a medium of sharing information and creating awareness. Platforms such as Facebook, Twitter, YouTube and blogs have been used to engage with various audiences. The users generate and shape the content. Social media strengths are complementing traditional media in facilitating the shaping of content.

Users of social media have access to platforms like Mkulima Young, Young Farmers Market, Digital Farmers Kenya and Mkulima Hub Kenya. Farmers and those interested in farming obtain information from these social media platforms. These platforms educate and inform on

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agricultural matters as well as facilitate the buying and selling of agricultural produce and related products.

The users exchange information and discuss issues concerning agriculture based on experience and knowledge. They also buy and sell agricultural produce and inputs and use pictures, links and videos to facilitate this. This sharing of information facilitates the marketing of the farmers produce and formation of networks. The social media platforms are also used to share links, news articles, information, feedback and for queries.

Agricultural institutions in Kenya have also incorporated social media in their information system. For instance the Agricultural Information Resource Center has Facebook and YouTube platforms and a blog. However not all institutions have fully embraced Web 2.0 as a tool for disseminating information. A 2012 report by CIARD states that the use of Web 2.0 to enhance visibility and exchange of research outputs, including metadata, has not been widely embraced for sharing research outputs.

The MoA (Ministry of Agriculture) KARI use YouTube to disseminate videos about events at their institutions. At individual level, there were isolated cases of use of tools such as Facebook, blogs, and Skype by researchers. However, it could not be established if such tools were being used to share research information.

It is also evident that there is convergence of traditional media and social media to provide and shape content. Agricultural programs are using social media to engage audiences and obtain feedback. For example programs like Shamba Shape Up on Citizen Television and the pull out seeds of gold, in the Saturday Nation have social media platforms. Mkulima Young a radio program on Coro Fm also obtains its feedback on the Mkulima Young social media platforms.

Social media overcomes geographical boundaries and creates communities who share common interests. The users also seek out information from traditional media social media platforms**.** Rhoades and Hall (2007) noted that there was a large presence of blogs covering topics on agriculture. Many of the blogs were formally written however a vast majority were not media related. Agriculture media is beginning to understand this phenomenon and utilize Web 2.0 technologies for their audiences.

Therefore, it is important to look at each of these Web 2.0 applications. It is also important to understand how audiences would like their information presented to them in this fast-paced society (Rhoades & Aue, 2010). They argue that research should be done with audiences to see how much they want or do not want their agricultural information using the web 2.0 technologies. According to findings by Cline (2011) respondents allocate a large portion of their time to social media sites for agricultural purposes and were participatory in 'agvocacy' process via social media. Respondents prefer twitter to gather and disseminate agricultural information. 'Agvocates' views twitter as not only a sharing place for agricultural news but also a sharing place for advice and opinions.

According to findings by Ruth and Lundy (2004) newspapers would be the best form of communication to receive information on agriculture followed by television, government agencies and radio. According to Hall and Rhoades (2009) studies of audiences in rural America noted that farmers still preferred face to face communication over online communication. However according to Lievrouw and Livingstone (2006) as quoted by Rhoades and Aue (2010), with the decline of farm radio and media, rural markets have been left without agriculture news podcasting is a new method of audio news distribution, it

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bypasses traditional radio media outlets to reach agricultural producers and general news consumers.

LITERATURE REVIEW

The agricultural sector globally is embracing social media and utilizing it to promote knowledge within the industry as well as networking with other like-minded agricultural professionals. The communities and relationships that agriculture is largely based on are further extended through social media channels and rural workers have begun to use social media to combat the feeling of isolation which arises due to the nature of their work.

Social media overcomes geographical boundaries and creates communities who share common interests. The users also seek out information from traditional media social media platforms**.** Rhoades and Hall (2007) noted that there was a large presence of blogs covering topics on agriculture.

The study adopted the uses and gratification theory which explain the motivation that makes users choose a certain media to satisfy their specific needs. These needs develop out of the social environment. The theory states that receivers select the types of media and media contents to fulfill their needs. Uses and gratification links need gratification to a specific medium choice that rests with the audience member.

MATERIALS AND METHODS

The study adopted a descriptive survey and Kesses District was purposively sampled due to its relatively conventional mode of small scale farming hence the small scale farmers in the area met the characteristics of the study. The study randomly sampled 106 small scale farmers in the area and questionnaires and focus group discussion was also used to obtain information from the farmers.

Findings

From the study, it was established that farmers required agricultural information to make the right decisions. This was in agreement with the interviewed extension services officer as well as social media administrators in Uasin-Gishu County, the study further revealed that farmers require adequate and reliable agricultural information.

Furthermore, 76% of the respondents agreed that they seek information from different sources in terms of literacy levels 73% of the respondents were well educated while 53% accepted that they attended training, seminars and workshops where they obtain basic knowledge on farming and hence are able to educate other farmers. On the other hand, 49% of the respondents had educational background in agriculture which gave them more advantage than other farmers.

In terms of availability of extension services, the study revealed that few extension officers were in place but they were not readily available to give farmers extension services due to the high demand of the extensions services. This forced many farmers to seek alternative avenues like social media to get agricultural information. The study revealed that 86% of the respondents agreed that extension officers provide information on small holder farmers that

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include enterprise selection, farm planning, market price information, farm visits, one on one demos, group trainings, demos, field days and exhibitions. It was further established that the services are demand driven.

The study established that Kesses District has only 12 public extension officers available for the entire district which is insufficient and this supports Gakuru et al. (2009) who stated that the number of extension workers has been decreasing while farmer numbers have been increasing; hence the need for innovative services to address this gap. Furthermore, the extension information offered is out of date, irrelevant and not applicable to small farmers' needs, leaving such farmers with very little information or resources to improve their productivity.

Majority of the farmers 68% use social media to seek for a variety of agricultural information, mostly scientific, educational and technology based, including training information, agrochemicals and technological information. The study further revealed that 58% of farmers however do not take as much interest in market based agricultural information including market trends, price, and stock available as well as credit facilities, source, terms and conditions.

It follows then, that, farmers in the study area source for agricultural information from a variety of avenues, key among which include the internet, social media and extension services. As such, the social media, as compared to other sources is significantly adopted among farmers in the study area.

Extension services can be made available using various ICT channels. Broad basing agricultural extension activities; developing farming system research and extension; having location-specific modules of research and extension; and promoting market extension, sustainable agricultural development, participatory research, etc. are some of the numerous areas where ICT can play an important role (Mbugua et al., 2012). They further state that IT can help by enabling extension workers to gather, store, retrieve and disseminate a broad range of information needed by farmers, thus transforming them from extension workers into knowledge workers.

Respondents were further asked to indicate the various challenges they encountered when trying to obtain information from social media. Among the most common challenges faced include poor network access, power outages, and costly charges when accessing the internet.

Similarly, Babu et al. (2012) points out that the major constraints to information access are poor availability, poor reliability, lack of awareness of information sources available and untimely provision of information. Van and Fortier (2000) add that smallholder farmers usually experience challenges in obtaining agricultural information due to lack of infrastructure. There have been short comings of traditional print and library materials of providing agricultural information to rural farmers who are generally illiterate and relatively remote from formal sources of information like extension stations and libraries.

Further, according to Ndung'u and Waema (2011), households' perspective on the development outcomes of internet usage and mobile phones indicated that internet access and usage was limited and restricted to urban areas while mobile phones were distributed across the country According to Synovate (2009) rural internet access and usage is more driven by mobile phones compared to urban areas.

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CONCLUSION AND RECOMMENDATIONS

Conclusion

From the study, it can be concluded that agricultural information is highly required among a majority of farmers in Kesses District. Majority of farmers who need agricultural information, a majority go a step further and seek for the same. To fulfill these informational needs, majority of farmers use social media to seek variety of agricultural information, mostly on scientific, educational and technology based, including training information, agrochemicals and technological information.

Most of the farmers however, seems not to have much interest in market-based agricultural information including market trend, price, and stock available as well as credit facilities, source, terms and conditions. The study further shows that farmers in the study area source for agricultural information from a variety of avenues, key among which include the internet, social media and extension services.

The study further concludes that a majority of famers have a positive attitude towards the use of social media in seeking agricultural information hence the assumption that social media is largely beneficial as a source of agricultural information and that it is also cheap and convenient. A majority however seem to be discouraged by the perceived technical difficulties in accessing the information.

It can further be deduced from the findings obtained that Facebook is the most common social media platform among farmers in the study area, a majority of whom use the media on a weekly basis. It can also be deduced that overall, social media users in the study area access the various platforms from weekly to monthly basis depending on the popularity of the platforms. However, while social media is increasingly being taken up by farmers in the study area, the same is yet to be fully utilized to obtain agricultural information, using the social media frequently while majority only use the same sometimes. A significant number either rarely or never use the media to obtain agricultural information. While most farmers using social media are active on the same, most do not share agricultural information.

Recommendations

From the study it is evident that social media plays a significant role in building feedback mechanisms and allowing for the monitoring and evaluation of the impact of agricultural projects. Social media can also be utilized more because it is cheaper to access hence it can be advantageous to organizations who want to disseminate agricultural information.

Due to challenges faced by farmers while accessing social media platform, Uasin Gishu County should establish information centers in Kesses District whereby farmers can access agricultural information online.

Online marketing applications for agricultural products should be developed so that farmers can use the platform to connect with esteem suppliers and customers both locally and internationally. Furthermore, social media can be used to complement extension services in areas where there are geographically dispersed groups and where extension officers cannot effectively reach all farmers due to various factors. Social media can complement communication campaigns that for instance persuade users to take up agriculture as an

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alternative source of employment and it can also be beneficial as a platform for lobbying on agricultural matters.

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