

International Governance of Pathogen Genomics Data

Alexandra Phelan SJD LLM LLB Associate Professor & Senior Scholar Johns Hopkins Center for Health Security

NASEM Accelerating the Use of Pathogen Genomics and Metagenomics in Public Health Workshop Jul 22, 2024

Outline

- 1. Sovereignty over genetic resources
- 2. Genetic resource digital sequence information
- 3. Multilateral ABS for pandemic pathogens & sequences



1. Sovereignty over genetic resources

Sovereignty

- founding principle of international law
- inc. right of a state to rule itself, develop its own laws, govern its own territory
- Extraction of resources as a feature of colonialism

Convention on Biological Diversity (1992) recognizes:

- States' sovereign rights over genetic resources within their territory
- Genetic resources defined to include any material of microbial origin containing functional units of heredity

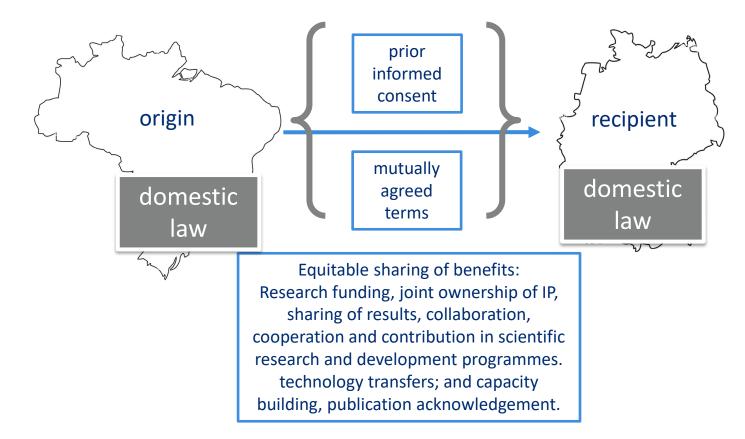
• Nagoya Protocol governs:

- Access to Genetic Resources; and
- Fair and Equitable Sharing of Benefits Arising from their Utilization -> ABS



1. Sovereignty over genetic resources

Bilateral – "I give, I get"



Multilateral (for specific genetic resources) – Access decoupled from Benefits Sharing – "We give, we get"

- Pandemic influenza: WHO Pandemic Influenza Preparedness Framework
- Other pathogens: N/A at present time

2. Genetic resource digital sequence information

Expansion of GSD sharing has potential to "unravel" the core bargain of ABS.

- Bilateral:
 - Captured in existing domestic ABS laws
- Multilateral:

Under <u>CBD COP Decision 15/19 (Dec 2022)</u> States Parties:

- *Agree* that the benefits from the use of digital sequence information on genetic resources should be shared fairly and equitably
- Efficient, feasible, certainty, open access, not hinder research & innovation
- Requires distinctive approach but not necessarily legal binding
- Ongoing work (e.g. fund for commercial use, not-for-profit use, voluntary or triggered benefit sharing)



3. Multilateral ABS for Pandemic Pathogens & Sequences

- Negotiations for a <u>Pandemic Agreement</u>
 - Dec 2021, WHO Member States

Pathogen Access and Benefits Sharing (PABS) System

Agreed (as of 22 Jul 2024)

- Recognition of sovereign rights
- Public health need for rapid and timely sharing of pathogens with pandemic potential and sequence information
- Rapid, timely, fair and equitable sharing of benefits from pandemic pathogens & sequences
- PABS System (and definition) to be governed by a new PABS Instrument
- Importance of legal certainty, and research and innovation



3. Multilateral ABS for Pandemic Pathogens & Sequences

Pathogen Access and Benefits Sharing (PABS) System

Still to be determined (as of 22 Jul 2024)

- Definition of pathogen with pandemic potential
- Process for access to samples (eg WHO lab networks) and sequences (eg types of databases)
- Benefits to be shared (eg 10-15% vaccines, diagnostics, therapeutics during a PHEIC, 20% during a pandemic emergency on public health risk and need)
- Use of legally binding contracts
- Annual monetary contributions
- Next negotiation sessions: 9-20 Sept, 4-15 Nov
- Adoption: 15 Dec 2024 or May 2025



Summary

1. Sovereignty over genetic resources

- ABS regimes exist under international law for genetic resources
- Pathogens fall within their scope genetic resources

2. Genetic resource digital sequence information

- There are current efforts to include genetic resource sequence information in a multilateral ABS instrument

3. Multilateral ABS for pandemic pathogens & sequences

 Current negotiations for a Pandemic Agreement include a new PABS instrument specifically for pandemic pathogens and sequences

