

INFORMATION LITERACY FOR SUSTAINABLE AGRICULTURAL DEVELOPMENT IN NIGERIA: A CASE OF FARMERS IN LAGOS-STATE

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Abstract:

The study examined the information literacy for sustainable agricultural development in Nigeria: a case of farmers in Lagos-State. Demographic characteristics explored revealed farmers' various sources of agricultural information based on their level of information literacy in accessing agricultural information coupled with the level of farmers' need for capacity building towards sustainability of national development. Descriptive exploratory survey was used with self-structured questionnaire-based survey of selected vegetable farmers. A sample of 150 vegetable farmers engaged in agricultural activities was selected for the study using disproportional stratified and purposive sampling techniques. Some local government areas were selected purposively from the three senatorial districts in Lagos state namely Lagos West (Iyana –Oba), Lagos East (Ikorodu) and Lagos Central (Ogudu). Descriptive statistical tools of frequency, percentage, rank, mean, standard deviations were used to analyze the data. Pearson product moment correlation was used to explore the relationships existing among the dependent and independent variables and Generalized Linear Models (GLM) was used to determine the significance and contributions of demographic factors to information literacy of farmers and farmers' need for capacity building towards sustainability of national development. Findings revealed that agricultural development for national sustainability will depend on farmers' ability to make use of information communication technology through the use of internet as yardstick and tool for information agricultural sourcing, improving on their information literacy to an appreciable level. Recommendations were based on the need for farmers to develop their capacity building in management for effective marketing, technology know how that will enhance their jobs beyond the present scope.

Keywords: VegetableFarmers, Information Literacy, National Development, Local Government Area, Sustainability

Introduction

National, according to Longman Dictionary of Contemporary English, 7th Edition (2009) refers to a phenomenon that embraces a whole nation. National development therefore can be described as the overall development or a collective socio-economic, political as well

as religious advancement of a country or nation. This is best achieved through development planning, which can be described as the country's collection of strategies mapped out by the government (Lawal & Oluwatoyin, 2011). Aremu (2003) opines that the myth of growth and development is so entrenched that the country's history reflects the history of development strategies and growth models from colonial times up to date. No term has been in constant flux as development. This seems the only country where virtually all notions and models of development have been experimented.

Gboyega (2003) captures development as an idea that embodies all attempts to improve the conditions of human existence in all ramifications. It implies improvement in material well-being of all citizens, not the most powerful and rich alone, in a sustainable way such that today's consumption does not imperil the future, it also demands that poverty and inequality of access to the good things of life be removed or drastically reduced. It seeks to improve personal physical security and livelihoods and expansion of life chances. Naomi (1995) believes that development is usually taken to involve not only economic growth, but also some notion of equitable distribution, provision of health care, education, housing and other essential services all with a view to improving the individual and collective quality of life, Chrisman (1984) views development as a process

In an era of knowledge economy, information literacy plays an increasingly important role in every sphere of the development process. As a new paradigm for lifelong learning, information literacy (IL) has become a subject of interest and discussion in a range of scientific and professional literature. In most developing countries, agriculture is the most important economic activity providing food, employment, foreign exchange and raw materials for industries. In Nigeria agriculture has been playing a major role in the country's economy. Just recently, after the global economic recession, agriculture has been contributing 20% to the Gross Domestic Product (GDP) of the revenue generation of the nation. The agricultural production system in Nigeria is highly dominated by traditional farming and the application of modern inputs has been extremely limited. As a result, yields of various crops are very low for national development sustainability in Nigeria.

The present age has been rightly called an Information age because information has become the most important element for progress in society. Information has been described as "the fifth need of man ranking after air, water, food and shelter" (Kemp, 1976/2016). Everyone needs information about everything even in his day-to-day life. In agricultural production environment, relevant and timely information helps farming communities to take right decisions. Utilization of information in the agricultural sector enhances farming productivity in a number of ways. Providing information on weather trends, best practice in farming, new technologies developed by scientists, and timely access to market information helps the farmer make correct decisions about what crops to plant and where to sell their product and buy inputs (Bachby, 2012).

Information has received a wide acceptance as an essential resource of this century. It has been described as a stimulating creativity, resulting in new outcomes and processes. All human societies depend very much on information for existence. The proper identification and use of information sources are prerequisites for objective decision making. Consequently, the possession of awareness and use of appropriate information guarantee effective functioning of both the individual and organization. The major function of information is to increase the knowledge of the user, to reduce his level of uncertainty or reduce the varieties of choices available to the users of information. For information to be effective, it must be accurate, timely and relevant. (Adio, Yusuf, Yusuf, & Shehu, 2016).

Information is an indispensable factor in the development of any nation. Choo (2012) affirmed that people use information to create knowledge, but not just in the sense of data and facts but the form of representations that provide meaning and the context for purposive action. Information service provision to farmers in Nigeria might have been ineffective for the production of varieties of food and, raw materials for sustenance of the people. Majority of our rural farmers depend on indigenous or local knowledge for improved farming systems. Such knowledge (indigenous or local knowledge) refers to skills and experiences gained through oral tradition and practice over many generations but the use of such primitive skills by our rural farmers, especially those in Lagos State, Nigeria, has not substantially helped to improve yield (Adedipe, Okuneye & Ayinde, n.d.)

According to Acheampong, Frimpong, Adu-Appiah, Asante, & Asante (2017), agricultural information is useful for farmers because it helps them to overcome their inadequacies in knowledge of certain basic practices that may include technical, marketing, social, and legal agricultural information. Farming is one profession that depends on the constant flow of information. However, most farmers find it difficult to identify when they have the need for information. In Nigeria, especially in the Norther geographical zone, there are few information centres where farmers may resort to meet their information needs. Where these centres are available, they are not well resourced with best materials and personnel who can professionally handle these farmers most of whom are illiterates (Food and Agricultural Organization 2014).

Information literacy as defines by Association of College and Research Libraries (ACRL) (cited in Rader, 2013) an intellectual framework for identifying finding, understanding, evaluating and using information. It includes determining the nature and extent of needed information; accessing information effectively and efficiently; evaluating critically information and its sources; incorporating selected information in the learner's knowledge base and value system; using information effectively to accomplish a specific purpose; understanding the economies, legal and information technology; and observing laws, regulations, and institutional policies related to the access and use of information.

According to Ogungbeni, Ogungbo and Adeleke, (2013) a nation cannot attain a state of food sufficiency without the development of her farmers. It is therefore important for farmers, who are producers of food, to be well equipped for them to perform at optimal capacity. One of the key ingredients for farmers to yield good output is information (Tolobonse, Fashola and Obadiah, 2008 cited in Ogungbeni, Ogungbo and Adeleke, 2013). Information such as weather forecast has always been critical to the success of a farmer. The ability to access, evaluate and use information is a prerequisite for lifelong learning, and a basic requirement for the information society. Information literacy presupposes that an individual recognizes the need for information, and knows how to find, evaluate, use, and subsequently communicate information effectively to solve particular problems or to make decisions (Ojedokun, 2007). To be information literate, a person must be able to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information.

Objectives of the Study

1. To investigate farmers' sources of agricultural information in Lagos.
2. To determine the level of information literacy of farmers in accessing agricultural information in Lagos State
3. To determine the level of farmers' need for capacity building towards sustainability of national development.

4. To investigate the relationship between farmers' sources of agricultural information and their levels of information literacy in Lagos State
- 5.

Hypothesis

1. There is no significant relationship between farmers' sources of agricultural information and levels of information literacy.

Literature Review

Information is a processed and organized data for meaningful purpose which could be in different forms or sources. Every rational person needs some form of information for his / her day to day activities. Therefore, emphasis on the importance of agricultural information cannot be out of place, because information had 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 (Naomi, 1995). There is no doubt that information is very important in all aspects of agricultural development from planning to the production stage in the farm. It is obvious that those factors that limit agricultural information development may be related to the difficulties in accessing information for research and development activities. Agricultural information is supposed to be made available to research scientists, extension workers, farmers and other users, so that they can all engage in agricultural development and ensure sustained food production. This means that they require different types of information at the right time in order to make the right decision. (Adio, Yusuf, Yusuf, & Shehu, 2016)

According to Low (2000), information is a means of transferring events for better awareness, to add new meaning that could change events, lives, or experiences because awareness and use of information produce knowledge. The ever increasing information explosion on agricultural produce such as seedling, harvesting, marketing and storage among others, may have considerable implications on farmers, implementation of farm tools and the extension services, (Oto, 2011, Ovwigho, 2009). It is generally believed possession of adequate information literacy to the grass root especially to farmers will enhance productivity. The importance of farmers' information literacy and awareness towards agricultural produce and food security cannot be overemphasized. Sokoya, Onifade and Alabi (2012), observed that interpersonal connectivity between farmers and agricultural extension agents will enhance farmers' information literacy, knowledge and awareness of current issues of farming that will boost stages of farming and abundance food supply.

Farmers need access to reliable information for their agricultural activities. According to Gakuru, Winters, and Stepman. (2009), some of such information focus on crop market prices, weather information, information about transportation and storage facilities as well as crops and cattle diseases and fertilizers. Farmers also require the direct interface with extension workers for consultations about their agricultural activities. In line with this, Kydd and Doward (2004) and Poulton (2006) as cited by Katengeza, Okello and Jambo (2011) said that the failure of agricultural markets for smallholder farmers often results from lack of access to information or from the endemic problem of information asymmetry between farmers and buyers.

A study by Makoka and Kachule (2013) found out that smallholder farmers are operating in an environment where availability and flow of market information is very poor and greatly contributes to poor access to markets. Information sources are various means by which information is recorded for use by an individual and organization. Radio, television, extension workers, cooperative societies, friends and colleagues, newspapers and magazines, books/leaflets, phones, libraries and institutes are some of agricultural information to farmers. Also, observation of people organizations, speeches, documents, picture and art work can also

be described as information sources. The information sources for farmers depend on the type of work and services they perform. Many studies have been conducted to determine the type of information sources of agricultural extension workers for instance, Alfred and Odefadehan (2007) identified various information sources of extension workers to include organizations, individual associates, local, national and international seminars, workers' trainings, print and electronic media, telecommunication and internet service. Koyenikan (2011) categorized information sources into as formal and informal sources. According to him, the formal sources include state radio stations, local and international print media (such as newspapers, newsletters, and journals) and seminars/workshop, while the informal sources are farmers, family friends and personal assessments and judgment.

Over the past few years it has become visible that capacity building is fundamental to pursue sustainable development (UNEP 2002). The term capacity building refers to training, professional development, and professional education (UNOSD, 2012). Rola-Rubzen and Gabunada (2003) concluded that capacity building has helped farmers in improving their farm produce and its marketing, as well facilitates in improving assessment, critical thinking, and decision-making which would help them critically assess innovations and options for improvement, translating to better incomes and welfare of farm households. Capacity building for sustainable development should be considered a critical tool (Ceccon & Cetto, 2003) and it requires effective coordination with in an organization and with other departments working for advancement (Alam, Flowra, Salam, Kabir and Ali, 2009) of farming community by making them competent to utilizing the training efficiently (Hartl, 2009).

Capacity building of farming community by providing training is imperative mechanism for enhancing and updating farmer's knowledge. Training engages the transfer of new knowledge, skills, technology, behaviour and attitude to build up the farmers' competencies to carry out their allocated task more efficiently and resourcefully. Likewise, farmers require necessitate training to improve yield per unit area because agricultural knowledge and technology is constantly changing and farmers need to keep abreast of new technologies (Ahmad, Muri, Ahmad and Yousur, 2005). In other words, training, capacity building and education are key elements to reduce poverty by equipping them with the knowledge and skills to raise their produce and income (Ogundele, Akingabde and Akinlabi, 2012) ultimately to improve living standards.

Some of the challenges aforementioned by farmers might be due to the inability of the farmers to be information literate. Information literacy is germane in the life of an individual before decisive decision can be made, it is a lifelong phenomenon needed by everybody, information is knowledge, information is powerful, farmers in this discourse needs it to excel in their chosen profession of farming. The concept encompasses a number of competencies. An information literate person must be able to: recognize the need for information ; formulate questions based on information needs; recognize that accurate, relevant and complete information is the basis for intelligent decision making; identify the potential sources of information; developing successful search strategies; access sources of information from all media, evaluate information; organize information for practical application; integrate new information into an existing body of knowledge; and use information in critical thinking and problem solving (Ojedokun, 2007).

Methodology

The present study is exploratory in nature, and it adopted a questionnaire-based survey of selected vegetable farmers. One hundred and fifty vegetable farmers engaged in agricultural activities in Lagos-State were selected for the study using disproportional stratified and purposive sampling techniques. Some local government areas were selected purposively from

the three senatorial districts in Lagos state namely Lagos West (Iyana –Oba), Lagos East (Ikorodu) and Lagos Central (Ogudu). The respondents were selected considering their location and rich experience in vegetable type of agricultural farming, and a minimum ability to read and write in English and Pidgin language. Since most of the farmers were not well-educated, data were collected through personal contact and face-to-face meeting with each individual through a structured questionnaire. Descriptive statistical tools of frequency, percentage, rank, mean, standard deviations were used to analyze the data. Pearson product moment correlation was used to explore the relationships existing among the dependent and independent variables and Generalized Linear Models (GLM) was used to determine the significance and contributions of demographic factors (gender, location and academic qualification) to information literacy of farmers and farmers’ need for capacity building towards sustainability of national development.

Data Analysis and Discussion of Findings

The socio-demographic information of the participants was analyzed using frequency and percentage in this section.

Table 1: Participants Demographic Variables (N=150)

Variables	Category	Frequency	Percentage (%)
Farmers’ Association	Ikorodu Vegetable Farmers’ Association	50	33.3
	Ogudu Farmer’s Growers	50	33.3
	Iyana-Iba Women Vegetable Farmers’ Association	50	33.3
	Total	150	100.0
Location	Urban	112	84.8
	Semi-urban	20	15.2
	Total	132	100.0
Gender	Male	58	48.3
	Female	62	51.7
	Total	120	100.0
Age	18-29 years	26	18.8
	30-39 years	67	48.6
	40-49 years	34	24.6
	50-59 years	11	8.0
	Total	138	100.0
Years of experience	1-5 years	34	23.9
	6-10 years	63	44.4
	11-15 years	26	18.3
	16-20 years	08	5.6
	21-25 years	02	1.4
	26-30 years	06	4.2
	40 years and above	03	2.1
	Total	142	100.0
Academic qualification	Primary	19	13.8
	Secondary	39	28.3
	NCE	36	26.1
	HND	15	10.9
	Bachelor’s degree	05	3.6
	Adult education	24	17.4

Source: Field Survey, 2018.

Table 1 shows the analysis of the participants' demographic variables. Fifty farmers were evenly selected across Ikorodu, Ogudu and Iyana-Iba areas of Lagos state (Ikorodu=33.3%; Ogudu=33.3%; Iyana-Iba=33.3%). More than eighty percent (112 or 84.4%) of the farmers were located in the urban area of Lagos state. Females (62 or 51.7%) were more represented in the study than their male counterparts (58 or 48.3%). Nine in every ten participants (92.0%) were more involved in vegetable farming were youths, showing that vegetable farming is gaining acceptance among the Nigerian youths. 68.3% of the participants had worked experience of 1-10 years. While vegetable farming gained wide acceptance from SSCE holders (28.3%), it is regrettable unfortunate that few HND (10.0%) and bachelors' degree (3.6%) holders were attracted to this profession. The reason for low acceptance of vegetable farming among graduates of HND and B.Sc. may not be unconnected to the desire white collar jobs, a situation which has become prevalent in the Nigerian society. The demographic analysis which penetrated all strata of the demographic indices of the respondents showed that the information provided by the participants can be relied upon for the realization of the research objectives.

Analysis of Research Questions

In order to analyze the research questions **1, 2 and 3**, the following data shown on Tables **2, 3, 4** and **5** were collected. For decision rule, 2.5 was used as the hypothetical cut-off point, a value obtained by adding the exact upper limit of the scale (4) and exact lower limit of the scale (4) and divided by two. Any research item in which the respondents score a mean of 2.5 and above is regarded as being a significantly related to the study.

Research Question One: What are Farmers' Sources of Agricultural Information?

Table 2 below provides answer to the research question on farmers' sources of agricultural information

Table 2: Descriptive analysis of farmers' sources of agricultural information (N=150)

Agricultural Sources of Information	Frequency	Percentage	Rank
Television viewing centre	113	12.4%	1 st
Workshop/conference	100	11.0%	2 nd
Colleagues	86	9.5%	3 rd
Television	77	8.5%	4 th
Extension agents and contact with farmers	76	8.4%	5 th
Mobile phone	75	8.2%	6 th
Radio set	75	8.2%	6 th
Library	73	8.0%	7 th
Relation	70	7.7%	8 th
Internet	63	6.9%	9 th
Non-Governmental Organization (NGO)	58	6.4%	10 th
Town crier	44	4.8%	11 th
Total = 910			

Farmers' sources of agricultural information was analysed and described in Table 2. In their order of importance, the sources of agricultural information among the farmers are television viewing centre (Rank=1st), workshop/conference (Rank=2nd), colleagues (Rank=3rd), television (Rank=4th), extension agents and contact with farmers (Rank=5th), mobile phone (Rank=6th), radio set (Rank=6th), library (Rank=7th), relation (Rank=8th), internet (Rank=9th), Non-Governmental Organization (Rank=10th) and town crier (Rank=11th). The finding suggests that the vegetable farmers sought for agricultural information from various sources.

However, it is shocking that at this present age where internet plays a major role in information sourcing, farmers hardly use this tool for sourcing agricultural information.

Research Question Two: What is the level of information literacy of farmers' in accessing agricultural information?

Answers to the research question on the information literacy of farmers' in accessing agricultural information are provided in Table 3.

Table 3: Descriptive statistics on the level of information literacy of farmers' in accessing agricultural information (N=150)

	Ikorodu Farmers		Ogudu Farmers		Iyana Iba Farmers	
	Mean	Decision	Mean	Decision	Mean	Decision
(a) I know the extent of information needed for vegetative farming development	3.67	Strongly Agree	3.67	Agree	3.58	Strongly Agree
(b) I can access agricultural information needed for empowerment on the job	3.07	Agree	3.13	Agree	3.20	Agree
© I can evaluate local and traditional information sources critically	2.84	Agree	2.85	Agree	2.92	Agree
(d) I often incorporate information received from farmers' group meetings and other associates into my knowledge base	3.0	Agree	2.85	Agree	2.96	Agree
(e) I can use information effectively to accomplish a specific purpose	2.74	Agree	2.76	Agree	2.92	Agree
(f)I understand the economic, legal, and social issues surrounding the use of information	2.83	Agree	2.85	Agree	2.92	Agree
(g)I can access the use of information ethically and legally based on the environment situated	2.60	Agree	2.69	Agree	2.92	Agree
Grand Mean=3.0						

Table 3, indicates the participants agreed they knew the extent of information needed for vegetative farming development, could access agricultural information needed for empowerment on the job, could evaluate local and traditional information sources critically, often incorporated information received from farmers' group meetings and other associates into their knowledge base, could use information effectively to accomplish a specific purpose, understood the economic, legal, and social issues surrounding the use of information and could access the use of information ethically and legally based on the situation of the environment because the items scored a mean mark above 2.50. The grand mean value (3.0) suggests that the level of information literacy of farmers' in accessing agricultural information is to an appreciable extent high.

Research Question Three: What is the level of farmers' need for capacity building towards sustainability of national development?

Table (4) provide answer to the research question on farmers' need for capacity building towards sustainability of national development.

Table 4: Descriptive statistics on farmers' need for capacity building in management (N=150)

	Ikorodu Farmers		Ogudu Farmers		Iyana Iba Farmers	
	Mean	Decision	Mean	Decision	Mean	Decision
(a) Farmers need to be trained on how to manage customer relationships	3.52	Strongly Agree	3.63	Strongly Agree	3.70	Strongly Agree

(b) Most farmers are deficient in employee management skills.	2.98	Agree	3.0	Agree	3.18	Agree
(c) Farmers need training in the application of technologies appropriate to their needs and capacities	2.91	Agree	2.71	Agree	3.04	Agree
(d) Farmers should be trained over long periods of time (up to several months) through regular and frequent group sessions for effective management	2.84	Agree	2.65	Agree	2.94	Agree
(e) Farmers cannot be effective without adequate knowledge of business management.	2.80	Agree	2.48	Disagree	2.76	Agree
Grand Mean=3.02						

Farmers' need for capacity building in management was analysed and presented in Table 4. The participants agreed that farmers needed to be trained on how to manage customer relationships, most farmers were deficient in employing management skills, farmers needed training in the application of technologies appropriate to their needs and capacities, and that farmers should be trained over long periods of time (up to several months) through regular and frequent group sessions for effective management. Participants in Ogudu disagreed that farmers could not be effective without adequate knowledge of business management while those in Ikorodu and Iyana-Iba were of contrary view. This result suggests that farmers' need capacity building in management to be effective in their jobs (Mean=3.02).

Table 5: Descriptive statistics on farmers' need for capacity building in technology know-how (N=150)

	Ikorodu Farmers		Ogudu Farmers		Iyana Iba Farmers	
	Mean	Decision	Mean	Decision	Mean	Decision
(a) Farmers require the knowledge of use of inputs subsidies to encourage the technology transfer and adoption of process	3.48	Agree	3.33	Agree	3.61	Strongly Agree
(b) Farmers urgently need capacity building in the use of soil conservation and improvement techniques, including integrated approach	2.59	Agree	2.56	Agree	3.0	Agree
(c) Most farmers are obsolete in the knowledge of modern day technology	2.59	Agree	2.56	Agree	3.0	Agree
(d) Traditional approach to farming should be replaced by advanced modern technologies.	2.64	Disagree	2.41	Agree	2.98	Agree
Mean=2.94						

Analysing the result in Table 5, the participants agreed that Farmers required the knowledge of use of inputs subsidies to encourage the technology transfer and adoption of process, farmers urgently needed capacity building in the use of soil conservation and improvement techniques, including integrated approach, most farmers were obsolete in the knowledge of modern day technology and traditional approach to farming should be replaced by advanced modern technologies. This result implies that farmers' need to be trained in the area of technology know-how to enable them do their jobs effectively (Mean=2.94).

Table 6: Descriptive statistics on farmers' need for capacity building in marketing (N=150)

	Ikorodu Farmers		Ogudu Farmers		Iyana Iba Farmers	
	Mean	Decision	Mean	Decision	Mean	Decision
(a) Farmers need capacity building in marketing to enable them sell their farm produces	3.67	Strongly Agree	3.32	Agree	3.65	Strongly Agree
(b) I know how to use referral marketing skills.	2.98	Agree	3.0	Agree	3.02	Agree
(c) My knowledge of marketing is poor.	2.74	Agree	2.70	Agree	2.80	Agree
(d) Capacity building will tremendously improve my marketing skills	2.78	Agree	2.59	Agree	2.92	Agree
(e) I need capacity building on how to use free pricing methods to sell my produces	2.92	Agree	2.80	Agree	2.89	Agree
(g) I can use option based marketing methods to sell my farm produce	2.69	Agree	2.76	Agree	2.94	Agree
(f) I know the three major marketing approaches to increase sales.	2.62	Agree	2.69	Agree	3.02	Agree
Grand Mean=2.94						

Farmers' need for capacity building in marketing was analyzed and presented on Table 6. The participants agreed that Farmers need capacity building in marketing to enable them sell their farm produces, knew how to use referral marketing skills, Capacity building will tremendously improve my marketing skills, they needed capacity building on how to use free pricing methods to sell their produces, they could use option based marketing methods to sell their farm produce and they know the three major marketing approach to increase sales. By implication, while farmers displayed knowledge in some aspects of marketing, such as the use of referrals and option based marketing they contended that they admit of the shortcomings in their knowledge of marketing. Hence, this calls for capacity building in marketing.

Bivariate Analyses

Table 7: Bivariate analyses of the relationships among the variables (N=150)

	1.	2.	3.	4.	5.	6.
1. Sources of information	1	-.007 (.936)	.111 (.178)	.181* (.028)	-.142 (.091)	.263** (.001)
2. Information literacy	-.007 (.936)	1	.383** (.000)	.164* (.050)	-.124 (.144)	.273** (.001)
3. Need for capacity building in management	.111 (.178)	.383** (.000)	1	.223** (.007)	-.247** (.003)	.686** (.000)
4. Need for capacity building in technology	.181* (.028)	.164* (.050)	.223** (.007)	1	-.250** (.003)	.588** (.000)
5. Need for capacity building in marketing	-.142 (.091)	-.124 (.144)	-.247** (.003)	-.250** (.003)	1	-.784** (.000)
6. Overall need for capacity building	.263** (.001)	.273** (.001)	.686** (.000)	.588** (.000)	-.784** (.000)	1

* $p < .05$. ** $p < .01$. *** $p < .001$

Bivariate analyses were done using Pearson Correlation Product Moment correlation coefficient to explore the relationship among the variables before proceeding to the multivariate statistics of Generalized Linear Models (GLM) for influence assessment. The bivariate analysis provides insight into the nature and strength of the relationship existing among the variables considered in the study. An inspection of the Pearson correlation matrix

in Table 7 suggests ample relationships among the variables. For instance, information literacy correlates positively with need for capacity building in management [$r=.383$, $p=0.000$] and need for capacity building in technology [$r=.164$, $p=0.050$]. By implication, farmers who reported high level of information literacy also conveyed high level of need for capacity building in management and technology know-how. Sources of information does not correlate with information literacy [$r=-.007$, $p=0.936$]. This means that the hypothesis which states that there is no significant relationship between farmers' sources of agricultural information and levels of information literacy is accepted. This acceptance of this hypothesis suggests that, the number of agricultural information sources consulted by farmers is not connected to their level of information literacy among farmers. Additional paired relationships can be observed in Table 6 before proceeding to the multivariate models displayed in Table 7.

Discussion of Findings

Farmers' sources of agricultural information as analysed and described in Table 2 has shown that farmers hardly use information sourcing for agricultural information. This findings is in tandem with Matto (2018) that famers need access to reliable information for their agricultural activities. According to Gakuru, Winters, and Stepman, (2009) some of such comprise of crop market prices, weather information, information about transport and storage facilities as well as crops and cattle diseases and fertilizers. Findings on Table 3 indicate that with the grand mean value of (3.0) suggests that the level of information literacy of farmers' in accessing agricultural information is to an appreciable extent, high, thereby corroborates the study of Seneviratne (2014) carried out on information literacy of rural Sri Lanka, that modern society is said to be highly information dependent and almost all social activities nowadays are information, knowledge and learning oriented.

The finding on Table 4 suggests that farmers need capacity building in management to be effective in their jobs, this assertion confirms the study of Amani (2016) that individual capacity, empowerment and organizational change. Also included is learning initiatives to empower individuals and generate change at the organizational level. A better understanding of these mechanisms can help improve effectiveness of capacity building initiatives. Moreover, result implies that farmers need to be trained in the area of technology know-how to enable them do their jobs effectively. The findings agreed with the studies of Khiece (1999), Minjauw (2001), Minjauw, Muriuki,, Romney (2003) and Riise, Lundekvan, Mulder, Wu, Haugen (2004) that recently, there have been transfer of concepts and methods into integrated crop-livestock farming systems and small holder poultry-keeping have been explored in Vietnam. The findings have shown the need for capacity building in marketing, thus corroborating CRS (2007) study that essentially basic market skills and knowledge on managing farming as a business enables poor farmers to transition from semi-subsistence to commercial agriculture and enhance agro-enterprise development.

Conclusion

The study examined the demographic characteristics of farmers and their various sources of agricultural information based on their level of information literacy in accessing agricultural information coupled with the level of farmers' need for capacity building towards sustainability of national development.

The findings from the research revealed that agricultural development for national sustainability will depend on farmers ability to make use of information communication technology through the use of Internet as yardstick and tool for information agricultural sourcing, improving on their information literacy to an appreciable level. Apparently, farmers need to build their capacities in the areas of management for effective marketing of their

produce, technology know-how to enhance their jobs which would in turn sustain national development.

Recommendations

Based on the foregoing, the following recommendations were made:

1. Information and communication technology (ICT) plays important roles in agricultural development. Therefore, farmers who hardly use internet should develop their information literacy by acquiring necessary information literacy skills that will help them in sourcing for agricultural information.
2. Not minding the appreciative level of accessing agricultural information. The level of information literacy of farmers in accessing agricultural information should be high and sustainable so that farmers would be able to compete with their counterparts in advance countries.
3. Farmers' need for capacity building for development has gone beyond information communication technology alone, there is need for technology know-how, application of pesticides, land acquisition development, preservation, industrial relation and cottage small scale finance and funds-raising or credit facility enhancement programme.
4. Marketing of agricultural products of farmers is essential elements in getting across to their customers. Therefore, it is necessary for farmers to acquire basic marketing skills and knowledge on how to manage farms as a business to enable the farmers' transition from poor farmers to semi-subsistence to commercial agriculture and enhance agro-enterprise for national development.

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