

POLICY AND ENVIRONMENTAL LAW SERIES

Sociedad Peruana de Derecho Ambiental

PERUVIAN SOCIETY FOR ENVIRONMENTAL LAW

LIMA - PERU Nº 19

PROGRAM OF INTERNATIONAL AFFAIRS AND BIODIVERSITY

ACCOUNTING FOR THE SCIENTIFIC PRESENT, TECHNOLOGICAL ADVANCES AND GENETIC INFORMATION IN THE NEGOTIATIONS OF THE ABS INTERNATIONAL REGIME

Manuel Ruiz

Peruvian Society for Environmental Law

Introduction

The negotiation of an International Regime on Access to Genetic Resources and Benefit Sharing (IR) is now underway.¹ The Ad Hoc Open Ended Working Group on Access and Benefit Sharing, has received the mandate from the Conference of the Parties (COP) of the Convention on Biological Diversity (CBD), to elaborate, discuss and negotiate the structure and content of an international regime establishing rules for and conditions on access to genetic resources and benefit sharing.

As with most ABS related policy processes, the negotiating scenario is quite complex, given the diverse positions which are becoming apparent among countries. In general, developing countries are proposing an IR which focuses on measures to be adopted by “user” countries to support implementation of the CBD objectives and ABS national laws in particular, as well as the inclusion of traditional knowledge related issues. Developed countries on the other hand, are more cautious and demand further analysis and reflection on the issues at hand, as a pre-condition to even start considering negotiations on structure and substantial content of the regime.

Since the first ABS laws were passed in the mid 1990’s, results have been varied. In terms of the more obvious positive outcomes, it is unquestionable that ABS has been a catalyst which has stimulated debates in various fields, has served to unify positions of developing countries and also served countries to demand and propose rules on fairness and equity in relation to genetic resources flows, use and participation in benefit generation worldwide. On the negative side, notwithstanding the efforts made by Parties to achieve equity and fairness through policies and laws and general COP guidance, there is consensus in the sense that much more is required. In brief, the benefit sharing objective of the CBD and of most national laws, has not been met in practice and seems far from being so.

The IR is one way in which Parties are joining efforts to support achievement of these objectives. This paper argues that, if the IR is to become effective and assist in realizing benefit sharing in practice, there is a need to refocus part of the debate or, at the very least, open the debate to include in-depth discussion regarding relatively new and mostly

overlooked issues. These are: new technologies and their application to genetic resources, and the informational nature and expression of genetic resources as the key to their valuation and potential use.

The reason for a shift in focus is quite simple. There is a widening gap between policy discourse and scientific and technological reality. The “distance” between policy and legal discussions and the informed acknowledgement of actual advances in science and technologies in the biological realm, particular in the area of genetic resources, is negatively affecting formal and substantial developments of ABS policy and legal structures. This is furthermore dramatic in areas where science and technology are developing at a rapid pace. This paper suggests that only by understanding these new fields, will it be possible to negotiate a fully informed and operational IR on ABS.

1. A brief history of the ABS debate

Although the roots of ABS policy and legal concerns can be traced back in time to the late 1970’s, it is really with the adoption and entry into force of the CBD that discussions were reinvigorated, especially due to the demands and pressures exercised by developing (“biodiversity rich”) countries and a series of supportive NGO’s.

The first national efforts to develop specific ABS policies and regulations started in the Andean region and, almost immediately, in The Philippines. Subsequently, a series of other processes began in different countries of the world, including in Brazil, Costa Rica, Chile, India, Madagascar, Nepal, countries in the Organization of African Unity, The Seychelles, among others. All mostly developing and biodiversity endowed countries, rich in genetic diversity.

Two of the most recent developments on ABS, have been the entry into force of the UN Food and Agriculture Organization (FAO) International Treaty on Plant Genetic Resources for Food and Agriculture and the initiation of the negotiations of the ABS International Regime.

As mentioned previously, ABS has become over the years, an important unifying issue for developing countries. The creation of the Group of Like Minded Megadiverse Countries (2002), is an evident reflection of this.

But maybe most importantly, ABS has triggered further discussion on a series of related, equally important issues such as intellectual property, Farmers Rights, protection of indigenous peoples traditional knowledge, biotechnology and biosafety, all critically relevant for developing and developed countries' interests, but especially for the former.

The influence of ABS and these issues, expands not only to the CBD process, but to the World Trade Organization (WTO), the World Intellectual Property Organization (WIPO), FAO and multiple other international and regional organizations and forums.

2. Is an International Regime on ABS needed ?

This is actually an irrelevant question, in as much as there is already a formal mandate by COP for the development of an IR. However, it is very relevant in the context of understanding the *nature* of the regime. What countries will eventually agree to is, in fact, an instrument or a tool which will be part of an *existing* international regime on ABS. The mandate for the IR recognizes the possibility of developing and instrument or instruments in this regard.

In reality, the IR will become a complement to existing international measures, obligations and mechanism included in: the CBD, the FAO International Treaty, the Bonn Guidelines, codes of conduct and institutional policies by user institutions such as botanic gardens, microbial collections, biotechnology companies, funding agencies, etc. Even guidance provided through COP Decisions on ABS over time are part of this policy and legal framework or international "architecture". All of this is the *international regime on ABS*.

Key in the development of the IR or the instrument rather, is identifying the areas which may require more specific, detailed and maybe mandatory international action by Parties, in the form of binding obligations.²

Already, some of these broad areas have been identified in the CBD process and include: compliance and enforcement (related to timely and effective access to justice in foreign jurisdictions), actions by user countries to support realization of ABS related objectives, and the potential of an international certificate of origin/legal provenance/compliance. But there may be others.

Firstly, it has been claimed that there needs to be some type of international legal obligations which ensure that, for example, access contracts or even certain provisions in national ABS laws, are complied with and can be enforced in foreign jurisdictions. This may imply initiating administrative or judicial actions in these jurisdictions.

Secondly, in relation to the "users" issue, it is important that Parties acknowledge and reflect in the debates an understanding of the precise responsibilities they have in their role of providers of genetic resources and as users of resources. In this regard, there may be common but differentiated responsibilities which need to be reflected (at least in general terms) in the IR and according to these specific roles. This in turn, requires an acknowledgement of the fact that countries are users and providers at the same time, albeit in varying degrees and intensity. Quite simply: some countries are more *users* than others, depending on technology, industrial and commercial fields. Still, *all*

countries must recognize and regulate their situation as such.

Finally, the internationally recognized certificate of origin/legal provenance/compliance offers a conceptually useful tool to support tracking and monitoring of genetic resources and maybe evidencing (in a simple way) compliance with national ABS regulations (including prior informed consent, mutually agreed terms, etc.). Nevertheless, there are still a series of pending aspects that require further analysis, not the least as to what exactly would a certificate apply to, this is, the access contract, a certain specimen or a specific genetic resource ?

One pressing question still is how to and whether incorporate TK into the IR in some way. If incorporated, TK may add additional complexities to the negotiation process. In itself, TK is a very complex issue which may require an instrument of its own for its international protection. This is where the Intergovernmental Committee on Genetic Resources and Intellectual Property, Traditional Knowledge and Folklore may come in to play as a negotiation forum – if given the mandate by WIPO. The "advantage" of the IR is that it already as a mandate to negotiate ABS and TK as a related issue.

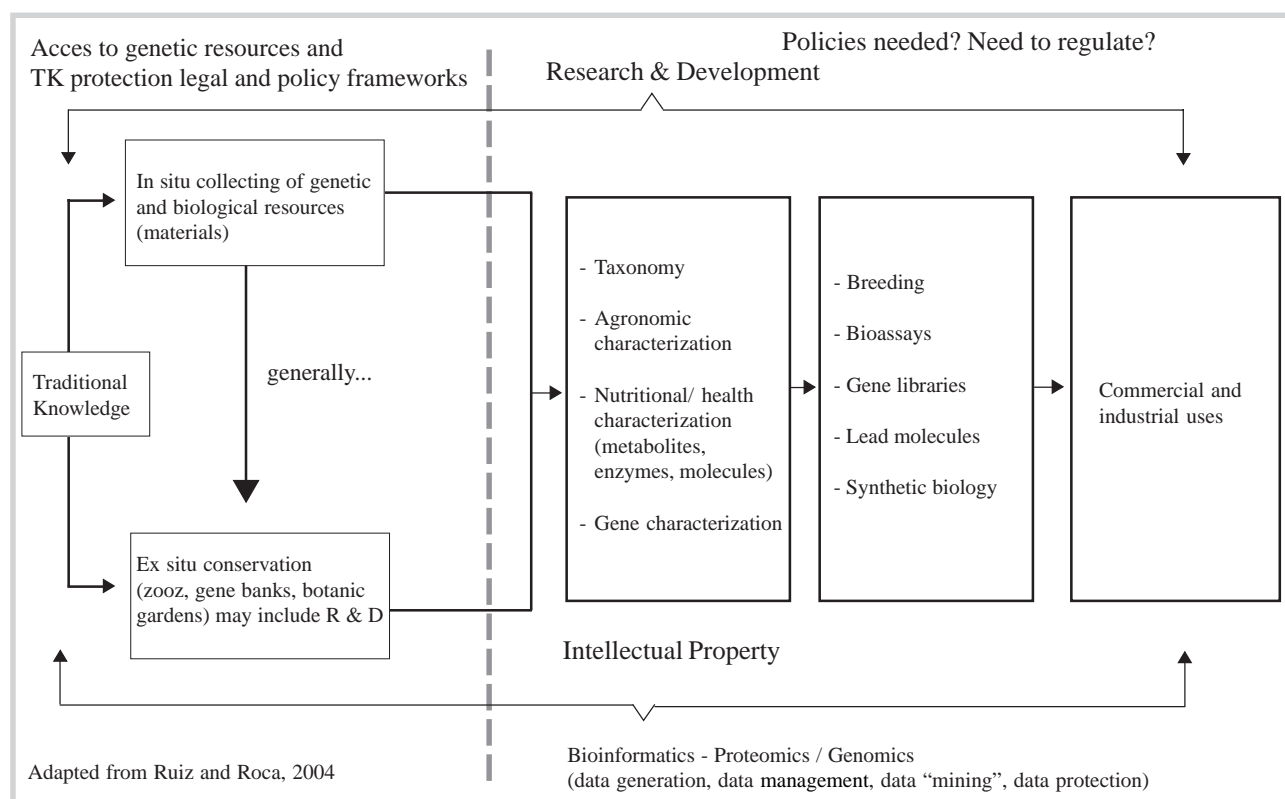
Summarizing, an IR for ABS *is* needed. To be more precise, what is required is an international *instrument*, which may be composed by a series of tools and mechanisms which added to existing ABS instruments (such as the CBD, the FAO IT, etc.) complement and form the basis of the ABS international regime or system.

3. The widening gap between policy and science and technology in the context of ABS

ABS discussions have over the years focused on a «classic», relatively simplistic paradigm regarding bioprospecting. Basically, the image (and informing model) is that of scientists collecting biological specimens with the aid of indigenous communities, in some remote tropical forest, identifying active and useful compounds in partnership with foreign companies, obtaining intellectual property rights over a developed product and capturing benefits with no or limited recognition nor sharing with the country of origin. Unfortunately, the influence of this appealing picture prevails even to date and (with more or less degree of sophistication) continues to be at the foundation of most ABS policy positions and legal solutions, especially coming from developing countries.

This model is certainly valid and perfectly legitimate. However, it is probably past its time and only captures a very general vision of what bioprospecting is and what are its methods and variations. What is much more striking, is that ABS meetings, workshops and even current negotiations, have paid very limited (if any) attention to a critical element in ABS: the pace of scientific and technological developments and methodologies in regards to research and development in the field of genetic resources, including bioprospecting.

It almost always holds true that science and technology continuously outpace legal progress and regulatory ambitions. But in the context of ABS and, especially discussions within the CBD, it is evident that policy and legal debates are even more ahead of scientific and

Box 1. The realms of ABS and its derived implications

technological developments and, particularly scientific interests. And the gap is widening more and growing rapidly, to the concern of some who witness the potential implications in the context of the negotiation of an International Regime on Access to Genetic Resources.

Just as a quick exercise, how many times have debates (in CBD and especially ABS related meetings, workshops and forums – including the negotiation of the IR process) touched upon, much the less centred its attention on, issues such as:

- What is the role of bioinformatics in regards to R&D in genetic resources ?
- Considering the proven informational nature of genetic resources, what are the economic implications in terms of intellectual property ?
- Does the concern regarding “derivatives” capture this specific nature of genetic resources ?
- What are the implications regarding the fact that most species share a major proportion of genes ?
- And what about the fact that species are also widely distributed among countries and even regions, with a few exceptions ?
- How are the new avenues being opened by proteomics, genomics and synthetic biology relevant to ABS regulatory frameworks ?
- Given that microbial biodiversity is now an area of increasing interest, are current policy and legal frameworks and even ongoing discussions appropriately taking into consideration the very special nature of these resources ?
- What role does traditional knowledge play in this ultra technologically founded environment ?

In the best of cases, only a few times have these issues been discussed in depth. Most importantly, how many participants in the IR process actually understand these issues ? Only a few as well.

Ultimately, it is clear that information technology and all its variations, has dramatically changed the speed and manner in which scientific advances are made, not only in basic taxonomic type of research, but in more advanced, commercially and industrially oriented research.

Embedded within these advances are additional issues which have hardly been touched upon in ABS circles. It is no secret that data and information are the key drivers of much research and development, especially in biological sciences. For scientists doing advanced biological research, concerns are not so much whether or not ABS laws are constraining research and possibilities of collecting potentially useful biological materials (which is indeed a worry in any case), but how is data and information being affected as part of a shrinking scientific commons, where more and more, the enclosure trend is affecting availability of data and information. In this scientific realm, discussions are focused more on issues and concepts such as: open access, creative commons, digital rights management, metadata, *sui generis* rights (in database protection), interoperability of databases, power of search engines, genomics, bioinformatics, etc.

In the context of the IR, there seems to be a disconnect with these “other” issues. Not that the IR need to cover them in detail and “solve the problems” surrounding them. But it is definitely necessary for discussions and analysis of what is sought as an IR, to carefully consider these aspects, given they are the main variables surrounding genetic resources potential. If not addressed now, there is a risk that the IR loses the chance of creating sound policies and a legal framework which in some way bridges the gap between what

is happening in real life and policy and legal “solutions”.

4. Shifting or refocusing debates on the International Regime on ABS

As a result of the situation described above, it is suggested that efforts of the *ABS Ad Hoc Working Group* on the IR concentrate on the following:

a) Developing simple, clear, well defined international obligations regarding the transboundary flows and movement of genetic resources, in areas where international agreed action may be required.

These areas could include:

- Where compliance and enforcement related to conditions of access and use of tangible materials are required (e.g. specimens and parts thereof, extracts, compounds),
- Where measures may be needed from users (Parties and national public and private actors) of genetic resources to support realization of global *and* national ABS objectives,
- Where there may be a need for a simple “proof” or “evidence” system set up which facilitates verification of compliance with national legislation (e.g. the certificate of origin/legal provenance/ compliance may be a tool to consider – it may also act as a multi-purpose incentive for users and providers alike).

Ongoing work by the *ABS Ad Hoc Working Group* and different information documents produced over the past few years have in a way, moved in this direction.

In parallel the Working Group should consider:

b) Undertaking a systematic analysis of the issues

suggested in point 3 (above), and exploring how and to what extent the IR may need to modify its priorities in the light of this analysis. As a starting point, it may be necessary to intuitively make certain decisions as to the relevance and implications of these issues for ABS as a whole and, ultimately, if Parties are willing to address this complex challenge.

Initial suggested areas for analysis could include:

- Exploring and analysing the *informational* nature of genetic resources and the implications of this specific feature on the structure and content of the IR,
- Describing how bioinformatics has altered traditional ways of undertaking research – as an article well puts it “*Research is growing increasingly quantitative. Nearly everything these days, from atoms to cells and on up, is described in data. When work involves finding statistical relationships in mountains of bits, two things happen: First, mathematicians and computers scientists gain sway, which means an expanding role for powerhouses like Microsoft and IBM. Second, as researchers find common patterns, they start jumping from one discipline to another.*”³
- What exactly are “derivatives” and is it possible and even worthwhile to consider them within the scope of ABS.
- How is the data protection trend proving even more risky for research and development than patents in biological sciences.

The message is really that in the light of recent and ongoing scientific and technological developments, it may be a good time to reflect upon some of the more challenging issues, those with far reaching implications and which are, if not absent in the debate, obscured within it.

Endnotes

- 1 In Decision VII/19 D, the Conference of the Parties mandated the Ad Hoc Open Ended Working Group on Access and Benefit Sharing to elaborate and negotiate an international regime on access to genetic resources and Benefit sharing with the aim of adopting and instrument/instruments to effectively implement ABS provisions of the CBD (Kuala Lumpur, Malaysia, February 2004).
- 2 The gap analysis provided by document UNEP/CBD/WG-ABS/5/3 (Gap Analysis, Note by the Executive Secretary) provides with a good review of some of these areas.
- 3 Baker, Stephen and Green, Jay. Using Spam Blockers to Target HIV, Too. In: Business Week. October, 2007.

The Peruvian Society for Environmental Law (SPDA) is a non for profit organization founded in 1986. It’s main role is to promote sustainable development through Environmental Law and Policy dissemination and advice to the public and private sector at the national, regional and international level.

SPDA - Policy and Environmental Law Series

Executive Director: Manuel Pulgar-Vidal.

International Affairs and Biodiversity Program: Jorge Caillaux, Manuel Ruiz and Isabel Lapeña.

SPDA’s Policy and Environmental Law Series publishes articles, papers and research documents prepared by its members.

SPDA appreciates the support of the John D. and Catherine Mac Arthur Foundation.

Prol. Arenales 437, Lima 27, Perú. Telf.: +51-1-441-9171 +51-1-422-2720 Fax: +51-1-442-4365;

e-mail:postmast@spda.org.pe © 2007 Sociedad Peruana de Derecho Ambiental.

PRINTED IN RECYCLED PAPER