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IMPACT OF INDIAN KNOWLEDGE SYSTEMS IN SUSTAINABLE ENVIRONMENT AND CONSERVATION PRACTICES: INSIGHT FROM INDIGENOUS TRADITIONS IN MELGHAT TIGER REGION IN AMRAVATI DISTRICT

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Keywords	Abstract
Indian Knowledge Systems, Indigenous Traditions, Sacred Groves, Ethnomedicine.	Indian indigenous knowledge systems (IKS) constitute a reservoir of centuries-old wisdom rooted in close interactions with nature. This paper mainly explores the actual role of these knowledge frameworks in the process of promoting sustainable in the tribal tradition across the country of India such as sacred groves, shifting cultivation, conventional water management, ethnomedicinal practices and culturally embedded ecological ethics. In Indian knowledge system (IKS) mainstream environmental coverage can fortify climate variation, ecological recuperation, and cultural continuity. These are the challenges such as documentation, participatory governance and go-sectoral integration.

Introduction:

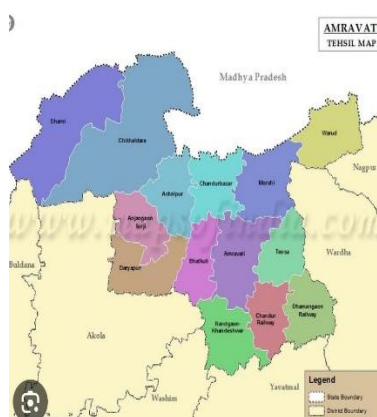
The term 'Indigenous Knowledge' (IK) also used reciprocally with Traditional knowledge, is used to describe any indigenous knowledge, innovation, or custom, tradition of local communities that is important in protection, conservation and sustainable use of biodiversity and various traditions. In India, efforts have been made to manage and protect threatened species and their habitats, particularly within the state forests (Powell and Sedunary 2013). India has a long established and a rich culture there is



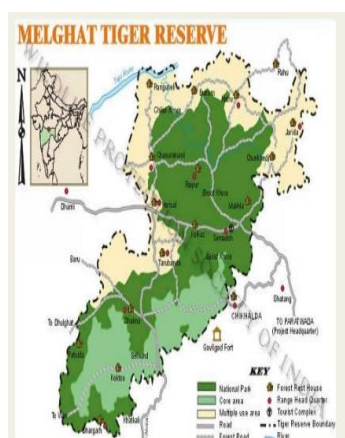
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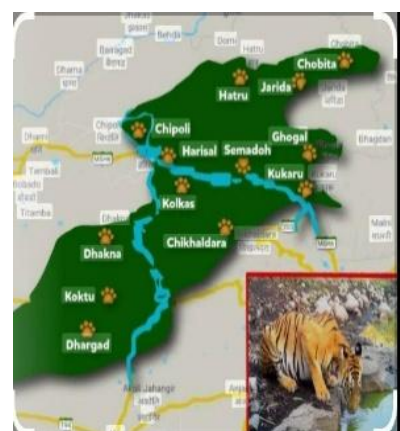
abundant reservoir of traditional knowledge in every part of the country. Likewise, MTR is a historical land having enriched cultural heritage which has varied communities and vast resources. Its flora and fauna are vast and varied in nature. The article is intended to unfurl the essence of traditional knowledge in MTR and discuss that the TK is just not in the need for documentation of indigenous knowledge system for the state, but to recognize Adivasi or tribal communities right over access and use to traditional knowledge of the natural resources. The researcher will look in Role of Women in IK of medicine, Vegetation from forests, fishing techniques. The present study is an attempt to understand traditional knowledge systems used in managing biological resources for medicinal value, the vegetation from forests and fishing techniques in MTR. The villages were selected on the basis of near to core area and on the list of relocation from MTR. To understand the role of women better in the traditional knowledge, we also included their roles in wild vegetables, fishing techniques and medicinal use from biological resources.



Map of Amravati District



Map of Melghat Tiger Reserve



RESEARCH OBJECTIVES

- To study the role of Adivasi people in protection of Indigenous knowledge.
- To study the practices of Adivasi people in wild vegetation, use of medicinal plants by using traditional knowledge at MTR.
- To review and assess national policies and legislation in relation to right Adivasi peoples to access and control over indigenous knowledge.

THE STUDY AREA

MTR extends over an area of 1676.93 Km. of Southern Tropical Dry Deciduous Forests buffered by another approximate 1200 km of Reserve Forests. It harbours a viable population of tiger (73-1998 estimate) supported by another 20-25 tigers in the surrounding reserve forests. The area is catchments to the five major rivers. viz. Khandu, Khapna, Sipna, Gadaga and Dolar aa of which tributaries of river Tapti. The Teak (*Tectona grandis*) dominated Dry deciduous forests of the area harbors variety of fauna and flora making state it one of the prime biodiversity repositories in Maharashtra. There are over 700 naturalized species belonging to 400 genera and 97 families. There are 90 tree species, 66 shrub



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species, 320 herb species, 56 climber species, 23 sedge species and 99 grass species. Medicinal plant species of ethano botanical importance number more than 250 species.

CONCEPT AND DEFINATION OF TRADITIONAL KNOWLEDGE

Indigenous knowledge is held by communities and cultures over generations and has deep cultural and economic significance. It held includes a diversity of knowledge such as literary, artistic and scientific works, medicinal practices, agricultural techniques, handicraft, songs and dances. Indigenous knowledge about the biodiversity can include the healing, agricultural and sacred properties of plants, animals, as well as condition of cultivation and processing methods. Indigenous Knowledge is found in ancient text, Traditional science, and folklore and in continuing practices and beliefs of communities.

ADIVASI PEOPLE AND INDIGENOUS KNOWLEDGE

Adivasi people and forests are strongly connected with one another because Adivasi people especially those residing in forests have a deep connection with the forest ecology since they are in charge of collecting water, as well as food, fuel, fodder leaves for their family. The Adivasi people meet their nutritional need from forests resources. They have traditionally acquired the information of wild edible vegetation. This IK is useful to develop new meal sources. Recognizing the Adivasi people access to the IK of wild edible vegetation along with their ethano medicinal uses is essential for preservation. Wild vegetation plays a significance role in Adivasi people's life in forests as they are the ones who are responsible for the food and nutritional need of the family. The following are the little wild edible vegetation which the Adivasi people of MTR use as per traditional knowledge.

Vegetation from Forest (Melghat)

Amaltasa, Amla, Champa, Gunj, Gunchi, Jangli Matol, Kantel Phool, Ketki, Kektad, Kena, Khatti Bhaji, Pimpal, Pipri, Ran Bhendi, Safed musli.

Fishing

The most interesting part of this process was the limited communication that Adivasi peoples used to organize the collective harvesting of fish.

Traditional medicines

Adivasi people in MTR use almost forest species for medicinal purposes. The Adivasi people depend on knowledge of local 'vaidus' and 'bhagats' for primary healthcare. Indigenous knowledge of medicines found in Melghat tiger reserve. The following are only few TK on medicines on the basis of field study conducted by researcher at MTR.

- **Scientific name:** Calotropis procera, Asclepiadaceae
Local name: Akau ki patti.
- **Scientific name:** phyllanthus emlica
Local name: Amla.



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- **Scientific name:** Aegle marmelos.
Local name: Bael.
- **Scientific name:** Acacia arabica
Local name: Babul.
- **Scientific name:** Gardenia gummifera
Local name: Dikamali.

INDIGENOUS KNOWLEDGE DIGITAL LIBRARY

IKDL is a cooperative ventures between National Institute of Science Communication and Information Resources(NISCAIR), Council of Scientific and Industrial Research, Ministry of science and technology and Department of AYUSH ,Ministry of Health and Family Welfare ,which is being actualized at NISCAIR. A inter disciplinary group of Traditional Medicine(Ayurveda, Unani, Siddha, and Yoga) specialists, patent analysis, IT specialists ,researcher and specialized officers are included in production of IKDL for Indian Systems of Medicine.

CONCLUSION :

Indigenous Knowledge for various reason that is community right to Traditional knowledge is needed rights to wild local foods, health culture, promotion of traditional customs and practices, traditional fishing, saving methods. Recognition of course, also includes the possibility for traditional women practitioners to gain income from their IK as well as recognize their rights over IK and not be taken advantage of in arrangements that deprive them of possibilities to practice their skills. It's the need of the hour to recognize traditional knowledge as a 'gendered science', which would help "legitimize and strengthen adivasi peoples. In the Melghat Tiger Reserve culture is deeply rooted in indigenous tribal traditions, with the Korku tribe making up about 80% of the local population. The Korku people are unique for worshipping the tiger as a god, reflecting a deep spiritual connection to the apex predators sharing their home. The indigenous Korku and Gond communities in the Melghat Tiger Reserve rely heavily on traditional healing culture, utilizing over 500 local plant species for primary healthcare.



PLATE N0.1: Villages in MTR



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Fishing in Melghat

PLATE NO.2: Culture in Melghat Tiger Reserve



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Gloriosa superba



Madhuka longifolia



Madhuka longifolia



Butea monosperma

PLATE NO.3: Medicinal plant in MTR

AUTHOR(S) CONTRIBUTION

The writers affirm that they have no connections to, or engagement with, any group or body that provides financial or non-financial assistance for the topics or resources covered in this manuscript.

CONFLICTS OF INTEREST

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.



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