



Review Paper

## Bio-piracy in India: A Decline in Cultural Values

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### Abstract

*Traditional Knowledge has been an asset and often a major source of income for many indigenous communities. Increasing bio-piracy has been seen to reflect a conflict of cultural and ethical values between the original stakeholders and the bio-pirates and a deterioration of basic values is what is overall concluded in this study.*

**Keywords:** Bio-piracy, Traditional knowledge, Ethical values.

### Introduction

India is a land of traditions and we have gathered knowledge over centuries unknown. About 15% of the world's population is supported by India owing to its unique geographical location and diversity in culture. Our traditional knowledge is a vital part of our cultural identity as it is the sole means of livelihood in rural areas<sup>1</sup>. It takes generations and involves communities for the development and utilisation of traditional knowledge. It is interconnected with ecological resources available around the communities involved.

Although a part of this knowledge is documented but its interpretation is cumbersome because of the involvement of local script used, thus causing patent grants to those who enjoy extravagant benefits despite of not owing the knowledge actually. This causes differences in the market interests of the parties involved<sup>2</sup>. The original stakeholders of this traditional knowledge are left dissatisfied due to lack of profits or benefits that should otherwise have been conferred upon them.

Exploitation of modern systems of knowledge is a result of industrialisation process where production and not sustainable utilisation is the key<sup>3</sup>. As a result of this, the knowledge of the local communities is unsustainably and inequitably exploited. This when coupled with unawareness of the holders of this knowledge regarding their possible protection or compensation by modern legal systems, lead to unfortunate disappearance of traditional knowledge as a whole.

### Bio-piracy

Bio-piracy refers to the process by which the rights of indigenous communities to natural resources and traditional knowledge are disturbed, often retracted and replaced by monopoly rights of those who have exploited indigenous knowledge and biodiversity. Bio-piracy occurs when multinational companies make billions of dollars by claiming

intellectual property rights to traditional knowledge and plant genetic resources. Therefore, formal innovators who perform mere translations and minor modifications and seek patents, claiming the knowledge as well as the life forms as their private property, are pirating traditional knowledge evolved and utilised by informal innovators<sup>4</sup>.

In other words, any attempt to gain proprietary rights over indigenous biological resources or their products, being inconsiderate towards the contribution and consent of the original stakeholders. These practices will lead to inequality between the developed countries that are supported by transnational corporations and developing countries which are dependent solely on their indigenous resources<sup>5</sup>. The issue of bio-piracy is touching threatening horizons because the western countries are toying with the patents of crucial traditional and indigenous products of the progressing nations<sup>6</sup>. In India, the Ayurveda related knowledge is gaining global attraction as well as adoption due to the awareness regarding the adverse effects of allopathy leading to bio-piracy<sup>7</sup>.

### Cultural Values and Ethical Responsibilities

Several studies reveal that many of the indigenous owners of a plethora of valuable knowledge (individual or communities), are not in favour of trading their knowledge for any monetary or materialistic benefits. The prevalence of the importance of ethics in their culture make them share their knowledge and expertise willingly with any outsider without even expecting any kind of advantages, favours or rewards from them.

Hence, the poor indigenous communities remain poor and the indiscriminate extractors of this intellectual wealth keep on accumulating more and more wealth. Apart from this dilemma which has arisen with the mismatch of ethical and cultural values between these stakeholders and the dominant and indiscriminate extractors of their knowledge, the validity and

importance of basic moral and cultural values are also put to question.

The native communities or tribes are generally not acknowledged for their knowledge in a manner that they should ethically have been. Why do these people have to continue being nameless and faceless in revelation of some knowledge that has never been explained before? And that also in so large proportions that almost the entire discipline of ethno-biology has got its constitutionality through such extraction of traditional knowledge without even the rarest and smallest of acknowledgement.

Certain dimensions of ethical responsibility have been identified which are<sup>8</sup>:

Accountability of: All those who have been appointed by several National and International Organisations for Research and Prospection of Biodiversity. Such recruits towards the country from which the knowledge originated. Professional People towards several bodies that direct the exploration and extraction of Biodiversity and the communities related to academics as well. Several international Organisations like the United Nations.

The bodies that govern the legal aspects related to property rights and the subsequent ethical and moral complications. The civilians and consumers of those products. The current generation for the upcoming generations and towards other fellow non-human beings as well.

Moreover, most local and ethnic communities give plant and animals a unique position in their socio-cultural activities<sup>9</sup>. These plants and animals have indispensable roles in rituals and other occasions (death/birthday/marriage).

In several primitive societies, destroying plants that are supposed to be abodes of various spirits is believed to chase away some spirits which are an integral part of their socio-cultural beliefs. Many plants used by indigenous communities have sacred values, for example, the Indian Lotus, having several medicinal properties, is a culturally significant plant in many cultures and is considered to be a symbol of devotion and purity and is so believed to be the seat of Goddess Laxmi, Goddess Saraswati, Lord Vishnu and Lord Brahma. Also, seeds of Eucalyptus and *Zizyphus jujuba* are considered to be dear to Lord Shiva, Mango to Lord Hanuman, Silk cotton to goddess Laxmi, and similarly many others.

In this manner, bio-piracy compels traditional communities to pay in order to consume the patented products that originally belonged to them without any boundaries<sup>10</sup>.

The traditional knowledge that is mostly associated with biological resources is an intangible component of the resource itself. It has a great potential of getting converted into

commercial profits by proving to be the leading factors in the development of many products and processes, and product development in this manner saves on time and cost that would otherwise have to be spent in research. Therefore, the original stakeholders of this knowledge must definitely get a share of benefit in return.

What earlier used to be the foundations of a good and satisfactory life are now overshadowed and even compromised for materialistic rewards. In the run towards development, patents, success and money, people don't even care remembering what they have inherited from their culture being an Indian<sup>11-13</sup>. It is very unfortunate that people have failed to be a responsible and good human being in the quest to become a richer or a more powerful individual<sup>14</sup>. We have left behind measuring things and situations on moral basis and have suffered a great decline in core cultural values like care, concern for the other person, respect for Mother Nature, humanity, empathy, equality, an urge to help and the list goes endless.

India is a party to the Convention on Biological Diversity (CBD) which envisages that these benefits must be shared. India is also a party to the TRIPS agreement of the World Trade Organisation (WTO), which is involved in creating private rights over inventions. And this is what reflects the social balance that has kept India as a country strong and united.

There have been many instances of Bio-piracy in India, all of which are difficult to list, here are 5 of these which are illustrated in the table given (table-1)<sup>10-20</sup>.

## Conclusion

India as a country carrying the Earth's richest biodiversity is very much vulnerable to Bio-piracy. There has been indiscriminate exploitation of traditional knowledge without equitable sharing of benefits and hence there is an urgent need to make amendments and to introduce new enforcements that would aim at getting rid of this unethical practice of bio-piracy. Awareness regarding Intellectual Property Rights and patents, rights of native communities must be accommodated at a greater level in our society

All this has adversely affected the integrity of our cultural and ethical values as a nation. We need to foster our basic values and care for the good of others' in order to curb this evil of bio-piracy. The cultural aspect to this problem is what remains least explored.

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**Table-1**  
**List of Some Common Traditional Indian Drugs Targeted By Bio-Piracy**

Common Name	Indigenous Use	Patent Number	Patentee
Turmeric [Curcuma Longa]	Heals wounds	US Patent 5401504	University of Mississippi Medical Centre
Anar [PunicaGranatum]	Anti-diarrhoea	US Patent 5411733	ToyoharuHozumi, Takao Matsumoto
Rice (Basmati)	Unique Aroma and flavour	US Patent 5663484	RiceTec
Karela, Jamun, Brinjal	Control of diabetes	US Patent 5900240	Cromak Research Inc.
Aswagandha	Treatment of Depression, Insomnia. gastric ulcers and convulsions	EP 1906980	Natreon Inc., US MultiNational

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