

## IUCN の名古屋議定書解説手引きによる「遺伝資源」の解釈

出典：IUCN(2012), *An Explanatory Guide to the Nagoya Protocol on Access and Benefit-sharing*, IUCN Environmental Policy and Law Paper No.83.

下記から全文をダウンロードできます。

[https://cmsdata.iucn.org/downloads/an\\_explanatory\\_guide\\_to\\_the\\_nagoya\\_protocol.pdf](https://cmsdata.iucn.org/downloads/an_explanatory_guide_to_the_nagoya_protocol.pdf)

### Genetic Resources ( P70 ~ P72 )

The first sentence of Article 3 limits the scope of the Nagoya Protocol to genetic resources that fall within the scope of Article 15 of the CBD and the benefits arising from their utilization. Article 15(1) of the CBD establishes a sovereign right to legislate over genetic resources. Article 15(3) specifies that only those genetic resources provided by Parties that are countries of origin or that acquired the genetic resources in accordance with the CBD can avail themselves of the access and benefit-sharing (ABS) provisions (Glowka et al., 1994, p. 77; Nijar, 2011a, p. 27; Buck and Hamilton, p. 51). If the prerequisite is met, Article 15(7) of the CBD supports national measures to ensure the fair and equitable sharing with the providing Party of results of research and development and the benefits arising from the commercial and other utilization of genetic resources.

#### **Box 10: Definitions Relevant to the Scope of the Protocol**

Apart from the definitions introduced through Article 2 of the CBD (see Box 6), Article 2 of the Nagoya Protocol includes a few definitions that are important to fully understand the scope of the Protocol:

- “*Utilization of genetic resources*” means to conduct research and development on the genetic and/or biochemical composition of genetic resources, including through the application of biotechnology as defined in Article 2 of the Convention.
- “*Biotechnology*” means any technological application that uses biological systems, living organisms, or derivatives, thereof to make or modify products or processes for specific use.
- “*Derivative*” means a naturally occurring biochemical compound resulting from the genetic expression or metabolism of biological or genetic resources, even if it does not contain functional units of heredity.

The reference to utilization of genetic resources in the first sentence of Article 3 means that the definition of that term has to be used to clarify the scope of benefit-sharing. Accordingly, it captures benefits arising from research and development on the genetic and/or biochemical composition of the genetic resources, including through the application of any technological application that uses biological systems, living organisms, or derivatives thereof, to make or modify products or processes for specific use. This includes the use of biochemical compounds resulting from the genetic expression or metabolism of biological or genetic resources, even if they do not contain functional units of heredity. While roughly following the benefit-sharing model laid out in Article 15(7) of the CBD, this expands the material scope of application to naturally occurring biochemical compounds.

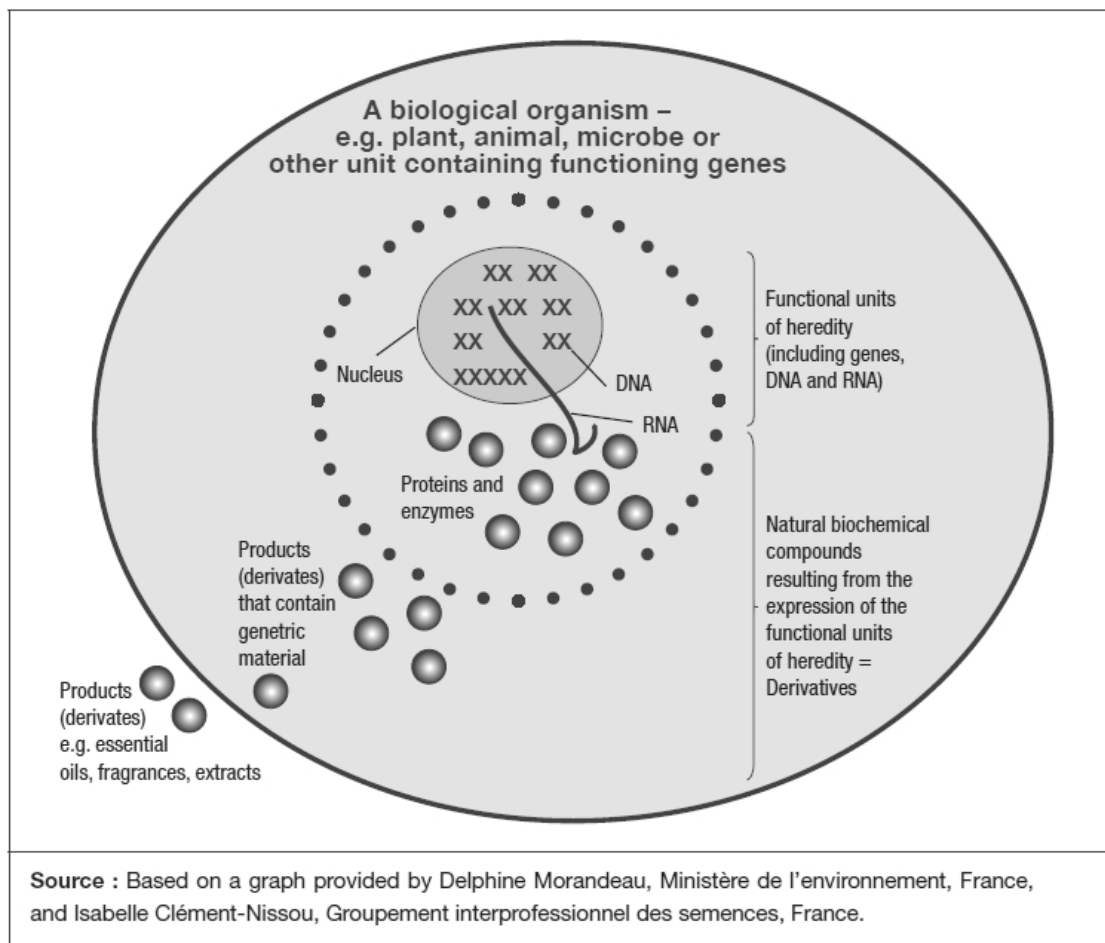
Derivatives were mentioned in draft text for Article 3 but were removed as part of the compromise text put forward by the Japanese COP 10 Presidency (Tsioumani, 2010, p. 289). Thus, Article 3 in its final version does not use the term derivatives but includes only a reference to utilization of genetic resources. Still, Article 2 of the Protocol defines both utilization of genetic resources and derivatives in a way that the Protocol covers a specific type of derivative within its scope: biochemicals (Joseph, 2010, p. 91). Research and development on naturally occurring biochemical compounds resulting from the genetic expression or metabolism of biological or genetic resources is now covered by ABS requirements (Kamau, Fedder and Winter, 2010, p. 256). This means that research on the use of extracts and molecules from plants, as well as the development of pharmaceuticals, cosmetics, or nutraceuticals, is covered by requirements for prior informed consent (PIC) and mutually agreed terms (MAT) (Oliva, 2011, p. 1224). However, it is important to understand that because Article 15 of the CBD is limited to the utilization of genetic resources and Article 2 of the Nagoya Protocol links utilization to the genetic and/or biochemical composition of genetic resources, naturally occurring biochemical compounds accessed independently of genetic resources fall outside the scope of the Protocol.

Furthermore, it has to be noted that Parties agreed to leave human genetic resources outside the framework of the Nagoya Protocol. However, human genetic resources may be subject to further consideration by the CBD COP serving as the meeting of the Parties to the Nagoya Protocol.<sup>1</sup>

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<sup>1</sup> CBD COP Decision X/1/5

**Figure 4: Understanding Genetic Resources**



Genetic resources are defined by the CBD as “genetic material of actual or potential value”. That definition required further clarification as to what “genetic material” is. The CBD defines genetic material as “any material of plant, animal, microbial or other origin containing functional units of heredity”.

Functional units of heredity are genes. A gene is a segment of DNA (on a specific site on a chromosome) that is responsible for the physical and inheritable characteristics or phenotype of a living entity (the way an organism looks).

DNA contains the information for the function and characteristics of living organisms. In this sense, DNA contains the instructions or information (called genes) needed to conduct cellular components and the way that living organisms function.

A range of natural biochemical compounds result from the expression of genes. Compounds such as proteins and enzymes occur within cells – the smallest unit of a

living organism – and retain functional units of heredity. Cells release biochemical compounds necessary for organism function into tissues. These compounds also retain genetic material.

Finally, other biochemical compounds are produced through human intervention, such as extraction, concentration, or dilution. These compounds may or may not retain genetic material. Examples include oils, plant extracts and synthetic (man-made) biochemical compounds.