

# ABS - Plant breeders' perspective

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# Content

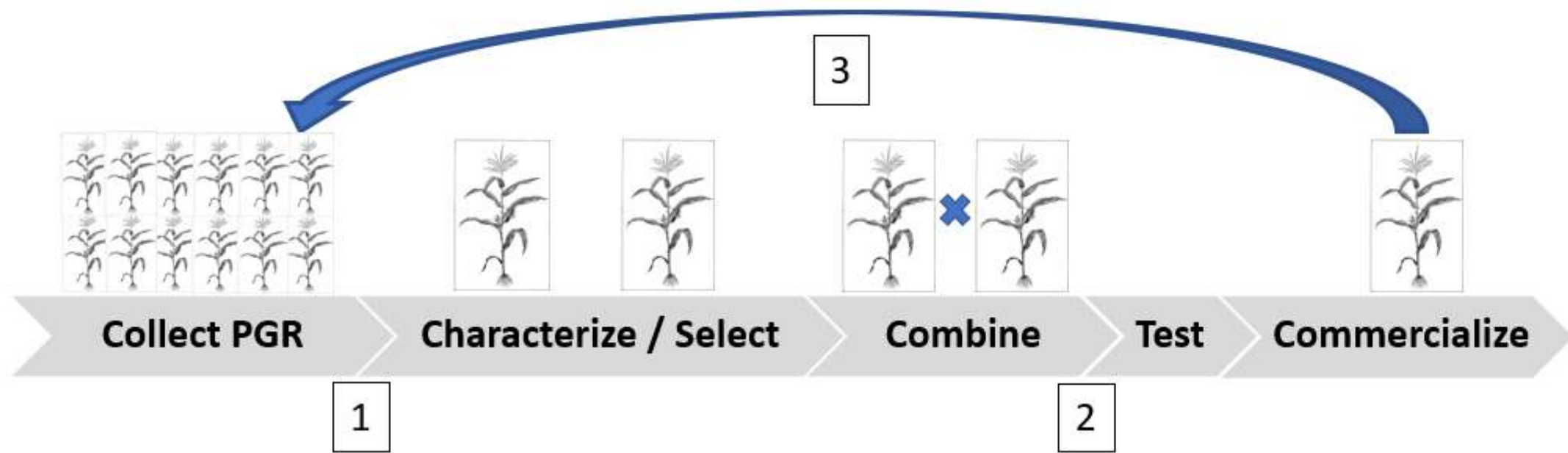
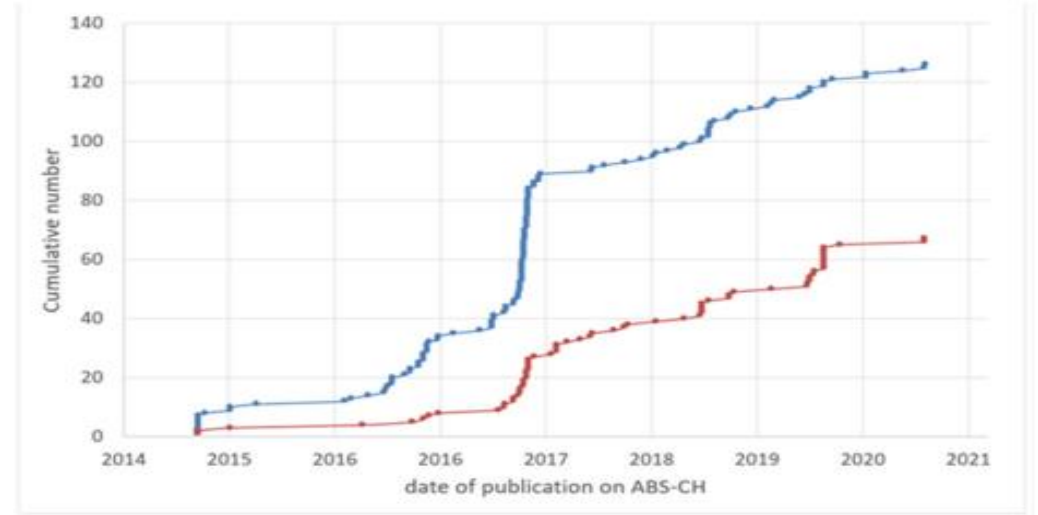
ABS laws applied to our value chain

Recent Seed sector input and positions for ABS / DSI

A few use cases

# Plant breeding and ABS

figures from <https://doi.org/10.3390/su14010277>



# Where are we now in 2022 - ITPGRFA

Seed associations state that –among available ABS mechanisms- MLS of ITPGRFA is preferred

ITPGRFA has partial PGR coverage, and thus it is not a full solution for private sector seed companies

In Nov 2019, ITPGRFA GB8 had a proposal to make

- broader coverage
- a subscription system
  - get income earlier & more predictable, more business-friendly (less track&trace or perpetual obligations).
- This was NOT adopted

ITPGRFA GB9 is planned for 9-14 May 2022

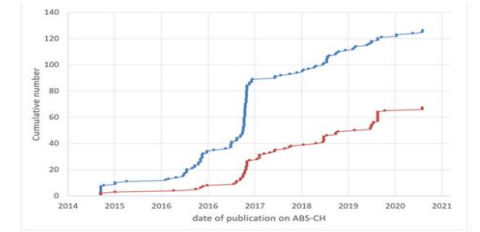
Some countries make bilateral ABS requirements for PGRFA.

For DSI, ITPGRFA monitors the position of CBD and waits for that, to choose its own policy.

# Where are we now in 2022 – bilateral ABS

## Gradually more national ABS law

Based on art 15 of CBD (1993): the authority to determine access to genetic resources rests with the national governments and is subject to national legislation.



At international level, the ABS discussion in CBD and NP becomes broader

Derivatives, DSI,

Benefit sharing and/or DSI is woven-in in lots of discussions

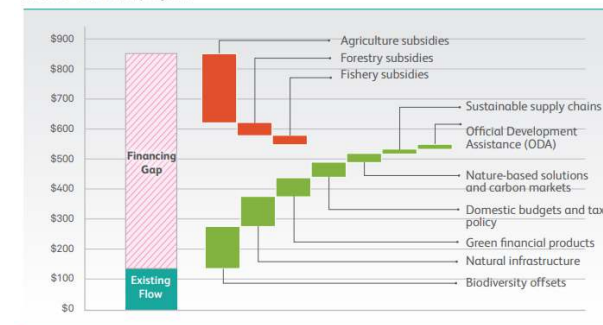
Fair sharing of benefits, biodiversity, sustainability, IPLC, and others

in 2022, ABS / biodiversity may be discussed under the NP, the post-2020 GBF, and GEF

Biodiversity has huge resource needs.

- Paulson institute mentions annual USD >800 bn in 2030
- [FINANCING-NATURE Full-Report Final-Version 091520.pdf \(paulsoninstitute.org\)](#)

FIGURE 5.1. Estimate of growth in financing resulting from scaling up proposed mechanisms by 2030. (in 2019 US\$ billion per year)



# Seed sector interface with the ABS policy discussions (1)

Plant breeding and private sector supports the overall objectives of the CBD

- Biodiversity conservation
- Sustainable use (CBD: not depleting relevant GR or ecosystem)
- Sharing benefits

Plant breeders (and GR users) are

- Not 'demandeur' for (current) ABS mechanisms
- Not Policy maker in ABS mechanisms
- Not direct negotiator

We are an engaged observer, contributing to the negotiation

Seed sector advocacy on ABS and DSI

- via seed associations, and
- for DSI also via ICC (International Chamber of Commerce)

# Seed sector interface with the ABS policy discussions (2)

We are aware that agriculture & food production has a big biodiversity footprint

Plant breeding intrinsically has a positive contribution

- Using but not depleting GR to develop improved varieties
- Plant breeding is a game changer for sustainable agriculture
- Results from modern breeding reach smallholders farmers, e.g. Bt cotton

Seed companies already undertake non-monetary benefit sharing and capacity building

The socio-economic and environmental value of plant breeding in the EU –Noleppa-HFFA

<https://euroseeds.eu/news/plant-breeding-is-a-game-changer-for-sustainable-agriculture-new-study-shows/>

## Pro-Mais

PRO-MAIS is a non-profit breeders' organization with 9 members founded in 1967 that aims to advance the study of and improve maize.

[Read more](#)



## Input in kind to CGN

Dutch breeders contribute approximately 10-15 % of the budget of the Dutch gene bank CGN (Centre for Genetic Resources).

[Read more](#)

[Seeding Benefits - Euroseeds](#)

## REPORT ON CROPLIFE INTERNATIONAL MEMBERS' ACTIVITIES RELATING TO BIODIVERSITY AND CLIMATE

[Biodiversity-Report-2021-FINAL.pdf \(croplife.org\)](#)

# Published positions on DSI (1)

May 2019: initiative from ICC

[7-joint-stakeholder-statement-on-digital-sequence-information-01-08-201.pdf](#) (iccwbo.org)

## **Promoting sustainable use and conservation of biodiversity through open exchange of Digital Sequence Information**

*Joint statement by public and private sector organisations, academic and scientific institutions, data repositories and collections representing a broad range of stakeholders*

Oct 2020: WiLDSI coordinated by DSMZ

[German Collection of Microorganisms and Cell Cultures GmbH: Digital Sequence Information](#) (dsmz.de)





# Published positions on ABS/DSI (2)

TOWARDS A NEW IMPLEMENTATION STRATEGY FOR ACCESS AND BENEFIT SHARING

Oct 2020 by ICC

<https://iccwbo.org/content/uploads/sites/3/2020/10/icc-future-implementation-of-abs-for-tf.pdf>

1. Review the impact of current ABS . . mechanisms on R&D, collaborations, and production.
2. Design a future ABS strategy that optimises value creation from R&D.
3. Resource mobilisation for biodiversity conservation should not only rely on ABS monetary benefit sharing.
4. Assess the workability and impact of an ABS system before considering adoption.
5. An agreement [on ABS/DSI] should not be at the expense of research and innovation.

# Published positions on ABS/DSI (3)

ICC SUBMISSION TO CBD NOTIFICATION (2021-063)

Sept 2021 by ICC

[International Chamber of Commerce 29 September.pdf \(cbd.int\)](#)

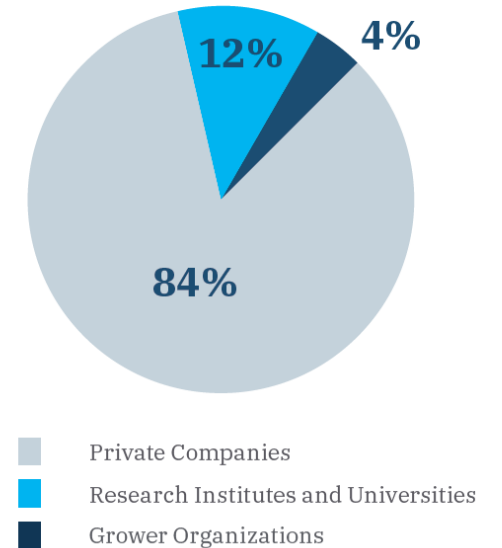
1. Parties should review and improve the ABS system as a whole to achieve a comprehensive system that can replace the current approach to ABS and truly deliver on the aims of the CBD, rather than focus **on a specific system for “DSI” coming “on top” of the current bilateral system.**
2. ABS procedures should be harmonised and simplified for a more workable and effective system which creates the required level of legal certainty for both providers and users.
3. A proper assessment of the current ABS system, as well as the workability and impact of any changes considered, should be made before any decision is taken.
4. The crucial importance of open exchange and access to “DSI” in the public domain for research and innovation, including for biodiversity conservation, must be kept in mind

# Use case 1: wheat genome sequence

- Wheat genome sequence completed in 2018
- Private sector co-financed
- Annotated and curated sequence became freely available
- Several public-private collaborations work with the wheat genome sequence
- A.o. CIMMYT uses the sequence in collaboration with several NARS, in capacity building, and development of better wheat varieties

I hope it will soon lead to better seeds for local farmers

REVENUES



Lot of crops have genome sequences, and could set up capacity building in provider countries.

## Use case 2

Help 'provider countries' benefit from the results of innovation and value creation.

Example: Fairplanet .

[HOME](#) | [התנדבות באפריקה](#) Fair Planet



## Use case 3: ex situ conservation

Seed companies co-operate with germplasm collections (CGN, Worldveg and others)

- Offering services-in-kind
- Getting characterizations of germplasm

Personal opinion

## Our community of GR/DSI users deserves an ABS mechanism that helps the stakeholders . . .

To contribute to major objectives of CBD, NP, (SDG)  
and objectives for agriculture: Food security & Farmer income & Ecological sustainability

To innovate and create value

### **Diversity of breeders**

- Commercial seed company (large and small)
- Public sector, academic, CGIAR
- Amateur breeders
- Some farmers, smallholders, IPLC, undertake breeding
- Working on agricultural crops, vegetables, ornamentals,
- Target market can be very local, or very large

p.s.: Numbers about farmers and smallholders.

<https://ourworldindata.org/smallholder-food-production>

### **Interactions / cooperation**

- Among breeders
- With data scientists, including DSI
- Public and private sector
- With farmers
- Across diverse countries
- Across value chain, including consumer

Thank you,

Your questions, suggestions

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