Chapter 6 **Biopiracy:** Challenges Before India

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ABSTRACT

Bio-piracy indicates unauthorized use of bio-resources of a country either by the individuals or institutions or companies of other countries. The countries with enormous bio-resources, like India, become the victims of biopiracy. The paper highlights different issues relating to biopiracy in the context of food security of India. It has been argued that the distress of farmers has increased a lot after the emergence of GM seeds. First of all, GM seeds raise the cost of cultivation by monopolizing the seed business in the hands of a few. Secondly, taking monopoly control over the market by the MNCs became easier because technology allowed them to develop seeds which can be used once-for-all. The farmers, therefore, have to give up their traditional practice of saving and sharing of seeds. The paper cites various instances of biopiracy in India and explains how biopiracy jeopardizes the food security and health security of the people in India. Events of piracy of plants with medicinal values and medicinal knowledge of traditional healers are also on increase at a rapid pace in India. This trend also poses challenges health security of India. More initiatives need to be taken at different levels including government and NGOs need to be taken in documenting codified and non-codified traditional knowledge (TK).

INTRODUCTION

The events of biopiracy are occurring more frequently than before all over the world, especially in the southern hemisphere. The victims, in most of the cases, are the developing world, especially the countries in Southern hemisphere like India, South Africa, among others, which are rich in biodiversity. Develop-

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ing and underdeveloped of Southern hemisphere is the source of 90 per cent of the world's biological wealth. India, for example, has 81,000 species of fauna and 47,000 of flora, including 15,000 plant varieties unique to the country. In spite of this richness, these countries hold only 3 per cent of patent worldwide. Industrial countries, on the other hand, hold 97 per cent of all patents and are driving the rush to patent plant genetic resources (Baxter, 1999).

Bio-piracy indicates unauthorized use of bio-resources of a country either by the individuals or institutions or companies of other countries. It refers to "appropriation, generally by means of patents, of legal rights over indigenous biomedical knowledge without compensation to indigenous groups who originally developed such knowledge" (Sudha, 2014). Naturally, the countries with enormous bio-resources, like India, became the victims of biopiracy. It is a mere coincidence that the major share of global bio-resources was possessed by the poor underdeveloped or developing countries. These poor countries are being the victims of biopiracy practised by the rich countries.

The indigenous communities of bio-resource rich countries, by their intense search for food and medicine, discovered various parts of plants and animals useful for the purpose. The entire human race then got benefitted from their discoveries, but none of them claimed anything in return. But the invention of biotechnology in the 1970s changed the scenario a lot. The multi-national companies of the developed countries, like DuPont, Syngenta, Pharmacia, Dow an Aventis, certainly discovered immense profit prospect from the use of this knowledge of indigenous communities. The plundering of this traditional knowledge along with the bio-resources of the underdeveloped countries started with immediate effect. These multi-national companies, thereafter, started patenting the products they developed by using this knowledge and bio-resources in their own name. For example, the farmers in the north-west of Mexico have long been producing a bean which is an important staple and also an important source of income of them. In 1994 Larry Proctor, a US citizen collected this seed. He then developed a new variety of this bean from the mother seed. The new variety was different from the original one only in colour. The new variety had a yellow coat. Mr Proctor called the variety 'Enola' and applied for a patent. He was granted a patent in 1999 by the US Patent and Trademark Office (USPTO). The patent was later assigned to his seed company POD-NERS.

It is against this malpractice of developed countries a Canadian activist Pat Mooney first coined the term bio-piracy (Mgbeoji, 2006). After obtaining the patent right, the MNCs started accusing underdeveloped countries of pirating or unlawfully appropriating their intellectual property rights. It is at this juncture the Third World Countries started counteracting First World Countries of misappropriating the knowledge of their indigenous people. This allegation of misappropriation was then termed bio-piracy. Bio-piracy is thus meant for an unauthorized appropriation of bio-resources and associated knowledge regarding their uses without making proper compensation to the indigenous people who originally possess this knowledge, and to the countries as well who owns the biological resources.

Biopiracy, therefore, stands on the way to the development of these bio resource-rich countries. These countries fail to exploit their resources because they lack technical knowledge of using these resources in industrial processes. The developed countries, rich in technology but poor in resources, are taking advantage of this slackness of the developing world. They are continuously using these bio-resources for their own. In return, developing countries have been paid only an infinitesimal fraction of the value for the raw materials and knowledge they contribute (ETC, 2002). Nevertheless, the United Nations Development Program claimed in 2001 that two per cent royalty charge levied by developing countries on genetic materials developed by local communities in the southern hemisphere that has been patented in the industrialized North would generate more than \$5 billion from medicinal plants alone (UNDP,

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