

DISCUSSION PAPER

Derivatives

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Introduction

The issue of derivatives generates considerable debate and confusion. This paper addresses the two issues involved and suggests a way forward.

What does the CBD say?

Article 2 of the Convention provides the following definitions:

- "Biological resources" includes genetic resources, organisms or parts thereof, populations, or any other biotic component of ecosystems with actual or potential use or value for humanity;
- "Genetic material" means any material of plant, animal, microbial or other origin containing functional units of heredity; and
- "Genetic resources" means genetic material of actual or potential value.

Article 15 applies those terms as follows:

- 15.1 Recognizing the sovereign rights of States over their natural resources, the authority to determine access to genetic resources rests with the national governments and is subject to national legislation;
- 15. 2 Each Contracting Party shall endeavour to create conditions to facilitate access to genetic resources for environmentally sound uses by other Contracting Parties and not to impose restrictions that run counter to the objectives of this Convention;
- 15. 3 For the purpose of this Convention, the genetic resources being provided by a Contracting Party, as referred to in this Article and Articles 16 and 19, are only those that are provided by Contracting Parties that are countries of origin of such resources or by the Parties that have acquired the genetic resources in accordance with this Convention;
- 15.4. Access, where granted, shall be on mutually agreed terms and subject to the provisions of this Article;
- 15.5. Access to genetic resources shall be subject to prior informed consent of the Contracting Party providing such resources, unless otherwise determined by that Party;

¹ The views expressed in this paper are those of the author and do not necessarily present those of the Australian Department of the Environment and Heritage.

III. Specific Issues for consideration in the elaboration of the IR:
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- 15.6. Each Contracting Party shall endeavour to develop and carry out scientific research based on genetic resources provided by other Contracting Parties with the full participation of, and where possible in, such Contracting Parties; and
- 15.7. Each Contracting Party shall take legislative, administrative or policy measures, as appropriate, and in accordance with Articles 16 and 19 and, where necessary, through the financial mechanism established by Articles 20 and 21 with the aim of sharing in a fair and equitable way the results of research and development and the benefits arising from the commercial and other utilization of genetic resources with the Contracting Party providing such resources. Such sharing shall be upon mutually agreed terms." (my underlining)

What is the Problem?

Discussants are using the term 'derivatives' in two different ways and this can generate responses that do not address the underlying concerns raised - with the result that heat, rather than light, is generated by the discussion. So how is the term being used or understood? I suggest that the use of the term for one group of discussants reflects their underlying concern that it is necessary to legislatively control the responsibilities of parties during their commercializing or utilising of genetic resources they have obtained in order to secure the fair and equitable sharing in benefits arising from such developments. Accordingly in this instance, the word 'derivatives' is used in the sense of new products or innovations that come from the source material.

The second use of the terms reflects a different concern. This is that the language of Article 15 is self-defeating. In their view, measures that simply deal with 'genetic resources' are intrinsically inadequate and do not allow nations to benefit from the intent of Article 15. They see the intent of Article 15 as thwarted by the fact that the value of genetic resources lies in their components, in the interaction of genes and in the biochemicals they express (eg proteomics). These essential components of genes and gene function are what these discussants refer to when they talk of "derivatives".

Resolving the Problem

The first concern is already addressed by the CBD through the Bonn Guidelines. When implemented, national legal frameworks establish the mechanism whereby as a condition of being granted access the user of genetic resources is obliged to enter into a benefit-sharing agreement. That agreement in turn determines how benefits flowing from that use and including benefits from any innovation or product developed or otherwise derived from the genetic resources are to be shared with the provider of access.²

Thus, as has been pointed out in earlier debates at CBD COP 6 and later CBD meetings, the issue of the management of benefits from derivatives is resolved through benefit-sharing agreements.

I now turn to the second area of concern: the perceived limitation of the existing definition of 'genetic resources'. The concern is that the power to regulate access to 'genetic resources' is not adequate, as it does not allow for access to the things contained in and with the genes. This is what is referred to in the second usage of the term 'derivatives'. Can the existing

² See the Bonn guidelines at page 14, paragraph 44 (i)

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definition of genetic material include these derivatives? I suggest that the answer is yes. As can be seen from the above definitions, 'Genetic resources' means 'genetic material of actual or potential value'. This means that we have to have regard to what 'Genetic material' in turn means. The CBD defines "Genetic material" as "any material of plant, animal, microbial or other origin containing functional units of heredity."

So what does 'containing functional units of heredity' mean? Firstly its scope is wide: "any material of plant, animal, microbial or other origin" (my underlining). Secondly it refers to "containing functional units of heredity". This latter term is undefined. However, if we take our understanding of that term from contemporary science then we would have to understand it as referring to all the elements that are necessary to establish functional units of heredity. This then includes genes (including their constituent elements) and the factors that control their expression and their direct products including RNA and protein. Our understanding of functionality is steadily expanding and it is clear that a functional unit of heredity is the sum of a number of interacting physical factors - not simply a piece of DNA.

If this understanding is acceptable then the second "derivatives problem' is resolved. If not, countries can still exercise the general authority over the disposition of their natural resources as set out in Article 3 of the CBD. Alternatively they can ensure that any benefit-sharing agreement, whether required under national laws for access to genetic resources under article 15 or more broadly under Article 3, contains clauses dealing with the material in question.