

# Preserving Indigenous Knowledge through LIS

Narsima Murty N

Research Scholar, Singhania, University, Rajasthan, India

**Abstract:** This paper discusses the characteristics and significance of indigenous knowledge; reviews the process of capturing and preserving IK; analyses the existing information management literature on IK; examines the role of information management in IK in light of reported experience, especially in Africa and Australia; proposes that information management discipline review its curricula to accommodate areas needed, and work for the development of tools and techniques for IK management

**Key words:** Indigenous knowledge; LIS, Capturing; Preservation..

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## INTRODUCTION

The expressions 'traditional,' 'local' and 'indigenous' knowledge are used in the literature inter-changeably. However, the use of 'indigenous knowledge' (IK) seems to have become more popular than others. IK is also being used erroneously for some categories of information produced indigenously. Development of databases of locally produced literature, creation of institutional repositories, and such other activities focusing on the management of certain categories of national information output as reported by Sukula (2006), TJiek (2006), ~~and some other writers should not~~ come within the purview of IK. Indigenous knowledge has been defined as "the local knowledge – knowledge that is unique to a given culture or society. IK contrasts with the international knowledge system generated by universities, research institutions and private firms. It is the basis for local-level decision-making in agriculture, health care, food preparation, education, natural-resource management, and a host of other activities in rural communities" (Warren, 1991, as cited in World Bank, 1998). It has also been described by Flavier et al (1995) as "the information base for a society, which facilitates communication and decision-making. Indigenous information systems are dynamic, and are continually influenced by internal creativity and experimentation as well as by contact with external systems" (p. 479).

### Special Features of Indigenous Knowledge

Several authors have identified some special features of IK. These have been summarized by Mearns, Du Toit and Mukuka (2006) as follows:

1. IK is local, holistic, and integrative because it is rooted in a particular community and its experiences are situated within broader cultural traditions of the people living in that place.

2. IK is essentially functional and is geared to practical response and performance.
3. IK is experiential rather than theoretical and is reinforced through continuous experience, trial and error.
4. IK is learned through repetition which aids in its retention and reinforcement.
5. IK is constantly changing by way of being produced and reproduced, discovered and lost.
6. IK is characteristically shared to a greater degree than other forms of knowledge, although its distribution is socially differentiated, based on gender and age.
7. The distribution of IK is always fragmented. It does not exist in its totality either in one place or one individual.
8. IK is tacit and can not easily be codified.
9. IK is transmitted orally, or through imitation and demonstration and the process of codification may lead to the loss of some of its properties.

### Importance of Indigenous Knowledge

Agricultural or desert-based societies slowly created communities that were mostly self-contained and based on self-help. Their approach to problem-solving was through cumulated individual or communal experience and knowledge derived from trial and error. This aggregated know-how took the shape of crudely validated knowledge which improved and increased in time but remained mostly unrecorded. Modern societies create and use complex and specialized knowledge and are dependent on the continuous efforts of research scholars and the services of specialists. However, large pockets of agricultural or desert-based communities have concurrently existed with the urban and industrial societies, sometimes located not far from them.

Agricultural or desert-based communities, mostly in developing countries, even in the present information age, have remained

practically cut off from access to the specialized knowledge and the services of specialists. Thus they have been, out of mere necessity and for the sake of their survival, depending on and making use of their traditional unrecorded knowledge. It has been estimated that about 80 percent of the world's population still relies on IK for either medicine or food (Nakata, 2002). Therefore, in this information age, preservation of indigenous knowledge and culture has become important because of its compatibility with the preservation of local environment and sustained development of concerned communities. In light of the global spread of recorded information dominated and facilitated by information and communication technologies IK is being seriously threatened by loss and well-conceived, coordinated, and continuous efforts must be made to save it.

IK is now being considered very important for the socio-economic development processes. The current world-wide interest in IK is overwhelmingly driven by research into sustainable development practices in developing countries. The scientific community is also worried about the loss of bio-diversity of species and ecosystems, and the future implications of that for the whole planet (Sen, 2005). During 2004, IFLA issued a 'Draft Statement on Indigenous Knowledge' acknowledging the disruption of IK throughout history, the need for its preservation and transmission to future generations, and its protection from further erosion (IFLA, 2004). Among other things, IFLA "recommends that libraries and archives work in cooperation with Indigenous communities to:

1. Devise and implement programs to collect, preserve and disseminate resources on Indigenous knowledge traditions.
2. Make available and promote information resources which support research and learning about Indigenous knowledge systems. (p. 177)

#### **Capturing and Preserving Indigenous Knowledge**

In addition to research, attention has now been focused on preserving IK. It is being feared that a lot of it is being lost due to rapid urbanization and continuous attrition in the older population. Modern science has been gaining tremendously from IK. Its preservation received a boost during the 1970s through the activities of WHO and FAO in the area of health and agriculture. Beginning with the UN Conference on Environment and Development held in Rio de Janeiro in June 1992 which emphasized the recording of IK and the IDRC international conference on 'Indigenous Knowledge and Sustainable Development' held in Silang, Philippines, in September 1992, many conferences and workshops have been held which have focused on the significance of IK in local development (World Bank, 1998) and laid stress on its recording and preservation. A lot of work is now being done to identify, record, and preserve IK.

As a result of these efforts, a good amount of research and

practical work has been conducted in several related areas (Anwar, 2005; Anwar, 2006). According to Pidatala (2001), a group of Eritreans launched a project in 1982 "to identify and understand the IK of the Eritrean peoples in a socio-economic context" (p. 1). IK is predominantly tacit and embedded in practices and experiences and exchanged within the community through oral communication and demonstration. Recording and disseminating it across communities is not easy. The process of exchanging IK involves the following six steps (World Bank, 1998, pp. 8-10):

1. Recognition and identification which may not be easy in certain situations and might involve social and technical analyses;
2. Validation in terms of its relevance, reliability, functionality, effectiveness and transferability;
3. Recording and documenting in view of the intended use of information using audio-visual technology, taped narration, drawings, or other forms of codifiable information;
4. Storage which will involve categorization, indexing, relating it to other information, making it accessible and conserving, preserving and maintaining it in the form of retrievable repositories for later use;
5. Transferring means making it available to the potential users for testing in the new environment; and
6. Dissemination to the wider community through appropriate channels of communication.

The exchange of IK is the ideal outcome of a successful transfer. What role has the Information Management (IM) profession played so far in the capturing, preservation, organization, and use of IK? Information Management in this paper has been used instead of Library and Information Science (Anwar, 2009).

#### **Current Literature on Indigenous Knowledge**

There is a good amount of literature on IK in several 'development' related disciplines, e.g., agriculture, economics, sociology, education, health sciences, etc. and it has been growing fast. Ocholla and Onyancha (2005) identified and presented bibliometric analysis of 1,808 documents dealing with IK published during the period 1990-2004 retrieved from eight databases. This study does not cover any IM databases. The authors list 16 subject categories covered by this literature including 'Information Science (Knowledge management, Access to information)', but do not give the number of citations for each subject. While recommending the creation of IK databases and integration of IK within knowledge management, they consider this area very weak.

What is the status of IK literature in the IM discipline? Three related databases, Library and Information Science Abstracts, Library Literature, and Library, Information Science and Technology Abstracts should reveal the quantity of literature contributed by IM. A search of these three databases resulted in

90 unique citations produced from 1990 to 2007, the last year not fully covered. Six of these citations are for book reviews while four deal with locally produced literature or unpublished research, e.g. Sukula (2006) and TJiek (2006) which is 'indigenous information' rather than IK. Thus we are left with 80 publications some of which are authored by writers of other disciplines, e.g., law. The rate of production comes to an annual average of 4.4 publications as compared to 120.5 in other disciplines reported by Ocholla and Onyancha (2005). These 80 publications include some publications of one or two pages each which appear to be news reports. Therefore, it can safely be said that this contribution is very limited as far as the quantity is concerned.

### Concluding Remarks

The Information Management profession, through its long experience in preserving and organizing human knowledge and serving as an effective mediator between the information and its user, is in a unique position to become an active partner in the whole process of IK management from identification to its use. However, it must be emphasized that IK resources require differential treatment in contrast with the normal information resources. The profession will have to develop new tools and techniques in order to meet the requirements of IK management. In addition, it will have to, through its organized bodies and educational establishments, become much more active in concert with agencies involved in the preservation and use of IK in sustainable development.

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