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The Global Transition to Sustainable Development: Environmentally Sound Technologies and Intellectual Property

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Abstract

The study examines the precious sensitive problem of the legal tensions between internationally transferred environmentally sound technologies and intellectual property rights from the perspectives of international law of sustainable development. In this study, the more significant directions of politics of international law on sustainable development aimed at solution of this problem are examined. Author analyzes comprehensively the already achieved balanced relation between protection of intellectual property rights and objectives of international technology transfer at the level of multilateral environmental agreements. This article makes some suggestions for understanding the new tasks of international law politics of sustainable development in the context of increasing of IPRs protection. Author concludes that protection and enforcement of IPRs should contribute to promotion technological innovation transfer and dissemination of technology, as well as balanced relation between rights and obligations through prism of sustainable development. That may be possible due to international collaboration on solving the problem of contradiction between interests of users of environmentally sound technology, on the one hand, and economic interests of rights holders, on the other hand, on basis of coordinated standards of international environmental agreements.

Keywords: sustainable development, environmentally sound technologies, international law, intellectual property, global politics.

Introduction

As well known, the one of the more important issues of current Global Agenda is the global transition to sustainable development. The central factor of this transition is a wide application of results of scientific and technological progress, namely appropriate technologies around the world. Shortly, paramount special technologies mentioned in international law instruments are characterized by Agenda XXI (Chapter 34.3) as environmentally sound (clear/green) technologies (ESTs) including technologies for prevention of pollutions of environment, for conservation of biodiversity and its sustainable use as well as technology for prevention of climate changes (low-carbon technologies or alternative technologies) or adaptation thereto.

International technology transfer by which ESTs is being disseminated around the world is inserted in moving towards sustainable development regulated, in turn, by norms and principles enshrined in instruments of international public law. The point is that international technology transfer oriented to sustainable development is regulated by international legal instruments pertaining to the so-called international law of sustainable development consists of such branches of international law as international environment and international economic (trade, investment) law. Remarkably, the decisive importance for international ESTs transfer belongs to international law of intellectual property (IP) that includes provisions on protection of intellectual property rights (IPRs).

As long as some transferred technologies are proprietary and, accordingly, is being transferred over formal channels, designed to observance the exclusive rights of rights holders, IPRs affect the internationally transferred ESTs very considerably. Moreover, there is profound legal tensions between IPRs and internationally transferred ESTs. We consider these tensions make serious difficulties for successful moving toward achievement of sustainable development.

Therefore, the most difficult problem of global transition to sustainable development is seen in harmonization of different interests, including interests of developed, developing and least-developed countries, saying nothing of interests of right holders and public. From the perspectives of increasing of effectiveness of international ESTs transfer, norms of provisions relating to signed branches of international law should be harmonized each other, especially provisions of international IP law and international environmental law. These tasks demand the scrupulous examination of existing tensions between protection of IPRs and goals of transferred ESTs as applied to evolving of international law of sustainable development and its politics. This is core object of given study.

Material and methods

The first methodological starting point of given study is overall approach emphasizing the dual role of protection of IPRs in the process of technology transfer. On the other hand, protection of IPRs provides the incentives to create technology and know how due to respect for moral and economic interests of creators that are often right holders. On the other hand, protection of IPRs in modern world intends to increasing that makes a lot difficulties for the access to technology and, accordingly, their using. Unconditionally, international transfer of ESTs faces just now mentioned dual effects of IPRs protection. That is because the patent licensing agreements, playing in many cases important role for dissemination technology, can call the access to technology in question. The second methodological approach applied in given study is the idea of forming the balanced international law on sustainable development that shall overcome the tensions between international IP law and international environmental law. Additionally, given study is based on the analysis of provisions of appropriate international law instruments and takes into account more interesting findings of scientific and expert works on subject matter regarded.

Discussion

ESTs are such tools for sustainable development that are acting if and only if they have being transferred and diffused. More generally, transfer of technology, especially ESTs to developing countries, is one of the most actively discussed issues of international economic relations and international relations in the area of aid to development being seen now as aid to sustainable development. Therefore, transfer of technology under provisions of the multilateral environmental agreements (MEAs) and its problems, namely numerous barriers, are the traditional subject matter of experts and researches specializing in international environmental law [1 – 3]. To be a little concrete, provisions of multilateral environmental agreements, for example conventions of Rio, contain number provisions as regards technology transfer and draw its goals. As laconically highlighted by C. Alberts, “technology transfer is one of the most important issues in international environmental law, when considering the means to sustainable growth” [4, p. 64].

International technology transfer, being the critical factor to sustainable rate of economic growth and development generally, is very sensitive to implications of IPRs protection. The fact of matter is that during last 50 years, protection and enforcement of IPRs have had tendency to increasing standards. We consider that diverges enough explicitly with substantial logic of technology transfer. Accordingly, IPRs is soundly under discussion within international cooperation in technology transfer area in context of transition to sustainable development. It is determined by that IPRs, on the one hand, have never been more so economically and politically significant and, on the other hand, controversial as now.

A new moment in discussion on impact of IPRs on transition to sustainable development implies following. International transfer of clear technologies, including climate change technologies, is subject to logic of formal and informal transfer. In first case, given transfer has investment, trade and, certainly, IPRs aspects [5 – 8]. The core question consists in that what are IPRs – tool for or barrier to transfer and dissemination of sustainable technologies, for example, climate change technologies?

Results

1. Balance of ESTs and IPRs as the imperative of global sustainable development

We want to stress that IPRs is the inevitable tool for transfer and diffusion of ESTs but is no factor of their restriction because of ESTs are global public goods of intellectual nature that makes for forming an appropriate conditions necessary for overall prosperity. This research results of my study arise from looking at the paradigm articulated in conventional law instruments concluding provisions on technology transfer and confirmed by Agenda XXI and other strategic documents in the sphere of sustainable development. Such paradigm also covers some international law instruments in sphere of IPRs protection directly. That demonstrates not only the TRIPS Agreement, but also other instruments of the WTO and instruments of international IP law. This implies the use of potential of international IP system acting as the horizon of international technology transfer in area of sustainable development.

Insofar as the paradigm of sustainable development departs from understanding the economy as a necessarily consistent with environmental and social aspects of development, modern international transfer of all sorts of technologies has certain significance for transition to sustainable development. In the age of universal intentions to sustainable development there is demanded to rethinking the understanding of technology and their transfer as one of the factors of country's competitiveness. As I considers, the competitiveness is not reduced now to economic dimension but implies the achieved success in harmonization of three aspect of development. This postulate creates a new viewing technology innovation, especially ESTs and acquiring them from both internal and external sources, and further process of their using. Unconditionally, internationally transferred ESTs have the central role in this process.

That is why the possible difficulties in international transfer proceeding from IPRs and, accordingly, formal channels of transfer should be examine as difficulties of transition to sustainable development. Speaking generally, world society, conducting the policy oriented to sustainable development, is convinced in the necessity to more broadly develop and use ESTs having disseminated through formal and informal channels of international technology transfer as such.

IPRs protection being the significant facet of cooperation between developed and developing countries has sensitive public aftermaths concerning the establishing of balance between interests of possessors of exclusive rights to technologies and public interests. As well-known, this balance is provided by regimes of restrictions and exceptions of exclusive rights under modern intellectual property law at the national and the international level. This balance has direct relation to issues on world development and, immediately, to issues on transition to sustainable development.

2. Protection of IPRs under MEAs: a concise exploration

The observance and protection of IPRs should be treated in the light of mentioned in multilateral environmental agreements (MEAs) principles of technology transfer, namely the fair, reasonable and mutually agreed conditions. Characteristically, issues on IPRs addressed to transfer of ESTs are reflected in various MEAs in a different ways [9; 10, p. 135-136]. The UN Convention on Biodiversity (CBR) (1992) provides the transfer of proprietary and nonproprietary technology. Wording of second part of para 2 of the Article 16 postulates that in the case of technology subject to patent and other forms of IPRs protection, such access and transfer shall be provided on terms which recognize and are also consistent with the adequate and effective protection of IPRs. That reflects interests of developed countries and, at least, interests of advanced developing countries-donors.

The Convention to combat desertification (1994) also contains provisions on need to protect IPRs. Article 18.1(e) among appropriate measures designed to creating the domestic market conditions and incentives for promotion the development, transfer, acquisition and adaptation of suitable technology, knowledge, know-how and practices was referring to measures to ensure the adequate and effective protection of IPRs. Provisions on protection of IPRs is included in list of terms of technology access and transfer of the International Treaty on plant genetic resources for food and agriculture (2001). Para b(iii) "Access to and transfer of technology" of the Article 13 ensures the access and transfer to protected technology, noting that such access and transfer shall

be provided on terms which recognize and are consistent with the adequate and effective protection of intellectual property rights.

However, provisions on needs to protect IPRs in process of technology transfer are absent in several relevant international agreements and several MEAs. So, Nagoy Protocol to CBR (2010) in the Articles 22 and 23, devoted to technology transfer, directly not toughs upon protection of IPRs. Meanwhile, issues on IPRs protection is raised in para 3g(ii) addressing mutually agreed terms of access to genetic resources and para 1(j) and para 2(q) of the Annex to this Protocol "Monetary and non-monetary benefits" that states joint ownership of relevant IPRs.

Algorithm of technology transfer also is reflected in strategic documents on sustainable development. The Agenda XXI, for example, emphasizes transfer of ESTs, in particular to developing countries, under favourable, concessional and preferential terms, as mutually agreed, taking account the needs to protect IPRs (para 34.14(b)). The Programme for further implementation of the Agenda XXI (1997) continuing range of problems of technology transfer, also attaches importance to protection of IPRs. Moreover, para 88 of Ch. "Transfer of environmentally sound technologies" is parallel to provisions of para 34(b) of the Agenda XXI. However, in contrast to the Agenda, the Programme underscores that much of the most advanced ESTs being developed by the private sector is privately owned (para 90). Therefore, as I think, the private sector should be stimulated to transfer proprietary technologies.

3. Internationally transferred ESTs and IPRs: a new problem context

Remarkably, appropriative coordination of international efforts on overcoming imbalanced relations between IPRs and technology transfer, when exclusive rights prevent the technology transfer on equitable and fair terms, entails including of provisions on IPRs protection to articles of MEAs devoted to regulation of technology transfer. Unfortunately, achieved balance is very fragile because of further increasing of standards of IPRs protection, on the one hand, and the inadequate conformity of international trade and investment law and especially international law of IPRs with the succeeding in objects of sustainable development, on the other hand. As a results, the solution of task of developing the balanced international law concerning transfer of ESTs demands taking in account the new emerging problems.

It is clear that multilateral agreements on IPRs, especially the TRIPS Agreement, are implicitly oriented to sustainable development due to postulating the balance of public interests and interests of right-holders. The ongoing discussions within global policy in area of IP and international technology transfer at the new level of resoluteness to transition to sustainable development concentrate on adapting the TRIPS provisions to new tasks of international development and, especially, the TRIPS potential (Article 66.2) and TRIPS mechanisms to facilitation the transfer of ESTs to least-developed countries [11]. At once, there has appeared a concern about that whether does TRIPS hinder or facilitate the transfer of climate related technologies, as well as transfer of biotechnologies to developing countries and how to exploit the potential of it provisions optimally.

As already stated, the broadening of extent of IPRs that has been provided by multilateral IPRs agreements and the TRIPS means the transition from minimum standards to more strict level of IPRs protection embodied in the TRIPs-plus provisions contained in number of free trade agreements (FTAs). The possible results of these provisions for perspectives of international technology transfer in whole [12] and transfer of ESTs in particular are contradictory [13 – 14]. That may affect unpredictably the international transfer of technology in the context of transition to sustainable development. In this account, politics of international law in the examined area faces new problems. Consequently, world society is interested in renewal of politics of international law of sustainable development in considered area as applied to the new era of development of IPRs protection and, concurrently, new era of flows of ESTs.

In other words, differently drawn interests as regards IPRs protection may cause troubles for technology transfer aiming at facilitation the sustainable development. In this case, international law provisions admitting needs of developing countries for sustainable development under favourable terms of technology transfer (Article 4.2. of the Vienna Convention for the Protection of the Ozone Layer, Article 16 of the Convention on Biological Diversity, Article 66.2 of the TRIPS Agreement) are far from fulfilling. The aftermaths of such collision between different groups of countries block manifestations of creative potential of technologies. In my opinion, this collision impedes transfer of ESTs and put off realization of goals of sustainable development.

Finally, it may be stressed the implementation of provisions on technology transfer means not only effective financial international cooperation, but also cooperation on IPRs protection, namely realization of coordinated approach. The latter is possible if all countries will adhere to minimum standards of protection of transferred technologies. As I consider, coordinated standards is a broad basis for balanced interests of developed and, accordingly, developing countries concerning benefits from technology transfer.

Conclusion

In sum, protection of IPRs, especially patent rights is the subordinated aspect of technology transfer and diffusion of technologies in condition of sustainable development. The protection and enforcement of IPRs should contribute to promotion technological innovation transfer and dissemination of technology, mutual advantage of producers and users of technological knowledge, social and economic welfare, as well as balanced relation between rights and obligations through prism of sustainable development. Based on this paradigm, international law of sustainable development should conduct further politics striving to harmonizing transfer of ESTs, on the one hand, and IPRs, on the other hand. This politics is a precious promising, and we can already see the serious results of required harmonization.

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