

International governance of biodiversity: Involving all the users of genetic resources

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February 2004

Ten years after the signing of the Convention on Biological Diversity (CBD), the objective of fair and equitable sharing of the benefits arising from the utilization of genetic resources – one of the three objectives of this convention – is far from being achieved and continues to stir up discussions.

The current international context is based on a private-law approach – contracts on access to genetic resources and the sharing of benefits tied to their utilization. The contracts establish the standards that should regulate the transfer of genetic resources for research and possibly marketing purposes, in exchange for advantages granted to the party recognized as the provider. Based on the Bonn Guidelines adopted in 2002, more than 50 countries have enacted, or are about to enact, national legislations defining the procedures of access to genetic resources and benefit sharing.

Some provider countries are complaining about bearing most of the costs of regulation while the spin-offs are still at a low level, whether in financial or technology-transfer terms. The diagnosis of this problem differs depending on whether it comes from provider or user countries, from local communities or States, or from researchers or the private sector. It's true that the issue is not easy to grasp hold of, due to the many different ways of thinking among the stakeholders and to the uncertainty regarding the value of genetic resources.

Three explanations can be put forward. The first considers the problem from a purely technical angle, by emphasizing the lack of administrative, scientific, and negotiation capability for implementation in the develop-

ing countries (which implies that it would be enough to reinforce these capabilities in order to attain the CBD objectives). The second claims that the hopes put into this sector in the early 1990s were greatly overestimated and have not yet been confirmed, explaining the current low level of spin-offs. Finally, the third highlights the non-application and lack of effectiveness of the multilateral regulation framework discussed within the CBD. This criticism partially ties in with the first one, but it's not limited to just implementation; it questions the coherency of the international framework that's supposed to guarantee facilitated access and fair and equitable sharing of benefits.

The objective of the action plan of the World Summit on Sustainable Development to create an "international regime" on access and benefit sharing can be interpreted along the same lines as this last explanation. One of the ideas mentioned is the "user's measures"; i.e., measures that genetic-resources users can take to achieve the objective of benefit sharing.

The present *Synthèse* is based on an international roundtable organized jointly by Iddri and the United Nations University (Institute of Advanced Studies) in Paris on 6 and 7 November 2003. The objective of this document is to analyze the extent to which greater involvement by users makes it possible to enlarge the discussion on international governance of access and benefit sharing and, by doing so, improve its effectiveness. It explores three areas where this taking on of responsibility can be carried out: technology transfer, disclosure of origin, and access to justice in case of disagreement.

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Technology transfer

The issue of technology transfer has shaped the international discussion on biodiversity. The dual objective of facilitated access and fair and equitable sharing of benefits is the result of negotiation structured as a confrontation between countries that possess genetic resources but are weak in the latest technologies and countries weak in genetic resources but that possess advanced technology.

In the 1960s and 70s, the ways of dealing with the technological imbalance between industrialized countries and developing countries focused on the model of development. The objective was to create production capacity for competitive goods in the developing countries so that they could break out of the classic scenario of exporting of raw materials. Two strategies were implemented: import substitution and export incentives. The first sought to set up heavy industry to supply the domestic market locally. The second relied on the production of goods for final consumption intended for export. At the time, the discussions dealt with the terms for technology transfer to support these development strategies.

Twenty years later, the discussion has evolved: the import-substitution strategies turned out to be expensive and fell to the budgetary discipline of the 1980s and 90s. The export-incentive policies, which were more effective, have reached their limit today. By bringing intellectual property rights (IPRs) into general use in all countries, the World Trade Organization (WTO) agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs) makes technological imitation, which was the basis of this model, increasingly difficult.

The issue has therefore gradually switched from terms of technology transfer to conditions of technology access. At present, there is no consensus on the relevance of “strong” intellectual property rights put into general use in all countries. For those who support it, such rights would make direct foreign investment, which is a key element in technology transfer, safer and therefore more attractive. For its critics, the IPRs would widen the tech-

nological gap by emphasizing the competitive advantages of countries that possess technologies. Empirical data have been gathered by both sides.

The debate on the connection between technology transfer and IPRs are even more complex in the case of genetic resources. This is because the knowledge used in the innovation process comes not only from scientific research, but also from the so-called “traditional” knowledge that’s often bound up with genetic resources. There is therefore a transfer of knowledge from the provider to the user that isn’t taken into account in the current system of intellectual property rights. Arrangements are necessary for taking into account the whole innovation chain.

A broader question is that of access to knowledge. This has become a major theme of the international discussion on intellectual property rights and an essential component of technology transfer. Knowledge is an intangible “good” with a complex production procedure (stemming from public, private, and joint public-private research) and whose means of transfer do not necessarily go through market channels (e.g., the case of migration). These specificities imply going beyond the current framework limited to North-South confrontation between States and the use of market tools. In a context of strong uncertainty about the information held by the various stakeholders, involving a large community of users would make it possible to lay the foundations of a networked and more decentralized regulation system.

The disclosure of origin of genetic resources

The 1990s gave rise to debates on the connections between the CBD, which recognizes access rights to genetic material, and the TRIPs Agreement, which provides for intellectual property rights on the information contained in this material. While, in the beginning of the decade, the potentially conflicting relationship between the two treaties was highlighted, a majority of analysts gradually considered that these two types of rights could coexist, one applying to tangible and the other to intangible material.

A new question then arose: how to improve the synergies between intellectual property rights and access rights to genetic resources so as to improve the conditions of benefit sharing? One proposal was to impose the disclosure of origin of genetic resources in the patent applications. Patent applicants, who

sometimes don't know anything about the CBD, would thereby be made sensitive to the issue of benefit sharing. Furthermore, the providers, who are often incapable of knowing if the genetic resources that have been transferred have resulted in marketable products, could make sure that the users have respected the bioprospection contract and denounce biopiracy if the need arises.

A growing number of countries have come out in favor of this proposal. The Andean Community, which is a pioneer in the field of benefit sharing, made the patentability of genetic inventions dependent on the prior obtaining of access rights to the natural genetic material. Next, it was the countries that use genetic resources, such as Denmark and Norway, which introduced this clause into their patent system. This evolution shows the growing influence of the rich countries with regards to biological diversity in the international regime, as well as the desire of countries rich in technology not to leave this issue up to them.

At the multilateral level, the CBD Conference of Parties has officially called upon States to "encourage" the disclosure of origin in patent applications. However, as this provision refers more to intellectual property, it's rather the World Intellectual Property Organization (WIPO) and the WTO that have authority on the subject. The WIPO Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore has taken up the issue. Furthermore, the TRIPs Council is still at a standstill because of divergent national positions. Three groups of countries are in conflict. The United States claims that intellectual property rights are not intended to regulate access to genetic resources. The so-called "megadiverse" countries, which are rich in biodiversity, consider that the TRIPs Agreement must be modified in order to require the disclosure of origin of biological resources. In between these two positions, Switzerland proposes not re-opening negotiation on the TRIPs Agreement, which it considers to be a downright Pandora's Box, but modifying the implementation rules of WIPO's Patent Cooperation Treaty so that applicants can be required to declare the source of the genetic resources.

Beyond these issues of international governance, the debates are dealing on the terms of disclosure of origin. Should disclosure of origin be mandatory, encouraged, or authorized? Must the geographical origin, provider, or source of material be disclosed? Should the disclosure focus on the biological resources, the genetic resources, or the traditional knowl-

edge with which they are associated? Should the applicants provide proof that they obtained authorization from the provider and that they negotiated benefit sharing?

Although the idea of disclosure of origin is making headway in the international arena, some are coming back on the relevance of such a measure. This is because the applicants quite often spontaneously specify the origin of the genetic

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resources in their patent applications, as this information is essential for proving their inventiveness. Sometimes the applicants do not disclose the origin because they be not aware of it, as the genetic resources were not directly extracted by them from nature and went through several intermediaries. It seems a little unrealistic to believe that disclosure of origin alone will make it possible to identify the cases of "biopiracy." Despite these uncertainties, disclosure of origin, supplemented by other mechanisms, would represent a significant step towards implementing the principle of benefit sharing.

Access to justice

Up to now, the discussions on benefit sharing sought to encourage the negotiation of contracts between providers and users of genetic resources. It's therefore in the interest of all the partners to ensure that these contracts be properly fulfilled and that any disagreements be resolved fairly and equitably. For example, once a bioprospection contract is signed, how can the clauses on re-supplying the user or on sharing the benefits with the provider be guaranteed? And if no contract is signed, what recourse is available for the users who can't have access to the resources and for the providers who consider themselves victims of biopiracy? The answer to these questions will determine the relation of trust and the frequency of opportunist behavior.

In the benefit-sharing system, access to justice is difficult due to the disparity between the stakeholders involved — States, non-governmental organizations, biotechnology companies, and local communities. These stakeholders don't share the same conception of justice, don't have

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the same resources to defend themselves, and don't have access to the same types of legal recourse.

Even though the discussions have barely started, two approaches are emerging. The first favors using traditional forms of justice, such as civil or administrative procedures. Such recourse is often the only way to ensure that the decisions handed down are effectively implemented. Furthermore, when the two parties are brought face to face, it can act as a platform for speaking out in the media and as an example to discourage opportunist behavior. The two most famous cases are probably the Neem affair, which led to the overturning of the European patent registered by G.R. Grace & Company, and the basmati rice affair, which ended up in the revision of the American patent registered by Ricotech. In these two cases, non-governmental organizations used the media to put pressure on the patent offices. The objective is not so much to denounce all the cases of biopiracy, but to use the courts as part of a dissuasion strategy.

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However, the traditional forms of justice are often long and expensive. Other forms of mechanisms are more accessible for local communities and are favored by private companies. For example, the contracting parties can refer to a mediator to settle a conflict. Differently from arbitrators or judges,

mediators will attempt to bring the positions of the parties closer together and encourage negotiation without imposing their own decision. They may take into account several sources of law: public international law, national law, and even the traditional law of indigenous communities. Companies, States, and international organizations can also hire an ombudsman. Contrary to the mediator, to whom the case is submitted by both parties, the ombudsman receives the complaints of stakeholders who have not necessarily agreed on a body for settling their disagreement.

These alternative forms of justice have resolved a significant proportion of disagreements, but they are little used. This explains the proposal for the Secretariat of the Convention on Biological Diversity to take on a mediator or ombudsman to resolve the conflicts between users and providers of genetic resources.

Conclusion

Until recently, the debates on benefit sharing arising from the utilization of genetic resources have focused on the models of bioprospection contracts and on legislation on access to genetic resources.

Most of the major stakeholders of these debates remain dissatisfied with the benefits shared and judge that the international framework for responding to all the objectives aimed at by the CBD is insufficient. It's within this context that the issue of user responsibility has arisen. It makes it possible to update old issues (technology transfer) and to introduce new ones (alternative means for settling disagreements).

Along with rules of access established by the providers of genetic resources, user responsabilization could therefore contribute to the effective implementation of benefit sharing.