Non-commercial research and the ABS Protocol: what next?

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Keywords

ABS Protocol negotiations, access and benefit-sharing, certificates of compliance, Convention on Biological Diversity, DNA barcoding, genetic resources, model agreements, non-commercial research

Abstract

Countries worldwide will decide on adopting the draft Protocol on Access to Genetic Resources and Benefit-Sharing at the 10th meeting of the Conference of the Parties to the Convention on Biological Diversity in October 2010. Public research representatives are asking Parties to consider simplified access procedures for non-commercial research. The challenge for this very diverse sector, which includes many botanical gardens, is to convince Parties that such research can be clearly distinguished from commercial research, and that material accessed for non-commercial purposes will not later be used commercially, without the original providers' consent for the new use. A key distinguishing factor is the treatment of information: non-commercial researchers share it publicly, while commercial sectors tend to withhold it. However, there are also concerns about how original providers can benefit when information placed in the public domain is later used for commercial purposes. To gain trust, researchers must show that they do obey national laws, do keep track of material and do share benefits directly with countries of origin, not only global benefits for the international scientific community. Measures in the draft Protocol that will affect botanical garden research include monitoring and reporting requirements, possibly using a 'certificate of compliance' with national rules. Other measures include model legal agreements, codes of conduct and best practice standards, and awareness-raising measures such as help desks. Ultimately it is vital for gardens to keep informed about the issues, to share their concerns and successes with their national policymakers, and to continue to work in benefit-sharing partnerships.

A new access and benefit-sharing Protocol

Countries and biodiversity stakeholders worldwide are embroiled in final negotiations to develop a new international regime under the Convention on Biological Diversity (CBD) to govern access to genetic resources and benefit-sharing (ABS). The talks are due to end in October 2010 at the 10th meeting of the Conference of the Parties to the CBD (COP10), with the adoption of a Protocol on ABS containing legally-binding and voluntary measures. The call for an ABS regime came from the World Summit on Sustainable Development in 2002. The voluntary Bonn Guidelines (adopted earlier that year) were not thought strong enough by many biodiverse developing countries to compel users to share benefits and stop 'biopiracy', or the misappropriation of genetic resources (use without the consent of, or benefit-sharing with, the provider). The new Protocol is intended to provide a more coherent framework for ABS, with tougher compliance measures, to ensure that providers' ABS laws are followed once genetic resources leave their countries of origin. It will require significant action by the users of genetic resources and their governments. Its success will depend on whether or not Parties can agree on practical and affordable measures that will deal with

misappropriation but not stifle the collaborative research and innovation that generate the benefits to be shared.

Botanical gardens are key players because of their holdings and links to countries of origin and a range of research sectors. Many gardens are actively involved in non-commercial research, in areas such as taxonomy, ecology and practical conservation. This paper examines how, in particular, the non-commercial research sector has been participating in the talks, and introduces some of the most relevant measures in the draft Protocol.

Negotiators widely recognise that non-commercial biodiversity research is critical for CBD implementation, and institutional resources are limited, but there is no clear consensus about how the ABS Protocol should handle such research. The main concern is how to ensure that material does not change uses without provider consent. Material collected for non-commercial use can end up being used for commercial purposes, whether through unanticipated discoveries by the original researchers, transfer to commercial users, or commercial use of information in public databases or publications. Clearly the ABS Protocol should enable law-abiding researchers to work and share benefits, but providers fear that if access for non-commercial use is made significantly faster, cheaper and/or simpler, all users will aim for that route, and material may slip into commercial use without provider authorisation. Also, a simpler or faster process might not give indigenous and local communities enough involvement in decision-making.

Compliance issues for non-commercial researchers

Currently, though ABS awareness and experience is growing in the international scientific community, and some botanical gardens in particular are regarded as models of appropriate behaviour, researchers do not always fully follow countries' laws or ABS good practice. Some compliance issues include not getting all the right permits, not engaging with local communities, not sharing appropriate benefits, using or passing material to others without checking the provider's terms, and releasing information to the public domain without provider consent. But even ABS-aware researchers are finding that many countries' new ABS laws are confusing and cumbersome (e.g. see Kamau 2009). ABS is especially challenging when traditional knowledge is involved, as the process of gaining consent from indigenous and local communities can be very complex and the public dissemination of research results is particularly problematic. The rise of DNA barcoding is bringing many concerns into focus, as projects require the legal acquisition and transfer of millions of specimens between countries, and researchers must ultimately convince providers worldwide that they fully benefit from global information-sharing, and that benefits from future commercial use of data and tools can also be shared.

Participation in the ABS talks

Research institution representatives regularly take part in ABS meetings, independently or from within government delegations. However, until recently there has been no coordinated input to the ABS talks. The numbers of institutions and transactions involved in DNA barcoding have provided a major new impetus for involvement. The Consortium for the Barcode of Life, with other research and funding organisations, organised a workshop on ABS and non-commercial research in November 2008 (CBOL et al., 2008). It was timed to offer input to two CBD-convened expert meetings that provided technical and legal advice to the final negotiation rounds. The first expert meeting (CBD, 2008)

explored problematic terms (e.g. 'derivatives' of genetic resources) and how different sectors use genetic resources. The second expert meeting (CBD, 2009) dealt with compliance issues, including whether to develop special measures for non-commercial research and how to deal with changes in use, and also looked at current voluntary measures. (A third expert meeting tackled traditional knowledge issues, but did not directly involve non-commercial research.) An ABS Business and Science Dialogue (convened by the United Nations University/Institute of Advanced Studies in December 2009) provided an opportunity for representatives from industry and science to exchange ideas with CBD negotiators. Two research representatives also participated in a 'Friends of the Co-Chairs' (of the ABS Working Group) meeting in January 2010. And 'Public Research' now has two seats at the Inter-regional Negotiation Group (ING) table, allowing representatives to provide guidance to the meeting. This is an unprecedented opportunity, though like industry and civil society representatives, they can only propose text through Parties. The ING will meet again in mid-September to resolve outstanding issues.

Simplified rules for non-commercial research?

The central proposal from the non-commercial research sector is that there should be simplified access procedures for non-commercial use. Since the same institutions and technologies and even researchers can be involved in both kinds of projects, we need to be able to distinguish non-commercial from commercial uses so that changes can be recognised. The ABS workshop described several 'communities of research practice' that are not usually involved in commercial research, and suggested that the major way in which their projects differed from commercial projects is how they willingly commit to putting their results in the public domain through data release and publication, sharing benefits globally.

The expert group on terms and sectors described a list of typical uses and explored differences between sectors and, like the workshop, agreed that willingness to share information was a specific characteristic of the non-commercial research sector. The expert group also pointed out that many commercial sectors need access for basic research before developing value chains, and that they mainly source material from *ex situ* collections and intermediaries. Unfortunately for the public research community, those points make it more difficult to argue for simplified access, though researchers highlighted their commitment to following laws and codes of conduct and using standard agreements that require benefit-sharing and provider consent for new uses.

The compliance expert group considered two possibilities for countries: simple access for both uses, with strong remedies and sanctions, or a more streamlined process for non-commercial use, using mutually agreed terms to address any later change in use. However, this group generally considered that each country should decide whether to adopt simplified procedures. The Business and Science Dialogue participants noted the danger of creating loopholes by treating non-commercial research differently, and suggested that for legal certainty the ABS Protocol should cover the whole chain of ABS, including intermediaries. At the most recent round of ABS negotiations (July 2010), the research sector emphasised its commitment to complying with the Protocol and gained support for simplified procedures, but there is not yet a consensus.

Paradoxically, problems may loom for the non-commercial research sector because of its self-defining characteristic: public sharing of information. This is a growing concern for

some providers, who fear loss of control because increasingly data, not samples, are transferred between countries, then published and sometimes later mined by others for commercial benefit. The challenge is to find ways to share information for the public good that will also enable original providers to retain some control and receive benefits from downstream use. Licensing schemes such as the Science Commons may help to enable broad information sharing with links to providers and mutually-agreed terms.

Measures in the draft ABS Protocol

Though the talks are due to end soon, the treaty text is not yet finalised, and some critical issues for institutions are unresolved, such as whether the Protocol will cover new uses of pre-CBD material. Compliance is at the heart of the Protocol. Most developing countries are pushing for strong monitoring and reporting requirements, based on mandatory 'certificates of compliance' to accompany genetic resources (and possibly their derivatives), to show provider consent has been gained and terms have been agreed, and a web-based ABS Clearing House. The certificates would contain certain minimum information and a tracking code. A checkpoint system would ensure certificates have been obtained. Proposed checkpoints include patent offices, but also public research institutions and science publishers. Such a scheme would obviously have tremendous impact on researchers and collections – though if it were well-implemented it might compare positively to current processes for getting multiple permits, and create greater legal certainty for collections. A number of developed countries are attempting to remove detail on certificates and checkpoints from the Protocol at this stage to allow for further consideration of the considerable challenges, possibly during the Protocol's implementation phase.

The voluntary measures in the draft are generally very positive for research. 'Model contractual clauses' for different sectors should help to bring down the difficulty and cost of setting up legal agreements between providers and users. The Swiss Academy of Sciences is already working on a draft model agreement for non-commercial academic research. The draft Protocol also suggests a clear role for best practice standards and codes of conduct – already widely used by gardens. The draft treaty text proposes that codes and standards should be updated and that the meeting of the Parties to the Protocol should periodically take stock of codes and model clauses, so botanic gardens and research institutions will need to keep track of ABS developments. Awareness-raising has its own article in the draft Protocol, and the suggested measures for Parties – most particularly the establishment and maintenance of help desks – would provide invaluable practical help for researchers. We must urge our governments to take these actions.

What next?

Non-commercial research has a coordinated presence at the negotiation table – and the Protocol will only be a workable instrument with our participation (see Martinez, 2010). People wishing to provide specific input on the draft should contact their ABS national focal points and also the Global Taxonomy Initiative coordination mechanism steering committee and BGCI. Meeting updates will be posted on the BGCI ABS web pages.

The research community's credibility at the ABS talks is only as good as our commitment to complying with the Protocol, national laws and best practice, so we must keep working on ABS basics at home: using codes and guidelines (such as the Principles on ABS and the International Plant Exchange Network's Code of Conduct),

developing an ABS policy, getting the right permits and consents, keeping track of terms and using material as terms allow, and most importantly, working collaboratively and sharing benefits (see checklist in Davis, 2008). We also need to build sturdy two-way relationships with our ABS national focal points – to help our governments to understand practical issues and to design workable measures, and to ask for their assistance and support for our compliance.

References and links

ABS International Regime negotiations website: http://www.cbd.int/abs/ir/

BGCI ABS web pages: http://www.bgci.org/resources/abs

CBD (2008). Report of the Meeting of the Group of Legal and Technical Experts on Concepts, Terms, Working Definitions and Sectoral Approaches. UNEP/CBD/WG-ABS/7/2. Available at http://www.cbd.int/doc/meetings/abs/absgtle-01/official/absgtle-01-abswg-07-02-en.pdf

CBD (2009). Report of the Meeting of the Group of Legal and Technical Experts on Compliance in the Context of the International Regime on Access and Benefit-Sharing. UNEP/CBD/WG-ABS/7/3. Available at http://www.cbd.int/doc/meetings/abs/abswg-07/official/abswg-07-03-en.pdf

CBOL et al. (2008). Report of a Workshop on Access and Benefit Sharing in Non-Commercial Biodiversity Research Held at the Zoological Research Museum, Alexander Koenig, Bonn, Germany on 17-19 November 2008. Available at http://www.barcoding.si.edu/ABSworkshop.html

Davis, K. (2008) *A CBD manual for botanic gardens.* Botanic Gardens Conservation International, Richmond, United Kingdom

Kamau, E.C. (2009). Facilitating or restraining access to genetic resources? *Procedural dimensions in Kenya. Law, Environment and Development Journal* 5/2, pp. 152-166. Available at http://www.lead-journal.org/content/09152.pdf

Martinez, S. & Biber-Klemm, S. (2010) Scientists – take action for biodiversity. *Curr. Opin. Environ. Sustain.* 2:1-7. Doi:10.1016/j.cosust.2010.03.004. Available at http://www.cbd.int/abs/doc/implications-abs-academic-research-en.pdf