



Meghalaya's Traditional Indigenous Knowledge: Preservation And Protection

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Article History	Abstract
Received: 24 July 2023 Revised: 9 Aug 2023 Accepted: 24 Aug 2023	<p>A corpus of information gathered over many years by state agencies working in their respective domains, supporting the development of livelihoods, rural development, food security, and poverty reduction. But since most of this knowledge is implicit, it needs to be standardized so that everyone may access it. The transmission of traditional indigenous knowledge from generation to generation is essential to the sustainability of indigenous people's means of sustenance as well as the preservation and promotion of their cultures and identities. India's northeastern Meghalaya is home to a diverse range of wildlife. Because there is a general lack of awareness among the community and because there is no proper system in place to protect and defend their traditional Indigenous understanding, the indigenous people of Meghalaya are in danger of going extinct. It is crucial to preserve and protect the disparate traditional indigenous knowledge in Meghalaya. This essay aims to provide readers with an understanding of the concepts of traditional and indigenous knowledge. This research investigates Meghalaya's traditional knowledge and the need to preserve it within the state. This study also emphasizes the function of the Traditional Digital Knowledge Library (TKDL) in maintaining traditional indigenous knowledge. For thousands of years, indigenous peoples have been producing paintings, carvings, dances, and other artistic expressions that have been passed down orally through custom. Traditional knowledge forms the foundation of the identity, cultural history, and means of subsistence of indigenous peoples.</p> <p>The people of Meghalaya think the gods live in the hallowed groves or woodlands. It keeps terrible spirits at bay and bestows welfare upon people, their cattle, and their land. Those who disobey these groves' customary rules risk incurring the wrath of the god.</p> <p>Datlawakor is a Meghalayan football game that has been preserved. Football called "Datlawakor" is played between two teams from the upper and lower Myntdu Rivers using a timber ball. It is said that the victorious team is rewarded with an abundant crop.</p>

<p>CC License CC-BY-NC-SA 4.0</p>	<p>Native Americans frequently assert that their knowledge is holistic and inextricably linked to the places and resources that they have access to. In these cosmologies, traditional knowledge is intrinsically linked to access. The present paper highlights the Meghalaya's Traditional Indigenous Knowledge with its protection and preservation. A few recommendations have been given in the report to save and maintain Meghalaya's traditional knowledge.</p> <p>Keywords: <i>Traditional Knowledge, Indigenous Knowledge, TKDL, Biodiversity, Indigenous People.</i></p>
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I. Introduction

Knowledge is the most important component of any sustainable development plan for any organization trying to combat poverty, generate employment, or promote livelihoods.

Develop and implement a knowledge management policy that supports initiatives, procedures, and instruments that enable effective use of an organization's intellectual capital if inclusive growth and a sustainable development environment are strategic goals.

The people of Meghalaya think the gods live in the hallowed groves or woodlands. It keeps terrible spirits at bay and bestows welfare upon people, their cattle, and their land. Those who disobey these groves' customary rules risk incurring the wrath of the god. Religious belief is one of the main reasons for the preservation of plant resources in these groves. The residents in the area think that cutting down trees and taking twigs, flowers, fruits, etc., would anger the Sylvan deities. These woods are thought to have one of the highest concentrations of plant, animal, and bird species.

The main thing that has kept the sacred groves in such perfect shape is the mythology and native knowledge connected with them. Sacred groves stand for a long-standing custom of environmental preservation among Meghalaya's tribal people, founded on their cultural wisdom. These forests are areas of the landscape that are delimited and preserved by human society because they are thought to represent a significant relationship between humans and the natural world or the divine. These segments also contain vegetation, other forms of life, and geographical features.

As important to the history of humanity as the invention of the wheel or fire was to their survival, prehistoric societies' recognition of global property rights. Over time, the human race has gradually granted creative people the property rights to their creations.³ Indigenous peoples are entitled to recognition as the owners of their creative and intellectual works, as well as special ownership rights and protection.⁴

Traditional wisdom has a great deal of promise to address many of the problems facing our society. Wealth comes from wisdom. Only in conjunction with preservation, advancement, and benefit sharing may traditional knowledge be practiced. Traditional knowledge is the newest member of the intellectual property family. Still, considerations other than the government's readiness or incapacity to help must be taken into account when making decisions on how to handle this child.

Indigenous people own the right to manage, advance, and protect their artistic manifestations, traditional knowledge, and cultural heritage. This includes human and genetic resources, seeds, medicines, knowledge of the characteristics of plants and animals, and the products of their sciences, technologies, and customs, such as the fine and performing arts, oral traditions, literary works, designs, sports, and traditional sports.⁵ They possess the liberty to conserve, oversee, protect, and enhance their intangible assets, encompassing customary wisdom, customary cultural lingo, and cultural heritage.⁶

Idea of Traditional Knowledge:

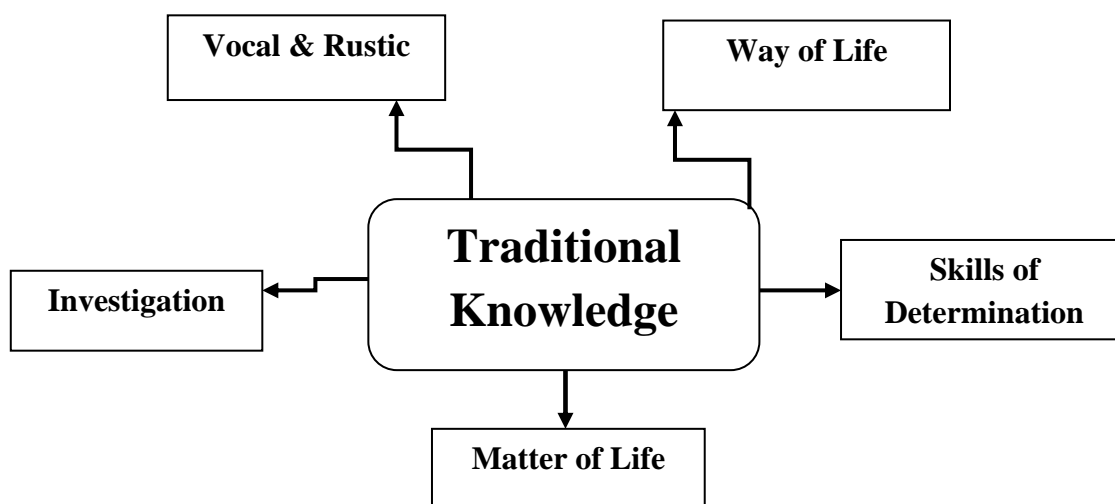
- ❖ The term "traditional knowledge" describes practices or knowledge inherited by Indigenous cultures and passed down through the generations. Knowledge or practice for which Indigenous groups operate as the guardians or custodians.
- ❖ generations. Knowledge or practice for which Indigenous groups operate as the guardians or custodians.
- ❖ Knowledge, expertise, abilities, and customs that are created, maintained, and transmitted from one generation to the next within a community and frequently constitute a portion of its cultural or spiritual identity are referred to as traditional knowledge (TK).

³ Avinash Shivade (Lexis Nexis, New Delhi, 2004) Intellectual Property Manual 3.

⁴ Article 29 and Part VI of the United Nations Draft Declaration on the Rights of Indigenous Peoples.

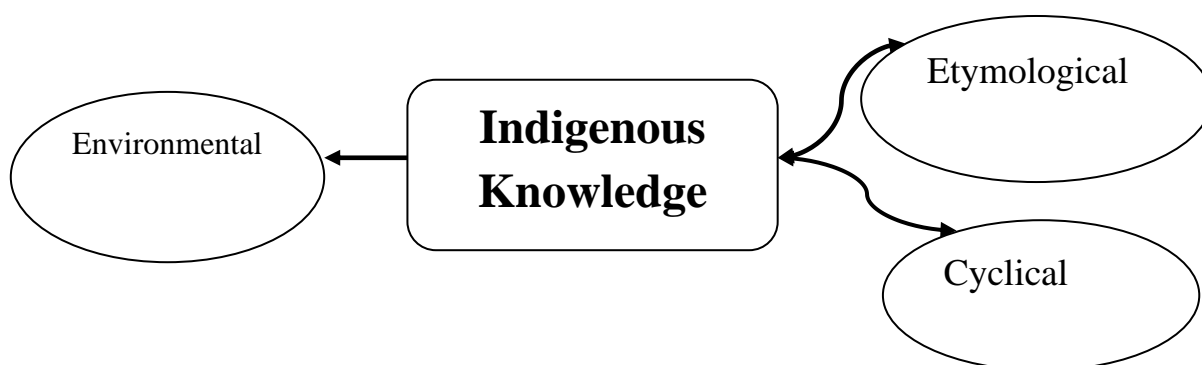
Available online at: <https://jazindia.com>

- ❖ Just three elements alone define "traditional knowledge," which is the information derived from thought and insight within a traditional setting. This covers the methods, discoveries, expertise, abilities, and education that are assimilated into conventional knowledge.



Indigenous Knowledge Concept:

- ❖ The concepts of Indigenous worldviews, beliefs, traditions, practices, and institutions are conveyed and put into action through Indigenous knowledge. It is typified by being adaptive in nature, holistic in perspective, oral transmission, local scale, and collective ownership.
- ❖ Indigenous wisdom gives local communities especially the impoverished ones problem-solving techniques. Indigenous knowledge contributes significantly to the body of knowledge on development concerns worldwide. Native American wisdom is a resource that is underutilized in development.
- ❖ Indigenous pedagogies teach integrated epistemological systems known as indigenous knowledge systems, which facilitate understanding the world's interconnectedness and our place in it. These systems incorporate concepts that are often called "science knowledge."
- ❖ Indigenous knowledge is included in the definition of traditional knowledge provided by the World Intellectual Property Office (WIPO).



II. Relevance of Traditional and Indigenous Knowledge

Although the terms "traditional knowledge" and "indigenous knowledge" have different meanings, we tend to use them interchangeably. There is no agreed-upon definition of traditional knowledge. An attempt at describing conventional understanding is made by the Convention on Biological Diversity. "Innovations and practice of indigenous and local communities embodying traditional lifestyles relevant for conserving the traditional knowledge"⁷ is the definition of traditional wisdom. Traditional knowledge is dynamic and changes to accommodate people's changing needs. It gets most of its vitality from being ingrained in people's lives on a deep level. It is challenging to keep traditional knowledge alive or to isolate traditional people from it.⁸

Customary wisdom should be preserved. But there isn't a legally binding agreement on preserving traditional knowledge.⁹ One of the significant barriers to preserving and recognizing traditional knowledge is the need for a generally agreed-upon description and established guidelines for its protection.¹⁰

5 Article 31 of the United Nations Declaration on the Rights of Indigenous Peoples.

6 *Ibid.*

7 Article 8 (j) of the 1992 Convention on Biological Diversity.

8 Intellectual Property and Human Rights 91 (1999): John Mugabe, "Traditional Knowledge and Intellectual Property Protection: An Examination in the Global Policy Debate,"

9 T. K. Mukherjee, "Preservation and Safeguarding Customary Knowledge," 1 *Ethnobotany and Medicinal Plants* 589 (2015).

10 *Ibid.*

We define indigenous knowledge as the knowledge that people who identify as indigenous to a place apply and possess because of their "combination of cultural distinctiveness and prior territorial occupancy relative to a more recently arrived population with its own distinct and subsequently dominant culture." Indigenous knowledge does come into this category, even though traditional knowledge is only sometimes indigenous. Put differently, indigenous knowledge is conventional, but traditional knowledge is only occasionally native.

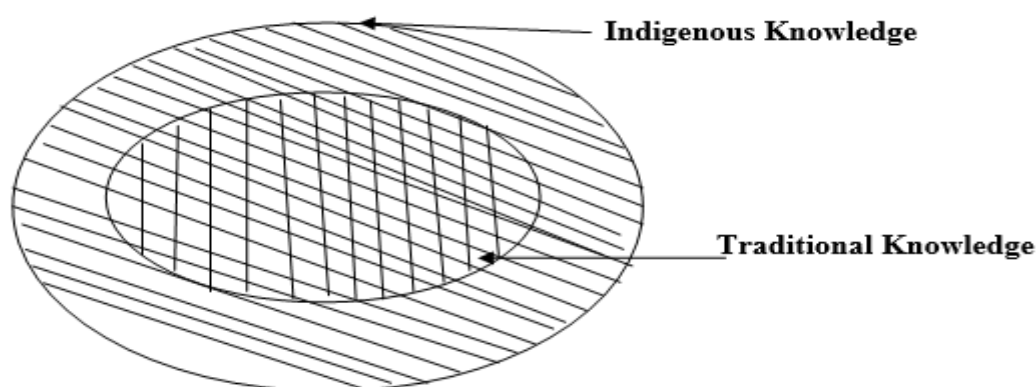


Figure: Indigenous and Traditional Knowledge

III. Meghalaya Traditional Indigenous Knowledge: The Need to Preserve and Protect It

One of the most challenging and divisive topics of the modern day is preserving and safeguarding Meghalaya's traditional indigenous knowledge (TIK).¹¹ It is crucial to discuss preserving traditional indigenous knowledge in a developing nation like India. Multinational firms have been using indigenous knowledge for economic gain without paying due to the growing significance of traditional indigenous knowledge (TIK) to these communities.¹²

Meghalaya's traditional indigenous knowledge has played an important role and continues to cooperate one in the growth of the agricultural sector, food security, and the health of the region's indigenous population. Indigenous communities have been developing and preserving traditional knowledge for generations to ensure their survival in the biosphere.¹³

11 A study on the legal measures to protect traditional knowledge in India was published in "Traditional Knowledge Misappropriation and Biopiracy," by Basil B. Mathew, in 2 *International Journal of Marketing, Financial Services & Management Research*; (2012).

12 *Ibid.*

13 *Ibid.*

It is based on years of experience. Indigenous customary knowledge is frequently woven into a society's daily routine and social fabric. It is typically not regarded as a discrete body of facts apart from the culture and sense of community that make up the community.¹⁴

Sacred, agricultural, and medicinal knowledge are all part of Meghalaya's traditional Indigenous wisdom.

Sacred Wisdom

Sacred groves support the long-standing Meghalayan indigenous people's practice of environmental conservation, which is founded on their indigenous wisdom. In Meghalaya, there is a strong belief that preserving sacred woods is indigenous knowledge. The indigenous Khasis, Garos, and Jaintias of the state are the ones who created, developed, and maintained it.¹⁵ Living close to holy forests, tribal societies have expertise in preserving and using genetic diversity. The assault of modernization is putting the foundation of traditional indigenous knowledge in jeopardy in many of these indigenous communities.¹⁶

Sacred forest management is just as important as biodiversity as a resource. For a considerable amount of time, tribal people have contributed to the protection and sustainable utilize of Meghalaya's environment. If the government recognizes and records this ecological expertise and traditional knowledge that underpins genetic conservation, it may be recovered forever.¹⁷

We must conserve and promote our legacy to preserve the ecosystem for coming generations and safeguard several rare, endangered, and relic biological species.¹⁸ In Meghalaya, the native tribes control more than 90% of the state's entire forested areas. Thus, a program for the preservation of the state's sacred groves must be started by tribal groups that support the welfare of the tribal population in the state as well as the traditional tribal intuitions that the Government of Meghalaya devised.

Agricultural Knowledge

Traditional agricultural methods are categorized as a stage between the regional hunt-and-gather strategy, which defines communities with food subsistence levels, and modern agricultural methods, which require large-scale food production for international distribution.¹⁹

14 *Ibid.*

15 S. Jeeva, BP. Mishra, et al. address "Traditional knowledge and biodiversity conservation in the sacred groves of Meghalaya" in the 5(4) Indian Journal of Traditional Knowledge 564 (2016).

16 *Ibid.*

17 *Ibid.*

18 Note 15 above, at 567.

19 The publication "Traditional Agricultural Practices in Meghalaya, North East India" was released by Roytre Christopher Laloo, Solomon Retna Dhas Nadar Jeeva, and associates in 2006.

For the sake of future generations, this conventional agricultural method broadens the balance between supplying our current requirements, preserving natural resources, and safeguarding the environment.²⁰ While they are impractical for producing large amounts of food, traditional agricultural techniques are responsible for a significant portion of local food production in poor nations.

The two main agricultural techniques used by the locals in Meghalaya are terrace or bun cultivation and shifting agriculture. These age-old farming methods have been suitably modified to fit Meghalaya's climate. The villagers are aware of the ecological balance that these farming practices maintain and have experience with them.

1. Shifting Cultivation

Shifting agriculture is a widely employed farming method in Meghalaya, primarily in the mountainous regions. These kinds of farming are sometimes called Jhum or Swidden cultivation. This stable farming approach has prevented soil erosion and land degradation, improved the production system, and maintained soil moisture for the previous thirty years.²¹ This method is a kind of primitive horticulture, where food is produced instead of foraged and hunted.²²

2. Burn or Terrace Cultivation

Over the past thirty years, bun cultivation has been used as a settled cultivation method on hill slopes and valleys to enhance the production system, preserve soil moisture, and stop soil erosion and land degradation.²³ Bench terraces are built in this method on hill slopes that straddle the slopes. The cut and hill method is used to level the area between two buns. The terraces are spaced vertically one meter apart on average. By keeping the most amount of rainwater inside the slopes and securely disposing of the surplus runoff to the foothill, such efforts aid in the prevention of soil erosion.²⁴

20 *Ibid.*

21 Accessible at: http://megsoil.nic.in/shifting_cul.htm Most latest visit was on August 19, 2023. NIC, Soil and Water Conservation, Meghalaya (National Informatics Centre, Meghalaya State Centre, Shillong), 2001.
 22 note 19 above at 8;
 23 Above note 21;
 24 Note 19 above, at 9.

Traditional Medicinal Knowledge

In terms of biodiversity, India is a rich nation. Since the Vedic era, Indians have been well aware of the utilization of plants as part of their knowledge for a variety of purposes. Traditional medicine has been used for thousands of years in India, especially Meghalaya, to treat a wide range of illnesses. Meghalaya is blessed with a wealth of natural resources, including medicinal plants, and natural beauty. Many individuals in Meghalaya rely on the traditional medicine made by the Khasi traditional healers, who have been providing medical care to patients for a long time. Typically, parents convey this kind of wisdom to their children or from one generation to the next. However, traditional medicine practitioners frequently pass away without passing on their knowledge to others. Therefore, official documentation. The traditional healers who prepare Meghalaya's traditional medicine are revered by the locals. The Meghalayan government enacted laws in 2011 to safeguard and advance traditional medicine in the region in response to the increasing acceptance and application of traditional knowledge among the state's citizens.²⁵

The only state in India having laws governing the practice of traditional medicine is Meghalaya. The Meghalayan government passed the Khasi Hills Autonomous District (Protection and Promotion of Khasi Traditional Medicine) Act and its implementing regulations in 2011 with the intention of codifying the scattered knowledge of Khasi traditional medicine and establishing workable measures for its advancement, protection, and preservation.

The Act has been extremely beneficial to Khasi Traditional Healers, who mostly depend on it for their basic medical needs. The Meghalayan government assigned the Meghalaya Biodiversity Board the responsibility of conserving and expanding indigenous Khasi medical expertise. The Khasi Traditional Medical Institute, which will award degrees and diplomas, is to be established in accordance with the Act.

A variety of measures are included in the Act to promote Khasi traditional medicine, including standards for traditional healers, the creation of herbaria, seed banks, and museums, as well as public, government, and media education regarding the role of Khasi traditional medicine in the primary healthcare system.

25 Teshaer Dagne, "Cross-Cutting Issues in International Intellectual Property Law: Preserving Traditional Knowledge in the Knowledge Economy," 2 International Community Law Review (2012).

But with commercial and systematic interest in traditional medicine systems growing, it is now necessary to recognize, protect, and preserve traditional medical knowledge, which needs to be strengthened in Meghalaya.

Food Made With Rice

Since ancient times, the Meghalayan tribes of Khasi, Jaintia, and Garo have been renowned for their mastery of traditional rice-based cuisine. For social-cultural indigenous memorials, the custom of practice is primarily hierarchical, in cases when comprehensive records are not accessible.²⁶

Meghalaya is known for its rice-based cuisine, which is widely enjoyed due to the availability of raw ingredients and the presence of numerous ethnic tribal tribes. In addition, organizing and marketing these goods brings in money to help the family.²⁷ As a result, sharing these food preparation skills will probably improve the economy and contribute to the preservation of this ancient expertise, which also serves to reinforce cultural identity.²⁸ To promote and sell food products, it is essential to develop, record, preserve, and enhance indigenous technologies.

IV. The Rationale behind Safeguarding and Conserving Meghalaya's Traditional Indigenous Knowledge

Indigenous Traditional Knowledge (TIK) is in danger. As young people move into cities and grow more engrossed with television, computers, and cell phones, it is vanishing. The younger generations have no interest in carrying on with customs from the past. Some young individuals find dressing traditionally strange

and archaic, even. In addition, seniors neglect to transfer or pass on the traditional wisdom to a member of the community who will be able to keep it when they pass away.

26" Eugenia Kyndiah, Magdaline Umdor, et al., editors, "Indigenous Knowledge In Preparing Rice Based Foods By The Tribes of Meghalaya," 3 International Journal of Innovative Research and Advanced Studies 235 (2016).

27 *Ibid.*

28 *Ibid.*

Indigenous people base their case for preserving traditional indigenous knowledge on issues of basic fairness and the right to manage, safeguard, and maintain one's cultural legacy. It is being used more and more to assist policymakers in a number of areas, such as trade, economic growth, diversity and food, and health. Considering this, TIK ought to be safeguarded for the following five reasons: Equity, biodiversity conservation, traditional practice preservation, biopiracy avoidance, and the significance of TIK in development are all mentioned.²⁹

Preservation of Biodiversity

Indigenous peoples' and the local communities' innovative knowledge and customs highlight their cultures. Therefore, preserving the relationship between people and natural features, such as plants and animals, is essential to protecting people's culture. Preserving traditional indigenous knowledge has the potential to contribute to environmental conservation, sustainable agriculture, and increased food security.³⁰

Maintaining Customary Methods

The safeguarding of traditional indigenous knowledge can offer a framework for maintaining the practices and knowledge that embody the traditional lifestyles that the indigenous people of Meghalaya maintain. It can help to maintain Indigenous people's sense of identity and guarantee their continued existence. This function clearly does not fit under the purview of TRIPS or any other multilateral agreement's IPR protection rules. By using suitable IPRs to protect TIK, indigenous people might become more aware of this information, find it more appealing, and consider it worthy of preservation.³¹

29 Wekundah, Joseph M. "Why Preserve Traditional Knowledge?" Special Paper Series 11 of the African Technology Policy Studies Network (2012).

30 *Ibid.*

31 *Ibid.*

Bio-Piracy Prevention

The unauthorised exploitation of biological resources and associated traditional knowledge (typically from developing countries) and the unpaid patenting of "inventions" produced from these resources or knowledge are the two actions that are encompassed by the term "biopiracy". For native people and indigenous communities, bio-piracy is a major concern. Numerous indigenous groups in Meghalaya have been utilising natural substances like herbs and spices for their therapeutic qualities.

These days, big businesses use these methods without giving credit to the people who created them. Bio-piracy will be prevented in large part by safeguarding indigenous traditional knowledge.

Boost Communities' and Traditional Knowledge Holders' Livelihoods Indigenous peoples rely on their traditional knowledge to manage and benefit from their local ecosystems, which is essential to their livelihoods and well-being. For primary healthcare, local people also rely on traditional remedies. The protection and commercialization of traditional knowledge will benefit individuals, communities, and national economies.³²

V. The Role of Conventional Knowledge Traditional indigenous Knowledge is Protected and Preserved through the use of Digital Libraries.

India is becoming conscious of the need to prevent patent biopiracy by protecting traditional knowledge. The protection and preservation of traditional Indigenous knowledge has drawn the attention of developing countries, particularly India. In order to create a proposal paper for the establishment of a Traditional Knowledge Digital Library (TKDL), the Department of Ayurveda, Yoga & Naturopathy, Unani, Siddha, and Homoeopathy (AYUSH), formerly known as the Department of Indian System of Medicine and

Available online at: <https://jazindia.com>

Homoeopathy (ISM&H), established an inter-disciplinary Task Force in 1999. 2001 saw the founding of the TKDL. India is spearheading efforts to protect its own medical knowledge and stop foreign patent offices from stealing it.³³ The process of digitizing existing information on Ayurveda, Unani, Siddha, and other traditional knowledge is known as Traditional Knowledge Documentation (TKDL).

32. Department of Trade and Forestry, Republic of South Africa, The Protection of Indigenous Knowledge through the Intellectual Property System: A Policy Framework, https://www.gov.za/sites/default/files/gcis_document/201409/31026552.pdf (accessed August 26, 2023)

33. <http://www.tkdil.res.in/tkdil/langdefault/common/Abouttkdl.asp> is the URL to the Digital Library of Traditional Knowledge. (Last accessed August 26, 2023)

Because it helps prevent issuing a patent on something that already exists, TKDL acts as a defensive measure against TIK theft, both within and outside national borders.

TKDL has the ability to serve as a link between TIK and contemporary medicine. It can also be utilized for worldwide advanced research based on TIK data to create new pharmaceuticals. Additionally, Traditional Knowledge Digital Library has been able to overcome the language and format barrier by methodically and scientifically translating and organizing the available contents of the ancient texts on Indian Systems of Medicines, including Ayurveda, Siddha, Unani, and Sowa Rigpa as well as Yoga, into five international languages: English, Japanese, French, German, and Spanish.

VI. Religious Myths and Beliefs

The mythology surrounding the gods and religious beliefs they represent have helped to preserve many isolated pockets (forest patches). The best kind of conservation practiced by our tribal tribes is called in-situ conservation, which keeps many species' populations intact in their native environments. It is an ecological legacy practice from the past. We must conserve and promote our legacy if we want to protect the ecosystem for future generations as well as a number of rare, endangered, and extinct biological species. It is essential to create a sacred grove conservation program through tribal traditional institutions under the protected area network program, since indigenous tribes own over 90% of the state's woodlands.

VII. Plan for Integrated Village Development

Meghalaya has a lot of natural resources, but it also has a lot of poverty, a lack of skilled workers, and low productivity. Developmental organizations have been working tirelessly to improve the rural areas' standard of living. However, a coordinated effort on all fronts is needed to try to empower the Human Development Indexes of the rural poor, and this can be achieved if "Convergence" occurs at the village level.

Planning a village is a human-centered process that gives special consideration to the most vulnerable elements of society, including women, children, and the underprivileged. In essence, this program is a people-driven approach to dramatically raise people's standard of living, particularly for those who are less fortunate.

VIII. Conclusion

Indigenous wisdom gives local communities especially the impoverished ones problem-solving techniques. Indigenous Knowledge contributes significantly to the body of Knowledge on development concerns worldwide. Native American wisdom is a resource that is underutilized in development.

The mountainous and wettest state in India is called Meghalaya. The meaning of the name Meghalaya is "above of the clouds". Meghalaya, in northeastern India, is one of the Seven Sister States. Meghalaya is a hilly state with highland plateaus and valleys interspersed throughout its rich geological landscape.

The observations, creations, practices, and beliefs that support sustainability and the ethical use of natural and cultural resources are collectively referred to as indigenous knowledge. It's also known as traditional ecological knowledge or traditional knowledge. If traditional knowledge offers guidance or leads, or if it promotes the creation of practical procedures and practices that benefit all parties, then it can be profitable.

The necessity of protecting traditional indigenous knowledge, encouraging its usage, and preventing its exploitation or theft.

XI. A Few Suggestions

Meghalaya's indigenous traditional knowledge is in danger of disappearing. Some recommendations have been made in order to safeguard and maintain Meghalaya's traditional indigenous knowledge:

- Determine the most important places to protect habitat, such as Meghalaya's sacred groves and other bio-cultural sites.
- Contracts should be signed with botanical gardens and relevant international organizations to control the transfer of germplasm that was previously removed for commercial purposes from developing nations.
- Create community-based conservation plans that leverage local customs and traditions to help rural communities become more self-sufficient in primary healthcare.
- More local control over resources should be favored by policies and frameworks developed by government and non-government organizations.
- A workshop on improving the basic knowledge of common and common diseases and ailments for traditional healers was organized.
- More people are becoming conscious of the necessity of maintaining basic hygiene when producing and dispensing herbal medicine.
- The promotion of traditional health care through health tourism is being strengthened.

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