

MANAGING INDIGENOUS KNOWLEDGE IN GHANA: METHODS AND TECHNIQUES

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Abstract

Knowledge Management (KM) is indispensable in the 21st century due to the considered value of knowledge. Knowledge is regarded as a factor of production, a means of gaining competitive advantage and a valuable asset that needs to be managed. The oldest human knowledge is the Indigenous Knowledge (IK). Every society has IK. It is from generation to generation. IK formed the basis for human survival and for the establishment of world civilizations. In the contemporary society, IK is still relevant for sustainable development; however, little attention is given to its management. Studies have explored how IK can be managed to ensure its continuity in various communities. However, how IK is managed in Ghana has not been investigated. This paper investigates the methods and techniques used to manage IK in Volta Region of Ghana. An interview was conducted in two communities to collect data for the study. The communities are noted for Kente (local fabric) weaving and for beekeeping as their traditional occupations. Residents of these communities were purposively and randomly selected to participate in the study. The data was analysed using SECI KM model as a theoretical basis. The study found that there exist systems for managing IK in the Volta Region in Ghana. The main methods used to manage IK are informal apprenticeship and socialisation and the techniques used are observation, practice, instructions, questioning and answering, meetings, discussions, and consultations.

Keywords: *Managing, indigenous knowledge, methods, techniques, Ghana*

Introduction

Knowledge management (KM) is indispensable in the 21st century due to the considered value of knowledge. In the post-industrial society, knowledge is regarded as a factor of production, a means of gaining competitive advantage and a valuable asset that needs to be managed. The oldest human knowledge is the indigenous knowledge (IK). Every society has IK.

IK can be described as knowledge that is developed, maintained and used by a particular community over a period of time. It is unique to a particular culture and society and normally passed on from generation to generation, through word of mouth (Sarkhel, 2016). IK is mostly tacit, expressed in people's beliefs, daily activities, events and the environment in which the people live. IK includes cultural heritage such as traditional stories, songs, dances and ceremonies and knowledge of traditional medicines, foods, farm practices, architecture, handicrafts, artwork and folk music (Hunter, 2005). Arguably, IK formed the basis for human survival and for the establishment of world civilizations.

In the contemporary society, IK is still relevant for achieving better societies and sustainable developments. Philip (2015) argues that since the 1980s, influential, international institutions widely acknowledged the importance of indigenous knowledge. The world still relies on IK for food and medicine (Sarkhel, 2016); 80% of the world's population still relies on IK for medicine and 50% for food supply Nyumba (2006). These statistics shows that IK remains indispensable in human society. Unfortunately, there are threats to its survival in most communities (Sukula, 2006). It is diminishing at a faster rate and needs to be rescued. It needs to be managed.

Lwoga and Ngulube (2008) argue further that little IK has been recorded for preservation hence access to valuable database in developing countries is limited. Lwoga and Ngulube (2010) also contend that there is the need to continuously recognise, identify, validate, preserve and disseminate indigenous skills and practices to improve agricultural activities. To address this situation, scholars are exploring how IK can be preserved and protected to ensure its continual existence through its management. Lwoga, Ngulube and Stilwell (2010) find traditional KM models appropriate for managing IK and integrating it with different knowledge systems and recommend for KM approaches to be adopted in managing IK. Njiraine and Le Roux (2011) assert that despite the tacit nature of IK, traditional KM models can be applied in managing it. These findings suggest that traditional KM theories can be appropriately applied in managing IK. However, Lwoga (2011) suggests that in managing IK, the western-based KM models should be applied with a caution in the context of the developing world. Probably, this could be due to cultural diversity and developmental disparity.

Sarkhel (2016) and Ngulube (2002) outline strategies that library or information professional should adopt in order to manage IK. The strategies include: preparing inventories and registers of indigenous knowledge systems, incorporating IK into collection development policies, developing standardized tools for indexing, cataloguing of IK and making IK accessible to communities and compiling bibliographies of IK resources. Muswazi (2001) proposes

developing a holistic Indigenous Knowledge Management (IKM) system that will pull together the strengths of LIS, ICT and knowledge experts in a continual basis in the codification, collecting, organising, preserving and sharing of IK. This proposal is laudable in that, most IK is still in tacit form, distributed in many heads, so to manage it effectively a coordinated effort is necessary. IK is a shared 'property' so its management should also be a shared responsibility. Therefore, Padmasiri (2017) recommends to national governments to intervene in the management of IK by formulating and implementing appropriate policies and strategies to manage it. These studies are efforts made, in various countries to find out how IK is managed, however, little research is conducted in Ghana on how IK is managed.

Problem Statement

Many rural communities in Ghana still depend on IK systems for their livelihood. IK systems still provide knowledge for learning trade such as weaving local fabrics; better farming practices, herbal medicine and general well being of the people. Despite the importance of IK to Ghanaian rural communities, efforts have not been made to find out how such knowledge is being protected. There is a need to manage the IK to ensure its continuity or availability for future generations. The purpose of this paper is to investigate IK management practices in Volta Region in Ghana.

Objectives

1. To explore how IK is managed in the Volta region of Ghana.
2. To investigate the methods used to manage IK in Volta region.
3. To investigate the techniques used to manage IK in Volta region in Ghana.

Research questions

1. To what extend is IK managed in the Volta Region in Ghana?
2. What methods are used to manage IK in the Volta region?
3. What are the techniques used to manage IK in the Volta region?

Justification

IK is part and parcel of the Ghanaian community. It remains critical to the sustainable development of the country. It is also important for maintaining, protecting and preserving the Ghanaian cultural heritage. So, protecting Ghanaian IK and preserving it in the right form are crucial and the best way to do so in the twenty-first century is through KM. Therefore, any study that is meant to find out how Ghanaian IK is or could be managed is justifiable.

Knowledge gained from such studies could equally be useful in other developing countries, especially in Africa.

The rest of the paper is presented in the following order; the methodology used to collect the data is discussed, followed by discussion, conclusion, recommendation and picture evidence of researchers' interaction with some participants on the field.

Methodology

A case study approach was employed to study two communities: Adaklu and Kpetoe. Adaklu and Kpetoe communities are traditionally noted for knowledge of beekeeping and weaving kente respectively. Both communities are found in the Volta Region of Ghana. The communities were studied based on the fact that they are noted for possessing such IK. The communities were studied together in order to compare IKM practices of different IK in different communities.

In all 30 people (15 from either community) participated in the study. Participants from Adaklu community were purposively selected using experience criterion. The researchers were linked up with a sub chief of the community. With the help of the chief, the researchers identified and listed 15 most experienced beekeepers in the community. The researchers discussed with the participants the aim of the project and requested for their participation in the project.

On the part of Kpetoe, the participants were randomly selected using a membership list of Kpetoe Kente weavers' Association. The list (of 25 members) was obtained from the association with the help of the president of the association. Individual members of the 15 selected were contacted on phone to explain to them the aim of the project and to request for them to participate in the study. Fortunately, they all agreed to participate. An interview was then scheduled with them individually.

A face-to-face interview was conducted in both communities using an interview guide. The guide was designed based on the Knowledge Spiral Model (Nonaka & Takeuchi, 1995). The model is a conceptualization of KM in organisations. The variables explored were Knowledge acquisition, knowledge sharing and knowledge retention. The interviews were analysed using the model as a basis. Apart from the bio data, all answers regarding IKM were coded under the three variables. However, the researchers introduced a forth variable, sustainability of IK industries. Data related to the forth variable were also transcribed and coded under IK sustainability.

Results

This section is the presentation and analysis of the data collected for the study. Apart from the bio information, the data is coded under four themes: methods and techniques of acquiring IK, methods and techniques of sharing IK, methods and techniques of retaining IK and sustainability of IK industries. The first three themes or variables were selected based on the knowledge spiral model (Nonaka & Takeuchi, 1995) and the last theme was based on the variable introduced by the authors.

Bio Data

All the participants were natives of the two communities (Adaklu and Kpetoe) studied, with an average age of 51. They all have a basic education except three. However, the highest educational level reached among them was middle school (standard seven) and the lowest level was primary four. On the average, participants used two years to acquire the knowledge of beekeeping and kente (a local fabric) weaving and have been practicing for many years.

Methods of and Techniques of Acquiring IK

Participants were interviewed regarding how they acquired the knowledge of beekeeping and kente weaving. It was established from their responses that all the participants acquired the knowledge from their parents or relatives. The knowledge acquisition process involves attaching a child to an adult (mostly a parent) at infancy. The child learns by observing what the parent or relative does. The master gives instructions and the child asks questions where necessary. Therefore, the main method of acquiring IK in the communities studied is informal apprenticeship as shown from narratives below.

“My father was a beekeeper. I cannot remember at what age, but I started involving in what my father was doing when I was young. As I was with him he would be telling me do this, do that, bring this to me and so on. Unaware, I was learning what he was doing. But I began asking questions after I became aware of what I was doing”.

Another participant also stated that:

“My father taught me even though, I had no interest. I learned by observing what he was doing and at some point he started teaching me how to construct the hive. Within five years I could make my own beehive. I could also harvest but I was not strong enough to carry the beehive or harvested honey from one place to another”.

Participants from kente weavers also have similar responses:

“I am 12 years old. My grandfather asked my cousin to teach me how to weave, so I started the work two years ago. I come here Monday to Saturday during holidays and only Saturdays when we are in school. You can see that I am now weaving, but not as fast as my master”.

“My father was a weaver. I started learning from him when I was young. It took me eight years to master. But I left the industry to seek employment in a mission hospital after the death of my father. However, it was difficult to earn enough money there, because it was a voluntary work. It became difficult to live with the meagre pay, so I had to return to my village to take up kente weaving as a full time job”.

The narratives also show that the main techniques used in acquiring IK in the communities studied are observing, imitating, instructing, practicing, questioning and answering.

Methods and Techniques of Sharing IK

Participants were interviewed to understand how the masters share their knowledge and experiences with apprentices, and among themselves. The findings reveal that IK is exchanged between and among apprentices and masters through interactions, meetings, consultation and training. So the main method of sharing IK in the communities studied is socialisation, and the main techniques are meetings, consultation and training. A participant mentioned that

“We train our boys through the interactions we have with them. We also hold regular meetings to discuss problems and share new ideas. We consult among ourselves anytime, anywhere. I can just call a colleague to find out how to deal with new issues that I am confronted with”.

Another participant stated that:

“During meetings members discuss new techniques, new designs, and new problems encountered. Besides meetings, members individually consult colleagues when they encounter problems. The consultation is done through telephone calls or face to face contact. In meetings we share new experiences”.

Methods and Techniques of Retaining or Storing IK

The participants were interviewed to find out how they retain the knowledge gained from their parents and colleagues. The researchers wanted to know whether they document their experiences. Unfortunately, their knowledge remains tacit, stored in their heads. So, the main method of retaining or storing IK in the communities is memorization. The participants blamed their inability to document what they know on their low level of education. One participant lamented:

“You know we are not educated like you are, I cannot write. It would have been good if we have been writing down the experiences, but I have never thought of it. Maybe you people can help us”.

Sustainability of IK Industries

All the participants were optimistic that IK industries are sustainable. The reason for the optimism is that IK represents a tradition that must be continued.

Another reason is that the communities are identified with the various IK and therefore, allowing it to die means losing an identity. Again, indigenous industries provide income for most of the local people so people will always engage in the industries for their livelihood. However, the kente weavers felt they were not making enough income from the industry. They blamed the inadequate income on their inability to raise initial capital themselves. They depend so much on customers to finance their businesses and that weakens their bargaining power. The kente weavers had no doubt that the industry will continue to exist, but for it to be vibrant, they needed financial support to raise their own initial capitals.

“Of course there is a future for IK industries. Communities are identified with various kinds IKs so for the sake of communal identity, people will not allow the industries to collapse. We earn income from the industry; it provides informal employment for our youth, so we are optimistic that IK industries will exist forever. However, for the industries to be vibrant there is the need for government and other stakeholders to support them”.

Discussion

The paper investigates IKM practices in the Volta Region of Ghana. The paper finds that there are informal systems for managing IK in the region, for that matter in Ghana. Informal apprenticeship is found to be the main method of acquiring IK in the communities studied. Learners are attached to their parents or relatives who possess the required knowledge, for a period of time to learn a trade, an occupation or a profession. This method of acquiring IK is less costly, mostly because the apprentices are children or relatives of their masters. This method has no formal contractual agreement and can last for unspecified period. This implies that IK in the communities studied can be acquired without much constraints through informal apprenticeship. However, Alhassan (2012) finds apprenticeship unpopular in the acquisition of IK. The author finds traditional, instructional methods to be the main method of acquiring IK in his/her study. This means that different methods are used in different communities or countries to acquired IK. However, a combination of these methods could be more effective.

Techniques used to acquire IK in the communities studied are observations, imitations, practicing, instructions, questioning and answering. Apprentices would observe what their masters do and try to imitate the actions. They continue practicing till they get it right. But where they are not clear of certain actions of their masters or why certain things are done in certain ways, they ask questions for clarifications. The master also issue instructions as to how to perform certain actions. This means that the technique used to acquire IK in the communities studied are hands-on-based, so knowledge acquired through these

techniques would be difficult to forget. In a different study, observation and imitation of older relatives were also found to be means of acquiring IK (Alhassan 2012).

Socialisation is found to be the main method of sharing IK in the two communities' studies. The apprentices are attached to their parents or relatives, so IK is shared between them through interactions. The finding is similar to what happens in Tanzania. In Tanzania, farmers use socialisation approach to share knowledge on traditional vegetables production, consumption and preservation (Chipungahelo, 2015). This finding is understandable because most IK, especially in the developing world, remain tacit and socialisation is an effective way of converting tacit knowledge to another tacit knowledge. However, knowledge shared through socialisation could be prone to distortion, forgetfulness and misrepresentation.

Findings also show that general interactions between masters and apprentices, discussions among peers and informal consultations were the main techniques of sharing IK in the Adaklu and Kpetoe communities.

It also found that IK in the communities studied remains tacit, so it is stored or retained in minds of people who possess it. This means that IK in the communities can easily be lost as a result of death or migration of the most knowledgeable people. Therefore codification and documentation of IK in the communities are necessary.

Conclusion

This paper investigates IK management practices in two Ghanaian communities to find whether IK is managed in those communities and the methods used if it is. The results reveal that there are systems of passing on IK from generations to generations in those communities and the main methods of acquiring and sharing IK are apprenticeships and socialisation respectively. The main techniques used for acquiring IK are: observation, imitation, practicing, questioning and answering. Also, interactions, discussions, meetings and consultation are techniques used for sharing knowledge. However, IK of the communities studied still remained stored in the mind of the people through memorization. With these findings, the authors conclude that IK is managed in Ghana. However, the practices are not documented.

Recommendation

This study is limited to only two communities, so the authors recommend that similar studies in the future should include many communities. Most IK and IK

systems in Ghana, perhaps in most of the developing countries, remain tacit, so future studies should consider mechanisms of codifying and documenting IK and IK systems. Finally, IK is a shared property of a particular community, so its protection or preservation should be a concern for all stakeholders in the community. Government and NGOs and agencies should do well to support the IK industries to ensure a continuity of the knowledge they hold. Below are sample pictures of participant's interaction with researchers

Figure 1 depicts a local beehive with honey producing bees



Figure 2 depict honey ready for harvesting



Figure 3 depicts the researchers interacting with local bee farmers



Figure 4 shows some kente weavers in action



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