



SNS COLLEGE OF ENGINEERING

Kurumbapalayam (Po), Coimbatore – 641 107

An Autonomous Institution

Accredited by NBA – AICTE and Accredited by NAAC – UGC with 'A' Grade
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

DEPARTMENT OF COMPUTER SCIENCE AND DESIGN

COURSE NAME : 19MC003 ESSENCE OF INDIAN TRADITIONAL KNOWLEDGE

III YEAR / VI SEMESTER

Unit II- Protection of traditional knowledge

Topic 4 : Value of TK in global economy



Contribution of TK to the Global Economy

- **Traditional Medicine Industry:** Billions of dollars generated from herbal and alternative medicine (e.g., Ayurveda, Traditional Chinese Medicine).
- **Agriculture & Sustainable Practices:** Use of TK in organic farming, seed preservation, and sustainable fisheries.
- **Handicrafts & Cultural Industries:** Traditional arts, crafts, and textiles contribute to global markets.
- **Eco-Tourism & Cultural Heritage:** Indigenous knowledge-based tourism generates revenue worldwide.
- **Biotechnology & Pharmaceuticals:** TK-inspired drug discoveries create multi-billion-dollar markets



Economic Benefits of Protecting TK

- **Job Creation:** TK-based industries provide employment in rural and indigenous communities.
- **Sustainable Development:** TK promotes eco-friendly practices beneficial for long-term economic growth.
- **Market Expansion:** Recognition of TK enhances business opportunities for local entrepreneurs.
- **Fair Trade & Benefit Sharing:** Ensures ethical compensation and intellectual property rights for TK holders.



Challenges to Economic Utilization of TK

- **Biopiracy & Exploitation:** Unauthorized commercial use of TK without compensation.
- **Lack of Intellectual Property Rights:** Difficulty in patenting and protecting TK under conventional IP laws.
- **Cultural Appropriation:** Misuse of TK-based symbols and knowledge without proper acknowledgment.
- **Limited Market Access:** Many indigenous communities face barriers to global markets due to lack of resources.



Strategies for Maximizing TK's Economic Potential

- **Legal Protection Mechanisms:** Strengthening laws like the Nagoya Protocol for benefit-sharing.
- **Capacity Building & Training:** Empowering local communities with entrepreneurial and financial skills.
- **Ethical Commercialization Models:** Promoting fair-trade certification and sustainable business practices.
- **Government & Institutional Support:** Investment in research and development of TK-based industries.
- **Global Partnerships:** Encouraging collaborations between indigenous groups and multinational corporations.



Case Studies & Success Stories

- **India's Traditional Knowledge Digital Library (TKDL):** Preventing unauthorized patents on TK-based medicine.
- **Kani Tribe & Jeevani Drug (India):** Revenue-sharing model for indigenous knowledge-based medicine.
- **San People & Hoodia Plant (South Africa):** Fair compensation agreement for the appetite-suppressant drug.
- **Māori Cultural Intellectual Property (New Zealand):** Legal frameworks protecting TK-based businesses.
- **Amazon Rainforest Bioeconomy Initiatives:** Indigenous-led enterprises benefiting from TK-based sustainable products.



Future Outlook

- Strengthening legal frameworks for TK protection.
- Enhancing indigenous participation in global markets.
- Promoting ethical research and TK commercialization.
- Ensuring fair compensation and sustainable economic growth for TK holder



Conclusion

- Traditional Knowledge is a valuable economic asset requiring protection and ethical utilization.
- Recognizing and integrating TK into global markets benefits both indigenous communities and industries.
- A sustainable approach ensures long-term economic, environmental, and cultural prosperity.



Any Query????

Thank you.....