

Report

The Contribution of Intellectual Property to Facilitating the Transfer of Environmentally Sound Technology

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In the line of the use and transfer of green technologies, the importance of Intellectual Property Rights (IPR) has risen enormously. IPR are seen as a driving force in competitive innovation and technical development, but on the other side, critics argue that the protection of IPR has an impeding character in transferring clean technologies to developing countries. For this reason, Ecuador submitted a proposal to the TRIPS Council, dealing with the "Contribution of Intellectual Property to Facilitating the Transfer of Environmentally Rational Technology". Against this background, the Friedrich-Ebert-Foundation Geneva Office and the Permanent Mission of Ecuador to the World Trade Organization organized a workshop for country delegates and sector's experts with the aim to create a space to freely exchange points of view on the Ecuadorian proposal from economic, business, development as well as legal perspectives.

Background

The overall comprehensive aims of sustainable development, the protection of the environment and adaptation to as well as mitigation of risks of climate change have become the most important pillars over the last decades not only in international environmental politics, but also in development and trade politics. Especially the development, use and transfer of green technologies has become a relevant aspect. Promoting greater access to and transfer of these technologies, in particular of Environmentally Sound Technologies

(ESTs), was already a central concern at the Rio Earth Summit in 1992 and its important outcome, the Agenda 21 on sustainable development. Chapter 34 of the Agenda deals with the transfer and promotion of ESTs to developing countries as well as the support for local capacity building.¹ As a result of rising technological capacities, notably in emergent economies, and increasing innovations and patents on such capacities, the importance of Intellectual Property Rights (IPR) has risen enormously. IPR are seen as a driving force in competitive innovation and technological development. On the other hand, critics argue

¹ Agenda 21, chapter 34, paragraph 14, https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf

that the protection of IPR as regulated in the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) is a huge barrier in transferring clean technologies to developing countries. Therefore, the protection of IPR in the development of climate change mitigation and adaptation technologies as well as their transfer to developing countries has become a contentious issue.

Against this background Ecuador submitted in February 2013 a proposal to the TRIPS Council, dealing with the "Contribution of Intellectual Property to Facilitating the Transfer of Environmentally Rational Technology" (IP/C/W/585). Today, 15 months later and with regard to the upcoming Ministerial Conference of the World Trade Organization (WTO) in December 2015, the Friedrich-Ebert-Stiftung (FES) Geneva Office and the Permanent Mission of Ecuador to the WTO organized a workshop with representatives of other countries supporting the proposal as well as sector's experts of the United Nations Conference on Trade and Development (UNCTAD), the International Centre for Trade and Sustainable Development (ICTSD) and the WTO. The intention of this workshop was to create a space to freely exchange points of view on the Ecuadorian proposal both from economic, business, development as well as legal perspectives in order to incorporate new elements, reformulations or revisions of it.

Ecuador's proposal

Ecuador highlights in its proposal that timely dissemination and transfer of technology were essential for achieving the objective of adaptation to and mitigation of the negative and harmful effects caused by climate change. Although a legal framework offering flexibilities in the TRIPS Agreement was existent – for

instance the mechanism of compulsory or voluntary licensing – the apparent lack of information or the excessive protection of IPR especially through the patent system could create an exclusive exploitation right for the legal holder of the invention, a fact which created monopolies leading to high prices and a lack of adequate access, transfer of information and knowledge.² Particularly in the most vulnerable developing countries, the paper holds, the current patent system could restrict the distribution of green technologies.³

Ecuador therefore pleads for a reaffirmation of the existing flexibilities in the TRIPS Agreement through a declaration that addresses the relation between legal flexibilities, climate change and the access to ESTs. The proposal argues in particular for a review of the articles 31 and 33 of the TRIPS Agreement regarding the provisions on the use without the authorization of the right holder, which should include provisions on the transfer of expertise and know-how to implement compulsory licenses, as well as a "reduction in the term of protection for a patent of (x) years in order to facilitate free access to specific patented ESTs". Furthermore, the regulation of voluntary licensing should be evaluated from the point of view of the most pressing needs of the most vulnerable developing countries, and should include a special, publicly funded mechanism to the promotion of open and adaptable technology licensing. The adaptation to climate change and the mitigation of its harmful effects should finally be included in the concept of "public interest," and a special provision should be adopted allowing for the exemption from patentability on a case-bycase basis.4 The general implication of the proposal is therefore to create a framework of reference to help promote the debate on the review and adaptation of existing flexibilities in the TRIPS Agreement regarding the IPR,

² IP/C/W/585, paragraph 5

³ IP/C/W/585, paragraph 19

⁴ IP/C/W/585, paragraph 17

namely the patent system, to facilitate the transfer of technology, information and expertise, which is a central concern for the least developing countries.

Economic and development perspectives on IPR and clean technologies

Pedro Roffe, Senior Associate with the International Centre for Trade and Sustainable Development (ICTSD), opened the discussion with a summary of the proposal and his recommendations on it. As he pointed out, the debate on technology transfer regarding climate change issues had been held for the last two decades. Also, there had been some positive developments, e.g. the Bali Action Plan of 2007 or the Cancun Conference in 2010, and enhancing technology transfer had been one of the key pillars of the UNFCCC. He highlighted the dual role that IPR play in this complex sector: The protection of IPR, he stated, promoted the development of new technologies by fostering competitive innovation and providing incentives, but hindered on the other hand an open transfer of technologies, knowledge and expertise. The debate, however, was characterized by a general lack of empirical evidence and reliable, objective data. As recent research of the ICTSD had shown, patenting in the sector of green technologies was currently dominated by OECD countries, but also a number of emerging economies particularly in specialized individual sectors, while least developing countries did only hold very few patents. But generally, he continued, IPR still remained to be an obstacle in combating the negative consequences of climate change, at least in some cases, which was why the discussion on IPR and climate change should continue. Roffe concluded that the existing IPR regime should facilitate the transfer and use of green technologies, but simultaneously sustain a balance between the protection of IPR and the competitive character as a driving force of innovation on the one hand and the diffusion of technology on the other. The discussion should recognize and identify all existing (potential) barriers, promote appropriate competition policy tools as well as consider all relevant options in the existing regime, but also possible alternative regimes.

At the very beginning of the discussion, the main question of the debate became apparent: Is the existing IPR regime, including the flexibilities provided by the legal framework, adequate and sufficient for the case of the transfer of green technologies to developing countries? The overall answer can be summarized as: it depends on the case. As several experts highlighted, one cannot generalize as this debate covered a complex issue that included a variety of policy fields, of different local conditions in the countries as well as a variety of different technologies all subsumed under the term "green technologies". Thus, a multidisciplinary perspective was needed which would also bring the debate into other discussion forums.

As Jayashree Watal, Counsellor in the Intellectual Property Division of the WTO, stressed during her presentation, one should consider the fact that between the two extreme positions on IPR and ESTs – those that are in favor of the proposals presented by Ecuador and those that strongly reject the alleged impeding character of IPR protection – there was a number of states considering the existing legal framework as adequate, but support further discussion on its use and alternative instruments. Besides, she reminded to be clear in the used concepts and to focus on important guiding questions, e.g., whether the main objective is the access to technologies or domestic production; what technology is exactly of interest as climate change technologies differ highly in their character and involve a large number of different sectors; and whether it is a transferable, i.e., copiable technology that permits the production of a generic or not. Lastly, she concluded, there was no general proof that the existence of a patent on a particular technology was a barrier to access, nor did the absence of a patent right provide any guarantee for the functioning of a technology. Instead, the access and use of green technologies depended highly on the way a particular patent is exploited, on the existing skill levels on the domestic level, the efforts undertaken by a state in the domestic infrastructure and at least financial aspects.

Legal perspectives

Kiyoshi Adachi, Chief of the Intellectual Property Unit of the Division on Investment and Enterprise at the United Nations Conference on Trade and Development (UNCTAD), and David Vivas Eugui, Legal Officer at the Trade and Environment Branch of the Division on International Trade in Goods and Services, and Commodities of UNCTAD introduced participants to the already existing framework on IPR and climate change. They identified three big upcoming intergovernmental negotiations that explicitly deal with the issue at hand: The draft of the Addis Ababa Accord of the third Conference on Financing for Development, which underlines the use of the existing flexibilities on IPR to further the public interest in sectors of vital importance for sustainable development, including responses to climate change; the agreement on the so-called Sustainable Development Goals (SDGs) that deal concretely with the development, transfer, dissemination and diffusion of ESTs to developing countries (target 17.7.)⁵; and finally the 21st Conference of the Parties of the United Nations Framework Conference on Climate Change (UNFCCC CoP 21), as well as several follow-up meetings like the ministerial conferences of the WTO or UNCTAD.

Both experts underlined that although there were flexibilities under the TRIPS Agreement, there was only little evidence on their use in

practice so far. The better question would be whether or not there is a need for a better understanding and information about their use in the context of ESTs rather than seeking for a revision of the regulations. As Vivas noted, regarding the patents filed in third markets to replicate and innovate around, most of the patents filed in developed countries before 2013 and 2014 should be already in the public domain within African and Latin-American markets. He also opted for the narrow perspective on ESTs. Most of the existing studies, he held, focused on renewable energy as well as mitigation rather than adaptation to climate change, and failed to take into account the variety of technologies used in a wide range of sectors in different countries with diverse conditions (for example, the most relevant sector for least developing countries is agriculture, which requires very different technologies than those needed in other sectors). Ecuador's proposal, he concluded, should therefore clearly point out its actual target and purpose.

They continued that two main pillars of the existing flexibilities consisted in compulsory or voluntary licensing, which both had proven to be effective at least in some cases. Therefore, the most relevant part was an adequate domestic law allowing for the use of the flexibilities found in the TRIPS Agreement (exemplified by the US Clean Air Act, which provides compulsory licensing in cases of necessity to comply with emission requirements and nonavailability of reasonable alternatives). Vivas lastly referred to alternative models dealing with the topic, for instance negotiations under UNFCCC (e.g. the proposal to establish an international IPR mechanism to facilitate access and the development of technology), systems of pricing and advanced market commitments or the so-called Aid4Trade Initiative, and proposed to finally focus on more urgent concerns like regulating subsidies or establishing

⁵ of the draft Open Working Group proposal for Sustainable Development Goals as of February 2015, https://sustainable-development.un.org/sdgsproposal

a non-discrimination clause for the access to public funds and subsidies on ESTs. These statements were supported by Nirmalya Syam, Program Officer with the Innovation and Access to Knowledge Program at the South Centre. But, as he added, the transfer of technology was highly dependent on transaction costs and local capacity. IPR were thus not the only barrier in transferring ESTs. Licensing might not be very attractive if a direct export of a given technology is more profitable than investments in local manufacturing. Nevertheless, he maintained, the concern of developing countries was a legitimate one since patents did not necessarily encourage innovation in countries with a weak industrial or technological base, and added that a reluctance of right holders to licensing could be observed. Consequently, there was a need for discussion about how the TRIPS provisions could contribute to the facilitation of transfer and diffusion of ESTs and about the general aspect that IPR needed to be subordinated to the global interest of achieving environmental sustainability.

Focusing on the paragraphs 17 d and e of the Ecuador proposal, the "public-interest"-based exemption from patentability and the "reduction in terms of protection for a patent of (x) years," Fernando Piérola, Senior Counsel at the Advisory Centre on WTO Law (ACWL) finally presented some concluding remarks on the main methods of changing WTO law. The two relevant instruments here are the amendment procedures and the decisions of the ministerial conferences, particularly waivers. The advantage of an amendment that enters into force after two thirds of the members have accepted it (but only for those members that have accepted it), he claimed, was the fact that it offers the widest scope of application and could result in important institutional changes. The limitation of this method was however that it would only be effective for those members that have accepted it, while the others retain their rights under the existing rules. He proposed therefore that an amendment may be combined with a waiver. A waiver, which can be granted only by consensus, in exceptional circumstances and for a determined time during the ministerial conference, releases a member for a determined period of time from its WTO obligations.

Conclusions

The debate on IPR and the transfer of green technologies is dominated by two extreme positions. While one side sees IPR as a general barrier, the proponents strongly reject the possibly hindering character and emphasize the important role of IPR in promoting innovative and competitive innovations as well as developments. However, as the discussion has shown, there is an enormous "grey area" due to the complexity of the issue. At the end, there has been consensus about the fact that several flexibilities regarding the patent system are already existent in the TRIPS Agreement, which remain but unused by (many) states. It became apparent that there is a lack of information on how to exactly use the possibilities the existing laws already provide. Besides that, there is a huge number of factors, like transaction costs, local manufacturing conditions and infrastructure, financial resources etc., that hinder an effective transfer and use of green technologies. Nevertheless, IPR can have an impeding character in some cases, which should however be underlined by objective and strong empirical data. It became clear that this debate reflects a political problem of cemented and opposed positions particularly between developed and developing countries. The dialogue therefore should be continued to find a balance between IPR protection as a driving force for innovation and the transfer of technologies to facilitate the achievement of sustainable development for developing countries. Finally, this debate concerns not only international trade, but also development and social politics as well as environmental politics and affects the international community of states as a whole. Thus, there is a strong need for a multidisciplinary perspective that creates a multilateral framework and coherence between all relevant fields and related organizations.

On the author

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