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Dissemination of Information Resources on Indigenous Knowledge for Sustainable Agricultural Development in Benue State.

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ABSTRACT

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resources on indigenous knowledge for sustainable agricultural development in Benue State. Two research objectives with corresponding research questions were raised and one hypotheses were formulated and tested at 0.05 level of significance for the study. The population of the study comprises 123 professional and non-professional librarians in Joseph Sarwuan Tarka University, Makurdi and Akperan Orshi College of Agriculture, Yandev in Benue State. The research employed census sampling technique thereby sampling all the population since it was small and could be relatively handled by the researcher. The instrument employed for data collection was a self-structured questionnaire titled "Perceived Influence of Dissemination of Information Resources on Indigenous Knowledge Questionnaire" (PIDIRIK). Data for the study was collected with the help of research assistants who were staff of the libraries of the two institutions sampled. Out of 123 respondents from the sampled institutions, only 115 were available as at the time of administration of the instrument and responded to items on the instrument. Data collected were analyzed using frequency, percentages, mean and standard deviation to answer the research questions while the null hypotheses were tested using Chi-square. The findings of the study revealed that types of information resources and indigenous knowledge significantly influence sustainable agricultural development in Benue State. The study also revealed that methods of dissemination of information resources significantly influence sustainable agricultural development in Benue State. Based on the findings of the study, the researcher recommended that professional and non-professional librarians should incorporate strategies of indigenous knowledge in dissemination of information resources for sustainable agricultural development. the researcher also recommended that the use of agricultural shows, agricultural demonstrations, ICT, agricultural seminars and other methods of dissemination of information resources should be given to farmers periodically to ensure sustainable agricultural development in Benue State. Among others.

This study investigated the perceived influence of dissemination of information

Keywords: Perceived Influence, Dissemination, Information, Resources, Indigenous, Knowledge, Sustainable, Agricultural Development, Benue State.

Introduction

Background of the Study

Food seems to be the most critical of all the basic needs. A hungry man is an angry man goes a common saying. In most cultures, there are popular sayings or proverbs emphasizing the importance of food to human existence. Among the Tiv people of central Nigeria, there is a popular saying to the effect that no other matter can arise or be entertained in the presence of hunger. It is, therefore, not a surprise that the world food situation, which has reached a critical and alarming state, has led to the apprehension of global food crisis and made food security a global concern. It is estimated that over 900 million people around the world suffer from the pangs of hunger while even a larger number experience malnutrition, majority being in lower income developing countries (Food and Agriculture Organization, 2017). Strategic programmes and initiative have been adopted at different levels to tackle the challenges of food security and prevent imminent global food crisis. International organizations, particularly known as Food and Agricultural Organization (FAO) have championed some of these initiatives. In Africa, it is evident in the literature that, the African Union has put in place a plan to make Africa food secure by requiring countries in the continent “to allocate a substantial portion of their budget to agriculture, provide farming input subsidies, and make available affordable information and communications technology”. This is in apparent recognition of agriculture as the critical sector for sustainable development. Agriculture is the production of crops and rearing of animals for man use. It is evident in the literature that; agriculture sector employs the largest proportion of Nigeria’s workforce. The sector is crucial for general growth of the economy (providing inputs into the industrial sector) and poverty reduction especially among the rural poor for whom it provides employment, (Eyong2017). The author further affirms that, agriculture contributes to poverty reduction and is a source of livelihood and a provider of environmental services in many developing countries. According to Wikipedia (2019) agricultural sustainable development is the organizing principles for meeting human development goals while at the same time sustaining the ability of natural systems to provide the natural resources and ecosystem services upon which agriculture depend. The desired result is a state of society where living condition and resources use continue to meet human needs.

Sustainable of Agriculture and Indigenous Knowledge

Sustainable agriculture is [farming](#) in [sustainable](#) ways meeting society’s present food and textile needs, without compromising the ability for current or future generations to meet their needs (Agricultural Sustainability Institute, 2019). It can be based on an understanding of [ecosystem](#)

[services](#). There are many methods to increase the sustainability of agriculture. When developing agriculture within [sustainable food systems](#), it is important to develop flexible business process and farming practices. According to Crippa, Solazzo, Guizzardi, Monforti-Ferrario, Tubiello and Leip, (2021), agriculture has an enormous [environmental footprint](#), playing a significant role [in causing climate change, water scarcity, water pollution, land degradation, deforestation](#) and other processes and it is simultaneously causing environmental changes and being impacted by these changes. Sustainable agriculture according to Rockström, Williams, Daily, Noble, Matthews, Gordon, Wetter strand, DeClerck, and Shah (2016) consists of [environment friendly](#) methods of farming that allow the production of crops or livestock without damage to human or natural systems. It involves preventing adverse effects to soil, water, biodiversity, surrounding or downstream resources as well as to those working or living on the farm or in neighbouring areas. Elements of sustainable agriculture can include [permaculture, agroforestry, mixed farming, multiple cropping](#), and [crop rotation](#) (Ben, 2013)

The term "sustainable agriculture" according to Brown (2012), was defined in 1977 by the [USDA](#) as an integrated system of plant and animal production practices, having a site-specific application that will, over the long term satisfy human food and fiber needs, enhance environmental quality and the natural resources base upon which the agriculture economy depends, making the most efficient use of non-renewable resources and on-farm resources and integrate where appropriate, natural biological cycles and controls, sustain the economic viability of farm operations and enhance the quality of life for farmers and society as a whole.

Knowledge has been affirm as power, which brings development in every human endeavour that is useful for decision-making. Knowledge is the integration of new information into previously stored information to form a large and coherent view of a portion of reality. The experiences of knowledge for development initiatives in international cooperation underscores the complexities and difficulties associated with knowledge but these have contributed to the understanding of the nature of knowledge that has impact on development. It is clear that, knowledge is both a process and a product; it is dynamic and mostly available in the “heads” of individuals and embedded in a practice of livelihood. The creation of knowledge is complex; its sharing requires diverse tools for translation, conversion, filtering and two-way communication and interaction. Indigenous Knowledge is an unwritten body of knowledge. It is held in different brains, languages and skills, in as many groups, cultures and environment as are available today. According to

Williams and Muchena (2011), "it covers the whole range of human experience". Hence, as Indigenous Knowledge is closely related to survival and subsistence, it provides a basis for local-level decision making in agriculture. Indigenous Knowledge develops over centuries; therefore, it represents all the skills and innovations of people, and embodies the collective wisdom and resourcefulness of a community.

In Nigeria, it is encouraging to observe that, over the last two decades, there has been a dramatic increase in interest in the role that indigenous knowledge can play in truly participatory approaches for agricultural sustainable development. It may not be accidental that the growing interest in the potential contribution of indigenous knowledge to development is becoming manifest at a time when current development models have proven not too successful. Recent research has given valuable insights into how people use their own locally generated knowledge to change and improve in the society. The agricultural sector provides a prime example. Farmers adopt a wide range of indigenous agricultural practices based on generations of experience, informal experiments and intimate understanding of their environments. Mudege (2015) reports that, the application of indigenous agricultural farming (indigenous knowledge) has reflected in the indigenous soil preparation and planting materials, indigenous methods of controlling pests and diseases, indigenous methods of maintaining soil fertility, indigenous methods of controlling weeds and indigenous methods of harvesting and storage.

Farmers in the developing world have for long depended on Indigenous Knowledge for improved agricultural produce. The applicability of Indigenous Knowledge takes place during different farming seasons and periods. According to Nyota and Mapara (2018), such knowledge ranges from clearing the land, tilling, selecting seed varieties for planting, planting, harvesting and storage as well as identifying weather patterns. Generally, among the indigenous peoples, the agricultural sector needs Indigenous Knowledge and Indigenous Knowledge needs the agriculture sector. This is because developing the agricultural sector remains a critical factor towards the achievement of sustainable food production and, indeed, global food security in the developing world. Utilizing Indigenous knowledge gives it legitimacy and credibility in the eyes of both local people and outside scientists, increasing cultural pride and thus motivation to solve local problems with local ingenuity and resources. Local capacity building is a crucial aspect of sustainable development (Abioye, Zaid & Egberongbe, 2014).

Information Resources

Information resources in this study, refers to all the media for storing information on indigenous knowledge. Information resources on indigenous knowledge is grouped into two namely printed and non-printed. The printed information resources on indigenous knowledge include posters, brochures, newspapers, magazines and pamphlets amongst others. While the non-printed includes tape recorders, radio, television, computers cameras, video tapes, internet and CD-ROM to mention but a few. Dissemination of information resources on indigenous knowledge simply means encouraging access to the information resources on indigenous knowledge for planning and decision-making. The study by Obande and Abdulsalami (2020) investigated the availability, awareness and use of electronic resources by students in 'Federal University Lafia and Nasarawa State University Keffia. Mudasiru (2020) studied the factors influencing adoption of electronic information resources among postgraduate students in Nigerian universities.

Dissemination of Indigenous Knowledge

Dissemination makes it easy to share Indigenous Knowledge. Dissemination of Indigenous Knowledge facilitates fixation of information for broad scrutiny and ownership by the writer. A traditional knowledge may be lost forever, if it is not properly documented, analysed and disseminated. Knowledge that is gained but is unavailable to others is wasted. Madukwe (2016) posits that Indigenous Knowledge dissemination should begin from the grass-roots level, (with the originator or source of the information). This means that librarians should return to the respective indigenous groups and hand copies of their recordings to the people. Meanwhile, World Bank (2016) noted that various projects are in place to disseminate Indigenous Knowledge. Nevertheless, the form of Indigenous Knowledge dissemination is firmly dependent on the concept and context of such knowledge to be disseminated.

Dissemination of Information Resources

Dissemination of information resources on Indigenous Knowledge is essential for development and information purposes. Indigenous Knowledge can be repackaged through proper documentation of oral and other indigenous practices, which may be obtained from the custodians of such knowledge. To underscore the importance of disseminating Indigenous Knowledge, Atteh (2011) declared that its essential to propagate the use of indigenous traditional knowledge for human causes through certain activities such as seminars, workshops, debates, lectures, and exhibitions in which

such stories of indigenous traditional knowledge use need to be reflected. The assertion validates the fact that dissemination of Indigenous Knowledge is done after proper documentation, which can promote such cultural knowledge across border. Indigenous Knowledge does not flow on its own accord; it needs owners or originators with the vision motivation to create, adapt or exchange it. These can be done using different channels.

There are many channels of disseminating knowledge. These include information and communication technologies (ICTs), newsletters; posters; workshops; storytelling; films; and many more. Asah (2013) concurs with this statement by saying that books, newsletters, video, databases, and the Internet are commonly used formats for disseminating Indigenous Knowledge. Disseminating information resources on indigenous knowledge within and across communities can help enhance cross-cultural understanding and promote the cultural dimension of development. Chisenga (2012) stated that, conducting village level workshops and group discussion with farmers, publishing newsletters in local language for the exclusive communication of traditional farm technologies and travelling to interior regions were some of the effective means of disseminating information resources on Indigenous knowledge. The dissemination of information resources on indigenous knowledge is very central for sustainable agricultural development. Commenting on the importance of indigenous knowledge Altieri (2015) affirms that, indigenous knowledge facilitates agriculture, horticulture and forestry indigenous knowledge can determine favoured times and how to prepare, plant and harvest gardens and farms, ways to propagate plants, seed storage and processing and crop planting. The authors also suggest techniques of pest management and protection. Examples are, using burnt cow dungs and neem (dogonyaro) seeds for preserving legumes and the use of manure as fertilizer with long residual content.

It is evident in the literature that; indigenous agricultural practices are very crucial to the development of agriculture. Eyong (2017) supported this by saying that, there are many indigenous cultivation practices, which conserve soil and water and increase soil fertility for increased crop production in the area. The farmers depend on manual labour often provided by the extended family system or self-help groups on a rotational basis in operations ranging from clearing or slash and burn, hand hoeing, seedbed preparation, as well as weed control and harvesting. There is sufficient information on how the farm plots are prepared but there are many different tilling practices over the centuries that can be sustainable. Ridges (with or without imbedded organic residues) are widely used in the region to grow vegetables, maize, groundnuts, potatoes, soybeans, taro species, legumes and many others.

On plateaus, some farmers make flat ridges and on hilly areas, round-top ridge systems are used. Contoured ridges prevent soil erosion and retain some moisture that is good for plant growth (Kunnie, 2010). All these can be transmitted from generation to generations for sustainable agricultural development if information resources on indigenous knowledge are properly disseminated. Dissemination of indigenous knowledge can be done by libraries. The basic function of libraries is acquisition, organization, preservation, storage, retrieval and dissemination of information in whatever format they appear. Libraries have, however, shown a lot of inclination towards preservation of local culture in paper and digital format. They have also promoted exchange of information in many countries. According to the International Federation of Library Association (IFLA) cited by Katende and Kityo (2016) libraries could help in:

- Collecting, preserving and disseminating indigenous and local traditional knowledge
- Publicizing the value, contribution, and importance of indigenous knowledge to both non-indigenous and indigenous peoples;
- Raising awareness of the protection of indigenous knowledge against exploitation;
- Involving elders and communities in the production of IK and teaching children to understand and appreciate the traditional knowledge;
- Encouraging the recognition of principles of intellectual property to ensure the proper protection and use of indigenous knowledge and products derived from it.

Libraries can facilitate the dissemination of indigenous knowledge by creating an environment which permits face-to-face forums and network formation to discuss and debate on issues that might be useful to members of the communities. For example, libraries can organize talk shows involving traditional rulers, elderly people and professionals in various vocations from different areas ranging from soil identification and preparation methods, farming methods, pest and disease control, improving soil fertility, storage methods, seed preservation and many more. Discussing issues related to these areas in an open environment drives access to indigenous knowledge, which hitherto will be held in the heads of people in different indigenous communities. Information collected during these talks can be edited and made available in videos, CDs or DVD and many other formats for easy dissemination. Ahmed (2014) reports that, the potentials of dissemination of indigenous knowledge have been recognized by national agricultural institutes in Nigeria. The need to document and disseminate indigenous agricultural practices is, therefore, felt and appreciated, prompting most of the national agricultural institute libraries in Nigeria to embark on a project of documenting and disseminating indigenous knowledge on a varying scale and with a varying degree of success.

The project in some of these libraries was, however, haphazard and faced with enormous obstacles which have held it down and which have the potentials of completely derailing it, the most critical being poor funding.

Unfortunately, most of the indigenous knowledge is not documented. Kayombol (2010) observes that, indigenous knowledge is gradually disappearing in most African countries including Nigeria without any tangible efforts to recognize or manage it. Transfer of indigenous knowledge from generation to generation is mostly done through oral tradition or by demonstration. However, indigenous knowledge is not equally shared in the communities due to issues related to power relationships and cultural differences. This call for urgent intervention in the management of indigenous knowledge to salvage the situation surrounding it (World Bank, 2016). In agreement of this, Kumar (2018) attributes this to the fact that oral paths are being blocked and people are no longer staying in homogenous community blocks. The conviction here is that, indigenous knowledge seems not to be appropriately documented and disseminated and even the little that is in distribution is notably under looked in favour of scientific methods. Therefore, investigating the perceived influence of dissemination of information resources on indigenous knowledge will be important. It is on this background that; the researcher seeks to investigate the perceived influence of dissemination of information resources on indigenous knowledge in Benue state

Statement of the Problem

Indigenous Knowledge provides the basis for problem solving for local communities and especially for the indigenous people. Indigenous Knowledge offers great opportunities for improved agricultural production and sustainable food security. Many authors have recognized it as an important source of developmental information and have recommended its proper documentation and dissemination for sustainable agricultural development. Dissemination of information resource on indigenous knowledge is useful in livestock-keeping, crop management, farming methods and food processing and storage and preservation as well as soil and water management. It also enhances cross-cultural understanding and it promotes the cultural dimension of sustainable agricultural development. Indigenous Knowledge is cost effective since it is stored in people's memories and activities.

Despite the strategic role that Indigenous Knowledge plays in agricultural transformation of the society, literature and personal observation had revealed that, Indigenous knowledge is becoming less visible and insignificant in some communities because of the adoption of modern methods of farming. Perhaps a lot of

Indigenous Knowledge has remained largely not documented, which threatens its sustained dissemination and utilisation. The non-dissemination of information resources on Indigenous Knowledge may affect agricultural development. This is because majority of farmers are rural dwellers who depend wholly on indigenous practices for their farming business.

It is therefore, imperative to create awareness and bring critical issues relating to the perceived influence of dissemination of information resources on Indigenous Knowledge for sustainable agricultural development to the front burner so that, its potentials can be harnessed to engender sustainable agricultural production to combat imminent food crisis. So many researches might have been carried out on how agricultural development could be sustained but there is no much attention on the perceived influence of dissemination of information resources on indigenous knowledge, this call for the present study. In the light of this, the study seeks to investigate the perceived influence of dissemination of information resources Indigenous Knowledge for sustainable agricultural development in Benue state.

Research Questions

The study seeks to answer the following research questions

1. What are the types of information resources on indigenous knowledge disseminated for sustainable agricultural development in Benue State?
2. How do the types of information resources influence indigenous knowledge for sustainable agricultural development in Benue State?

Statement of Hypotheses

The following hypotheses were formulated to guide the study and were tested at 0.05 level of significance

1. The types of information resources on indigenous knowledge does not significantly influence

Methodology

Descriptive survey research design was adopted for the purpose of this research, The population of the study was 100 farmers, 43 professional and 80 non-professional librarians from Federal University of Agriculture Makurdi and Akperan Orshi College of Agriculture Yandev totaling 123 librarians (Library Department Office, University of Agriculture Makurdi and Akperan Orshi College of Agriculture Yandev, 2019), Two sampling techniques were used (random and census). Random sampling

techniques was used to sample 100 farmers. Two set of instrument were used for data collection (one for farmers and the other for librarians'). The researcher administered the questionnaire to 115 respondents out 123. The data collected was analysed using descriptive statistics. Research question one, research question two, were answered using Mean and Standard Deviation. Any percentage that is above 50% for research question one, three and five was regarded as yes while less than 50% was regarded as no. Also, a Mean of 2.50 and above for research question two, Chi-square was used to test the research hypotheses at 0.05 significant level. Chi-square was choosing because the researcher was interested in finding the relationship between the observed and expected variables. The hypothesis was rejected when the p-value was less than the Alpha value ($p < 0.05$) and was not rejected when the p-value was equal to or more than Alpha value ($p \geq 0.05$).

RESULT AND DISCUSSION

Presentation of Results

Research Question One: What are the types of information resources on indigenous knowledge that can be disseminated for sustainable agricultural development in Benue State?

Table 1: Frequency and percentage counts on the types of information resources on indigenous knowledge for sustainable agricultural development in Benue State

S/N	Types of Information Resources on Indigenous Knowledge	Frequency		Percentage			Decision
		No	Yes	No	Yes	NO	
1	Posters	115	103	12	89.6	10.4	YES
2	Brochures	115	78	37	67.8	32.2	YES
3	Newspapers	115	89	26	77.4	22.6	YES
4	Newsletters	115	92	23	80	20	YES
5	Magazines	115	5	110	4.3	95.7	NO
6	Pamphlets	115	10	105	8.7	91.3	NO
7	CD ROM	115	8	107	7	93.0	NO
8	Tape records	115	110	5	95.7	4.3	YES
9	Radio	115	110	5	95.7	4.3	YES
10	Television	115	102	13	88.7	11.3	YES
11	Videos	115	107	8	93	7.0	YES
12	(ICT)	115	5	110	4.3	95.7	NO

Source: Field work: 2020

Table 1 shows that, item 1,2,3,4,8,9,10 and 11 have percentage scores above the decision point of 50% which signifies yes while item 5,6,7 and 12 have percentage scores less than the decision point of 50% signifying no. This shows that out of the 12 types of information resources that were listed, only 8 were used in disseminating information on indigenous knowledge for sustainable agricultural development.

Research question two: How do the types of information resources on indigenous knowledge influence sustainable agricultural development in Benue state?

Table 2: Mean scores and standard deviation analysis on how the types of information resources on indigenous knowledge for sustainable agricultural development in Benue State

S/N	ITEMS	NO	\bar{x}	SD	Decision
13	Posters illustrations on farming best practices influence indigenous knowledge on sustainable agricultural development	115	2.97	0.16	Accepted
14	Reading of farm brochures influences indigenous knowledge on agricultural development.	115	3.09	0.16	Accepted
15	Knowledge gained from reading of Newspapers helps in sustaining the indigenous knowledge on agricultural development	115	3.0	0.16	Accepted
16	Dissemination of information by agricultural extension workers through Newsletters sustain indigenous knowledge on agricultural development	115	2.96	0.16	Accepted
17	Agricultural magazines sustain indigenous knowledge on agricultural development	115	2.49	0.15	Rejected
18	Periodic dissemination of information through pamphlets influence indigenous knowledge on agricultural development	115	2.44	0.15	Rejected
19	CD ROM as a source of information dissemination on agricultural development sustain indigenous knowledge on agricultural development	115	2.49	0.15	Rejected
20	Tape records as a source of information dissemination on agricultural development sustain indigenous knowledge on agricultural development	115	3.04	0.16	Accepted
21	Dissemination of agricultural talk shows on radio influences indigenous knowledge on sustainable agricultural development	115	3.14	0.17	Accepted
22	Agricultural programs aired on Television networks influences indigenous knowledge on sustainable agricultural development	115	3.37	0.17	Accepted
23	Agricultural videos influences indigenous knowledge on sustainable agricultural development	115	3.15	0.16	accepted
24	Information and Communication Technology (ICT) as a source of information dissemination on agricultural development sustain indigenous knowledge on agricultural development	115	2.68	0.15	Accepted
Cluster Mean Score and Standard Deviation			2.90	0.16	Accepted

Key: N= Number, \bar{x} = Mean, SD= Standard Deviation

Table 2 shows that, item13,14,15,16,20,21,22,23 and 24 have mean scores above the decision point of 2.50 while item 17,18 and 19 have mean scores of less than the decision point of 2.50. The cluster means scores and standard deviation was 2.90 and 0.16. This shows that types of information resources enhance indigenous knowledge for sustainable agricultural development in Benue State.

Research hypothesis one: The types of information resources on indigenous knowledge does not significantly influence sustainable agricultural development in Benue State

Table 3: Chi-square test of types of information resources on indigenous knowledge for sustainable agricultural development in Benue State

	Df	χ^2	sig	Alpha Level	Remark
Pearson Chi-square	33	115.513	.000	0.05	S,R
Number of valid cases	115				

$P(.000) < 0.05$. Df= Degree of freedom, χ^2 = Chi-square calculated, Sig p-value; $P < .05$, S= significant, R= rejected.

Summary of Major Findings

The following findings emanated from the study based on the research questions answered and hypotheses tested.

1. Types of information resources like posters, brochures, newspapers and radio among others significantly influence sustainable agricultural development in Benue State.
2. Types of indigenous knowledge like pest control, soil identification, disease management and land preparation among others significantly influence sustainable agricultural development in Benue State.

Discussion of Findings

The study investigated the perceived influence of dissemination of information resources on indigenous knowledge for sustainable agricultural development in Benue State. Based on the findings of the study, discussions were made on each of the research question the study sought to answer and hypotheses tested.

On types of information resources for sustainable agricultural development, the study found that types of information resources significantly influence sustainable agricultural development. Items on Table 1 and 2 such as posters, brochures, newspapers, newsletters, tape records, radio programs, television programs and videos were accepted as their percentages and mean scores were above the benchmark of 50% and 2.50. The finding was in line with the postulation of Dudu (2015) who in his study on the types of information resources on indigenous knowledge and the problems faced by the library in managing information resources on indigenous knowledge found that, records, tapes, books, pamphlets, posters, charts, cinema, newspapers and magazines influences indigenous knowledge for sustainable agricultural development. The finding of this study also agrees with the findings of Abioye, Zaid and Egberongbe (2011) who posits that, information resources on indigenous knowledge are disseminated through leaflets and bulletin, agricultural extension workers, radio and television as methods of indigenous knowledge dissemination. Based on the findings of this study, it can be inferred that, most farmers do not utilize some of the types of information resources such as ICT, CD ROM, pamphlet and magazine for sustainable agricultural development.

On the type of indigenous knowledge for sustainable agricultural development, the study found that, types of indigenous knowledge significantly influence sustainable agricultural development.

Summary

This study investigated perceived influence of dissemination of information resources on indigenous knowledge for sustainable agricultural development in Benue State. Two specific objectives with correspondent research questions and one hypotheses were tested for the study at .05 level of significance. The content scope was limited to types of information resources, types of indigenous knowledge and methods of dissemination of information resources on indigenous knowledge for sustainable agricultural development.

Conclusion

Based on the findings of this study, the study established that information resources have significant influence on indigenous knowledge for sustainable agricultural development in Benue State. The study revealed that, if information resources such as posters, reading of farm brochures, agricultural magazines, agricultural talk shows, agricultural programs aired on televisions and radio stations as well as agricultural videos are disseminated to farmers, it will enhance their indigenous knowledge for sustainable agricultural development.

Recommendations

Based on the findings of this study, the following recommendations were made:

- i. Since knowledge gained from posters illustrating farming best practices, farm brochures, tape records agricultural talk shows aired on radio and television stations, professional and non-professional Liberians and agricultural extension workers should ensure that these information resources are available to farmers at all times.
- ii. Professional and non-professional librarians should incorporate strategies of indigenous knowledge in dissemination of information resources for sustainable agricultural development.

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