A Balanced System for Access and Benefit-sharing of Genetic Resources

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Independent Legal Advisor on ABS
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1. Why should the plant breeders care about NP
2. PhD Hypothesis
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2. Why should the PGR community care about the NP?

1. Material Scope of ITPGRFA is limited

- Access to PGRFA found *in situ conditions* will be provided according to national legislation or, in the absence of such legislation, in accordance with such standards as may be set by the Governing Body

  - Unless explicitly stated otherwise by the Contracting Party, the PGRFA found *in situ conditions* do not belong in public domain and thus is subject to national ABS legislation

  - Until the ITPGRFA has agreed an access policy for genetic resources belonging to crops listed in Annex I and found in *in situ* conditions, these need to be accessed and utilised according to national ABS legislation
2. Why should the PGR community care about the NP?

2. Activity Scope of the ITPGRFA is limited

• Access to PGRFA for utilization and conservation for research, breeding and training for food and agriculture, provided that such purpose does not include chemical, pharmaceutical and/or other non-food/feed industrial uses.
3. PhD Hypothesis

Does the current ABS system attain its objectives, including biodiversity conservation?

**Hypothesis:** No, because:

- Nagoya Protocol is not designed to channel benefits into conservation
- The way Nagoya Protocol is implemented is too burdensome both for providers and users
- There exists a persisting lack of trust between the providers and users
## 4. ABS Goals

### GOALS FOR A BALANCED ABS SYSTEM

<table>
<thead>
<tr>
<th>Legal Certainty for access</th>
<th>Equity in benefit sharing</th>
<th>Incentives for biodiversity conservation and sustainable use</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Predictable conditions</td>
<td>• Fairness and equity in negotiation</td>
<td>• Innovative transboundary solutions</td>
</tr>
<tr>
<td>• Legal certainty</td>
<td>• Strengthen the participation of Indigenous People and Local Communities</td>
<td>• Creative incentives to conserve biodiversity</td>
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<tr>
<td>• Transparency</td>
<td>• Tech transfer and cooperation</td>
<td>• Cost-effective measures</td>
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- Sustainable use of biodiversity components
- Scientific research based on GR
4. ABS Goals

Findings were published in *Sustainable Development*
5. Provider Country Legislation

COMPARATIVE ANALYSIS OF NATIONAL ABS LAWS
<table>
<thead>
<tr>
<th>Commonly used regulatory options on ABS</th>
<th>Access</th>
<th>Material scope</th>
<th>Temporal scope</th>
<th>Utilization scope</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>In situ only</td>
<td>Sampling</td>
<td>Research</td>
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<td>In situ + ex situ</td>
<td>Utilization</td>
<td>Development</td>
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<td>Access to DSI</td>
<td>Access to a previously utilised genetic resource for new utilisation</td>
<td>R&amp;D</td>
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<tr>
<td>Pre-condition for access</td>
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<td>Mandatory BSA</td>
<td>Voluntary BSA</td>
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<td>Options for regulatory mechanisms</td>
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<td>Permit</td>
<td>Notification</td>
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<td>Standardisation</td>
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<td>Standardised</td>
<td>Case-by-case</td>
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<td>Benefit-sharing</td>
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<td>Monetary</td>
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<td>Types</td>
<td></td>
<td>Joint ventures</td>
<td>Access fee</td>
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<td>Up-front payment</td>
<td>License fee</td>
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<td>Royalties</td>
<td>Salaries and funding</td>
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<td>Trust fund payment</td>
<td>Raw data</td>
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<td>Research results</td>
<td>Research directed towards priority needs of the provider country</td>
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<td>Capacity building</td>
<td>Technology transfer</td>
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<td></td>
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<td>Technology transfer</td>
<td>Food and livelihood security benefits</td>
<td></td>
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<td>Trigger</td>
<td></td>
<td>Access</td>
<td>Utilisation</td>
<td></td>
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<tr>
<td>Standardisation</td>
<td></td>
<td>Standardised</td>
<td>Case-by-case</td>
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<td>Renegotiability</td>
<td></td>
<td>Renegotiable when the user and/or the intent changes</td>
<td>Non-renegotiable</td>
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<td>Compliance</td>
<td></td>
<td>Sanctions</td>
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<td>Administrative fines in any case of breach</td>
<td>Administrative fines for light breach, criminal sanctions for severe breach</td>
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</tbody>
</table>

5. Provider Country Legislation

Findings were published in *Frontiers in Plant Science*
6. Designing ABS Frameworks: Multi-criteria Analysis

**Focus: Overall benefits of access agreements to genetic resources**

**Level 1: Focus**

- **S₁: Industrial Users**
- **S₂: Academic Users**
- **S₃: Collections**
- **S₄: Providers**

**Level 2: Stakeholders**

**Level 3: Criteria**

- **C₁: Predictability**
- **C₂: Legal certainty**
- **C₃: Transparency**
- **C₄: Fairness & equity**
- **C₅: Sustainable use**
- **C₆: Cost-effectiveness**
- **C₇: Scientific research**
- **C₈: Strengthen IPLCs**
- **C₉: Tech. Transf. & coop.**
- **C₁₀: Incentives Biodiversity**
- **C₁₁: Innova. solutions Transboundary**

**Level 5: Design parameters**

- **DP₁: Material scope**
  - In situ access
  - Ex situ access

- **DP₂: Utilisation scope**
  - In situ
  - Ex situ

- **DP₃: Temporal scope**
  - Res.
  - Dev.
  - R&D

- **DP₄: Regulatory mechanism**
  - Notification-based access
  - Permit-based access

- **DP₅: Standardisation**
  - Standardised
  - Case by case

- **DP₆: Granting authority**
  - Centralised single institution
  - Several institutions mandated according to type of GR

- **DP₇: Local partner**
  - Yes
  - No

- **DP₈: Facilitated access**
  - For non-commercial research
  - Yes
  - No

- **DP₉: Renegotiability**
  - When user changes
  - When intent changes

**Level 4: Design parameters**

- **DP₁: Material scope**
  - In situ access

- **DP₂: Utilisation scope**
  - In situ, ex situ

- **DP₃: Temporal scope**
  - Access for sampling
  - Access for utilisation

- **DP₄: Mandatory BSA**
  - Access to previously obtained GR for new utilisation
  - Yes
  - No

- **DP₅: Granting authority**
  - Centralised single institution
  - Several institutions mandated according to type of GR

- **DP₆: Local partner**
  - Yes
  - No

- **DP₇: Renegotiability**
  - When user changes
  - When intent changes
6. Designing ABS Frameworks: Multi-criteria Analysis

<table>
<thead>
<tr>
<th>DP₁ Material scope</th>
<th>DP₂ Temporal scope</th>
<th>DP₃ Utilization scope</th>
<th>DP₄ Conditions of access</th>
<th>DP₅ Regulatory mechanism</th>
<th>DP₆ Granting authority</th>
<th>DP₇ Standardization</th>
<th>DP₈ Mandatory Local partner</th>
<th>DP₉ Facilitated access non-commercial research</th>
<th>DP₁₀ Renegotiability</th>
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<td>A. In situ access</td>
<td>A. Access for sampling</td>
<td>A. Research</td>
<td>A. Mandatory BSA</td>
<td>A. Notification-based access</td>
<td>A. Centralized single institution</td>
<td>A. Standardized</td>
<td>A. Mandatory local partner</td>
<td>A. Facilitated access for non-comm. research</td>
<td>A. Renegotiable when user changes</td>
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<td>Opt. B</td>
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<tr>
<td>B. In situ and ex situ access</td>
<td>B. Access or utilization</td>
<td>B. Development</td>
<td>B. No mandatory BSA</td>
<td>B. Permit-based access</td>
<td>B. Several instit. mandated according to type of GR</td>
<td>B. Case by case</td>
<td>B. No mandatory local partner</td>
<td>B. No facilitated access for non-commercial research</td>
<td>B. Renegotiable when intent changes</td>
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<td>Opt. C</td>
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<td>C. In situ, ex situ, and for DSI</td>
<td>C. Access to previously obt. GR for new utilize</td>
<td>C. Research &amp; Development</td>
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Findings were published in *Frontiers in Genetics*
7. ABS = Biodiversity Conservation?

Nagoya Protocol Negotiations

It was presupposed that ABS would contribute to biodiversity conservation through:

• Awareness of providers

• Negotiations of ABS contracts between providers and users

• Economic incentives created by the repeated access to the same resource

What does the final text to the Nagoya Protocol say?

• Recognises the potential of ABS to contribute to biodiversity conservation (Preamble)

• Objective: Benefit-sharing contributing to conservation and sustainable use (Art 1)

• Encourages providers and users to direct benefits into conservation (Art 9)

• Global Multilateral Benefit-Sharing Mechanism to direct benefits into conservation (Art 10)
Findings were published in *Plants People Planet*
5. Conclusions

1. Activation of the Global Multilateral Benefit-sharing Mechanism? The only mechanism that channels benefits into conservation.

2. Designing evidence-based ABS frameworks involving stakeholder input.

3. Creation of trust between the providers and users of genetic resources. Lack of trust = stringent ABS laws.

4. Further research on benefit-sharing: Conservation or sharing based on measurable economic value?
Thank you

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Illustrations: Maya Edelman