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RELATIONSHIP BETWEEN THE TRADE RELATED ASPECTS OF INTELLECTUAL PROPERTY RIGHTS AGREEMENT AND THE CONVENTION ON BIOLOGICAL DIVERSITY: PROTECTION OF GENETIC RECOURSES

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Abstract: This paper analyzes the relationship between the provisions of the Convention on Biological Diversity and the Agreement on Trade-Related Aspects of Intellectual Property Rights in relation to genetic resources. The authors focus on different points of view on the interaction of these international treaties and concludes that there is a contradiction between their individual provisions, in particular, with respect to the use of genetic resources. Considerable attention is paid to the analysis of the provisions devoted to Article 27 of the TRIPS Agreement, which establishes the requirements for mandatory patenting of inventions, including microorganisms and microbiological processes of cultivation of plants or animals. The provisions of the Convention on Biological Diversity regarding access to genetic resources and equitable sharing of benefits from their use are analyzed in detail. Specific proposals were made to amend the existing international documents to overcome the current contradiction between the TRIPS Agreement and the Convention on Biological Diversity, based on the results of the study.

Keywords: genetic resources, TRIPs Agreement, Convention on Biological Diversity, patent, disclosure of origin.

INTRODUCTION

All living and non-cellular organisms are carriers of genetic material, which contains functional units of heredity, namely genes. According to the Convention on Biological Diversity genetic resources are genetic material of actual or potential value. Access and utilization of genetic resources give tremendous benefits. Prior to the adoption of the Convention on Biological Diversity, developed countries with advanced biotechnologies used their technological superiority to obtain genetic resources from developing countries with the aim of using them and deriving economic benefits (1). Today, there is an acute problem of not only the use of genetic resources, but also their conservation (3), since the exploitation of genetic resources, which began in the 90s of the last century and continues until now, has led to their catastrophic depletion (6). The problem of purposeful management of biodiversity of genetic resources in the field of agriculture is becoming increasingly important for the world community (9).

RESULTS AND DISCUSSION

The Convention on Biological Diversity is an international treaty, the main objectives of which are to conserve biodiversity, use it sustainably, and share the benefits arising from the exploitation of genetic resources on a fair and equitable basis. Article 15 (1) of the Convention on Biological Diversity recognizes the sovereignty of states over their natural resources and allows states to determine access to genetic resources. At the same time, unfortunately, the Convention does not contain specific conditions under which access to genetic resources and their equitable distribution will be carried out. The Convention only states that access to these resources can only be obtained with prior informed consent. The provisions of Article 16 (5) of the Convention are of great importance, as they call on Contracting Parties to cooperate in the field of patents and intellectual property, being guided by national and international law in order to ensure that these rights would be conducive to and would not conflict with the objectives of the Convention.

Despite the fact that today there are 194 states parties to the Convention, the significance of this circumstance is reduced by the fact that the United States, which is the leader in the biotechnology industry, refused to ratify it. The US consider that the vaguely formulated requirements of the Convention in the form of compensation for the resources used or the transfer of biotechnology represent a threat to the development of this industry. Great Britain, Switzerland, France and Italy were in solidarity with the United States; they accompanied the ratification of the Convention with extensive interpretative declarations (in fact, reservations) in relation to these provisions of the Convention. The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement) is the first international multilateral agreement to regulate the protection and use of intellectual property objects in international trade, including the TRIPS Agreement. It is a key source that sets the main criteria for patentability and creates corresponding obligations to protect areas, including those related to biotechnology.

The TRIPS Agreement requires countries to ensure, within their legal regimes, minimum standards for the protection of intellectual property rights. These standards are based on the protection that already exists in developed countries and is actively promoted by large transnational corporations in the field of biotechnology. It should be

noted that the TRIPS Agreement was primarily included in the “package of WTO agreements” partly artificially and due to enormous pressure from large pharmaceutical companies and developed countries, especially the US and the EU. The peculiarities of the adoption of TRIPS in a “package” form predetermined the attitude of developing states to this agreement. The US and the EU were the first to withdraw from the old GATT system of 1947 in order to speed up the process of ratifying the WTO Agreement, which includes the regulation of intellectual property rights. After that, developing countries faced a serious choice: either to stay within the old GATT system, in which their main trading partners no longer exist, or to join the new one, even on favourable terms for them with regard to their intellectual property protection, but at the same time retaining access to US and European markets.

Article 27 of the TRIPS Agreement provides that, in accordance with national legislation, patenting must be available for any invention, “in all fields of technology, provided that they are novel, contain an inventive step, and are industrially applicable”. The TRIPS Agreement nominally harmonized national patent regulation using three main criteria of patentability (novelty, non-obviousness / inventive step, and utility / industrial applicability). However, the TRIPS Agreement does not contain any provisions on significant legal issues such as the range of existing knowledge (“prior art”) that are considered important in assessing novelty. “Those inventions may be excluded from the scope of patentable, “which commercial use must be prevented [...] for the protection of public order or morality, including the protection of life or health of people, animals or plants, or to avoid serious damage to the environment”. The TRIPS Agreement also allows WTO member states to exclude from the patentable ones the diagnostic, therapeutic and surgical methods of treating humans or animals, as well as plants and animals other than microorganisms, as well as essentially biological methods of growing plants or animals, other than non-biological and microbiological methods.

Almost immediately after the creation of the WTO, the provisions of TRIPS began to be subjected to harsh and well-reasoned criticism from developing countries and non-governmental organizations for their clear imbalance in favour of the interests of developed countries and their approach to protecting intellectual property. International rules, in particular the TRIPS Agreement, are most often seen as an obstacle to national policy making, as a narrowing of legislative choices, and as an enforced convergence of national laws that promotes the trade interests of intellectual property rights holders. “The TRIPS Agreement as it stands, while facilitating the granting of patents for products based on genetic resources and associated traditional knowledge, does not contain effective provisions to protect these resources and associated knowledge against misappropriation and theft. The absence of such provisions in the TRIPS Agreement may lead to conflicts in its implementation and interaction with the Convention on Biological Diversity” (10).

It seems that the following can be distinguished among the main reasons for supporting the point of view on the existence of an internal conflict between the TRIPS Agreement and the Convention on Biological Diversity: By requiring that plant varieties be protected for certain genetic material either by patents or through an effective *sui generis* system, and without preventing other genetic material from being patented, the TRIPS Agreement in practice ensures that such genetic resources would be appropriated by individuals in a manner that is inconsistent with the sovereign rights of States to genetic resources, as provided for in the Convention on Biological Diversity. This phenomenon has already received the name of “biopiracy”, when something is patented

in developed countries based either on traditional knowledge that is widespread in a number of developing countries and is considered publicly available there, or a product with minor changes (for example, seeds with one gene altered that increases frost resistance or food value), but without taking into account the labour or knowledge of the natural selection of these seeds by previous generations). This is how a patent was registered in the United States for a treatment using the healing properties of turmeric and a patent for basmati rice, widely used in India and Pakistan.

The TRIPS Agreement explicitly provides for loyalty to patentable subject matters and predetermined exemptions from patentability with specifically stating that “patents are granted for any invention, whether it is a product or a method, in all fields of technology”, and urging that there should be made available patents for inventions, including microorganisms and microbiological processes for growing plants or animals; plants and animals themselves, as well as the biological processes of their production. This mandatory coverage of certain biological objects could be interpreted as an encouragement or even an assignment of obligations of states to grant patents for genetic materials in their natural state. That is why the WTO Secretariat expressed concern that “... the obligation to protect microorganisms by patent may mean patenting a number of genetic materials in their natural state, bearing in mind the practice of a number of WTO Member States to define inventions in such a way that this definition includes the detection of substances naturally occurring in nature, which led to the receipt of patents for life forms found in their natural state. In this regard, it was suggested that in order to avoid conflict with the Convention on Biological Diversity, a patentable microorganism must undergo a certain genetic modification in the hands of man ” (10). It should be noted that in response to this proposal, the view was expressed that the granting of patents for inventions using genetic resources does not preclude the implementation of the provisions of the Convention concerning the sovereign right of states to access genetic resources in their territories and that the ownership of a patent for isolated or modified genetic material does not mean ownership of the original genetic material” (8).

It seems that the following steps can be taken in order to overcome the contradictions between the TRIPS Agreement and the Convention on Biological Diversity: Сделать генетические ресурсы объектом патентной охраны в соответствии с патентным законодательством всех членов ВТО, чтобы обеспечить оптимальную правовую основу для получения выгод (которые являются предварительным условием их совместного использования) (7)

- Make genetic resources the subject of patent protection, in accordance with the patent laws of all WTO Members, in order to provide an optimal legal basis for obtaining benefits (which are a precondition for their sharing) (7).

- Amend international patent law standards (2) by making it mandatory to disclose the country of origin of the genetic resources and traditional knowledge that form the basis of their application. States will have to incorporate requirements on disclosing a country of origin into their national legislation (5).

- Include in the TRIPS Agreement the recognition of the sovereignty of states over their genetic resources so that any private use of genetic resources was to be subject to these rights. This will bring the provisions of the TRIPS Agreement into line with Article 3 of the Convention on Biological Diversity and overcome the challenges posed by Article 27.3 (b) in the TRIPS Agreement (4).

SUMMARY

As follows from the above, we have reasons to believe that there are a number of conflicts between the Convention on Biological Diversity and the TRIPS Agreement regarding genetic resources. The Convention establishes the sovereignty of a state over its genetic resources, while the TRIPS Agreement includes them in the list of patentable objects. Developing countries that are rich in biological diversity and are the source of a large number of genetic resources have expressed concerns that the implementation of the TRIPS Agreement could lead to the loss of their sovereignty over their genetic resources.

CONCLUSION

Genetic resources are attracting increasing attention of the international community. The Convention on Biological Diversity is the main source of international law governing access to genetic resources and the sharing of benefits arising from their use. At the same time, the TRIPS Agreement, as a source of international patent law, is in conflict with the Convention on Biological Diversity, requiring that plant varieties be protected for certain genetic material either by patents or through an effective *sui generis* system. To overcome the existing conflict, it is necessary to adopt the requirement to disclose the country of origin of genetic resources and traditional knowledge that form the basis of their application, as well as to include recognition of the sovereignty of states over their genetic resources in the TRIPS Agreement.

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