IJCRT.ORG

ISSN: 2320-2882



INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

Documentation And Dissemination Of Indigeneous Knowledge: Some Aspects To Be Considered

Dr. Maya Moyee Narzary Librarian, Upendra Nath Brahma College, Kajalgaon, India

Abstract: Acquiring knowledge is a phenomenon, where the owner of it gains through different mechanisms-through experience, external factors, internal factors, formal, informal, etc. and it may be tacit or implicit or explicit. Some knowledge is such that it is confined to some special group/clans or very much intervened/mingled with lifestyle or functional life/culture of the community. And such knowledge is mostly undocumented which hinges around the community and pass on generations to generations orally or through practice, legends, myths, taboos, poetry, etc. Such a treasure of knowledge is known as the indigenous knowledge or traditional knowledge. The beauty and pride of such knowledge is incomparable. Some communities are well known for their indigenous knowledge they retains. In the contemporary world, if modern technology and indigenous knowledge are simultaneously capitalized then some of the unaddressed problems related to every realm of life may be mitigated in more effective and efficient manner.

Indigenous knowledge are very rich in nature but it is vanishing from its existence because these kind of knowledge is usually not documented, possessors are not willing to share, and not practiced. So, through this paper author attempts to highlight the issues and challenges confronted in the process of its documentation and dissemination of the same to reap full advantage.

Keywords: Local knowledge, indigenous knowledge, documentation, dissemination, management model, AYUSH

1. INTRODUCTION

According to Oxford Learner's Dictionaries Indigenous peoples are referred to those "(people and their culture) coming from a particular place and having lived there for a long time before other people came there; relating to, belonging to or developed by these people". Peoples sustain natural way of life and have the tendency to tackle every problem in their own way. In other words, they have possessed and own treasure of rare knowledge. But, it is now a concern worldwide as it is vulnerable to extinction due to socioeconomic fluctuation, prevailing inclinations and not practicing the same for one or the other reasons and conserving the same is now gaining momentum. In 1994, 9 August was adopted as the "International Day of the World's Indigenous Peoples".

UNESCO (United Nations Educational, Scientific and Cultural Organization) refers local and indigenous knowledge as "the understandings, skills and philosophies developed by societies with long histories of interaction with their natural surroundings. For rural and indigenous peoples, local knowledge informs decision-making about fundamental aspects of day-to-day life."(https://en.unesco.org/links#:~:).It clearly acknowledges that indigenous knowledge is the base of life indigenous people which is very much woven in every attributes of survival and applies it consciously or unconsciously. Moreover, it is evident in the form of beliefs, practice, foods, agricultural methods, treatment of ailments, language, etc which makes them unique and provides them a way of identity.

2. REVIEW OF LITERATURE

To proceed the study related to indigenous knowledge systematically various primary and secondary sources of information are scanned and surveyed. Hangshing, Jangkhohao(https://eprajournals.com/)highlights the glory of indigenous knowledge and its role in the global arena. The author also ponders on the issues as perceived relate to copyright, authentication and probable issues. (https://eprints.gla.ac.uk/1094/1/JBriggs_eprint1094.pdf)appreciates the indigenous knowledge and suggested difficulties and tensionsrelated the said knowledge.Javed, to (https://www.wipo.int/edocs/mdocs/tk/en/wipo) has contributed by reflecting the initiatives ventured in India to safeguard the traditional knowledge. WIPO (https://www.wipo.int/edocs/pubdocs/en), an international organization taking care of indigenous knowledge and set up guidelines for documentation of the same to mitigates some of the issues.

3. STATEMENT OF THE PROBLEM

According to UNESCO report(https://www.unesco.org/en/international-day-worlds-indigenous-peoples) there are nearly 370-500 million indigenous people where about 7000 languages are spoken and adopting 5000 different cultures. Every indigenous people have really numerous treasure of knowledge and basically it is retained among the clan orally or through practice. To conserve the same some mechanism is needed. So, documentation of the indigenous knowledge and legally protecting it from misuse is a matter of serious concern. Therefore, the author makes a humble attempt to reveal some of the issues and challenges pertaining to documentation and its communication & dissemination for better solution to some of the contemporary issues.

4. **OBJECTIVES**

- 1. To assess the issues and challenges in documentation of indigenous knowledge
- 2. To highlight the initiatives in India to protect indigenous knowledge. o propose a model for dissemination of indigenous knowledge.

5. METHODOLOGY

It is a kind of Secondary research. For the purpose different web sources, databases, and secondary sources and information are reviewed and scrutinized. Thus, it is base on:

- a. Personal reflection
- b. Literature search

6. LIMITATIONS

The paper may have some limitations in regard to scope and depth as it is based on the review of secondary web sources and websites.

7. INDIGENOUS KNOWLEDGE-WHAT DOES IT MEAN?

Indigenous knowledge is one type of heritage which is intertwined with culture and religion which is carried from one generation to another within the community or the clan. The beauty of indigenous knowledge is that it is sustainable in nature which is evident in healthcare & medicine, livestock, animal rearing, delicacy, agriculture, handicraft, etc. It is very much existed in some of the communities till now even though modern technology is swapping out. According to Evelyn Mathias, indigenous knowledge is(https://iirr.org/wp-content/uploads/2021/10/Recording-and-Using-Indigenous-Knowledges-A-

Manual.pdf) based on experience, often tested over centuries of use, adapted to local culture and environment, dynamic and changing which may be common knowledge (known to all in a community), shared knowledge (not known to all members of the community) and specialized knowledge (attained through some training-example blacksmith, pottery, etc). And further details are as follows:

Table 7.1: Types of indigenous knowledge

| Information | Possess information related to different activities related to their |
|-----------------|--|
| IIIOIIIauoii | |
| | work culture |
| Practices and | Holds traditional methods of healing certain ailment, weaving, |
| Technologies | preservation and storage methods, etc |
| Beliefs | Certain Faith guided them in maintaining health, religion and |
| | environment |
| Tools | Specific equipments used for certain works |
| Materials | Knowledge of certain materials used in some specific kind of |
| | work like house construction, crafts, etc. |
| Experimentation | Tendency for using some other way for resolving the same |
| | through test and trial |
| Biological | Knowledge of locally available species of tree, crop, animals, etc |
| Resources | |
| Human Resources | Skilled and specialists in certain works |
| Education | Owns traditional methods of teaching and learning |
| Communication | Owns traditional ways of paintings/carving on some specific |
| | leaves/bark, exchange of information, folk media (poetry, drama, |
| | songs, etc) used to communicate, etc |

Before the advent of modern technology, it was the base of everything. All over the world there are 195 countries having a population of nearly 8,019,051 billion people and the very fact is that in every country more or less practicing indigenous knowledge and by its very nature it is continuing orally, by virtue of experience, etc in other words undocumented with no scope for future reference. At this point of time, losing an unreplenishable treasure really crop out for sure. So documentation of indigenous knowledge is of prior significance to bestow identity to the owner of it, continue the valuable knowledge, protect and safeguard it from misuse in particular and for the benefits of the mankind in general.

Documentation is the only way to retain the valuable time tested indigenous knowledge confined to particular clans/community related to different knowledge system which are being practiced every now and then in their day to day activities and in life style. Moreover, it can be a humble endeavor to preserve and disseminate to expand the horizon of its goodness & benefits. Due to various reasons these invaluable knowledge is getting extinct and not practiced. Indigenous knowledge has the feature of problem solving as the owner of the knowledge capitalizes independently to thrive sustainability. Every indigenous knowledge is special in nature; all over the world it is valued for its attributes for sustainability. Moreover, it can be instrumental in the modern technology driven society in different realm. However, it is also a matter of concern that documentation of indigenous knowledge may also lose its luster and naivety due to misappropriation and injudicious use.

Some of the ways in which Indigenous Knowledge can be documented include:

- Establishment of Indigenous Knowledge resource concepts.
 - Setting up of Indigenous Knowledge websites, databases and databanks.
 - Conducting research into Information Knowledge System.

Nevertheless, there is a

- Lack of data bank to take custody at the regional as well as national level.
- Lack of mechanism to check the reliability of indigenous knowledge as documented through different survey or oral tradition.
- Reduced practice of IK by the young generations of the IK holders, which directly or indirectly

resulting in extinction of knowledge as well as medicinal plants due to ignorance and urbanization.

- Local communities are reluctant to disclose generally for insecurity and mitigating one's control over the knowledge in particular.
- Lack of guidelines, methods/formats and mechanism for the researcher to document IK from different clan pertaining to different domain of IK.
 - Less practiced due to cumbersome procedure or not easily accessible to required constituent

IK.

- Need of collaboration among elite groups /organization or research institution and the researcher/clans for Data Bank for the purpose preservation and development.
- Need of awareness/sensitization among the local communities regarding the positive implication of documentation, protection and dissemination.
 - Need of reviving IK as it is getting eroded due to a gap lack of practicing it.

8. WHY DOCUMENTATION?

Documentation is one of the methods of coding the unmodified piece of knowledge. It is also an acceptable way of preservation for posterity and giving one kind of dignity and protection. Moreover, it is one of the effective ways for dissemination. Documentation enables (https://www.wipo.int/edocs/pubdocs/en/wipo_pub_1049.pdf):

- monetary or in-kind benefits
- organized and systematized (preserved) for future generations
- collaboration and partnerships among a broad range of actors
- identification and broader social recognition of indigenous peoples and local communities in relation to specific traditional knowledge
- capacity building and educational uses of databases or registers
- defensive intellectual property protection, i.e., scope to prevent the unjustifiable acquisition of intellectual property rights over traditional knowledge.
- positive intellectual property protection for traditional knowledge or products related to it

Moreover, documentation is a valid proof of existence which can harness economic upliftment (inidividual/national/global)and which may improve livelihood, helps in problem solving, prevent biopiracyand save the environment by having the knowledge. Therefore, it is one of the ways to provide moral reorganization to the owner of knowledge, to bestow legalities, andwill boost conservation of biodiversity.

9. ISSUES AND CHALLENGES

Documenting intangible, unrecorded knowledge scattered in diverse form is really challenging. In the documentation process, holders of the traditional knowledge play a vital pivotal roleand some of the issues are:

- 1. Lack of consent for publication
- 2. Suspicious to be misused
- 3. Mechanism for documentation is very tedious.
- 4. Complicated to decode.
- 5. Language barrier
- **6.** Time limitation
- 7. Financial limitation
- **8.** Lack of authentic source of information/initiation
- **9.** Lack of lucidity in expression of knowledge
- **10.** Difficulty in identifying authentic informants
- 11. Granting of IPR
- 12. Cultural protocol/ethical issues
- 13. Lack/unwilling to involve and participate in the whole process of documentation
- **14.** Urges immediate compensation for sharing information

10. WORLD INITIATIVES

Some of the National and International Framework/Initiatives for Traditional Knowledge

- ✓ WIPO in protecting Traditional Knowledge
- ✓ Sustainable Development Goal (2015)
- ✓ Foundation for Revitalization of Local Health Traditions (FRLHT), Bangalore-Since 1993, improving healthcare in rural as well as urban area of India through Traditional Health Sciences by research, training, education and community service. It is working meticulously in documentation of traditional knowledge and creation of databases. It has been recognized as National Centre of Excellence for Medicinal Plants and Traditional Knowledge.
 - ✓ Convention on Biological Diversity
 - ✓ Paris Climate Agreement
- ✓ UNESCO (2003) Convention for the Safeguarding of the Intangible Cultural Heritage, which urges protection of TK and TCE (Traditional Cultural Expressions) at national and international levels.
- ✓ LINKS (Local and Indigenous Knowledge System) initiated in 2002 by UNESCO which acknowledges the local and indigenous knowledge for understanding climate science and help policy makers to know the impacts and its improvement for improvement and sustainable development.
- ✓ Some of the legislative measures to protect TK are(https://www.wipo.int/edocs/mdocs/tk/en/wipo iptk ge 2 16/wipo iptk ge 2 16 presentation 12javed .pdf): The Biological Diversity Act (2002), The Protection of Plant Varieties and Farmers Rights Act (2001), The Geographical Indication of Goods (Registration And Protection) Act, 1999 and Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006
- ✓ World Submit on Indigenous people and Nature (2021) with IUCN (International Union for Conservation of Nature) World Conservation Congress was held virtually "to raise awareness that enhanced measures are required to protect the rights of indigenous peoples and their roles as stewards of nature" (https://www.iucncongress2020.org/sites). It aims to conserve nature through indigenous solutions, indigenous needs and Indigenous Proposals and Global Policy. And launched the global indigenous agenda for the governance of indigenous lands, territories and natural resources
- ✓ UNESCO,s United Nations Declaration on the Rights of Indigenous Peoples was initiated in 2007 (UNDRIP) and UNESCO policy on engaging with Indigenous Peoples was also implemented on 2018 which consists of (https://unesdoc.unesco.org/ark:/48223/pf0000262748) a) Indigenous peoples rights, as defined in the UNDRIP, of specific relevance for UNESCO's work b) Application of the UNDRIP to the organization's mandated areas c) Mechanisms for mainstreaming UNESCO's policy on engaging with indigenous peoples.

11. INITIATIVES IN INDIA TO PROTECT TRADITIONAL KNOWLEDGE

To protect and overcome some of the issues related to traditional/indigenous knowledge various initiatives have been taken. WIPO (World Intellectual Property Organization) is a global forum by UNESCO created in 1967 for IP related issues, programs and services. And some of the initiatives taken by UNESCO for indigenous people are (https://unesdoc.unesco.org/ark:/):

- ✓ It recognizes indigenous people as the essential partner in achieving the 2030 agenda for sustainable development.
- ✓ Adopted a policy UnitedNations Declaration on the Rights of Indigenous Peoples (UNDRIP) in 2007 to "protects indigenous peoples' rights to their collective biocultural heritage as a whole, including traditional knowledge and resources, territories, and cultural and spiritual values and customary laws".India has voted for UNDRIP.
- ✓ LINKS (Local and Indigenous Knowledge Systems), IHP(Intergovernmental Hydrological Programme), MAB(Man and Biosphere Programme), International Basic Sciences Programme (IBSP) and IGGP(International Geoscience and GeoparksProgramme) are initiated to engage indigenous peoples and scientists to identify, understand and address economic, environmental, ethical, cultural and societal challenges, including global environmental changes.

In India, 706 ethnic groups are identified and contribute total 104 million or 8.6% of population of the country. In North East India, major populations are dwelling. (https://www.iwgia.org/en/india.html). Some of the initiatives in India to protect the rights of the knowledge holders in general are (https://www.emerald.com/insight/content/doi/10.1108/978-1-80043-063-120200001/full/pdf?title=prelims)

- 1. Patent Act of India
- 2. Geographical Indications of Goods (Registration and Protection) Act, 1999
- 3. Copyright Act, 1957
- 4. Biodiversity Act, 2002
- 5. Protection of Plant Varieties and Farmer's Rights Act, 2001 (PPVRA, 2001)
- 6. The Seeds Bill

In 2006, Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) was introduced.

To monitor and maintain the different initiative various bodies have been administered (https://www.wipo.int/edocs/mdocs/tk/en/wipo_iptk):

- **1.** TKDL(Traditional Knowledge Digital Library)
- 2. TKRC(Traditional Knowledge Resource Classification)
- **3.** Inclusion of Indian Journals relating to TK in PCT(Patent Cooperation Treaty) minimum documentation (2 journals)
 - **4.** State level Traditional Knowledge Innovation Kerala (TKIK)
 - 5. Community level databases- People's Biodiversity Registers (PBRs)

Initiatives are undertaken to ensure and provide appreciation and protection through IPRs (Intellectual Property Rights) keeping the benefits attributed to various (medicine, agriculture, food, handicraft, etc) traditional knowledge attached to the clan. Rather, it will enable to control misappropriation, access and use.

India is a land of diversity, and the real beauty of country lies on the uniqueness of different people which get changed after every mile we proceed. It is worthy to mention the different digital initiatives of Ministry of AYUSH, India to bring awareness and to encourage education and research in the field of medical sector (Ayurveda, Yoga & Naturopathy, Unani, Siddha, Sowa Rigpa and Homoeopathy) in different categories for different target groups: (https://www.sciencedirect.com/science/article/pii/S0975947621001467)

Table 11.1: Initiatives of AYUSH

| SL.NO. | CATAGORY | INITIATIVES | YEAR | PURPOSE |
|------------------------------|-------------|---|-------|--|
| 1. Health information System | | AYUSH hospital management information system (A-HMIS) | 2018 | AYUSH Electronic Health Records (EHR |
| | information | National AYUSH Morbidity and Standardized Terminologies Electronic Portal (NAMASTE) | 2017 | Comprehensive webportal for AYUSH terminologies |
| | | AYUSH Suraksha | 2010 | Pharmacovigilance portal for ASU (Ayurveda, Siddha, Unani) drugs |
| | | e-Aushadhi | 2019 | Complete supply chain management System for AYUSH |
| | | e-Charak | 2016 | Electronic channel of market for herbs, aromatic and raw materials |
| | | TriskandhaKosha | ••••• | Ayurveda, information technology and Sanskrit. |
| | | SiddAR APP | 2018 | An Android mobile application for |

| | | | | documenting ADE |
|----|--|--|------|--|
| | | Traditional Knowledge Digital Library (TKDL) | 2001 | Documenting the traditional knowledge in digital format and prevention of biopiracy |
| 2. | Research database/library | AYUSH research portal | 2011 | Database for AYUSH research articles |
| | | DHARA | 2010 | Providing online indexing services for Ayurveda articles |
| | | e-CHLAS | 2016 | Electronic library to bring forth the index of research publications of various journals |
| | | Research Management Information system (RMIS) | ••• | Archive of AYUSH post graduate students (PG) thesis and dissertations |
| | | e- Granthasamuccaya(portal) | •••• | Electronic platform to access Ayurveda classical books |
| | | AYUSH Sanjivani App | 2020 | Measures adopted by public for enhancing immunity for COVID-19 |
| 3. | Academic | Ayurveda e-learning | 2010 | An electronic online learning program designed for Ayurveda |
| | | Ayurvedic Inheritance of India (portal) | 2013 | The course provides the comprehensive view of basic concepts and procedures and scientific research in Ayurveda |
| 4. | Information Education and Communication (IEC) | Siddha–NIS (National Institute of Siddha)App | 2018 | Mobile application consists information about Siddha, its therapies, types of medications, and details about NIS |
| | | Yoga locator | 2019 | Specially designed to record and to show Yoga events across the world |
| | | Naturopathy-NIN (National Institute of Naturopathy)App | 2017 | Provides basic information of Yoga and naturopathy system |

And different councils and national academic and research institutes are set up for different disciplines of Indian medicines(https://www.ayush.gov.in/images/whatsnew/Ayush_In_India2022.pdf):

Table 11.2: Councils of medical sector

| SL.NO. | COUNCIL | DISCIPLINE |
|--------|---------------------------------|--------------------|
| 1. | Central Council for Research in | Ayurvedic |
| | Ayurveda Sciences (CCRAS) | |
| 2. | Central Council for Research in | Siddha |
| | Siddha (CCRS): | |
| 3. | Central Council for Research in | Unani |
| | Unani Medicine (CCRUM) | |
| 4. | Central Council for Research in | Yoga & Naturopathy |
| | Yoga & Naturopathy (CCRYN): | |
| 5. | Central Council for Research in | Homoeopathy |
| | Homoeopathy (CCRH) | |

12. NEED OF KNOWLEDGE MANAGEMENT

Ebisi, Ebere Maryann and Arua, Godwin (https://www.researchgate.net/publication/330493574)rightly discussed that knowledge management mostly concerns to delivery of knowledge to the right information seeker at right time in a particular focus area to arrive at right decision. And the authors have highlighted on some important components of knowledge management.

People are the creator of knowledge, so their ability should be nurtured so that it can influence

other people.

- Appropriate processes are to be adopted for its proper management and sharing of knowledge.
 - ➤ Help of technology can be taken to boost the knowledge management initiative.

Sarkhel, Juran Krishna (http://www.qqml.net/index.php/qqml/article/view/329)has rightly discussed the need of "collection development policies, access management, storage and preservation media, and intellectual property rights" pertaining to knowledge management and sharing of the same and suggested various stages which are as follows:

Table 12.1: Stages of knowledge management

| SL.NO | STAGES | STEPS |
|-------|---------------------------------|---|
| 1. | Collection | Specifying goals & objectives; area of study & target group (knowledge holder-individual or community); formulation of pertinent question (quantitative or qualitative) & data collection and analysis method; developing a relation and providing information & sensitization to the community/traditional leaders, administrator for better cooperation and support; action plan and mobilization of resources to the reach out the people. |
| 2. | Recording and Documentation | Multifaceted approach- defining of term or terminology; recording of vernacular names;a step by step explanation of how the method can be used or done;purpose-general usefulness of the method; materials -things needed when using the method; value -usefulness of the method for recording IK and notes for additional explanations |
| 3. | Organization | Use of standardized indexing system, indexing policies, thesaurus, classification systems, folksonomies for the users, etc. |
| 4. | Preservation and Storage | Use of modern technology –tapes, films, databases, local communities, books journals, museums, etc |
| 5 | Dissemination and Networking | To local and global community through pamphlets, newsletter, journals, workshops, video, radio, etc. |

Other than the above mentioned process, some ethical sides should also be taken into consideration:

- Thorough information about the community to be approach
- Humble approach to make them understand the value and usefulness of their bundle

of

local knowledge and objective, benefit of the study, outcome, awareness about copyright, shared benefit of the project

- Focus on local people and knowledge
- Due information and permission from the community.

KNOWLEDGE MANAGEMENT MODEL **13.**

Knowledge management models provide some kind of framework or guidelines to approach knowledge for better management and linking it with different knowledge systems for better sharing and ethical use. Some of the models are:

| _ | Table 13.1: Models of knowledge management | | |
|---|--|----------------|---|
| | SL. NO. | MODEL | ELABORATION |
| | 1. | Nonaka and | Conversion of knowledge from |
| | | Takeuchi | Socialization-tacit to tacit |
| | | model | Externalization-tacit to explicit |
| | | .e0 (b). | Combination-explicit to other explicit |
| | de | Stan Stan | Internalization-explicit to tacit |
| | 2. | Jennifer | Emphasized on knowledge cycle |
| | A Comment | Rowley's | Knowledge acquisition |
| | | Knowledge | creation and construction |
| | | Management | knowledge articulation and sharing |
| | | Model | kn <mark>owledge</mark> rep <mark>ositories updating</mark> |
| | | | knowledge diffusion |
| | | | access and dissemination |
| | | i i | knowledge use and knowledge revision |
| | 3. | Adam's | Focuses on |
| | | Knowledge | Acquisition-acquiring knowledge from family, parents, |
| | . " | Model | friends, neighbor, |
| | V 7 | | Development-creation or documentation of acquired |
| | 1 | | knowledge |
| | | | Access-storage of created knowledge in various public |
| 8 | | | domain for access |
| | W.C. | 197 | Management-codification of knowledge for ethical use. |
| | 4. | Boisot I-Space | Focuses on three dimensions of knowledge |
| | ~ | knowledge | uncodified to codified |
| | | management | concrete to abstract |
| | | Model | undiffused to diffused |
| | | | comprising six phases - Social Learning Cycle (SLC) |
| | | | Scanning-acquiring diffused data |
| | | | Problem-Solving –codification of knowledge |
| | | | Abstraction –codified knowledge to abstract knowledge |
| | | | Diffusion –through sharing of knowledge get diffused |
| | | | Absorption- used for various purposes leads to uncodified or |
| | | | tacit new knowledge |
| - | | | Impacting-abstract knowledge has a reflection on concrete |
| | 5. | Karl Wiig | Focuses on four dimensions |
| | | knowledge | Completeness-either tacit or explicit knowledge |
| | | management | completeness makes a sense |
| | | model | Connectedness – proper link to be established or identified |
| | | | between various knowledge for better utility |
| | | | Congruency – existence of conformity among facts, concepts, |
| | | | perspectives, values, etc for an ideal knowledge |
| | | | Perspective and Purpose – management of knowledge base |
| | | | on purpose and its perspective. |

(Author's compilation and elaboration from different resources)

Many more models are suggested by stakeholders or knowledge management experts. It is under the discretion of researcher or the knowledge managers to adopt base on their respective area of interest, objective and purpose. Moreover, it needs to be properly identified, collected, codified, stored, shared, utilized, retained and scope for updation.

14. PROPOSED MODEL

Documentation is significant as it provides better scope for preservation, mitigates confusion and future analysis & interpretation. Before documentation it, target groups should be properly identified, acquisition(collected in different forms as-charts, photographs, jotting of word, etc), codification, recording in some media elaborately, storage, dissemination and knowledge revision.

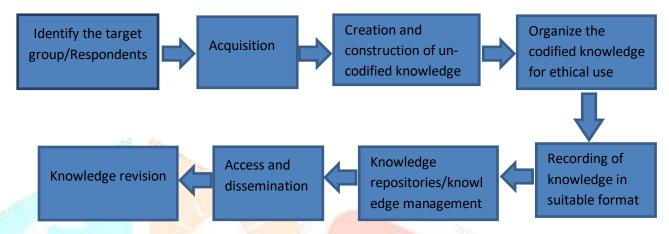


Figure 14.1(stages of documentation)

Dissemination of indigenous knowledge on demand with some legality is the best option to protect the rights and unethical use of the same. Therefore, a model was proposed to value the process of access:

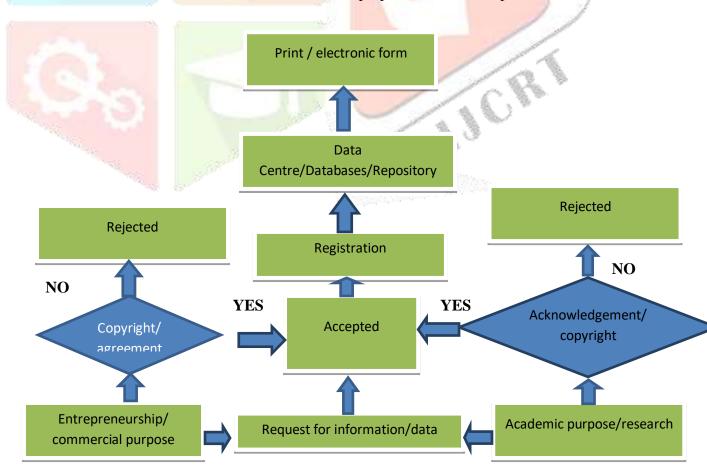


Figure 14.2: Process of accessing indigenous knowledge

- 1. User community may approach the data center which shoulders the responsibility of data handling and management through a formal request.
- 2. Need of the users may be for academic /research purpose or for entrepreneurship/commercial purpose. Whatever may be their need, they have to undergo a formal registration procedure with certain terms and conditions.
- 3. If the user approaches for entrepreneurship/commercial purpose, then they have to accept or conformed to some agreement related to monetary charges and other concern aspects, otherwise the registration will be rejected. Similarly, pursuing for academic/research purpose, they need to follow the copyright guidelines and at any point of time if breaches the same, then the request is rejected and registration is cancelled.
- 4. If the user follows the protocol of access/use, then the request is forwarded to concern data center and data center through proper verification accepts the request.
- 5. Finally, the users can have the access to information which is for public access in the desired format i.e. in print /electronic.

15. DISCUSSION

Collection of indigenous knowledge is very interesting and challenging too. Interesting in the sense that, it confronts to the revelation of something new knowledge which is unknown to others and at the same time very holistic kind approach for sustainability and challenging as the whole process come across dealing with informants which belongs to different backgrounds, identification of expert indigenous informants, language barriers, undocumented, tacit, reluctant to share the knowledge, ethical issues, etc. No denying the fact that, indigenous knowledge has the power to revolutionize the way of life with self-sufficiency and sustainability but consciously or unconsciously it is ignored and overlooked. There is a gap between indigenous knowledge and modern knowledge, as the approaches are different but there is a scope to bridge the gap by incorporation modern knowledge to improve indigenous knowledge. Moreover, knowledge management is one of the ways to share the benefits of indigenous knowledge.

World Intellectual Property Organization (WIPO) empowers indigenous people and knowledge through various policies and activities. UNESCO, IFLA, World Summit, etc are encouraging indigenous knowledge from various perspectives. Not only in India, in various part of the world like Africa, indigenous knowledge is practiced and sustained through generations. These particular assets are so effective that in absence of modern medical facility as well as other functional facilities is surviving very modestly and elegantly.

16. CONCLUSION

- Dissemination and sharing of indigenous knowledge of all kinds contributes to the mankind and sustainability.
- ➤ Prerequisite for dissemination and sharing of indigenous knowledge is there must be a mechanism to tape the invaluable knowledge in the form of documentation, organization, storage and preservation with an idea to protect the rights owner and ensure safeguards from all aspects.
- ➤ Protection in different perspective is not possible in the community level, so there must be a national policy to maintain the worth of it effectively and awareness among the indigenous people about usefulness and benefits of it and cooperation in the whole process.

Thus, dissemination of knowledge of all kinds contributes to the mankind. Especially indigenous knowledge holds a sublime status as it contributes to highlight the culture and practices adopted by the owner of such knowledge and it's a one of the ways of sustainability.

6.

REFERENCES

- 1. **7 types of knowledge** .https://www.alltius.ai/glossary/types-of-knowledge
- 2. **Addressing Global Challenges with Indigenous Knowledge** https://www.un.org/en/academic-impact/we-are-indigenous-addressing-global-challenges-indigenous-knowledge
- 3. Archives, Harmony and Friendship. National Archives of Japan. https://www.archives.go.jp/english/news/pdf/ica2016.pdf
- 4. **AYUSH digital initiatives: Harnessing the power of digital technology for India's traditional medical systems.** https://pdf.sciencedirectassets.com/314880/1-s2.0-S0975947621X00071/1-s2.0-S0975947621001467/main.pdf?X-Amz-Security-
- 5. Balanced Scorecard for performance measurement and strategic planning of indigenous knowledge management.

 https://www.researchgate.net/publication/245031504_Balanced_Scorecard_for_performance_measurement_
 - and strategic planning of indigenous knowledge management

 Challenges confronting libraries in documentation and communication of indigenous knowledge in

 Nigeria https://www.sciencedirect.com/science/article/abs/pii/S105723171000007X
- 7. Challenges to local knowledge https://www.fao.org/3/y5631e/y5631e.pdf
- 8. **Documenting Traditional Knowledge A Toolkit** https://www.wipo.int/edocs/pubdocs/en/wipo_pub_1049.pdf
- 9. Emerging trends in the generation, transmission and protection of Traditional Knowledge. https://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2019/04/TK-Emerging-trends-in-the-generation-transmission-and-protection-of-TK-final-paper.pdf
- 10. Foundation for Revitalization of Local Health Traditions (FRLHT) Bangalore. Karnataka. https://www.panchakarma.com/foundation-for-revitalisation-of-local-health-traditions-frlht-bangalore-karnataka-p-255.html
- 11. Goal 16:Peace, Justice and Strong Institutions https://www.idlo.int/sustainable-development-goals/
- 12. Government of Assam, Department of Cultural Affairs. (2023). List of Libraries. Department of Cultural Affairs, Govt. of Assam.https://culturalaffairs.assam.gov.in/information-services/list-of-libraries
- 13. Indigenous Knowledge Management vs Adam's Knowledge Management. https://actascientific.com/ASAG/pdf/ASAG-05-0968.pdf
- 14. **Indigenous peoples around the world** https://www.unesco.org/en/international-day-worlds-indigenous-peoples#:~:text=Indigenous%20Peoples%20around%20the%20world,of%20the%20world's%20cultural%
- 15. **Indigenous peoples in India** https://www.iwgia.org/en/india.html
- 16. Introduction to "The Nonaka and Takeuchi" Knowledge Management Model https://sis.binus.ac.id/2018/02/05/introduction-to-the-nonaka-and-takeuchi-knowledge-management-model/
- 17. **Issues and Challenges on Indigenous Knowledge** Research https://eprajournals.com/IJMR/article/11369
- 18. IUCN World Conservation Congress Marseille, France. (2021). World Summit of Indigenous Peoples and

 Nature

 https://www.iucncongress2020.org/sites/www.iucncongress2020.org/files/updated_ip_summit_concept_note-21 june 2021- english- updated.pdf
- 19. Knowledge Management in Libraries in the 21st Century. https://www.researchgate.net/publication/330493574_Knowledge_Management_in_Libraries_in_the_21st_Century#:~:text=Knowledge%20management%20refers%20to%20effectiveness,the%20development%20of%20knowledge%20economy.
- 20. Knowledge management model.

 https://www.researchgate.net/publication/290455619_Knowledge_management_model
- 21. Knowledge Management Models and their Utility to the Effective Management and Integration of Indigenous knowledge with other Knowledge Systems. https://www.researchgate.net/profile/Patrick-Ngulube/publication/259801712_Knowledge_Management_Models_And_Their_Utility_To_The_Effective_Management_And_Integration_Of_Indigenous_Knowledge_With_Other_Knowledge_Systems/links/55ff9_91d08aeafc8ac8b9e05/Knowledge-Management-Models-And-Their-Utility-To-The-Effective-Management-And-Integration-Of-Indigenous-Knowledge-With-Other-Knowledge-Systems.pdf
- 22. Learning from India's TKDL: Digitization as a Tool to Protect Cultural Property and an Argument for doing it yourself. https://georgetownlawtechreview.org/wp-content/uploads/2021/05/Abdullah-Learning-From-Indias-TKDL-5-GEO.-TECH.-REV.-99-2021.pdf
- 23. **Legal Protection for Traditional knowledge** https://www.emerald.com/insight/content/doi/10.1108/978-1-80043-063-120200001/full/pdf?title=prelims

- 24. Local and Indigenous Knowledge Systems (LINKS) https://en.unesco.org/links#:~:text=%C2%A9%20UNESCO,day%2Dto%2Dday%20life
- 25. Local knowledge, global goals. https://unesdoc.unesco.org/ark:/48223/pf0000259599
- 26. Oxford Learner's Dictionaries https://www.oxfordlearnersdictionaries.com/definition/english/indigenous
- 28. Planning & Evaluation Division, Ministry of Ayush, Government of India. (2022) AYUSH in India https://www.ayush.gov.in/images/whatsnew/Ayush_In_India2022.pdf
- 29. **Protection of Traditional Knowledge** https://egyankosh.ac.in/bitstream/123456789/51678/1/Unit-9.pdf
- 30. **Protection of Traditional Knowledge Initiatives of India** https://www.wipo.int/edocs/mdocs/tk/en/wipo iptk ge 2 16/wipo iptk ge 2 16 presentation 12javed.pdf
- 31. **Protection of Traditional Knowledge Initiatives of India** https://www.wipo.int/edocs/mdocs/tk/en/wipo_iptk_ge_2_16/wipo_iptk_ge_2_16 presentation_12javed.pdf
- 32. **Recording and using indigenous knowledge: A manual** https://iirr.org/wp-content/uploads/2021/10/Recording-and-Using-Indigenous-Knowledges-A-Manual.pdf
- 34. The use of indigenous knowledge in development: problems and challenges https://eprints.gla.ac.uk/1094/1/JBriggs_eprint1094.pdf
- 35. **Traditional knowledge.** *Wikipedia*https://en.wikipedia.org/wiki/Traditional_knowledge
- 36. UNESCO (2018) UNESCO policy on engaging with indigenous peoples https://unesdoc.unesco.org/ark:/48223/pf0000262748
- 37. UNESCO policy on engaging with indigenous peoples https://unesdoc.unesco.org/ark:/48223/pf0000262748
- 38. United Nations. (2023). The Sustainable Development Agenda. United Nations. https://www.un.org/sustainabledevelopment/development-agenda/
- 39. What Is Knowledge Management? https://www.getguru.com/reference/what-is-knowledge-management#:~:text=Knowledge%20management%20(KM)%20is%20the,a%20wiki%20or%20employee%20intranet.
- 40. What is knowledge management? https://www.ibm.com/topics/knowledge-management
- 41. **Worldometres** https://www.worldometers.info/geography/how-many-countries-are-there-in-the-world/#:~:text=Countries%20in%20the%20World%3A&text=There%20are%20195%20countries%20in,and%20the%20State%20of%20Palestine.
- 42. Worldometres <a href="https://www.worldometers.info/world-population/#:~:text=World%20Population%20Clock%3A%208%20Billion,(LIVE%2C%202023)%20%2D%20Worldometer
 %20Worldometer