

## Abstract

Biological resources and traditional knowledge are very important for the survival of mankind, both in the field of biological and in the field of economic. It has been estimated that at least 75 % of people in the world can not live without food that is derived from traditional knowledge.

Convention on Biological Diversity (CBD) is an international agreement established from the cooperation with the states and private sectors around all over the world. The objectives of this Convention are the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources. CBD has affirmed the importance of the biological diversity in every living organism, as well as the needs to conserve and develop traditional knowledge in developing countries. CBD is, therefore, closely linked to the protection of biological resource and traditional knowledge in developing countries.

The TRIPs Agreement meanwhile was initiated by developed countries. It raised the issue of trade-related aspect of intellectual property rights in GATT. Later, when the World Trade Organization (WTO) was established, TRIPs is one of the package agreement of the WTO that is binding to all WTO' members.

The TRIPs Agreement aims to encourage industrial and technological facilitate development with emphasis on inventors' rights. Member states are giving the patent protection available for any inventions, whether products or processes, in all fields of technology, provided that they are new, involve an inventive step and are capable of industrial application, subject to Article 27 of the TRIPs Agreement. Moreover, members may exclude from patentability inventions, according to Article 27.3 (a) diagnostic, therapeutic and surgical methods for the treatment of humans or animals and according to Article 27.3 (b) plants and animals other than microorganisms, and essentially biological processes for the production of animal other than non-biological and microbiological process. This means that members are to provide protection for microorganisms, non-biological process and microbiological process. However,

members shall provide for the protection of plant varieties either by patents or by an effective *sui generis* system or by any combination thereof.

This thesis aims to study the legal problems arising from the implementation of CBD and TRIPs as well as the impact on the protection of Bio-Natural resources in developing countries, with special focus on the issue of intellectual property. The study is based on the research on documents concerning the protection of biological resources and traditional knowledge, with particular attention to different protections provided by CBD and TRIPs. The problems of biopiracy, in developing countries will also be addressed.

As the result of the study, the author concludes that the system of intellectual property of the TRIPs Agreement is influenced by the concept of the protection of private property, introduced with the aim to provide protection for the invention of tools and machines which are non-living organisms. But biological resources and traditional knowledge have different characteristics. Implementation of intellectual property to protect biological resources and traditional knowledge entails several complications. It also controversy when a developed countries make use of the natural resource without a sharing the benefits with the developing countries, the owners of the resources. This kind of unfair practice is considered “biopiracy” . The best way to end future disputes between developed and developing countries is to amend article 27.3 (b) of the TRIPs Agreement by inserting farmers' rights and local communities' rights contained in the Convention on Biological Diversity into the TRIPs Agreement. This insertion will render the principle of local communities' rights, the protection of biological resources, and traditional knowledge legally binding. Prior informed consent is therefore required and fair and equitable sharing of the benefits with indigenous people and local communities must be enforced. The recommended amendment will force developed countries such as the United States of America who have failed to ratify the Convention on Biological Diversity but are members of TRIPs to observe the practice of fair and equitable sharing of the benefits with indigenous people and local communities.