

Traditions and Sustainability: Glimpses of Societal Knowledge System from India

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Abstract

This article discusses how the Indian knowledge tradition is embedded not only in books but also in people's ways of life. Indigenous Ecological Knowledge far surpasses today's standards of sustainable development. The ways of living with nature and preserving it are inherent in Indian traditions. These practices can still be prominently seen in villages and tribal areas. Sacred groves and protected forests are concepts of today, but they have existed in society for centuries. The proper use of resources is illustrated with examples. Along with this, it quotes some books on agriculture and environmental thinking in India and discussed the important elements.

Keywords: *Indian Knowledge System, Traditions and Knowledge, Indigenous Ecological Knowledge, Rural Life and Sustainable Development*

INTRODUCTION

The concepts, abilities, and comprehension that a group acquires throughout time are all considered knowledge. It is totally different from today's parameters of knowledge which is measured through degrees. Modern education system has developed this way only. Though, that is more organised but that doesn't guarantee for skills and abilities. Skills and abilities are acquired through practice and through conditioning. If a particular task is practiced repeatedly, it becomes

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firmly ingrained in the mind. Then, performing that task becomes easier because the person becomes adept at it. For example, a merchant doesn't need to repeatedly add and subtract on a calculator to sell his goods; he memorizes most of the calculations. He may not have a degree in mathematics, but he can perform simple calculations quickly and easily. If a person consistently performs a particular task, they become skilled at it. This knowledge is acquired through social conditioning. In my opinion traditions are collective knowledge that passes generation to generation. Customs, beliefs, and behaviours that are passed down from one generation to the next are known as traditions. Collectively, they mold communal values and cultural identity. In India too, traditions were formed, changed, and passed down from generation to generation. Thus, knowledge flowed from one generation to the next. This paper focuses on the Societal Knowledge, Indigenous Ecological Knowledge and Rural Life and Sustainable Development. Along with this it discusses some of the books that are important resources related to ecological knowledge.

Hypothesis: In Indian society, knowledge is not only embedded in books but also in traditions.

Research Method: This is an analytical research which is qualitative in nature. No statistical data have been used for the purpose of research. Where necessary, books, articles, and internet sources have been used. Traditions of Indian life have also been mentioned as needed.

DISCUSSION

Though rate of urbanization is increasing rapidly but still Indian society is a traditional society where rural population constitutes around 60% of the total population. Rural societies are mostly agrarian and traditional societies where primary activities dominate. Later every traditional society changes into highly urban industrial society (Rostow, 1960). Rostow propounded his model named "Stages of Economic Growth" in 1960. In the model he presented five stages through which all countries must undergo to become developed urban industrial society. Though many countries disagree at the concept of development said by Europeans but even though Rostow's model is studied thoroughly in settlement geography. The five stages told by him are- 1.Traditional society 2.Preconditions

to take off 3. Take off 4. Drive to Maturity and, 5 Age of high mass consumption. Here, stage 5 is stage of highly urban industrial society. When society converts into urban industrial structure the traditions change (Jacobs, 2024).

Indian Society had been a traditional society that's why the knowledge system developed by ancestors is intact. Cultural Knowledge & Traditions has wisdom that is a form of accumulated problem solving knowledge. It's not that there aren't any bad traditions; both good and bad traditions developed. Bad traditions were questioned and rejected by people, but good traditions persisted in society for a long time and still exist. They contain a wealth of knowledge and technology that can easily solve many problems. Examples of the Cultural Knowledge and Traditions may be traced from a) Rituals and festivals b) Ceremonies c) Traditional art, crafts, music, dance, and food d) Indigenous ecological knowledge traditions e) Storytelling traditions f) Moral teachings and community rules. In this paper Indigenous ecological knowledge would be discussed in detail.

INDIGENOUS ECOLOGICAL KNOWLEDGE

Indigenous Ecological Knowledge (IEK), also known as Traditional Ecological Knowledge (TEK), is the profound knowledge that Indigenous peoples acquire about the land, plants, animals, water, seasons, and climate as a result of thousands of years of intimate relationship with their surroundings. IEK is built over generations of observation and experience from the surroundings. Natural phenomena are interconnected with each other, anyone can understand them holistically only when he has knowledge of various other disciplines. This can be traced from ancient Indian literatures to the modern literature. Rigvedic and Atharvavedic Environmental Consciousness is best illustration of ecological knowledge where it is mentioned.

माता भूमिः पुत्रोअहंपृथिव्याःपर्जन्यःपितासउनःपिपर्तु॥”

(Mata Bhumi: PutrohamPrithviah, Parjanya: Pita saona: Pipartu.”)

अर्थ है,..... यह भूमि (पृथ्वी) हमारी माता है और हम सब इसके पुत्र हैं। ‘पर्जन्य’ अर्थात मेघ हमारे पिता हैं। और ये दोनों मिलकर हमारा ‘पिपर्तु’ अर्थात पालन करते हैं।

It clearly mentions human earth (environment) relation – that means we are all the sons of this land, Earth, which is our mother. “Parjanya,” which means “cloud,” is our father. And they both look after us jointly (Atharvaveda, the 12th Kanda, 12 verse of Sukta 1). The lines mentioned above emphasize that this Earth is not only planet it is our mother and clouds that irrigate mother Earth with their water is our father. Life is possible on the Earth only due to the water that falls on earth surface. It is our responsibility to protect mother Earth.

“त्वज्जातास्त्वयिचरन्तिमर्त्यास्त्वंबिभर्षिद्विपदस्त्वंचतुष्पदः।” अथर्ववेद १२.१.१५

(Tvajjatastvayicharantimartyastvambibharshidwipadastvamchatushpadah)

अर्थात्, हे पृथ्वी माता! जो प्राणी (त्वज्जाताः) तुझ से उत्पन्न, और तुझ पर ही (चरन्ति) विचरते हैं। उन (द्वीपदः) दो पैर वाले मनुष्यों और (चतुष्पदः) चार पैर वाले पशुओं का (बिभर्षि) भरण-पोषण करती हो।

That is, O Mother Earth! The creatures (tvatjaatah) are born from you and roam around on you (charanti). You (Bibharshi) nourish those (dwipadah) two-legged humans and (chatushpadah) four-legged animals. These lines specify that when Vedas were written the earth, their features and their dependants all were analysed and an interconnected relationship between them was studied thoroughly. The Vedas explain how responsible our behavior should be towards nature, how we should protect the Earth. After all, it is our lifeline. This is what sustainable development is all about. Sustainable development includes conservation of resources, judicious use of available resources and responsible behaviour towards nature. All these are mentioned in the ancient Indian texts.

RURAL LIFE AND SUSTAINABLE DEVELOPMENT

Sustainable development in rural India has been built on the tenets of cooperation, recycling, and independence. There are several instances of this in our daily lives. We can easily see the judicious use of many resources around us. Plastic bottles, for instance, are used to produce a variety of decorative products, hold water, and water plants. In a similar vein, used plastic containers are utilized for storage or other uses. Shoes, electronics, furniture, and other items are frequently repaired and reused rather than thrown away in Indian civilization. Old bicycles, fans, kitchenware, and other items are sold and reused in houses. Mop heads, bags (jhola), and cotton for blankets and mattresses are all made

from old clothing. Old newspapers are used for rubbish collection, cleaning, packing, and book covers. Animal husbandry is a common practice in Indian society alongside agriculture. Cows, buffaloes, or goats are readily found in most households. Ghee, milk, and yogurt are obtained from these animals, and the dung is collected and thrown to the field, that increases their natural fertility. For millennia, waste materials have been composted in India and added to fields to improve their fertility. We may learn about cooperation, independence, and recycling in Indian life—the cornerstones of societal harmony—from numerous such tiny examples. These are all instances of fair and sensible usage of natural resources (Bajpai, 2024).

These are only few examples but many more can be traced if anyone looks towards tribal regions and tribal life in India. Tribal's know about many herbs that are available in the jungle that can treat many infections and diseases and they are not having side effects like allopathic medicines.

SOME INDIGENOUS MEDICINAL PLANT AND THEIR USES

Neem has been known for its therapeutic properties since ancient times. The advantages of its fruits, seeds, oil, leaves, roots, and bark are mentioned in the oldest Sanskrit medical texts. One The Indian Ayurvedic and Unani medical traditions have traditionally employed each of these. Neem has been used medicinally by millions of Asians for thousands of years. Additionally, the tree has gained recognition as a helpful remedy for a number of illnesses in regions where it has recently been introduced, such as tropical America and Africa (Silva, 2013). Each and every part of neem is very useful they work against many diseases and infections. The products are commonly used in villages and in tribal region. Neem plant works as fungicide, anti-bacterial, antiviral agent, dermatological, dental treatment, malayria and pain relief agent (National Research Council, 1992).

According to a study on traditional herbal medicine practitioners of the 'Nathan Saper community, 57 kinds of medicinal plants from 51 genera and 35 families were employed by members of the snake charmer community to cure a variety of illnesses. According to the study, this society mostly treats snakebite, using 19 different kinds of medicinal plants from 13 distinct families.

Men claimed a far greater number of medicinal plants than women did. The Fabaceae family included the greatest number of medicinal plants used by this community for traditional purposes (Panghal et.al, 2010). In an study on Reang tribe of Tripura state of India it was found that a total of 125 species of medicinal plants from 116 genera and 59 families that are used to treat 42 different illnesses were presented in this study. The majority of the cures are recommended to be taken orally, and leaves are the primary plant portion employed. The best plant parts utilized to treat a variety of illnesses were found nearby (Shil et al, 2014). Likewise garlic is very helpful in treating gastro-intestinal problems, tulsi plant has many uses. Native to India, tulsi, often called holy basil, is highly valued for its therapeutic applications in the Ayurvedic and Siddha medical systems. Although tulsi has been shown in several in vitro, animal, and human studies to have a variety of therapeutic properties, including as adaptogenic, antibacterial, anti-inflammatory, cardioprotective, and immunomodulatory effects, there are currently no systematic evaluations of human research on the safety and clinical efficacy of tulsi (Negar et.al, 2017).

These were some of the plants used in India that are very helpful for treating various illness and they have very less side effects. Their properties and their uses are best examples of our knowledge traditions in different communities. A lot many examples can be given in favour of this. When medicine failed during COVID 19 Kadha (decoction or herbal tea) worked effectively to fight against corona virus. It boosted immunity.

SACRED GROVES AND NATURE WORSHIP

In India, sacred groves are areas of forest or natural vegetation that are protected by local people for ecological, cultural, or religious reasons. They are some of the world's earliest examples of community-based conservation. They are very effective methods used by rural and tribal population for nature conservation. In different parts they are named differently such as devrai, kavu, sarpakavu, devarakaadu, oram, mandas, etc.. They are actually sections of woodland devoted to regional deities, ancestral spirits, or natural entities.

Because it is customarily forbidden to cut trees, graze, hunt, or disturb the grove, biodiversity can flourish. So they are very effective methods for in-situ

biodiversity conservation. Some of the groves are mentioned in table 1 given below. These groves are found throughout the India. They are sites where indigenous people have deep faith, so no one interferes in the nature there.

Table 1- Some examples of Sacred Groves

No.	State	Sacred Groves
1	Karnataka	Kodagu's (Coorg District) <i>devarakaadu</i> (God's forest) parcels.
2	Maharashtra	Western Ghats have hundreds of <i>devrais</i> with high biodiversity.
3	Himachal Pradesh	Groves associated with local village gods (<i>devta van</i>).
4	Kerala	<i>Kavus</i> and <i>sarpakavus</i> (serpent groves) important for ritual and ecological health.
5	Meghalaya & Nagaland	Strong traditions of clan-based sacred forests. Example-Mawphlang Sacred Forest
6	Rajasthan	<i>Orans</i> dedicated to local deities; Bishnoi community known for nature protection.
7	Tamil Nadu	<i>Ayyanar groves</i> featuring terracotta horses.

Bishnoi Community of Rajasthan is known Bishnoi(20+9) because of the 29 principles established by “JambhojiMaharaj” that constitute the foundation of the Bishnoi society’s way of life. The word “Bishnoi,” which is derived from the words “twenty” and “nine,” represents the society’s steadfast adherence to these rules. Vegetarianism, animal preservation, tree worship, water conservation, and a modest lifestyle have all received particular attention in these regulations. All members of Bishnoi society, regardless of gender, base their lives on these principles (Saurabh, 2025). These examples demonstrate that knowledge about environmental conservation is already prevalent in Indian society. Although it may not be widely publicized, it is present in our lifestyles. Numerous examples could be cited from various sectors. Where necessary, information was written down, books were written through which things were preserved, but not much research was done on them in later years. For example, *KrishiParashara* is a great book on agriculture, but it is rarely mentioned in the twenty-first century.

KRISHI PARASHAR: A BOOK ON CLIMATE, METEOROLOGY AND AGRICULTURE

KrishiParashar is a good book that effectively explains type of soil, type of winds, type of clouds and, which cloud causes rain which is dry. It explains the vegetation types as well as correlation between soil, climatic elements and vegetation. It talks about the Moon, Sun, planets and stars and also explains their interrelationship with the Earth. This book also explains which crops should be cultivated in which season to yield the best yield. It also describes what foods should be eaten according to the season. It contains many such points, based on calculations and logic. However, later geographers, meteorologists, and agricultural scientists did not pay much attention to them. It is very important to mention a verse here which is from KrishiParashar.

ह्लादीमृदूदकशिवशक्रभवोमारुतोवियदविमलमा।
स्निग्धसितवहुलपरिवेषपरिवृतौहिममयूखावक्रो।

(Krishi Parashar, Page 11, Taken from Brihatsanhita)

यहाँ श्लोक में की तरह मेघों की भी कई जाति बताई गई है, प्रस्तुत प्रसंग में चार जातियां उल्लेखनीय हैं- १. संवर्तक २. आवर्तक ३. पुष्कर, ४. द्रोण। इनमें संवर्तक नामक मेघ बहुत प्रलयकारी वृष्टि की क्षमता रखता है। आवर्तक मेघ शुष्क होता है, यह केवल पवन वेग के कारण भ्रमण करता रहता है, तीसरा पुष्कर मेघ कभी-कभी थोड़ी वृष्टि करता है। चौथा द्रोण मे घसंयमित कृषि योग्य वृष्टि करता है।

Here, as in the verse, several types of clouds have been described. In the present context, four types are noteworthy - 1. Samvartak, 2. Avartak, 3. Pushkar, 4. Drona. Among these, the Samvartak cloud has the capacity to cause catastrophic rainfall. The Avartak cloud is dry and keeps moving only due to the speed of the wind. The third Pushkar cloud sometimes gives a little rain. The fourth Drona cloud gives moderate, agriculturally suitable rainfall.

CONCLUSION

The knowledge tradition in India is rooted in the Vedas and Puranas, as well as the lifestyles of rural people and remote tribal communities. It needs to be understood and studied holistically. Lifestyles change with time and place, and in the same sequence, changes in weather determine many lifestyles. India

has all kinds of climates, and therefore, people with all kinds of lifestyles. Practical knowledge has flourished according to place, time, and people. We need to organize it. Furthermore, ancient books need to be viewed not just as literature but from the perspective of Science and Social Science. It is possible that solutions to many problems like environmental degradation may be found there.

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