



Use of Social Media for Disseminating Agricultural Information amidst Food insecurity in Nigeria

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Abstract

The paper examined the Use of Social Media for Disseminating Agricultural Information amidst Food insecurity in Nigeria. The paper used literature review to collect relevant data. Deductions were drawn from content analysis of the literature reviewed. The findings indicate that subsistent farming is one of the major causes of food insecurity in many developing countries, because of lack of information that could educate the farmers on best practices to improve production for better yields. The paper argued that with the use of social media, farmers could share information that will improve their farming practices which could guarantee bumper harvest for consumption by the families of the farmers and exporting the surplus to markets. In addition, the farmers could also use the social media to keep in touch with their colleagues, family members, agricultural extension workers, Scientist and experts in the field not only in their locality but throughout the globe.

Keywords: Social media, Food Security, Dissemination of Information, Agricultural Information, Food insecurity

Introduction

Agriculture has been part of human life since the beginning of the human race and the need for agricultural information is probably almost as old as agriculture itself. Agriculture plays a very important role in the development and economic growth of societies; agriculture enhances food security, poverty reduction and promotes rural development. Agriculture is an important sector with the majority of the rural population in developing countries depending on it. Agriculture remains an important source of livelihood for the majority of Africans, even though the sector is still very unproductive, resulting in food insecurity and large imports of staple foods. Reasons for the food insecurity are not difficult to discern. Subsistent farming is the main reason for the food insecurity, because the farmers could hardly produce what they consume from one farming season to another. This could be attributed to lack of adequate information that could educate the farmers on proper farming practices.

Information is regarded as a crucial resource and an important commodity for development, is a basic necessity and brings success in everyday life including farming activities (Odini, 2014). Information is a powerful tool for empowerment; it takes away ignorance and enables an individual to be enlightened about best option to take when making any decision. Information is the driving force of a modern society. Over the last few decades, the increased emphasis on information in every sphere of life has resulted in the increased use of information in every sector (Islam & Hoq, 2010). The role of information in any society, community, or organization cannot be over-emphasized.



Social Media

Social Media is a technology that relies on the existence of the Internet, and therefore bears most of the characteristics of the Internet. Mark-Anthony, Chukwuemeka and Martins (2021) define social media “as a web based tools that enhance user generated content and campaigns aimed at sharing of information in various forms. Its main goal is to promote interaction among people, their group and community.” Similarly, Simisaye and Adeyoye (2015) defined social media as a group of Internet–based applications that build on the ideological and technological foundations of Web 2.0 (where sites facilitate interaction and collaboration among users in a social media dialogue), and that allow the creation and exchange of user–generated content. Among the technologies that shaped and improved communication today, are the so–called “social [media] communication technologies”.

As an interactive technology, social media facilitate the creation and sharing of information, ideas, interests, and other forms of expression through virtual communities and networks. The information a user generated could be an opinion, video, audio and multimedia, which can be shared and discussed over digital network. According to Stanley (2022) the power of the 21st century is now literally in our hands. We have never before had such a powerful tool to connect with millions of people from the comfort of our own home and all around the world; it is changing the way business is done. Stanley (2022) further argued that “social media has given the power to the voice of the average Joe, and whilst that may come with challenges, the opportunities are there for the taking.”

There are different types of social media platforms and also different formats of information conveyed by these platforms, such as Video, Audio, Text and Graphics that are available and that can be used by individuals and groups. Wong (2021) reviewed nine types of social media platforms and format. These include:

- i. Social audio platforms
- ii. Video platforms
- iii. Disappearing content formats (message shared is deleted after 24hrs)
- iv. Discussion forums
- v. Shoppable social media
- vi. Social media live stream
- vii. Business social media
- viii. Closed/Private community social media platforms
- ix. Inspirational Social media platforms

Some of these platforms and formats could be used to improve food security by sharing information on agricultural best practices to farmers in Nigeria. Information, according to Mark-Anthony, Chukwuemeka and Martins (2021) is power and agricultural information is pertinent to unlocking the potential of the agricultural sector. Unlocking the potential of the agricultural sector through the use of social media will result in the production of more food for the populace. The production of more food means the elimination of food insecurity in the country.

Food Security and Insecurity

Food Insecurity is lack of access to adequate, enough and nutritious food for normal growth. The consumption of the food must be at least three times a day. Consuming food three times a day allows the body to grow and develop into an active and healthy life. According to FAO (2022a) “A person is food insecure when they lack regular access to enough safe and nutritious food for normal growth and development and an active and healthy life. This may be due to



unavailability of food and/or lack of resources to obtain food. p.1” According to Mondal (2013) there are two types of food insecurity, chronic and temporal. Chronic food insecurity is caused by inadequate food intake over a long period of time and is constant. The chronic food insecurity could be as a result of civil unrest, wars, famine and etc. Temporal food insecurity on the other hand is as a result of reduction or decrease in food intake as a result of price changes, production failures or loss of income. For example, in Nigeria, there is wide food insecurity (both chronic and temporal) as a result of the activities of Boko Haram and Banditry that continued to unleash terror in villages and towns in the country. States like Maiduguri, Yobe, Katsina, Sokoto, Zamfara and some parts of Kaduna state are under siege by these miscreants. Despite the facts that farming is subsistence, yet the menace of Boko Haram and Banditry, has widen the food insecurity by forcing people to flee their villages, living all their possession behind to a safer area. For these communities, food insecurity has become part of their daily lives.

Food security on the other hand, from the above explanation can be understood to be the opposite of food insecurity. It is a situation in which people have sufficient food to eat. Kelemu, Hailu, Haregewoin and Bezabeh (2017) traced the historical development of the concept of food security that emerged in 1960s. By 1996 an acceptable definition of the phrase was approved and settled at the World Food summit in Rome. The summit defined food security to mean availability, accessibility and sufficiency of food to all people at all times. In the words of the summit, “Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life. Household food security is the application of this concept at the family level, with individuals within households as the focus of concern” (FAO, 2022b, p.2).

Expatriating on the concept of food security, Kelemu et. al (2017) identified four important dimensions to food security. These are (i) Food availability (ii) Food Access (iii) Food Utilization and, (iv) Food stability. For any measurement of food security these are the important variables to consider. Food must be available and affordable to all regardless of the financial standing of all citizens. In other words, food must be available to everyone living in a given community and that it must be very cheap for all in order to have the economic ability to acquire sufficient quantity. This is guaranteed by a combination factors such as own production, stocks, purchase, gifts, borrowing or aid (Kelemu, et. al., 2017). In clarifying the concept of food security, Fahy (2021) explained that access is simply having enough quantity of the food in a community; and that it means very little if there is poor access to it. True food security means that individuals have the resource they need to obtain a sufficient quantity as well as quality nutritious food.

On food utilization, Fahy (2021) noted that not all food is of equal or sufficient value. For food to be secure, “it is crucial that food being accessed is of good quality. It is paramount that food is nutritious and healthy enough to provide the energy people need for their daily activities.” In addition, it is also crucial for individuals to have the necessary knowledge and tools to properly utilise the food available to them. They must properly select, prepare and store foods that are available and accessible. Stability on the other hand means that access, availability and utilization of food are meaningless unless it remain relatively stable over time. For this reason it is important to minimise threats to stability of food security in any given community. The threats to food stability may include natural disasters, climate change, conflict and economic factors such as volatile price fluctuations, low earning by individuals in the community etc.



The practice of farming is one way of bringing stability to food security. The more people cultivate the land the more food is produced and the more agricultural information is disseminated to the farmers the more high yield grains and vegetable are produced and the more guarantee they have on food stability.

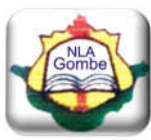
Agricultural Information

The word agriculture is a general term considered by many to be a science and others as an art yet others consider it to an occupation concerned with cultivating land, raising crops, breeding and raising livestock. National Geographic Society (2023) defines agriculture as “the art and science of cultivating the soil, growing crops and raising livestock. It includes the preparation of plant and animal products for people to use and their distribution to markets. p.1” To buttress this view, Harrison and Fuller (2014) posited that agriculture is the most comprehensive word that is used to denote the many ways through which crop plants and domestic animals sustain the global human community by providing sufficient and adequate food and other products. Agricultural information can thus be considered as man’s accumulated knowledge in the field of agricultural practice. Tadesse (2008) cited in Adio, Yusuf, Kunle and Shehu (2016) described agricultural information as the various sets of information and messages that are relevant to agricultural production activities of farmers such as crop production and protection, animal production and management, and natural resource production and conservation etc.

Information today is the most critical resource, not only in agriculture but in the operations and management of organizations, industries, Individuals, Governments and private enterprises. Individuals and organization that can secure, master and utilize the information to their advantage prosper, while those with poor or no information base will continue to wither away. According to Adio, et. al. (2016) information has been described as man’s accumulated knowledge in all subjects, in all forms and from all sources that could help users of such information to improve and develop intellectually on their activities. In other words, information provides the user with better alternatives when taking critical decision/s. This means that the major function of information is to increase the knowledge of the user, and to reduce his level of uncertainty or reduce the varieties of choices available to him. There is no doubt therefore, information is very important in all aspects of human endeavor including agriculture.

Discussing the constituents of agricultural information, Oyindeinbofa (2017) sees agricultural information as knowledge that helps farmers to achieve maximum agricultural yield. He noted that information is the least expensive input, as far as farming implements are concern, for improved rural agricultural development as it assist the farmers to have knowledge about new agricultural techniques and technologies, planting treated seeds, soil conservation, prevention of plants and animal diseases, application of fertilizer, proper storage of farm products, marketing techniques and other agricultural activities. Thus with adequate information at their disposal farmers can be able to produce more foods for themselves and their communities, thereby improving their food security and eliminating its insecurity.

To generate and pass information on best practices to the farmers, most countries of the world recruit and employ agricultural extension workers. Agricultural extension officers are intermediaries between research and farmers. They operate as facilitators and communicators, helping farmers in their decision-making and ensuring that appropriate knowledge is implemented to obtain the best results with regard to sustainable production and general rural development (Commonwealth 2022). Also, Jobvine.com (2022) described the work of an agricultural extension officer as one who directly works with farmers and companies related to



agriculture. Their primary role is to assist farmers to make better decisions that will increase agricultural production. The extension officer is constantly armed with the latest techniques and information related to agricultural best practices and they relay this information to farmers. However, despite the importance of agricultural extension workers to farmers, it seems in Nigeria there is lack of adequate number of extension service personnel to cater for the teeming number of farmers in Nigeria. This is a serious challenge to agricultural development. For example, as at 2019, Nigeria had a total number of 14, 000 extension workers covering the entire country. Of this number 6,000 were employed in the public sector and the remaining 8,000 were privately employed (Udegbumam 2021). This means that many farmers are left to their own perils of using outdated farming practices. Adejo and Opeyemi (2019) have noted that farming requires information and technical expertise and hence the need for extension workers that have used different communication methods, such as farm and home visits the use of contact farmers, mass media and so on. They described these methods as limited and therefore recommend the use of new and emerging information and communication technologies by agricultural information providers. This is where social media tools can be deployed to close the gap between the farmers and the lack of adequate number of agricultural extension officers.

Use of Social Media to Disseminate Agricultural Information

As contemporary interactive communication technologies, Social media comprise of various tools that allow people to exchange information at local and global level. According to Kesharwani, Rout, Padhy and Ravichandran (2022) farmers can gain knowledge, information and ideas with the help of social media, and there are opportunities to reach experts, such as researchers, scientist, agronomist, environmentalist and others. They argued that with the help of these media, “farmers have increased their production, quality, quantity and business.”

On the use of social media by farmers, Team (2018), has revealed that farmers that use social media are using it almost every day and that Youtube is one of the most popular social media platform in which more than fifty percent of the farmers are using to know about general news, enjoy music or how-to-video on agricultural practices. This is similar to the submission of Spielman, Makhija and Campenhout, (2021) in which they indicated the acceptance of social media as a mode of communication between the farmers and agricultural extension workers in some developed and developing countries like United States, Pakistan, India, Kenya and many other developing countries.

Social media platforms/tools, such as Facebook, Youtube and WhatsApp are becoming better sources of information dissemination on agricultural production and its promotion. The dissemination of the information can be one to one, or one - many. Latif, Iftikhar and Shahzadi (2020) explored the role of social media in dissemination of agricultural information in Pakistan. They noted that Youtube has been accepted as the best media for learning and skills development among farmers in Pakistan. In addition, their study also found that social media is suitable for the promotion of farming practices, as it allows farmers to save time and cost by collecting data from their smart phones conveniently anywhere, any time.

Another important area of social media use is its power to send and receive communication from participating members of a social group. Kesharwani, et. al (2022) discussed the influence of social media. They noted that social media not only allow the connection and sharing of information, but it can be used anytime, anywhere and by everyone in the globe. As a result of these, 5, 385, 798,406 or (67.9%) of the world’s population (7, 932, 791, 734) used the Internet and its other technologies (InternetWorldStat.com, 2022). The report further highlighted that “social media has grown on the Internet and is changing the way people use the web on a



worldwide scale in the United States of America and in the rest of the world.” The report further argued that the world population is increasing at an alarming rate, while land needed to cultivate the food for the increased population is decreasing. This makes the sharing of information on agricultural best practices using social media to be significant because it will allow the production of adequate and high quality food to feed the growing population, thereby guaranteeing food security, especially in developing countries where farmers hardly produce enough food for their sustenance for given year.

There are quite a number of articles that indicated the adoption and use of one flat form or the other in agriculture. Varner (2018) in an answer to why should farmers care about social media noted that “it’s really quite simple: Mass influence.” He further emphasised that consumers are not just learning about food production but they are also using it to communicate and educate themselves, pointing out that if you have a one - on – one conversation about an issue, only the person you are talking to benefits from the information you delivers. But if you share the information using social media, it will likely reach millions of other growers asking the same question or facing similar problems.

Conclusion

Social media as an interactive technology is shaping how people communicate and share information, skills and knowledge. Farmers could utilize the technology to learn about best farming practices to boost their agricultural production, ask questions regarding farming practices from not only their colleagues, or friends and their local agricultural officers or extension workers, but agricultural experts and scientists from around the globe. The farmers can also subscribe to an agricultural networking forum where common issues are discussed and resolved.

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