

# Biodiversity, Biosafety ...and You

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# Major Biodiversity Conventions

- Convention on Biological Diversity (CBD) -1992
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) - 1975
- Convention on the Conservation of Migratory Species of Wild Animals - 1979
- The International Treaty on Plant Genetic Resources for Food and Agriculture -2004
- Convention on Wetlands (popularly known as the Ramsar Convention) -1971
- World Heritage Convention (WHC) -1972



# Major Biodiversity Conventions



- International Plant Protection Convention (IPPC) - “protect world plant resources, including cultivated and wild plants by preventing the introduction and spread of plant pests and promoting the appropriate measures for their control.” (1956)
- International Whaling Commission (IWC) - “provide for the proper conservation of whale stocks and thus make possible the orderly development of the whaling industry.” (1946)



# Agenda 21 of the Rio Summit

- Commits all States to engage in a continuous and constructive dialogue... keeping in view the increasing interdependence of the community of nations and that **sustainable development** should become a priority item on the agenda of the international community
- “comprehensive plan of action to be taken globally, nationally and locally by organizations of the United Nations System, Governments, and Major Groups in **every area in which human impacts on the environment.**”

<https://sustainabledevelopment.un.org/outcomedocuments/agenda21>

<https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf>

# The CBD

- Conceived as a **practical tool** for translating the principles of Agenda 21 into reality
- Adapted at the Rio Earth Summit in 1992, entered into force 1993
- 3 Main goals:
  1. conservation of biological diversity
  2. sustainable use of its components
  3. fair and equitable sharing of the benefits arising from commercial and other utilization of genetic resources.
- **Covers all ecosystems, species, and genetic resources**
- 196 parties

# Parties to CBD from South Asia

- Afghanistan (2002)
- Bangladesh (1994)
- Bhutan (1995)
- India (1994)
- Maldives (1993)
- Nepal (1994)
- Pakistan (1994)
- Sri Lanka (1994)

Philippines (1994)

❖ legally binding - Parties are obliged to implement CBD provisions.

# CBD → CPB

- CBD recognizes that ecosystems, species and **genes** must be used for the benefit of humans.
- Use should be done in a way and at a rate that does not lead to the long-term decline of **biological diversity**.
- Cartagena Protocol on Biosafety (CPB)
  - to cover the rapidly expanding field of biotechnology
  - “an international agreement which aims to ensure the safe handling, transport and use of **living modified organisms** (LMOs) resulting from modern biotechnology that may have adverse effects on biological diversity, taking also into account risks to human health.”

# Nagoya - KL Supplementary Protocol

- Full title: The Nagoya – Kuala Lumpur Supplementary Protocol on Liability and Redress to the Cartagena Protocol on Biosafety
- Entered into force on 5 March 2018 (42 Parties)
- “aims to contribute to the conservation and sustainable use of biodiversity by providing international rules and procedures in the field of liability and redress relating to living modified organisms. “
- “requires that response measures are taken in the event of damage resulting from living modified organisms, or where there is sufficient likelihood that damage will result if timely response measures are not taken. “
- “also includes provisions in relation to civil liability.”



# Nagoya – KL supplementary protocol

- First activity: to analyze their national legal frameworks to assess the extent to which the core and optional elements of the Supplementary Protocol are already addressed → allows Parties to develop any further measures, if necessary
- Need to balance stringency with national interest:
  - Developer of LMO?
  - User of LMO?

# Nagoya Protocol

- 2010 supplementary agreement to the 1992 CBD
- Full title: **Nagoya Protocol** on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity
- AKA the **Nagoya Protocol** on Access and Benefit Sharing (ABS)

# CBD/CPB/Nagoya Protocol

- Parties to the CBD meet every two years, in a Conference of Parties (COP) that also serve as the Meeting of Parties (MOP) to the Cartagena Protocol and the Nagoya Protocol.
- The meetings address issues related to technology scanning, risk assessment and management, capacity building, and benefit sharing, among others.
- The COP/MOP will be held this year on 17-29 November in Sharm El-Sheikh, Egypt.

# Issues/Concerns

- From Draft Decision Document of COP14 (DDD)



**CBD**



**Convention on  
Biological Diversity**

Distr.  
GENERAL

CBD/COP/14/2  
1 September 2018

ORIGINAL: ENGLISH

CONFERENCE OF THE PARTIES TO THE  
CONVENTION ON BIOLOGICAL DIVERSITY  
Fourteenth meeting  
Sharm El-Sheikh, Egypt, 17-29 November 2018

**DRAFT DECISIONS FOR THE FOURTEENTH MEETING OF THE CONFERENCE OF THE  
PARTIES TO THE CONVENTION ON BIOLOGICAL DIVERSITY**

**INTRODUCTION**

The present note contains a compilation of draft decisions for the consideration of the Conference of the Parties at its fourteenth meeting. These draft decisions are organized according to the provisional agenda for the meeting and the revised annotations thereto (CBD/COP/14/1 and CBD/COP/14/1/Add.1/Rev.1). This note includes the draft decisions contained in the various

# Issues/Concerns

- From Draft Decision Document of COP14 (DDD) - **187 pp**
- Item 10: “Enhancing integration under the Convention and its Protocols with respect to provisions related to access and benefit-sharing and biosafety, and Article 8(j) and related provisions”
  - Special attention to items dealing with biosafety and benefit sharing
  - Most of the language non-controversial, but specific sections may be contentious

# Issues/Concerns

- From Draft Decision Document of COP14 (DDD)
- Item 18: “Digital sequence information on genetic resources”
  - Definition of digital sequence information –placeholder term
  - Coverage: Proteins, nucleic acids, “information derived from biological and metabolic processes specific to the cells of the genetic resource”
  - Access, information in public databases not covered by prior informed consent
  - Fair and equitable sharing of benefits
  - Digital sequence information = Genetic resources

# Item 18:

- Proposed actions:
  - Open ended working group
  - Commission a [peer reviewed] study
  - Ad Hoc Technical Expert Group (AHTEG)
  - moderated open-ended online forum

# Issues/Concerns

- From Draft Decision Document of COP14 (DDD)
- Item 27: “Synthetic biology”
  - 2. *Recognizes* that synthetic biology is rapidly developing and a cross-cutting issue, with potential benefits and potential adverse effects vis-à-vis the three objectives of the Convention on Biological Diversity;
  - 3. *Agrees* that horizon scanning, monitoring and assessing of developments in the field of synthetic biology[, including those that result from genome editing,] is needed for reviewing new information regarding the potential positive and potential negative impacts of synthetic biology vis-à-vis the three objectives of the Convention and those of its Protocols;



# Issues/Concerns

- From Draft Decision Document of COP14 (DDD)
- Item 27: “Synthetic biology”
  - [4. *Decides* to establish a process and modalities for regular horizon scanning, monitoring and assessment of new developments in the field of synthetic biology, and *also decides* to establish a mechanism for regularly reporting the outcomes to the Subsidiary Body on Scientific, Technical and Technological Advice, the Conference of the Parties and the Conference of the Parties serving as the meeting of the Parties to the Cartagena Protocol on Biosafety;]

# Issues/Concerns

- From Draft Decision Document of COP14 (DDD)
- Item 27: “Synthetic biology”
  - 6. *Also recognizes* that developments arising from research and development in the field of synthetic biology may pose challenges to the ability of some countries, especially developing countries, in particular those with limited experience or resources, to assess the full range of applications and potential impacts of synthetic biology on the three objectives of the Convention;

# Issues/Concerns

- From Draft Decision Document of COP14 (DDD)
- Item 27: “Synthetic biology”
  - 10. *Calls upon* Parties and other Governments, taking into account the current uncertainties regarding engineered gene drives, to apply a precautionary approach,<sup>294</sup> in accordance with the objectives of the Convention, [with regard to][and refrain from] the release, including experimental release, of organisms containing engineered gene drives;

# Issues/Concerns

- From Draft Decision Document of COP14 (DDD)
- Item 27: “Synthetic biology”
  - *11. Recognizes* that, as there could be potential adverse effects arising from organisms containing engineered gene drives, before these organisms are considered for release into the environment, research and analysis are needed, and specific guidance may be useful,<sup>295</sup> to support case-by-case risk assessment;

# Issues/Concerns

- From Draft Decision Document of COP14 (DDD)
- Item 27: “Synthetic biology”
  - 12. *Notes* the conclusions of the Ad Hoc Technical Expert Group on Synthetic Biology<sup>296</sup> that, given the current uncertainties regarding engineered gene drives, the free, prior and informed consent of indigenous peoples and local communities might be warranted when considering the possible release of organisms containing engineered gene drives that may impact their traditional knowledge, innovation, practices, livelihood and use of land and water

# Issues/Concerns

- From Draft Decision Document of COP14 (DDD)
- Item 27: “Synthetic biology”
  - 13. *Calls* upon Parties, other Governments and relevant organizations to continue to develop or implement, as appropriate, measures to prevent or minimize potential adverse effects arising from exposing the environment to organisms, components and products of synthetic biology in contained use, including measures for detection, identification and monitoring, in accordance with domestic circumstances or internationally agreed guidelines, as appropriate, with special consideration to the centres of origin and genetic diversity;

# Issues/Concerns

- From Draft Decision Document of COP14 (DDD)
- Item 27: “Synthetic biology”
  - 15. *Decides* to extend the Ad Hoc Technical Expert Group on Synthetic Biology with renewed membership, taking into account, inter alia, the work on risk assessment under the Cartagena Protocol, to work in accordance with the terms of reference annexed hereto;
  - Later paragraphs: on line forum, experts nominated to participate, AHTEG








# Cartagena Protocol

- No draft decision documents yet, just the annotated agenda
- <https://www.cbd.int/meetings/CP-MOP-09>

Official (4)

Notifications (7)

Other (1)

1. <b>CBD/CP/MOP/9/1</b> Provisional agenda	 العربية English Español Français Русский 中文  العربية English Español Français Русский 中文	<input type="checkbox"/>
2. <b>CBD/CP/MOP/9/1/ADD1</b> Annotated provisional agenda	 العربية English Español Français Русский 中文  العربية English Español Français Русский 中文	<input type="checkbox"/>
3. <b>CBD/CP/MOP/9/2</b> Report of the Compliance Committee under the Cartagena Protocol on Biosafety on the work of its fourteenth and fifteenth meetings	 العربية English Español Français Русский 中文  العربية English Español Français Русский 中文	<input type="checkbox"/>
4. <b>CBD/CP/MOP/9/10</b> Socio-economic considerations (Article 26)	 العربية English Español Français Русский 中文  العربية English Español Français Русский 中文	<input type="checkbox"/>



# Cartagena Protocol

- ITEM 15. RISK ASSESSMENT AND RISK MANAGEMENT (ARTICLES 15 AND 16)

57. Last meeting: Parties invited to submit to the Executive Secretary (a) information on their needs and priorities for further guidance on specific topics of risk assessment of living modified organisms, (b) proposals on criteria, including the technical justification, that may facilitate the selection of topics for the development of further guidance, and (c) views on perceived gaps in existing guidance materials.

# Cartagena Protocol

- ITEM 15. RISK ASSESSMENT AND RISK MANAGEMENT (ARTICLES 15 AND 16)

57. In the same decision, the Online Forum on Risk Assessment and Risk Management was extended to exchange experiences on risk assessment, provide information and views on, and perceived gaps in existing guidance materials, and proposals to address any gaps identified. Further, the Parties requested the Executive Secretary to support regional and subregional capacity-building activities on risk assessment of living modified organisms

# Cartagena Protocol

- ITEM 17. TRANSIT AND CONTAINED USE OF LIVING MODIFIED ORGANISMS (ARTICLE 6)
62. ...In the same decision, Parties and other Governments were invited to submit to the Biosafety Clearing-House, in the context of operational objective 1.8 of the Strategic Plan for the Cartagena Protocol on Biosafety for the period 2011-2020, practical guidance on specific measures for contained use that effectively limit the contact of living modified organisms with, and their impact on, the external environment

# Cartagena Protocol

- ITEM 17. TRANSIT AND CONTAINED USE OF LIVING MODIFIED ORGANISMS (ARTICLE 6)

63. In the light of the above, the meeting of the Parties to the Cartagena Protocol will be invited to consider this agenda item on the basis of a note by the Executive Secretary containing a summary report on the activities undertaken in response to decision CP-VIII/17 (CBD/CP/MOP/9/9), including a recommendation by the Compliance Committee and a compilation of information submitted by Parties and other Governments, **with a view to identifying areas where activities might be needed to support Parties in their efforts to develop national measures on contained use of living modified organisms.**

# You (us)

- As stakeholders
- As regulators
- As negotiators
- As providers of inputs

You (us)

- Some words of paper sound nice, and are nice.

You (us)

- Some words of paper sound nice, and are nice.
- Some words on paper are nice **only if you read them very fast**

Thank you