Effective Management of Information as Empowerment Tolls in Oppressed System: A Lesson for Muslim Farmers in Kano State

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Abstract: Effective management of information is a systematic design of generation, control and transmission of information in a close or open inter-related system for the attainment of the system’s goals. Information is a powerful tool that has been utilized to win lost battles for centuries. The study aim at empowering farmers through providing adequate agricultural information. Little input on information sharing and networking through text message on Kenya’s and China’s farmers have shown astronomical improvement of farmers life. Hinging on the backdrop of this concept, this study used qualitative content analysis by critically reviewing various literatures to assess factors responsible for poor access of information among farmers in Kano state. In addition to propose means of improving access to information alternatives through SMS between all the stakeholders. The study revealed array of factors responsible for wide communication gap such as farmer’s incapability, Illiteracy, inadequate infrastructural facilities and few extension agent. Corruption after critical analysis is identified as major factor. Study propose cluster communication as the key to success of bridging communication gap between stakeholders. It is a root-to-top communication for effective networking of information management to circumvent the corruption-ridden conventional means of communication. Using simple but modern means of communication, three stages was proposed which includes; the enlightenment, implementation and feedback mechanism.

Keywords: information, empowerment, farmers

A. Introduction

Information is essential for the development of any economy. It is importance is so vital that innovation will not be possible without it (Fawole and Oladije, 2012). It is a significant resources than material and energy (Chen, Liu & Yang, 2011). A person that has more access to information can dominate social competition (Chen, Liu & Yang, 2011). With this notion, it is safe to assert that information poverty is an obstacles and major challenge to the development of a nation. Hence, the need to address this problem is necessary (Fawole & Oladije, 2012). In Nigeria, agriculture is one of the major source of employment about 70% and GDP about 24.4% (Agwu, 2017 & Ihegboro, 2014). The agricultural sector is normally dominated by small holder farmers about 80% of the population who are mostly engaged in subsistence farming (Agu, 2017). Farmers are key stakeholders of any country’s development because they are responsible for food production to meet domestic demand and serve as a source of export. In Nigeria, 99 % of food is produce by small holder farmers (Sabo et al, 2017)

In spite of their crucial importance to the economy, the role of small holder farmers in Nigeria is always neglected by placing them at the lowest strata in terms of empowerment (Sabo et al, 2017). Researchers in Nigeria have shown that the relevance of information and the need for integrating a proper channel of
communication between farmers and top official is not given adequate recognition (Fawole and Oladije, 2012). It has been recognized that the small holder farmers have limited access to modern means of getting information that can uplift their life (Obidike, 2011). Consequently, farmers are undermined and disempowers because they are always at the bottom of the pyramid in terms of development consideration, which drastically affect their productivity (FAO, 2015). Appropriate Communication for update on agricultural information is not seen as a major priority by the Government (Agwu et al., 2008). Therefore, certain amenities that are basic for getting appropriate agricultural information are lacking in most remote areas (Agwu et al., 2008). This is perhaps the reason why accessing appropriate information that can empower farmer is still a challenge (Obidike, 2011).

In this digital era, simple communication means such as text messaging can be employed to deliver prompt and reliable information to farmers in the areas of better-quality seedlings, improved methods of cultivation and fertilizer application, pest and weed control/extermination (Obidike, 2011). Generally there are certain basic information needs that farmers are concerned with. This is normally information pertaining to production, processing, and market, technical information tied to production systems among others (Brinkman and Wesseler, 2003). Most farmers in Nigeria cannot meet their information needs as desired because there is no effective communication among farmers in the rural area (Brinkman and Wesseler, 2003).

Lack of effective agricultural information reaches a climax where presently majority of rural farmers are oblivious of basic information regarding general price level, level of demand and supply for their commodities, the right place and time to sell their commodities and their prospective buyers (Brinkman and Wesseler, 2003). To crown it all, most rural farmers are not abreast with new government policies and programmes concerning farming financing activities (Ekoja, 2003). Despite the fact that the only way farmers are getting financial support is through Government financing schemes, the farmers often relies on extension agents or middlemen in getting information about market condition, who often exploit them by giving them false or inaccurate information about the value of their commodity (Ekoja, 2003).

The resultant effect of poor information translate to low profit generation for farmers, lower standard of living, poor expansion potentials and erratic market structure (Obidike, 2011). This brings about rapid decline of farming activities amongst the rural communities and hence, the observed influx of people into urban cities for greener posture (Obidike, 2011). Consequently, investigating factors responsible for the poor access of information among farmers is crucial so as to provide proper remedies of addressing the challenge in Kano State. Therefore the study seek to achieve the following objectives:

1. To investigate factors responsible for poor access of information among farmers in Kano state.
2. To propose a means of improving access to information by providing controlled means of communication between policy makers, agricultural extension workers and farmers so as to empower farmers of Kano State to generate more profit.

B. Overview of farmers sources of accessing information in Kano State

Kano state is an ancient city located in the northern part of Nigeria with a population accounted to 9,383,682 (Barau, 2006). However, over 90% of the population are Muslims. Most of the farmers are residing in rural areas and are considered as subsistence farmers with their acres not more than five (Adamu, 2016). The system of agricultural practice is characterised by traditional system of farming that date back to the fore ancestors with crude implements (Adamu, 2016). Such primitive practice of farming seriously affect the productivity of the farmers as their potential is not realised due to underutilisation of full capacity, consequently, resulting to low yield (Adamu, 2016).

The domination of low level awareness and inadequate information in Kano state is part of the reason why traditional system of farming is endemic among the poor farmers (Adenkule,
The catastrophic nemesis of poor information and communication is what aggravates the level of pest and diseases, use of poor quality fertiliser, pesticides and herbicides which retard the development of the agricultural sector in the State (Adenkule, 2004). This is emphasized by Blait (1996) as cited by Obidike (2012), rural agricultural development can only be improved when there is adequate access to information and knowledge in the form of marketing, pricing, credit, technological innovation, use of higher variety seeds, pesticides, herbicides among others. In Kano State, it is observed that despite the emergence of simple technological application such as text messages through phones, the available sources of information is through agricultural extension workers (leaflet, extension guide, posters), radio and television, agricultural shows, agent advisory visit e.t.c (Adenkule, 2004). But farmers prefer using radio rather than other facilities. In line with this background. It then becomes imperative to examine the factors responsible for poor access of information among farmers in Kano State.

C. Factors responsible for poor access of information among farmers in Kano State

1. Financial incapacitation of the farmers: The fact that majority of the farmers are subsistence small holder farmers and a generally poor due to low income generation with limited sources of accessing financing either from formal or informal sources makes the farmers to have inadequate sources of getting information. Considering proliferation of the new digital arena of information acquiring facilities such as computers, mobile phones, TV and other electronic products, one may assume that communication gadgets are accessible. However, the cost of these facilities, more especially computer is relatively high, and majority of the farmers cannot afford to buy (FAO, 2015).

2. Inadequate infrastructural facilities; Majority of the farmers in Kano State are rural based who lack the basic amenities in the form of good roads, electricity, telecommunications and internet connectivity. Poor communication system, poor relevant electronic gadgets and epileptic power supply block the chances of adequate information dissemination to Farmers in Kano State (Adekunle, 2004).

3. Poor network system: In Kano state the rural areas are generally situated in distance location away from the urban centres where the masts for propagating the network are concentrated. Hence, the network in most rural areas is constantly facing service failure, disjointed network propagation. The poor network is not limited to telecommunication services but even Radio and television signal reception is weak and poor in some villages (Adegoke & Babalola, 2011).

4. Insufficient extension workers: The number of extension workers is insufficient considering the number of farmers in Kano State where 70% of the population depend on agriculture. The extension workers also find it difficult to access remote areas and disseminate agricultural information. More so, extension officers have not fully embraced the use of Modern gadgets in advancing the access to agricultural information (FAO, 2015).

5. Illiteracy of farmers: Another major factor that hinders effective access to information among Kano State farmers is lack of modern education, which seriously affects farmer’s productivity. Most of the farmers are rural based, they therefore lack the necessary skills required to access and use information using high level means like computers—Hence to boost their productivity, they require prompt and update information through simple modern means of communication (Adekunle, 2004).

D. Critical analysis of the factors.

In order to formulate a workable solution to the menace of information starvation amongst farmers in Kano State, it is necessary to examine the factors listed above and analyse them with the view of extracting the most common feature among them so as to provide means of mitigating the menace.

When we look at the first factor, which is financial incapacitation of farmers, inferences
can easily be drawn from the basic economic principles of developing macroeconomics from microeconomics. However, for decades, government agricultural programme have been underplaying the role of microeconomics by paying lip service and infinitesimal budgetary allocation to agriculture partly because of oil money, which drives more than 80% of the country's economy. This led to neglect of the sector and hence the manifested poor condition of farmers. The little budgetary allocation to the sector hardly drips down to the farmers as the corruption mops up the allocation before it reaches the common man. This worsen the situation throwing farmers into abject poverty. Hence neglect and corruption have been identified as the major feature in this factor.

Government finger print is visible in almost all of the factors as inadequate infrastructural facilities lies squarely on government's shoulders and corruption is identified as the major depleting source of those facilities. Government spent large percentage of its budgets on infrastructural developments but the majority of the projects are in the town, rather than rural areas. Where projects are situated in rural areas, corruption ensures its execution in substandard style and this means throwing back the project back to square one in few years period.

The fact that communication services are provided by private organizations in Nigeria seems to absolve the government from the fault of poor network system in the country. However, government can have a role through the regulatory bodies to enforce good service delivery through customer right protection. So lack of proactive measures is hereby identified as the major feature in this factor. While illiteracy as factor is influenced by both government attitude and people attitude towards knowledge acquisition, lack of adequate extension workers is purely the fault of government. While corruption and conservative behaviour of rural people are the main features in the former (illiteracy), lack of proper design of area-tailored program is identified as the main feature in the latter (lack of adequate extension workers).

The aforementioned features are deeply interrelated as their association with the factors intersects with varying degrees. The most common features across the factors is corruption, which manifest in many forms as substandard execution of capital projects, diversion of essential amenities meant for farmers, failure of check and balance and connival tendencies between government regulatory agencies and private communication firms. With current efforts of government to stamp corruption in all sectors, most of its top officials seldom have direct contact with the farmers. As a result, they rely on information provided by junior or middle level officers, who often distort the true situation with doctored reports. Hence, a weak point is hereby identified for exploitation so that a programme that can generate a bridge between the farmers and decision making bodies can be produced.

E. Lesson from Kenya and China

With the emergence of the new digital era, access to information and its dissemination is made easy through Mobile calls and simple messaging systems (SMS), which connect people and help in disseminating information (Brinkman & Wesseler. 2003). They are easy to use and significantly facilitate direct communication. Despite the fact that there is an effort made by the government to provide new Mobile access advisory services to farmers (Vignare, 2013), the move is devoid of essential networking services such as linking farmers to market, getting access to financing through mobile phones and getting general information that may be beneficial to empowering farmers(Vignare, 2013). To this end, a reference is hereby drawn to what is currently being practiced in Kenya by agricultural commodities exchange, where they use Safaricom SMS platform to link farmers to market (Vignare, 2013). Another Kilimo Salama platform is establish where insurance is provided through exclusive mobile buying system in which farmers can pay for inputs such as fertilizer, pesticides among others. The flat form also provides a means of linking farmers to market, facilitate access to credit and inputs (Vignare, 2013).

A similar case is experience in china byBASF Leading Grower App, who provide prompt, comprehensive and precise agricultural and technological information.
service to meet the needs of large-scale farmers. The farmers can manage planting more efficiently via their phones, receive weather reports, learn about agricultural technologies and pest control and be able to consult with BASF experts through long-distance guidance about agricultural problems. “It is a systematic job to help farmers improve quality and profits,” (BAFS, 2018).

F. Conclusion and recommendation

Going by the identified problems of communication gap, many factors are found responsible for the poor access of information among farmers in Kano State ranging from financial incapability of the farmers, inadequate infrastructural facilities, poor network system, illiteracy of the farmers and insufficient extension expert with a common factor of corruption that link all the factors. Therefore, the study proposed its contribution by indicating that Federal, state, and local government should strive towards establishment of combine modern and traditional information centres for utilizing effective agricultural information. The modern means is through cluster telecommunication system. Mobile phones can be used by farmers, members of the community and government workers to connect and communicate (Fawole and Oladije, 2012). For the system to mitigate the effect of communication gap, a platform that can link the farmers directly with the policy makers, agricultural extension and other managerial staff through mobile SMS is imperative to get adequate agricultural information. This will help in changing the mind-set of the farmers and staffs as the cluster incorporates all level of staff. The communication should have a check and balance system for circumventing the middle level staff. The three communication stages of the proposed programme includes; the enlightenment where farmers will be train on how to send and receive messages, the kind of information they will access among others. Implementation is where flat form will be established for linking the farmers to get adequate and reliable information regarding market, access to money, credit and sales through SMS. In the implementation stage there is the need for assigning code where the moment a farmer need to get any information can easily access it by dialling the code. This reduces expenses of transportation and the cost born when expert will go to one farmer and another. The feedback mechanism is where the farmer will receive response regarding their request. This method of bottom-to-top linking farmers with policy makers and other stakeholders will empower farmers by guarding against corruption that embedded most of Government financing schemes. Other recommendations as follows;

1. Improve infrastructural facilities: This means that traditional rural Information centres should be furnished with communication infrastructures. In every rural community relevant and up to date information and communication devices, such as computers with internet access, local area and wide area networks, radio and television sets, telephones and fax machines, multimedia projectors, video and audio recorders so as to address the information coverage inadequacies. Likewise, providing adequate physical infrastructural facilities such as good roads, constant power supply, good networking to ensure reliable access of agricultural information to empower farmers.

2. Provision of financial incentives: The lack of purchasing power problem of farmers is major issue where majority cannot bear the communication cost government should collide with the communication enterprises to give certain incentive just like cost relief among others.

3. Improve public awareness campaign: This means massive public campaign should be encourage at all level. So as to create awareness among farmers on new modern means of getting agricultural information, telecommunication means inclusive. This can also be done through training, seminar and workshops by the extension workers to farmers.

4. More extension workers should be employ to better serve the farmers in receiving optimal information.
References
Precision agriculture in the digital era: https://www.basf.com/cn/en/company/news-and-media/BASF-Information/Food-nutrition/PrecisionJiang Weiqi, Manager, Marketing, Fungicide and Specialty Crop, Crop Protection, BASF Date retrieved 13/4/18
Role of Smallholder Farmers in Nigeria’s Food Security - Scholarly...