**Introduction**

About 55% of the current human population lives in cities, and most of them consider forests, mountains, wildlife sanctuaries as a sight of attraction for tourist and exploration. United Nations (UN) has predicted that 68% of the world’s population will be city dwellers by 2050, due to a rapid expansion of urbanization and globalization (UN, 2018). In the country where there are more than 1.3 billion people, India, there is a large community tribe in the southern parts of India, mainly in the Western Ghats, Kerala, and Tamil Nadu called the Kani Tribe. This nomadic tribe is well known for their medical knowledge and traditional techniques they use to cure ailments. With the help of the Indian government, scientists and researchers are given access to do extensive research on Kani’s botanical knowledge, especially in the Agasthyamalai (Agastya Rishi Mountain). In recent years, these outsiders have been discovering various genetic species of plants, and herbs that could revolutionize the medical industry.

From a Kani’s point of view, this lawful intrusion into the Kani community is considered unethical as they fear that these beneficiaries can over-exploit their scarce resources and leave nothing behind. A premier Indian R&D organization called JNTBGRI wanted to share the benefits of these herbal products namely Jeevani through patenting and commercializing it through a benefit-sharing model with the Kani community. This approach was taken initially by JNTBGRI to benefit the outside world with the help of this community and provide a source of income to these people through the licensing fees and paying royalties. In general, India is considered a nation which is filled with an abundant knowledge of biodiversity and has a unique wealth of Traditional Knowledge Systems (TKS). Therefore, this is an essential aspect as these interested stakeholders need to consider before entering into a community with statutory rights and not misuse the knowledge these tribal communities have for centuries.

**Change in the Economic lifestyle of the Kani Tribe**

The livelihood of the Kani tribe depends upon the resources that were abundant in their habitual places. The southern part of India where these tribal communities traded had a lot of agricultural opportunities, forest products, non-timber products, and herbal plants. They used to move from places to places within the western ghats in small family clusters. The forest departments provided these people with small plots of lands and provided legal rights to the Kani tribe to sell forest produce with limitation. Even though the Kani tribal communities had rich knowledge in traditional medicine and its appliances, they were used only for treatment purposes within the tribe. For generations, “the tribal physicians commonly called as Plathi are the executive holders of the traditional medical knowledge of the tribe” (WIPO, para.3) and kept in secrecy. Since these tribal members have extensive knowledge of the uses and management of biological diversity on their lands and environment, the researchers and foreign companies wanted to commercialize their discovery. These outsiders realized the potential these local forest communities when Dr. Pushpagangadam, a research scientist discovered when a tribe member was using “Arogyapacha,” which translates to healthy leaves, for relieving tiredness during an expedition (Gupta, pg.106-111). This plant was taken to the research labs of JNTBGRI and recognized various chemical elements this plant that could cure stress, fatigue, and become a natural herbal energy booster. The foreign medical companies and the JNTBGRI started to collaborate to commercialize and patent their finding. Based on several pharmacological studies done on this plant, TBGRI was able to patent the manufacturing process of the plant detailing its healing health properties and its importance in ‘Ayurvedic literature’ (Gupta, pg.112). Currently, the western companies are moving towards a more natural cure as these medicines do not have any side effects if taken with care and cheap (Arun V. et al., pg.594). Besides, the biological diversity Act 2002 has established rules for internationalizing and monetizing the use of genetic resources in India. The Kani tribe has a mutual trust agreement rather than a legal agreement between TBGRI, and the legal provisions are discussed under CBD and the Indian Biodiversity Act 2002 (Shodhganga, pg.278). Initially, the forest department banned the use of Arogyapacha plant, but after subsidizing families to cultivate Arogyapacha, this let these families earn income. The pilot program enabled Kani tribal community to increase their economic standards, but they were selling their traditional knowledge to outsiders, who might fire back causing more problems shortly. The introduction of the Jeevani herbal product gained worldwide attention and initiated western companies to sell their product under the trademark of “Jeevani” to increase their sales. Kani tribe along with JNTBGRI formed a Business Management Committee (BMC) increase their social and economic status through license fees, royalties, and it is said that the financial revenues have doubled as of now. Benefit sharing model benefited international companies, the Indian government, Forest departments, AVP, and the Kani tribal community.

**Change in the Social structure of the Kani Tribe**

Each community of the Kani tribe is under the supervision and follow the orders of Muttukani, a headman who aid the Kani members to organize and live a systematic lifestyle. Due to the interference of the forest departments, TBGRI (a trust registered and ran under the leadership of two Kani and nine members), and foreign companies, the Muttukani of each Kani community lost their control over their community. From an outsider’s perspective, the establishment of the mutual trust agreement (MOU) might facilitate better revenue opportunities but collapsed the social structure within the Kani tribe. There is an ongoing risk of bio-privacy, as organizations such as TRIPS is encouraging the exploitation and privatization of life forms and organisms (Shodhganga, pg.246). The use of the “Arogyapacha” in the production of the Jeevani herbal medicine with the help of Arya Vaidya Pharmacy (AVP), became an opportunity to exploit resources these tribes have been conserving for years (WIPO, para.12). The TBGRI became the representation of the Kani tribe, and they are enjoying the revenue they are receiving, but there can be a threat of Tragedy of Commons in the long run. The discussion over proprietorship, licensed innovation rights, and of and access to GR and related TK shape biodiversity were solidified in the discussion of the United Nations' Convention on Biological Diversity (CBD) which went into power in 1993. The Convention sets up a legitimate system for the mutual exchange of organic assets between nations (Bhat, 1999). The Tradition controls bioprospecting exercises by northern firms, and it currently remains as the primary real universal arranged instrument that makes express arrangements for the different connection between TK, biodiversity and nearby and indigenous networks by conceding rights to ensure TK to the last mentioned (Bodeker, 2000). It appoints a formal convention for sharing the advantages from GR and in this manner declares the property of the bioresources to the source nation.

The standard prescribed convention is the entrance and advantage sharing (ABS) consent to GR (and TK when appropriate) between the gatherings in bioprospecting exercises (Bodeker, 2000). It likewise requires a free earlier educated agree to be gotten from the holders of GR and TK before bioprospecting exercises happen. At first, the establishment of the TGBRI removed the fear from the Kani community that these private establishments might misuse their territory. However, after further investigation, in the benefit-sharing model (BSM), most Kani members did not get enough information about the BSM, they did not have memberships to join the TBGRI, lack of awareness to participate in the R&D process, and excluded from patent applicants (Basil, pg.487). International issues arose when an international firm, NutriScience, registered “Jeevani” as a trademark bearing their name, Indian based NGO filed a case against them for the act of theft and misappropriation (Basil, pg.488-489). There is a lack of uniformity and openness in the agreement formed by TBGRI and the AVP.

**Government regulations for the lives of the Kani Tribe**

The benefit-sharing model might reap financial benefits for the Kani community. However, there is a need to formalize the statutory laws and regimes to enhance the social status as well as protect the TK holders by collaborating with various countries making sure rules they sent are effective. “Currently, India does not have a law governing access to genetic resources, except to a limited degree the genetic resources located in national parks and sanctuaries” (Gupta, pg.105). Due to lot of disturbance created by the foreign companies, AVP, and the forest management in regulating the activities of the Kani tribe, it became hard for NGO such as the Gene Campaign (Dedeurwaerdere, pg.7 ). Restricting foreign companies to use ‘industrialized property systems’ need to be enforced as it can become a means for exploiting TK resources (Shodhganga, pg.253). The governance structure needs to be strong and effective in protecting the rights of the indigenous communities because currently these resources are recognized by outsiders. Mostly developing countries tend to adopt the benefit-sharing model through TRIPS patent framework, whereas developed countries do not agree on this regulation systems (Bijoy, pg.17). The inclusion of the tribal communities within the Indian Constitutional framework shocked some groups of people, but in India, a country filled with rich biodiversity, tribal rights need to be recognized as their resources are a part of the nation’s wealth.

Laws that were governing local tribal communities were focused on access to resources regulation and not on benefit sharing after validating the nature of the laws regulating the tribal legal system, along with the constitutional laws and international laws, recognizing cultural rights and protecting their rights through adjudication despite only negotiating (Bijoy, pg.13). The Kani tribe has a mutual trust agreement rather than a legal agreement between TBGRI, and the legal provisions are discussed under CBD and the Indian Biodiversity Act 2002 (Shodhganga, pg.278). The Kani tribe used the fruits of the Arogyapacha herb to remove the body and mental fatigue, but the Jeevani drug is made out of the plant’s leaves. The major shareholders were the forest department, researchers, Kani Tribe, and TGBRI. The benefit-sharing model received “Equator Initiative Prize” for sustainable utilization and sharing of Kerala’s biodiversity (Shodhganga, pg.294). The introduction of the IPR bill to protect the intellectual property rights of its tribal people (Shodhganga, pg.301). The Kani tribe can be categorized under the Adivasi knowledge system, the interaction with the outsiders has a strong influence in these communities’ cultures and practices. Currently, TRIPS is the international agreement promotes to harmonize national IPR regimes, but still, there is not a robust statutory law governing the indigenous rights and protection of India's rich biodiversity. The legal obligation of the state to record, monitor, and protect the rights of the habitats of the people in the forests have been violated. This became a significant issue and a black mark for the state by not regulating the rights of the Adivasis and the local communities to create laws that are developed to increase welfare them. Eco-development in the Kanyakumari Forest Division helped Kani tribe by forming EDCS to provide ‘provision for housing and other infrastructure facilities,’ and ‘fire protection’ (Shodhganga, pg.107). In recent years, the government started providing various facilities to the Kani tribe such as community wise students hostel, scholarships, free houses, and medical facilities (Shodhganga, pg.100-103). In the near future, there is hope that tribal communities like the Kani nomadic community will be supported and given equal status as a citizen as for India, it is a developing country, and there is much potential for India to grow and become one of the top economies in the world next to China.

After the intervention of outsiders into the lives of the Kani tribal communities, these people benefited financially. This could be the start for local communities and scheduled tribes to develop and maintain a positive repo with different kinds of people. On the other hand, these tribal people need to set limits and initiate rules that seem justified to protect them in case there is a threat of exploitation. In this case, the Indian government has started providing services such as housing, education and many benefits to these neglected or backward communities. The modern generation is discovering and exploring the valuable resources these local communities have preserved for generations, and it is also the responsibility of educated people to protect, conserve, and spread awareness about these local communities.

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