

COMMISSION ON GENETIC RESOURCES FOR FOOD AND AGRICULTURE

CGRFA/TTLE-ABS-6/23/Report

Sixth Session of the Team of Technical and Legal Experts on Access and Benefit-sharing

Rome, Italy, 2-4 May 2023

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COMMISSION ON GENETIC RESOURCES FOR FOOD AND AGRICULTURE

REPORT OF THE SIXTH SESSION OF THE TEAM OF TECHNICAL AND LEGAL EXPERTS ON ACCESS AND BENEFIT-SHARING

Rome, Italy, 2–4 May 2023

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

Rome, 2023



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I. OPENING OF THE MEETING

- 1. The Sixth Session of the Team of Technical and Legal Experts on Access and Benefit-sharing (ABS Expert Team) was held in Rome, Italy, from 2 to 4 May 2023. The list of experts is given in *Appendix A* to this report. Observers from from the following instruments and organizations also attended: Convention on Biological Diversity (CBD), International Treaty on Plant Genetic Resources for Food and Agriculture (Treaty) and .CGIAR.
- 2. Ms Ida Chiara de Rosa, representing Canada, representative of North America in the Bureau of the Commission on Genetic Resources for Food and Agriculture (Commission), opened the meeting and welcomed all participants. She recalled that the last meeting of the ABS Expert Team had to be held virtually due to the COVID-19 pandemic and expressed her hope and expectation that the capacity to interact face to face, both formally and informally, would increase the value of attendance at this meeting.
- 3. Mr Dan Leskien, Senior Liaison Officer of the Commission, welcomed the members of the ABS Expert Team. He noted various developments since the last session of the Commission, in particular the decision of the Fifteenth Meeting of the Conference of the Parties to the Convention on Biological Diversity (CBD) to establish, as part of the Kunming-Montreal Global Biodiversity Framework, a multilateral mechanism for benefit-sharing from the use of digital sequence information on genetic resources, including a global fund, and the draft *Agreement under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction* that is expected to be formally adopted in June 2023. He further noted the recommendations received from the Commission's intergovernmental technical working groups and introduced the two experts assisting the Secretariat in the preparation of the meeting: Mr David Smith, CABI (United Kingdom) and Mr Evanson Chege Kamau, University of Oldenburg (formerly University of Bremen, Germany) present at the meeting.

II. ELECTION OF CO-CHAIRS AND RAPPORTEUR

4. The ABS Expert Team elected Ms María Laura Villamayor (Argentina) and Ms Marliese von den Driesch (Germany) as Co-Chairs. Mr Brad Sherman (Australia) was elected as *Rapporteur*.

III. ADOPTION OF THE AGENDA

5. The ABS Expert Team adopted the Agenda, as given in *Appendix B*.

IV. ACCESS AND BENEFIT-SHARING FOR GENETIC RESOURCES FOR FOOD AND AGRICULTURE

6. The ABS Expert Team considered the document *Access and benefit-sharing and genetic resources for food and agriculture*³ and took note of comments and inputs from the Commission's intergovernmental technical working groups.⁴

Access and benefit-sharing and genetic resources for food and agriculture: typology of country measures

7. The ABS Expert Team recalled the Commission's request to compile for review by the Working Groups, the ABS Expert Team and the Commission at their next sessions, as a stand-alone document examples of legislative, administrative or policy measures on access and benefit-sharing (ABS) from different countries that directly or indirectly accommodate distinctive features of genetic resources for food and agriculture (GRFA) and associated traditional knowledge (TKGRFA).⁵

² A/CONF.232/2023/CRP.2/Rev.1.

¹ CBD/COP/DEC/15/9.

³ CGRFA/TTLE-ABS-6/23/2.

⁴ CGRFA/TTLE-ABS-6/23/Inf.2 Rev.1; CGRFA/TTLE-ABS-6/23/Inf.2 Add.1; CGRFA/TTLE-ABS-6/23/Inf.5; CGRFA/TTLE-ABS-6/23/Inf.6; CGRFA/TTLE-ABS-6/23/Inf.7; CGRFA/TTLE-ABS-6/23/Inf.8.

⁵ CGRFA-18/21/Report, paragraph 26.

- 8. The ABS Expert Team reviewed and revised the table contained in *Appendix II* of the document *Access and benefit-sharing and genetic resources for food and agriculture: typology of country measures*, ⁶ as given in *Appendix C*.
- 9. The ABS Expert Team requested the Secretariat to:
 - add other countries as examples in 2.1.1(b);
 - add other countries as examples in 2.1.5(a);
 - check the validity of country examples in 2.2.3(f) given the changes made by the ABS Expert Team;
 - provide an explanation for the term 'Framework PIC' in 2.3.1(f);
 - specify the relevant Argentinian province(s) in 2.3.2(g);
 - add a new section 3.1*bis* on the scope of measures addressing access to and utilization of traditional knowledge (TK);
 - provide references to country examples where missing; and
 - consider the country reports on the implementation of the Treaty received from Contracting Parties as an additional source of information.
- 10. Members of the ABS Expert Team agreed to provide any additional information, including country examples with the relevant references, by 15 May 2023 to the Secretariat for inclusion in the document that will be provided to the Commission for consideration at its forthcoming session.
- 11. The ABS Expert Team requested the Secretariat to provide an introduction to the stand-alone document, which:
 - highlights the need to read the typology of country measures alongside the Survey of access and benefit-sharing country measures accommodating the distinctive features of genetic resources for food and agriculture and associated traditional knowledge (Survey)⁷ referred to in the typology table as 'Humphries et al. 2021';
 - stresses that the typology table is a living document that may be updated in light of new ABS country measures;
 - clarifies that the ABS country measures referenced in the typology are examples only and are not meant to be exhaustive;
 - clarifies that where the typology table refers to "genetic resources" (GR) that it includes all genetic resources irrespective of their use;
 - describes the methodology used to prepare the typology table;
 - clarifies that while the document is in line with the ABS Elements and the Survey, it also
 acknowledges that there are countries that address ABS for GRFA through ABS measures
 that apply to both genetic and biological resources and that there are countries that address
 ABS through legislative, administrative or policy measures without making explicit
 reference to ABS; and
 - refers, as appropriate, to national measures that may be adopted, best practices and lessons learned from the realization of Farmers' Rights.⁸

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⁶ CGRFA/TTLE-ABS-6/23/2, Appendix I.

⁷ Humphries, F., Laird, S., Wynberg, R., Morrison, C. Lawson, C. & Kolesnikova, A. 2021. Survey of access and benefit-sharing country measures accommodating the distinctive features of genetic resources for food and agriculture and associated traditional knowledge. Rome, FAO on behalf of the Commission on Genetic Resources for Food and Agriculture. https://doi.org/10.4060/cb6525en

⁸ IT/GB-9/22/13/Inf.1.

12. The ABS Expert Team <u>recommended</u> that the Commission consider the usefulness of visualizing and/or summarizing specific ABS country measures as a whole, or model types of ABS country measures as part of the typology document or separate information material.

Draft online questionnaire on the implications of access and benefit-sharing measures for the use and exchange of genetic resources for food and agriculture and for benefit-sharing

- 13. The ABS Expert Team reviewed and revised the *Draft online questionnaire on the implications of access and benefit-sharing measures for the use and exchange of genetic resources for food and agriculture and for benefit-sharing*, as given in *Appendix D*. In doing so it took note of comments and inputs received from the Commission's intergovernmental technical working groups. The ABS Expert Team noted that the questionnaire will serve the purpose of preparing a report on the implications of ABS country measures for the use and exchange of GRFA and TK associated with GRFA, as requested by the Commission at its last session.
- 14. The ABS Expert Team recommended that an introduction to the questionnaire clarify the purpose and timeline of the questionnaire, as well as the stakeholder groups that the questionnaire addresses. The Team also recommended that the questionnaire use hyperlinks to clarify the meaning of specific terms including 'ABS measures', 'country', 'genetic resources', 'GRFA', 'permit', 'SMTA', 'special provisions' and 'TK' and that multimedia tools should be used to assist respondents in completing the questionnaire. The ABS Expert Team recommended that the Commission encourage all respondent groups to motivate relevant stakeholders to complete the questionnaire. The ABS Expert Team agreed that certain questions would benefit from contributions from the National Focal Points for the 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 (Nagoya Protocol) and the National Focal Points for the Treaty and recommended that the Commission bring the questionnaire to their attention through their Secretariats.

V. DIGITAL SEQUENCE INFORMATION AND GENETIC RESOURCES FOR FOOD AND AGRICULTURE

- 15. The ABS Expert Team considered the document *Digital sequence information and genetic resources for food and agriculture*¹² and took note of the draft study on *The role of digital sequence information in the conservation and sustainable use of genetic resources for food and agriculture: Opportunities and challenges.* ¹³ It took note of and endorsed comments and inputs from the Commission's intergovernmental technical working groups. ¹⁴
- 16. It further <u>recommended</u> that the Commission invite Members to submit information on domestic ABS measures applying to digital sequence information (DSI) and their actual or potential implications for the conservation and sustainable use of GRFA, including exchange, access to and the fair and equitable sharing of the benefits arising from their use, and to compile this information, for the information of the Commission.
- 17. The ABS Expert Team <u>recommended</u> that the Commission request the Secretariat to continue to monitor and report to the Commission developments regarding DSI in other fora, with a view to considering potential implications, opportunities and challenges for the Commission and its Members. It further <u>recommended</u> that the Commission continue to hold, in collaboration with the secretariats of the CBD and the Treaty, virtual open-ended workshops on DSI, as appropriate, with a view to informing and raising awareness of Commission Members, observers and stakeholders on recent

¹³ CGRFA/TTLE-ABS-6/23/Inf.3.

⁹ CGRFA/TTLE-ABS-6/23/2, Appendix II.

¹⁰ CGRFA/TTLE-ABS-6/23/Inf.2 Rev.1; CGRFA/TTLE-ABS-6/23/Inf.2 Add.1; CGRFA/TTLE-ABS-6/23/Inf.5; CGRFA/TTLE-ABS-6/23/Inf.6; CGRFA/TTLE-ABS-6/23/Inf.7; CGRFA/TTLE-ABS-6/23/Inf.8.

¹¹ CGRFA-18/21/Report, paragraph 27.

¹² CGRFA/TTLE-ABS-6/23/3.

¹⁴ CGRFA/TTLE-ABS-6/23/Inf.4; CGRFA/TTLE-ABS-6/23/Inf.4 Add.1; CGRFA/TTLE-ABS-6/23/Inf.5; CGRFA/TTLE-ABS-6/23/Inf.6; CGRFA/TTLE-ABS-6/23/Inf.7; CGRFA/TTLE-ABS-6/23/Inf.8.

technological and policy developments related to DSI. It further recommended to continue to raise awareness on the role of DSI in the conservation and sustainable use of GRFA and sharing of benefits derived from them and consider some of the challenges involved in assessing and making full use of DSI. In addition, the ABS Expert Team <u>recommended</u> that the Commission request FAO to continue to support capacity development and to monitor such initiatives taking place in other fora.

18. The ABS Expert Team <u>recommended</u> that the Commission encourage its Members to coordinate future work on DSI, including ABS for DSI, among relevant ministries domestically, with a view to ensuring consistency and mutual supportiveness of the ongoing processes in the different fora.

VI. CLOSING REMARKS

- 19. Mr Dan Leskien, Senior Liaison Officer of the Commission, thanked the Co-Chairs for their leadership during the session. He also thanked the *Rapporteur*. He thanked all participants for their valuable contributions and encouraged them to attend the Nineteenth Regular Session of the Commission that would take place in Rome from 17 to 21 July 2023.
- 20. The Co-Chairs thanked members of the ABS Expert Team for their hard work, good spirit, clarity and willingness to compromise. They also thanked the Secretariat.

APPENDIX A LIST OF EXPERTS

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APPENDIX B

AGENDA OF THE SIXTH SESSION OF THE TEAM OF TECHNICAL AND LEGAL EXPERTS ON ACCESS AND BENEFIT-SHARING

- 1. Election of Co-Chairpersons and Rapporteur
- 2. Adoption of the agenda and timetable
- 3. Access and benefit-sharing and genetic resources for food and agriculture
- 4. Digital sequence information and genetic resources for food and agriculture
- 5. Any other matters
- 6. Adoption of the Report

APPENDIX C

ACCESS AND BENEFIT-SHARING AND GENETIC RESOURCES FOR FOOD AND AGRICULTURE: TYPOLOGY OF COUNTRY MEASURES

	Measure	Country (examples)	Further reading
Element 1: INSTITUTIO	ONAL ARRANGEMENTS		
1.1 Institutional responsi	bility		
1.1.1 Single institutional responsibility for access and benefit-sharing (ABS) Some countries have chosen to entrust one single institution with the	(a) Single institution with focus on food, forest and/or agriculture	Comoros; ¹ Benin; ² Netherlands (the Kingdom of); ³ Portugal; ⁴ Bulgaria; ⁵ Bhutan; ⁶ Viet Nam; ⁷ Grenada; ⁸ Saint Kitts and Nevis; ⁹ Peru; ¹⁰ Honduras; ¹¹	Humphries <i>et al.</i> , 2021, p13f, 16ff; Hailu & Kamau, 2022, p243f; Mulesa & Westengen, 2020; National Biodiversity Centre, Bhutan, 2018, p23
administration of ABS measures	(b) Single institution with environmental focus	South Africa; Burundi; 12 Ethiopia; 13 Denmark; 14; Dominican Republic; 15 Guatemala; 16 Syrian Arab Republic 17	
	(c) Single institution with science/technology focus	Uganda; 18 Singapore; 19	_
	(d) Single institution with overall responsibility for all biodiversity	Peru; ²⁰ Costa Rica; ²¹ Ethiopia ²²	
1.1.2 Shared institutional responsibility for ABS	(a) Based on type of genetic resource*	Viet Nam; ²³ Republic of Korea; ²⁴ Estonia; ²⁵ Zimbabwe ²⁶	Humphries <i>et al.</i> , 2021, p. 14f; Trang, Ba Nguyen & Thu, 2022, p333; Lee & Cho, 2022, p380f

* For example for Annex 1/MLS PGRFA of the Treaty, see also 2.1.7 (a).

	Measure	Country (examples)	Further reading
Other countries have chosen to entrust different institutions with the ABS administration	(b) Based on commercial or non-commercial utilization	South Africa; ²⁷ Ecuador ²⁸	Humphries <i>et al.</i> , 2021, p14f: Kamau, 2022a, p168f; Cabrera Ormaza, 2022, p103ff
	(c) Based on (sub)sector or field of research	Mexico; (ref) Peru; (ref) Republic of Korea (ref)	Humphries et al., 2021, p14f;
1.1.3 Interagency coordination of ABS decisions Countries have established various mechanisms to coordinate administration of ABS among responsible agencies.	(a) One-stop-shop approach	Uganda; ²⁹ Mozambique; ³⁰ Nepal ³¹ Brazil; ³² Ecuador ³³ India; ³⁴ Dominican Republic ³⁵	Humphries et al., 2021, p16ff; Otieno et al., 2017; ABS Initiative, 2019; Nepalese Government, 2014, p112; Halewood, 2015; Mozini, 2022, p79f; Kamau, 2022b, p311f; Cabrera Ormaza, 2022, p104; Dominican Republic, https://ambiente.gob.do/autorizaciones-ambientales-2/
	(b) Coordination committees/councils (in addition or in lieu of the one-stop-shop approach)	South Africa; ³⁶ France; ³⁷ Kenya; ³⁸ Bhutan ³⁹	Humphries <i>et al.</i> , 2021, p16ff; Wynberg, 2017, pp198–218; FRB, 2020

1.2 Provision of national	1.2 Provision of national information on responsible institutions, ABS measures and procedures				
Countries use different ways to provide information on responsible institutions, ABS measures and procedures	(a) National websites, web portals, virtual platforms or information portals	Finland; ⁴⁰ Denmark; ⁴¹ Republic of Korea; ⁴² Hungary; ⁴³ Cameroon; ⁴⁴ Malaysia; ⁴⁵ France; ⁴⁶ Germany; ⁴⁷ Costa Rica; ⁴⁸ Kenya; ⁴⁹ Qatar; ⁵⁰ South Africa (ref)	Humphries et al., 2021, p17ff		
	(b) ABS Clearing-House		ABSCH, 2022		
	Measure	Country (examples)	Further reading		
Element 2: ACCESS TO AN	D UTILIZATION OF GENETIC RESOURCES FOR FOOD AND) AGRICULTURE (GRFA)			
2.1 Categories of genetic	resources (GR) subject to national ABS provisions on access				
2.1.1 Temporal scope	ABS provisions on access may apply to:				
	(a) GR accessed prior to entry into force of ABS measure, if there is a new use	Malaysia ⁵¹			
	(b) GR accessed after entry into force of ABS measure	Malta; ⁵² France; ⁵³	Winter, 2022; Greiber & Frederichs, 2022		
2.1.2 GR for which provider	"Country of origin" may be where:				
country is country of origin or has acquired GR in accordance with	(a) GR exists within ecosystems and natural habitats		Humphries <i>et al.</i> , 2021, p23ff		
Convention on Biological Diversity (CBD)	(b) Domesticated or cultivated species developed its distinctive properties	France; ⁵⁴ Mozambique; ⁵⁵ Uganda ⁵⁶	Humphries <i>et al.</i> , 2021, p24ff		

	(c) Domestication took place	Kenya ⁵⁷	Humphries <i>et al.</i> , 2021, p24
	(d) GR have been domesticated and produced for a long time	Viet Nam ⁵⁸	Humphries <i>et al.</i> , 2021, p23ff
	(e) Native species was present in the country's territory before a specific date	Australia ⁵⁹	Humphries <i>et al.</i> , 2021, p24ff
	(f) Micro-organism as isolated from the national territory substrates, territorial sea, exclusive economic zone or the continental shelf	Brazil; ⁶⁰ Colombia ⁶¹	Humphries <i>et al.</i> , 2021, p24ff
	(g) All of the above		
2.1.3 Privately/ publicly	ABS measures may apply to:		
held GR	(a) No distinction between public and privately held genetic resources	Most countries	
	(b) Publicly (state/community) held genetic resources only	Australia ⁶²	Humphries <i>et al.</i> , 2021, p25, 38
2.1.4 GR/biological	(a) GR	all	
resources	(b) Biological resources in addition	Malaysia; Australia; India;(ref) Malta; ⁶³ South Africa (ref)	
2.1.5 Genetic information	(a) Only in conjunction with utilization of physical GR		Bagley et al., 2020,
	(b) Independent of utilization of physical GR	Bhutan ⁶⁴	pp 13–18.
	(c) No specified regulation	Most countries	
2.1.6 GR held by	ABS measures may require:		
Indigenous Peoples and local communities (IPLC) ⁶⁵ Many countries require the consent of the IPLC holding the GR	(a) Prior informed consent (PIC) or approval and involvement of Indigenous Peoples and Local Communities (IPLC)	South Africa; 66 Malaysia; 67 Kenya; 68 Peru; 69 Spain; 70 Philippines; (ref) Malawi; (ref) Namibia (ref)	Kamau, 2022a, p172f.; Kamau, 2022c, p362ff.; Kamau, 2022b, p290f.; Cabrera Ormaza,2022, p110f.; Silvestri, 2022b, 451f
	(b) Compliance with community protocols/customary law	Indonesia; ⁷¹ (Madagascar?)	

	(c) Where IPLC does not exploit GR "sufficiently" or refuses to grant licence on "reasonable commercial terms and conditions"	Zambia; ⁷² Kenya (ref)	Humphries <i>et al.</i> , 2021, p27; Kamau 2022b, p281f
2.1.7 Exemptions of specific genetic resources	ABS measures may exempt: (a) GR for which ABS is governed by specialized international instrument	Malaysia; ⁷³ France ⁷⁴	Silvestri 2022a, p53, 55; Humphries <i>et al.</i> , 2021, p28f.
ABS measures of many countries do not apply to	(a.1) PGRFA falling under the Annex 1/Multilateral System of the Treaty	Argentina; ⁷⁵ Peru; ⁷⁶ Philippines; (ref) Bhutan (ref)	Kamau, 2022c, pp355, 359, 370; Mahop, 2022, p468
specific GRFA/related activities	(b) Plant varieties protected by intellectual property rights	Portugal; ⁷⁷ Uganda; ⁷⁸ Kenya ⁷⁹	
uctivities	(c) GR arising from domesticated or cultivated species	Argentina; ⁸⁰ France ⁸¹	Silvestri, 2022a, p53; Mahop, 2022, p468
	(d) Crop wild relatives	France ⁸²	Humphries <i>et al.</i> , 2021, p29
	(e) GR subject to forestry	France ⁸³	Humphries <i>et al.</i> , 2021, p29
	(f) Biological material cultivated or bred for use as a model in research and development	Morocco ⁸⁴	Humphries <i>et al.</i> , 2021, p29
	(g) Specific categories of GR, e.g. fisheries and AnGR	Spain ⁸⁵	Silvestri, 2022b, 449f
	(h) GRFA at discretion of the government	Australia ⁸⁶	Humphries <i>et al.</i> , 2021, p29
	(i) On case-by-case basis, e.g. GR in public ex situ collections	e.g. in Australia's Commonwealth areas; ⁸⁷ India ⁸⁸	Humphries <i>et al.</i> , 2021, p29, 38
	(j) GR collected by laboratories in the context of prevention, surveillance and combating risks to animal and plant health and to food safety	France ⁸⁹	Humphries <i>et</i> <i>al.</i> , 2021, p33; Mahop, 2022, p468
	(k) Biological resources normally traded as commodities	India ⁹⁰	
	(l) Derivatives accessed independently from GR	Viet Nam; ⁹¹ Malta ⁹²	Trang, Ba Nguyen T. & Thu, 2022, p329
2.2 Activities triggering/r	not triggering ABS obligations		

Access to GR for utilization ma	y trigger ABS obligations.		1
2.2.1 Exemptions on GRFA-related activities	GRFA-related activities (explicitly or implicitly) exempted by some countries from ABS obligations:		
	(a) Agricultural activities that are not for the purpose of research and development	Malaysia ⁹³	Humphries <i>et al.</i> , 2021, p31
	(b) Use of GR for production of agricultural products for sale	South Africa ⁹⁴	Humphries <i>et al.</i> , 2021, p29f
	(c) Use of GR as commodity for final consumption	Malta; ⁹⁵ Bangladesh; ⁹⁶ Philippines ⁹⁷	Humphries <i>et al.</i> , 2021, p29f; Mozini 2022, p78
	(d) Aquaculture or mariculture activities involving freshwater and marine species producing specimens for consumption purpose	South Africa; ⁹⁸ Australia; ⁹⁹ Malaysia; ¹⁰⁰ Spain ¹⁰¹	Humphries <i>et al.</i> , 2021, p31; Kamau, 2022a, p168
	(e) Collection of GR for use in public collections or further breeding in agriculture or forestry	Norway ¹⁰²	Humphries <i>et al.</i> , 2021, p31
	(f) Collecting broodstock for aquaculture	Australia (regulates "biological materials")	Humphries <i>et al.</i> , 2021, p30
	(g) Collecting plant reproductive material for propagation	Australia (regulates "biological materials")	Humphries <i>et al.</i> , 2021, p30
	(h) Production and marketing of seeds and forest plants	Spain ¹⁰³	Humphries <i>et al.</i> , 2021, p31
	(i) Collection and maintenance of samples in <i>ex situ</i> collections for conservation purposes	Spain ¹⁰⁴	Humphries <i>et al.</i> , 2021, p33
	(j) Exchanging biological resources as commodities unless used for research and development	India; 105 Namibia; (ref) Bhutan (ref)	Humphries <i>et al.</i> , 2021, p30
	(k) Marketing livestock as regular consumer goods	Bangladesh ¹⁰⁶	Humphries <i>et al.</i> , 2021, p30
	Exempted activities if performed by specific user groups:		

2.2.3 Exemptions of activities performed by specific user groups	(a) Exchange among IPLC in exercise of their traditional and customary practices	Malaysia; ¹⁰⁷ Kenya; ¹⁰⁸ Namibia; (ref) Ecuador (ref)	Humphries <i>et al.</i> , 2021, p33; Kamau, 2022c, p359; Kamau, 2022b, p278
Some countries waive ABS obligations/provide for	(b) Exchange of GR/TK among IPLC for their own consumption	Guatemala; ¹⁰⁹ Uganda; ¹¹⁰ Namibia; (ref) Bhutan (ref)	
simplified procedures for activities by specific user groups.	(c) Local people and communities of the area, including growers and cultivators (unless they wish to obtain intellectual property rights(IPR)	India ¹¹¹	
groups.	(d) Conventional breeding or traditional practices in use in agriculture, horticulture, poultry farming, dairy farming, animal husbandry or bee keeping by small-scale farmers	Malaysia ¹¹²	
	(e) Access to and utilization of GR by farmers, pastoralists and fishers according to their traditional way of life	China ¹¹³	
	(f) Non-commercial research by nationally recognized research organizations and foreign collaborators of such organizations unless intent changes	India; ¹¹⁴ Namibia; (ref) South Africa; (ref) Uganda (ref)	
	(g) Research by educational institutions	Kenya ¹¹⁵	Kamau, 2022b, p303 footnote 147
	(h) Exchanging within networks of user groups	India ¹¹⁶	Humphries <i>et al.</i> , 2021, p33
2.3 Authorization proced	lures applicable under ABS measures		
ABS measures normally requir	re PIC and mutually agreed terms prior to access and utilization of GR.	I	1
2.3.1 Simplified approval	Countries may simplify approval procedures in several ways:		
procedures	(a) No PIC for specific GR, e.g. GRFA	South Africa ¹¹⁷	Kamau, 2022a, p168f.
Countries may require PIC and mutually agreed terms (MAT) prior to access and utilization of GR.	(b) Access and utilization upon notification/ registration instead of PIC. Authorization is instead required prior to commercialization, transfer to third parties or change of initial intent	Brazil; ¹¹⁸ France; ¹¹⁹ South Africa ¹²⁰	Mozini, 2022, p74, 76; Humphries <i>et al.</i> , 2021, p35; da Silva & de Oliveira, 2018, p1; Kamau, 2022c, p366;

			Mahop, 2022, p468; Kamau, 2022a, p185f
	(c) Use of Standard Material Transfer Agreement (SMTA) for Treaty Annex 1/MLS/Art.15 PGRFA	Parties to the Treaty	
	(d) Use of SMTA for other PGRFA other than Treaty Annex 1/MLS/Art.15 PGRFA	South Africa(ref)	
	(e) Standardized access conditions for (all) BR/GR	South Africa; 121 Uganda; 122 Philippines 123	Humphries <i>et al.</i> , 2021, p36
	(f) Framework PIC, MAT	Peru ¹²⁴	Humphries <i>et al.</i> , 2021, p36; Cabrera Ormaza, 2019, p84 & 88, Cabrera Ormaza, 2022, p106f, 110; Beck, 2022, p497, 499ff
2.3.2 Procedural simplifications for specific	Countries provide for simplified procedures for specific activities, such as:		
activities	(a) Subsistence consumption and conventional commercial consumption	Philippines ¹²⁵	
	(b) Scientific research on agrobiodiversity that does not create spin-off technology	Philippines ¹²⁶	
	(c) Activities involving no economic exploitation of products or reproductive materials arising from GR	Brazil ¹²⁷	Mozini, 2022, p82, 84ff
	(d) R&D taxonomic, conservation or biosecurity purposes	Spain; 128 France 129	Humphries <i>et al.</i> , 2021, p33
	(e) Development of therapeutic drugs and food security in the event there are threats to the life and health of humans, animals, and plants	Republic of Korea ¹³⁰	Humphries <i>et al.</i> , 2021, p36; Lee & Cho, 2022, 381ff

	(f) Non-commercial research conducted by national state institutions	Philippines; ¹³¹ India ¹³²	Humphries <i>et al.</i> , 2021, p34
	(g) Access to GR for non-commercial/purely scientific purposes	Argentina ¹³³	Silvestri, 2022a, p55
	(h) Taxonomic, collection and pre-breeding purposes and research projects	Mexico; 134 South Africa 135	Humphries <i>et al.</i> , 2021, p33; Kamau, 2022a, p166f.
	Measure	Country (examples)	Further reading
ELEMENT 3: ACCESS TO A FOOD AND AGRICULTUR	AND UTILIZATION OF TRADITIONAL KNOWLEDGE ASSOC E	CIATED WITH GENETIC RES	OURCES FOR
3.1 Defining traditional	Some TK definitions refer to, for example:		
knowledge (TK)	(a) Relevant accumulated, transgenerational knowledge evolved by Indigenous Peoples and Local Communities (IPLC)	Peru ¹³⁶	Humphries <i>et al.</i> , 2021, p39ff
There are various definitions of TK in national (ABS)	(b) Relevant knowledge, experience and initiatives of native people	Viet Nam ¹³⁷	Trang, Ba Nguyen & Thu, 2022, p337
measures.	(c) Any knowledge, not limited to a specific subject area, technical or medical field, originating from a traditional community, individual or group	Guatemala ¹³⁸	
	(d) Knowledge contained in the codified knowledge systems passed on from one generation to another including agricultural, environmental or medical knowledge	Kenya ¹³⁹	
3.1.2 Excluding from	ABS measures may exclude:		
traditional knowledge (relevant to GRFA)	(a) TK that cannot be attributed to one or more traditional communities	France ¹⁴⁰	
	(b) TK associated with GR whose properties are well known and have been used for a long time and repeatedly, outside of the traditional communities that share them	France ¹⁴¹	
	(c) TK associated with some promotion methods likely to benefit agricultural, forestry or food and seafood products	France ¹⁴²	
	(d) TK and skills associated with the distinctive signs of origin and quality of agricultural and marine products	Morocco ¹⁴³	

	(e) TK insufficiently exploited by rights holder, or to which rights holder refuses to grant a licence on reasonable commercial terms and conditions (f)	Zambia; 144 Kenya 145	Humphries <i>et al.</i> , 2021, p27; Kamau, 2022b, p281f
3.2 Identifying the holde	ers of TK		<u>, </u>
Countries have established	Measures to assist in the identification of holders: (a) Government to ensure that PIC has been obtained from "relevant community"	Malawi ¹⁴⁶	
different procedures for the identification of the holders of TK	(b) Public entities representing the IPLCs to negotiate with users	France; 147 Ethiopia; 148 South Africa 149	Mahop, 2022, p470f; Hailu & Kamau, 2022, p257
	(c) Biocultural protocols	India; 150 Kenya; 151 Ecuador(ref)	Humphries <i>et al.</i> , 2021, p42
	(d) Public authority assisting in identification of knowledge holder and overseeing the agreement	Uganda; ¹⁵² South Africa (ref)	Humphries <i>et al.</i> , 2021, p42
	(e) State intervention (and guidance) to ensure that PIC has been obtained from the "relevant community"	Viet Nam; ¹⁵³ Malawi; ¹⁵⁴ Uganda; ¹⁵⁵ South Africa(ref)	Humphries <i>et al.</i> , 2021, p42f.
3.3 Procedures for obtaining	 g prior informed consent (PIC) or approval and involvement of IPI	.C	
	For obtaining consent to access/use TK, ABS measures may foresee:		Humphries <i>et al.</i> , 2021, p43
	(a) Same procedures as for GR;	See above 2.3	Humphries <i>et al.</i> , 2021, p43
	(b) Licensing procedures (in laws that protect TK as form of intellectual property right);	Kenya; Peru; South Africa; Viet Nam; Zambia	Humphries <i>et al.</i> , 2021, p43
	(c) Existence of biocultural or community protocols specific to GRFA;	e.g. Peru; Romania; South Africa; Kenya	Humphries <i>et al.</i> , 2021, p43; Cocchiaro & Rutert, p29–40; Kamau, 2022b, p290f, 306

	(d) Involvement/consultation of IPLC in neighbouring countries.	Kenya ¹⁵⁶	Humphries <i>et al.</i> , 2021, p44; Kamau, 2022b, p306
	Measure	Country (examples)	Further reading
ELEMENT 4: FAIR AND E	QUITABLE SHARING OF BENEFITS		
4.1 Scope of benefit-shar	ring obligations		
Benefit-sharing may apply to	GR/TK acquired, collected, used or obtained either directly or indirec	tly and found in both in situ and ex s	situ conditions
4.1.1 Temporal scope	Benefit-sharing may apply to:		
• •	(a) GR/TK accessed after entry into force of ABS measure	most countries	
	(b) Newly utilized GR/TK accessed prior to entry into force of ABS measure	Malaysia ¹⁵⁷	
4.1.2 Exemptions from benefit-sharing obligations	ABS measures may exempt from benefit-sharing obligations, for example:		
	(a) Resources not falling under (access provisions of) ABS measures	See 2.1	
	(b) Activities not considered "utilization"	See 2.2	
	(c) Traditional farmers and their cooperatives	Brazil ¹⁵⁸	Humphries <i>et al.</i> , 2021, p45; Mozini, 2022, p86
	(d) Non-commercial research	Australia ¹⁵⁹	Humphries <i>et al.</i> , 2021, p45
4.2 Fair and equitable			
4.2.1 Determination of	ABS measures may:		
benefits	(a) Provide detailed modalities for benefit-sharing	India; ¹⁶⁰ South Africa(ref)	Humphries <i>et al.</i> , 2021, p45
	(b) Mandate competent authority to determine benefit-sharing modalities on case-by-case basis	Rwanda; ¹⁶¹ Solomon Islands ¹⁶²	Humphries <i>et al.</i> , 2021, p45

4.2.2 Streamlined benefit- sharing	ABS measures may provide for simplified benefit-sharing, for example, for:		
_	(a) Scientific, non-commercial research on agrobiodiversity	Philippines ¹⁶³	Humphries <i>et al.</i> , 2021, p45
	(b) Purely scientific research purposes	Argentina ¹⁶⁴	Silvestri, 2022a, p62f.
	(c) For forest genetic resources (deferral of benefit-sharing arrangements until there are breeding results)	Spain ¹⁶⁵	Humphries <i>et al.</i> , 2021, p32
4.2.3 Sharing monetary	ABS measures may specify benefit-sharing modalities for GRFA:		
and/or non-monetary benefits resulting from GRFA	(a) Preference and identification of benefits that are of particular relevance to the food and agriculture sector	India; ¹⁶⁶ Uganda; ¹⁶⁷ Malaysia; ¹⁶⁸ Belgium (Walloon Region); ¹⁶⁹ Zambia ¹⁷⁰	Humphries <i>et al.</i> , 2021, p48
	(b) Mutual exchanges of GRFA within or between communities to sustain food or livelihood systems as a benefit	Mutual exchanges, e.g. India; ¹⁷¹ Kenya; ¹⁷² Traditional uses, e.g. Ethiopia ¹⁷³	Humphries <i>et al.</i> , 2021, p49
4.2.4 Facilitating benefit-	Examples include:		
sharing through model clauses	National model benefit-sharing clauses	Benin; ¹⁷⁴ Cameroon; ¹⁷⁵ France; ¹⁷⁶ South Africa; ¹⁷⁷ Bhutan;(ref) Australia(ref)	Humphries <i>et al.</i> , 2021, p46
4.3 Beneficiaries			
	fine in detail the beneficiaries (those with whom benefits should be sha s provide for national benefit-sharing funds for specific situations.	red) or the purposes for which ben	efits should be used.
4.3.1 National benefit-	ABS measure may establish benefit-sharing funds for:		
sharing funds	(a) Conservation of and further research in GR and TK	South Africa; 178 Bhutan; (ref) Ecuador (ref)	Kamau, 2022a, p172f, 200f.
	(b) Support of community conservation initiatives	Bhutan (ref)	National Biodiversity Centre, Bhutan, 2018, p32; Humphries <i>et</i> <i>al.</i> , 2021, p47

		(c) Support IPLCs and traditional farmers in the sustainable management and conservation of GR and the development and maintenance of diverse farming systems that enhance the sustainable use of GR	Brazil; ¹⁷⁹ Argentina (ref)	Humphries <i>et al.</i> , 2021, p47f.; Mozini, 2022, p86
		Measure	Country (examples)	Further reading
ELEN	MENT 5 : COMPLIANO	CE AND MONITORING		
5.1	Monitoring			
		(a) GRFA-specific checkpoints	e.g. Bhutan;(ref) Estonia;(ref) Hungary;(ref) Kenya;(ref) Republic of Korea ¹⁸⁰	Humphries <i>et al.</i> , 2021, p53
		(b) Established monitoring tools	India (ref)	
5.2	User country complia	ance measures		
5.2.1 measu	General compliance ures	(a) Specific measures to exercise due diligence to show that GR utilized in the country have been accessed according to applicable national laws of the providing country (providing the provider country is party to the Nagoya Protocol)	EU ¹⁸¹	Humphries <i>et al.</i> , 2021, p53
		(b) Specific measures to ensure GR used in the country have been accessed according to applicable international agreements, including through the use of the Treaty's SMTA for Annex 1/MLS PGRFA	Norway ¹⁸²	
		(c) Designation of user compliance-focused checkpoints	Malaysia; ¹⁸³ South Africa; ¹⁸⁴ Bhutan (ref)	
		(d) Requirement to report to the checkpoint or produce the access permit	Malaysia; ¹⁸⁵ Republic of Korea; ¹⁸⁶ South Africa ¹⁸⁷	
		(e) Requirement of the checkpoint to inform Competent National Authority (CNA) or relevant Competent Authority (CA) in writing of the production of the permit	Malaysia ¹⁸⁸	
		(f) Requirement of any person applying for a patent based on biological resources (BR) or TK to either notify the CA, make a statement if the patent relates to indigenous GR or TK, or furnish CA with proof	Malaysia; ¹⁸⁹ South Africa ¹⁹⁰	

	 (g) Requirements of any person applying for a plant breeders right/plant variety protection to bring the authorization of the relevant authorities (h) Obligation on any person wishing to access or commercialize foreign BR or TK from a Nagoya Protocol party to ensure compliance with that party's laws – if that party subjects access to permit 	Argentina; (ref) New Zealand? Malaysia; 191 Republic of Korea 192	
	(i) Measure for checkpoint communiqué	Malaysia ¹⁹³	
	(j) Measures permitting relevant authorities to investigate offences	Malaysia; ¹⁹⁴ Republic of Korea ¹⁹⁵	
	(k) Measure to encourage fair and equitable benefit-sharing	Republic of Korea ¹⁹⁶	
5.2.2 Exceptions	Exceptions to user country compliance measures may be applied where: (a) States do not claim or exercise sovereign rights over GR ¹⁹⁷ (b) Providing state is not a party to the Nagoya Protocol ¹⁹⁸ (c) Providing state has not established access measures ¹⁹⁹ (d) GR are accessed prior to entry into force of the Nagoya Protocol ²⁰⁰ (e) GR are governed by specialized international instruments and utilized according to the purposes foreseen by those instruments ²⁰¹ (f) GR are traded and exchanged as commodities ²⁰² (g) Pathogenic GR and pests are introduced unintentionally to the country ²⁰³ (h) TK is not associated with utilization of accessed GR (i) Activities do not fall under "utilization" ²⁰⁴ (j) there is no ascertainable level of continuity between the derivative and the GR from which it was obtained for R&D activities on derivatives ²⁰⁵ (k) Only information on GR is used ²⁰⁶ (l) There is utilization outside of the relevant jurisdiction ²⁰⁷	EU and Member States ²⁰⁸	Winter, 2022; Greiber & Frederichs, 2022

¹ Loi sur l'acces aux ressources genetiques et connaissances traditionnelles de l'union des Comores, 2020, Art. 5.

https://www.nationalcouncil.bt/assets/uploads/docs/bills/2022/Biodiversity_Bill_of_Bhutan_2021_Eng_Dzo.pdf. Ministry of Agriculture and Forests is the only designated CNA for the country responsible for all genetic resources. See https://absch.cbd.int/en/countries/BT (accessed 15 October 2022).

⁷ Decree on the Management of Access to Genetic Resources and the Sharing of Benefits Arising from their Utilization, 12 May 2017, Chapter II, Art. 6. The Ministry of Agriculture and Rural Development is responsible for granting, renewing and withdrawing licences for genetic resources for agricultural crop varieties, livestock, aquatic species and forest seedlings. See https://absch.cbd.int/en/countries/VN (accessed 10 October 2022).

⁸ Ministry of Agriculture, Lands, Forestry, Fisheries and the Environment Botanical Gardens is the only designated CNA for the country responsible for all genetic resources. See https://absch.cbd.int/en/countries/GD (accessed 12 October 2022).

⁹ Department of Environment, Ministry of Agriculture, Marine Resources, Cooperatives, Environment and Human Settlement is the only designated CNA for the country responsible for all genetic resources. See https://absch.cbd.int/en/countries/KN (accessed 10 October 2022).

¹⁰ Instituto Nacional de Innovación Agraria is the authority responsible for access to genetic resources, molecules, combination or mixture of natural molecules, crude extracts and derivatives of cultivated or domesticated inland species. See https://absch.cbd.int/en/countries/PE (accessed 10 October 2022).

¹¹ Ley General de Desarrollo Forestal Sustentable, 25 February 2003 (11, fracción XVII y XXXVI; 7, fracción XXX, L y LXVIII; 20, fracción XXXIII; 32, fracción XV; 69, fracción IV; y 128); Reglamento de la Ley General de Desarrollo Forestal Sustentable, 21 February 2005 (40, fracción III, Sección IV Colecta de Recursos Biológicos Forestales).
Dirección General de Gestión Forestal y de Suelos (Directorate General for Forestry and Soil Management) is responsible for permits for collection of forest biological and genetic resources. See

https://absch.cbd.int/en/countries/MX and https://absch.cbd.int/en/countries/MX/MSR (accessed 12 October 2022).

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¹² Projet de decret sur l'acces aux ressources genetiques et le partage juste et equitable des avantages qui en decoulent, 2017, Arts 15-17

¹³ Ethiopia (2006) Proclamation No. 482/2006 Access to Genetic Resources and Community Knowledge, and Community Rights Proclamation; Ethiopia (2009) Regulation No. 169/2009 Access to Genetic Resources and Community Knowledge, and Community Rights. The Ethiopian Biodiversity Institute is the CNA.

¹⁴ LOV nr 1375 af 23/12/2012 om udbyttedeling ved anvendelse af genetiske ressourcer see e.g. Arts 5-8.

¹⁵ Reglamento de acceso a recursos genéticos, conocimientos tradicionales asociados y distribución justa y equitativa de beneficios de larepública dominicana, Art. 7

¹⁶ Governmental Agreement 171-2014 (Government Agreement 171-2014), Art. 1. Consejo Nacional de Áreas Protegidas (National Council for Protected Areas) is the designated CNA responsible for all genetic resources. See https://absch.cbd.int/en/countries/GT (accessed 12 October 2022).

¹⁷ The National Environment (Access to Genetic Resources and Benefit Sharing) Regulations, 2005, Art. 5. Ministry of State for Environment Affairs (MOEN). See also https://absch.cbd.int/en/countries/SY (accessed 12 October 2022).

¹⁸ Uganda National Council for Science and Technology. See https://absch.cbd.int/en/countries/UG (accessed 12 October 2022).

¹⁹ Department of Science, Ministry of Education and Sports (CNA). See https://absch.cbd.int/en/countries/LA (accessed 12 October 2022). According to Art. 6 of the National Framework on ABS of 2013, the Ministry of Science and Technology is the management and monitoring organization on ABS at the central level.

²⁰ Ley 28216, Ley de Protección al acceso a la diversidad biológica peruana y los conocimientos colectivos de los pueblos indígenas, 7 April 2004, Art. 2; El Reglamento de Acceso a los Recursos Genéticos (D.S Nº 003-2009-MINAM), 6 February 2009, Art. 13. See also CBD, 2022, https://absch.cbd.int/en/countries/PE/MSR (accessed 13 October 2022).

²² Direction Générale des Eaux, Forêts et Chasse/Ministère du Cadre de Vie et du Développement Durable (General Directorate of Water, Forests and Hunting/Ministry of Living Environment and Sustainable Development) is the only designated CNA for the country responsible for all genetic resources. See https://absch.cbd.int/en/countries/BJ (accessed 12 October 2022).

³ The Nagoya Protocol (Implementation) Act, 2016, Art. 4 (read together with Regulation of the Minister for Agriculture of 31 March 2016, No. WJZ/15145152 and Decree of the Minister for Agriculture of 31 March 2016, No. WJZ/15163191.

⁴ Decreto-Lei-122-2017, Art. 4.1. See also https://absch.cbd.int/en/countries/PT (accessed 15 October 2022).

⁵ Ministry of Agriculture, Food and Forestry (for agricultural and forest genetic resources) and Ministry of Environment and Water (for genetic resources from naturally occurring species). See https://absch.cbd.int/en/countries/BG (accessed 12 October 2022).

⁶ The Biodiversity Bill of Bhutan, 2021, cl. 11 [Adopted.)

- ²¹ Biodiversity Law NO. 7788, Gazette No 101, 27 May 1998, Chapter I, II and V, National Commission for Biodiversity Management (CONAGEBIO) Ministry of Environment and Energy (MINAE) is the only designated CNA for the country responsible for all genetic resources. See https://absch.cbd.int/en/countries/CR/CNA (accessed 10 October 2022).
- ²² Ethiopia (1998) Proclamation No. 120/1998 Institute of Biodiversity Conservation and Research, Articles 3 and 6. See also Ethiopia (2006) Proclamation No. 482/2006 Access to Genetic Resources and Community Knowledge, and Community Rights Proclamation; Ethiopia (2009) Regulation No. 169/2009 Access to Genetic Resources and Community Knowledge, and Community Rights. The Ethiopian Biodiversity Institute is the only CNA responsible for all genetic resources and community knowledge.
- ²³ Decree No. 59 2017, Art. 6.1 & 26 (Agriculture/Environment).
- ²⁴ Act on Genetic Resources 2017, Art. 8 (1) 2 (Agriculture/ Fisheries/ Environment/ Science/ Health).
- ²⁵ Nature Conservation Act 2017, Art. 68 (2). Ministry of Environment for wild genetic resources and TK associated with them, and Ministry of Rural Affairs for genetic resources of agriculture and TK associated with them. See also https://absch.cbd.int/en/countries/EE (accessed 13 October 2022).
- ²⁶ Forestry/Environment. See https://absch.cbd.int/en/countries/ZW (accessed 13 October 2022).
- ²⁷ National Environmental Management: Biodiversity Act, No. 10 of 2004 (NEMBA), s. 87A as amended by section 22 of Act 14 of 2013 and Bioprospecting, Access and Benefit-Sharing Regulations 2015 (BABS Regulations), r. 6 (1) & (2). Permits for non-commercial research to be undertaken abroad are issued by the so-called Member of Executive Council (MEC). No permit is required for research undertaken in South Africa for this type of research. For commercial purposes DEA/DEFF is responsible.
- ²⁸ In Ecuador, relevant for granting access to genetic resources and permission for purely scientific/basic/academic/non-commercial research are three different governmental authorities. See Beck, 2022, p496f, 500ff.
- ²⁹ Uganda: National Environment (Access to Genetic Resources and Benefit Sharing) Regulations, 2005, Art. 5 (Uganda National Council for Science and Technology (UNCST)).
- ³⁰ Regulamento sobre Acesso e Partilha de Benefícios Provenientes de RecursosGenéticos e Conhecimento Tradicional Associado 2007, Art. 4 (Minister for the Coordination of Environmental Action).
- ³¹ National Biodiversity Coordination Committee (NBCC).
- ³² Brazil: Law nº 13,123 of May 20, 2015 (Access and Benefits Sharing of Genetic Resources and Associated Traditional Knowledge), Art. 6 (The Genetic Heritage Management Council (CGen)).
- ³³ Implementing Regulation for the Organic Code of the Social Economy for Knowledge, Creativity and innovation, 2017, Chapter III, Art. 25.
- ³⁴ The Biological Diversity Act 2002, *inter alia* s. 3 & 4, and Guidelines on Access to Biological Resources and Associated Knowledge and Equitable Sharing of Benefits Regulations, 2019, s. 1(1).
- ³⁵ Ley Sectorial De Biodiversidad (333-15) 2016, Art. 12, and also Reglamento de Acceso a Recursos Genéticos y Distribución de Beneficios (ABS) de la República Dominicana 2018.
- ³⁶ Bioprospecting Forum.
- ³⁷ Foundation for Research on Biodiversity.
- ³⁸ National Environment Management Authority ABS Permit Committee.
- ³⁹ National Biodiversity Centre of Bhutan.
- ⁴⁰ Genetic resources and legislation in Finland, http://www.biodiversity.fi/geneticresources/home (accessed 16 October 2022).
- ⁴¹ The Danish Environmental Protection Agency The Nagoya Protocol on Access and Benefit-sharing, https://eng.mst.dk/nature-water/nature/biodiversity-the-building-block-of-life/the-nagoya-protocol-on-access-and-benefit-sharing/ (accessed 16 October 2022).
- ⁴² Korean ABSCH "ABSCH Genetic Resources Information Center", https://www.abs.go.kr/kabsch/main.do (accessed 16 October 2022).
- ⁴³ Biodiversity Clearing-House Mechanism, https://www.biodiv.hu/hu (accessed 16 October 2022).
- ⁴⁴ National ABS Clearing House for Cameroon, https://portailchm.sie.cm/abs/ (accessed 16 October 2022). Law N°2021/014 of July 2021 To Govern Access to Genetic Resources, Their Derivatives, Traditional Knowledge Associated with Genetic Resource and Their Fair Equitable Sharing of the Benefit Arising from Their Utilization, s35.
- ⁴⁵ Access to Biological Resources and Benefit Sharing Act 2017, s. 4.
- ⁴⁶ Ministry of Higher Education, Research and Innovation, 2019.
- ⁴⁷ German ABS Information Platform, https://www.bfn.de/nagoya-protokoll (accessed 16 October 2022).
- ⁴⁸ Comisión Nacional para la Gestión de la Biodiversidad (CONAGEBIO), 2018,
- https://www.conagebio.go.cr/Conagebio/public/ (accessed 16 October 2022).
- ⁴⁹ Access and Benefit Sharing Portal for Kenya, http://meas.nema.go.ke/abs/ (accessed 16 October 2022).
- ⁵⁰ Qatar plant gene bank information system, http://web1.mme.gov.qa/qatargb/hotline (accessed 16 October 2022).
- ⁵¹ Access to Biological Resources and Benefit Sharing Act 2017, s. 63 (3) (4).
- ⁵² Access to Genetic Resources and the Fair and Equitable Sharing of Benefits arising from their Utilisation Regulations, 2016, s. 2 (2) (c).

- ⁵³ Loi n 2016-1087 du 8 aout 2016 pour la reconquete de la biodiversite, de la nature et des paysages (1) Titre V: Accés aux ressources genetiqués et partage juste et equitable des avantages 2016, Art. 37 Art. L. 412–6.
- ⁵⁴ Loi n 2016-1087 du 8 aout 2016 pour la reconquete de la biodiversite, de la nature et des paysages (1) Titre V: Accés aux ressources genetiqués et partage juste et equitable des avantages 2016, Article 37 Art. L. 412–4(6).
- ⁵⁵ Regulamento sobre Acesso e Partilha de Benefícios Provenientes de Recursos Genéticos e Conhecimento Tradicional Associado 2007, 2007, Art. 2(o).
- ⁵⁶ National Environment (Access to Genetic Resources and Benefit Sharing) Regulations, 2005, s. 2. In Uganda domesticated or cultivated species are determined in the "cultural contexts in which their specific properties have been developed".
- ⁵⁷ The ABS legislation does not make reference to domesticated species but a clarification has been made by the government.
- ⁵⁸ Decree No. 59/2017/ND-CP of the Government dated 12 May 2017 on the management of access to GR and the sharing of benefits arising from their utilization Art. 3(10). Species has been acclimated for a long time, adaptive to the living conditions as a local variety, and is now widely cultivated.
- ⁵⁹ Environment Protection and Biodiversity Conservation Regulation 2000, s. 8A.03(1); Environment Protection and Biodiversity Conservation Act 1999, s. 528.
- ⁶⁰ Decree No. 8.772 of May 11, 2016, regulating Law No. 13.123 of May 20, 2015, Art. 2.
- ⁶¹ Colombia, 2014, Art. 2.
- ⁶² Nature Conservation Act 2014 (ACT) Sections 169, 206, 207, 209 and Biodiversity Conservation Regulation 2018 (WA), Section 72(3).
- ⁶³ Access to Genetic Resources and the Fair and Equitable Sharing of Benefits arising from their Utilisation Regulations, 2016, Art. 2 (2) (b).
- ⁶⁴ Biodiversity Act of Bhutan 2003. Bhutan ABS Policy 2015, Section 6(k) defines "genetic resources" to include the "biochemical composition of genetic resources, genetic information and derivatives."
- ⁶⁵ For country measures defining IPLC, ways to determine the correct rights holder and procedures to obtain PIC or approval and involvement of IPLC, see below Element 3.
- ⁶⁶ South Africa: National Environmental Management: Biodiversity Act, No. 10 of 2004 (NEMBA), s. 82 (1) (a), (b); (2) (a); (3) (a).
- ⁶⁷ Access to Biological Resources and Benefit Sharing Act 2017, s. 23.
- ⁶⁸ Kenya: Protection of Traditional Knowledge and Cultural Expressions Act No. 33, 2016 (PTKCEA), s. 36 (1), 4.
- ⁶⁹ Act No. 27.811, 2002 establishing the regime for the protection of collective knowledge of Indigenous Peoples associated to biological resources (Peru), Art. 6.
- ⁷⁰ Spanish Constitution, Art. 148.1.9; Law No. 42/2007, of 13 December, on Natural Heritage and Biodiversity, modified by Law No. 33/2015, of 21 September. Official Journal of Spain No. 227, 22 September 2015, pp 83588–83632, Art. 68.2; Royal Decree No. 124/2017, of 24 February, related to the access to genetic resources deriving from wild taxons and to the control of their utilization. Official Journal of Spain No. 62, 14 March 2017, pp 18478-18499, Art. 5.2.
- ⁷¹ Regulation of the Minister of Environment No. 34/MenLHK/Setjen/Kum.1/2017 on Recognition and Protection of Local Wisdom in The Management of Natural Resources and the Environment 2017, Art. 24 (2).
- ⁷² Protection of Traditional Knowledge, Genetic Resources and Expressions of Folklore Act 2016, s. 30 (3). The provision foresees possibility of a compulsory licence to fulfil a national need, subject to compensation to the holder. ⁷³ Access to Biological Resources and Benefit Sharing Act 2017, Act 795, s. 5(2)(g).
- ⁷⁴ Loi n 2016-1087 du 8 aout 2016 pour la reconquete de la biodiversite, de la nature et des paysages (1) Titre V: Accés aux ressources genetiqués et partage juste et equitable des avantages 2016, Art. 37 Art. L. 412–5II.
- ⁷⁵ Administrative Decision No. 410 of the Argentine Secretariat of Environment and Sustainable Development that regulates basic common standards for the access and utilization of genetic resources in Argentina. 22 October 2019. OJ No. 34225, Art. 6.
- ⁷⁶ Decreto Supremo N° 003-2009-MINAM. Eleva al rango de Decreto Supremo la Resolución Ministerial N° 087-2008-MINAM y ratifican la aprobación del Reglamento de Acceso a los Recursos, efectuada por dicha Resolución2009, Art. 5 (narrow exclusion).
- ⁷⁷ Decree-Law No. 118/2002 of 20 April 2002, Art. 2(1).
- ⁷⁸ National Environment (Access to Genetic Resources and Benefit Sharing) Regulations 2005, Section 4c).
- ⁷⁹ The Seeds and Plant Varieties Act, 2006, s. 3(b)).
- ⁸⁰ Administrative Decision No. 410 of the Argentine Secretariat of Environment and Sustainable Development that regulates basic common standards for the access and utilization of genetic resources in Argentina. 22 October 2019. OJ No. 34225, Art. 6
- 81 Loi n 2016-1087 du 8 aout 2016 pour la reconquête de la biodiversité, de la nature et des paysages (1) Titre V: Accés aux ressources genetiqués et partage juste et équitable des avantages 2016, Art. 37 Art. L. 412-5II.
 82 Ibid.
- 83 Ibid.

- ⁸⁴ Projet de loi sur l'accès aux ressources génétiques et le partage juste et équitable des avantages découlant de leur utilisation(undated), Art. 5.
- ⁸⁵ Royal Decree No. 124/2017, of 24 February, related to the access to genetic resources deriving from wild taxons and to the control of their utilization. OJ No. 62, 14 March 2017, Art. 3(2) (if they are governed under other legislation).
- ⁸⁶ Environment Protection and Biodiversity Conservation Regulation 2000, Reg. 8A.05(1)(a)
- ⁸⁷ Ibid, Reg. 8A.05(1)(a)).
- ⁸⁸ Guidelines on Access to Biological Resources and Associated Knowledge and Benefits Sharing Regulations 2014, Art. 16; Guidelines on Access to Biological Resources and Associated Knowledge and Equitable Sharing of Benefits Regulations, 2019.
- ⁸⁹ Loi n 2016-1087 du 8 aout 2016 pour la reconquete de la biodiversite, de la nature et des paysages (1) Titre V: Accés aux ressources genetiqués et partage juste et equitable des avantages 2016, Art. 37 Art. L. 412–5.III(4).
- ⁹⁰ Biological Diversity Act 2002, s. 40 allows Central Government to exclude such biological resources.
- ⁹¹ Implied by Art. 1 of Decree No. 59/2017/ND-CP of the Government dated 12 May 2017 on the management of access to GR and the sharing of benefits arising from their utilization. According to Trang, Ba Nguyen T. and Thu 2022, p. 329, there are no PIC and MAT for access to derivatives when accessed without genetic resources.
- ⁹² Legal Notice 379 of 2016 Access to Genetic Resources and the Fair and Equitable Sharing of Benefits arising from their Utilisation Regulations, 2016, Art. 2 (2) (g).
- ⁹³ Access to Biological Resources and Benefit Sharing Act 2017, s. 5.
- ⁹⁴ National Environmental Management: Biodiversity Act, No. 10 of 2004, s. 1.
- ⁹⁵ Access to Genetic Resources and the Fair and Equitable Sharing of Benefits arising from their Utilisation Regulations, 2016, s. 2(2)(b).
- ⁹⁶ Biodiversity Act 2017, s. 35.
- ⁹⁷ Joint IPOPHL-NCIP Administrative Order No. 01, 2016: Rules and Regulations on Intellectual Property Rights Application and Registration Protecting the Indigenous Knowledge Systems and Practices of the Indigenous Peoples and Indigenous Cultural Communities 2005, s. 3.
- 98 National Environmental Management: Biodiversity Act, No. 10 of 2004 (NEMBA), GoN R149, G. 30739.
- ⁹⁹ Environment Protection and Biodiversity Conservation Regulation 2000, s. 8A.03(1)).
- ¹⁰⁰ Access to Biological Resources and Benefit Sharing Act 2017, s. 5.
- ¹⁰¹ Royal Decree No. 289/2003, of 7 March, on commercialization of reproduction forest materials, as long as there is no utilization of the genetic resources and no transfer to third parties for a different use, OJ No. 58, 8 March 2003; Royal Decree No. 124/2017, of 24 February, related to the access to genetic resources deriving from wild taxons and to the control of their utilization, OJ No. 62, 14 March 2017, Art. 3(3). The latter excludes from ABS obligations "activities of production and marketing of seeds and forest plants, regulated by Royal Decree 289/2003 of 7 March, commercialization of forest material for reproduction, provided that there is no use of genetic resources, and provided that there is no transfer to third parties for other use".
- ¹⁰² Nature Diversity Act 2009, s. 58.
- ¹⁰³ Royal Decree No. 124/2017, of 24 February, related to the access to genetic resources deriving from wild taxons and to the control of their utilization, OJ No. 62, 14 March 2017, Art. 3(3).
- 104 Ibid.
- ¹⁰⁵ The Biological Diversity Act, s. 40 allows for the exclusion.
- ¹⁰⁶ Biodiversity Act 2017, s. 35.
- ¹⁰⁷ Access to Biological Resources and Benefit Sharing Act 2017, s. 5 (2)(g).
- ¹⁰⁸ Environmental, Management and Coordination (Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing) Regulation, 2006, r. 3.
- ¹⁰⁹ Normativo de Investigaciones e Investigadores de la Diversidad Biológica 2020, Art. 25.
- ¹¹⁰¹¹⁰ National Environment (Access to Genetic Resources and Benefit Sharing) Regulations 2005, s. 4(2) & 3.2.
- ¹¹¹ Guidelines on Access to Biological Resources and Associated Knowledge and Benefits Sharing Regulations 2014, s. 17 (Indian law covers biological resources).
- ¹¹² Access to Biological Resources and Benefit Sharing Act 2017, s. 6.
- 113 Regulation of Access to Genetic Resources and Benefit-sharing (draft law), Art. 30.
- ¹¹⁴ Guidelines on Access to Biological Resources and Associated Knowledge and Benefits Sharing Regulations 2014, s. 13 (simplified ABS procedures).
- Environmental, Management and Coordination (Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing) Regulation, 2006, r. 3(a)(d).
- ¹¹⁶ Guidelines on Access to Biological Resources and Associated Knowledge and Benefits Sharing Regulations 2014, s. 17(b).
- ¹¹⁷ National Environmental Management: Biodiversity Act, No. 10 of 2004 (NEMBA), s. 86 (1) (a); Government Gazette 30739. Commencement date: 8 February 2008.
- ¹¹⁸ Law nº 13,123 of May 20, 2015 (Access and Benefits Sharing of Genetic Resources and Associated Traditional Knowledge), Art. 11 III.

- ¹¹⁹ Loi n 2016-1087 du 8 aout 2016 pour la reconquete de la biodiversite, de la nature et des paysages (1) Titre V: Accés aux ressources genetiqués et partage juste et equitable des avantages 2016, Art. 37 Art. L. 412–17 III.
- ¹²⁰ Bioprospecting, Access and Benefit-Sharing Regulations 2015 (BABS Regulations), Annexure 11, c. 9.
- ¹²¹ National Environmental Management: Biodiversity Act, No. 10 of 2004 (NEMBA), Annexures 7 and 8.
- ¹²² National Environment (Access to Genetic Resources and Benefit Sharing) Regulations, 2005, s. 15.
- ¹²³ Joint DENR-DA-PCSD- NCIP Administrative Order No. 01, Series of 2005: Guidelines for Bioprospecting Activities in the Philippines, Annex 2. Mainly for third party transfers and IP protection.
- ¹²⁴ Decreto Supremo Nº 003-2009-MINAM. Eleva al rango de Decreto Supremo la Resolución Ministerial Nº 087-2008-MINAM y ratifican la aprobación del Reglamento de Acceso a los Recursos, efectuada por dicha Resolución 2009, Arts 24–26: authorization of access to and utilization of a specific range of GR, possibly limited to specific purposes, accommodating international exchange that involve close working collaborations and partnerships with many stakeholders.
- ¹²⁵ Joint IPOPHL-NCIP Administrative Order No. 01, 2016: Rules and Regulations on Intellectual Property Rights Application and Registration Protecting the Indigenous Knowledge Systems and Practices of the Indigenous Peoples and Indigenous Cultural Communities 2005, s. 3 (simplified procedure applies to wild and exotic species used for this purpose).
- ¹²⁶ Ibid, s. 3 (1).
- ¹²⁷ Law nº 13,123 of May 20, 2015 (Access and Benefits Sharing of Genetic Resources and Associated Traditional Knowledge), Art. 11 (3) (implied).
- Royal Decree No. 124/2017, of 24 February, related to the access to genetic resources deriving from wild taxons and to the control of their utilization. Official Journal of Spain No. 62, 14 March 2017, Art. 3(3).
- ¹²⁹ Loi n 2016-1087 du 8 aout 2016 pour la reconquete de la biodiversite, de la nature et des paysages (1) Titre V: Accés aux ressources genetiqués et partage juste et equitable des avantages 2016, Art. 37 Art. L. 412–5 III(4).
- 130 Genetic Resources Act 2017, Art. 10.
- ¹³¹ Joint DENR-DA-PCSD Administrative Order No. 1, May 18, 2004 Joint Implementing Rules and Regulations (IRR) Pursuant to Republic Act No. 9147, s. 15(3).
- ¹³² Guidelines on Access to Biological Resources and Associated Knowledge and Benefits Sharing Regulations 2014, s. 13.
- ¹³³ Administrative Decision No. 410 of the Argentine Secretariat of Environment and Sustainable Development that regulates basic common standards for the access and utilization of genetic resources in Argentina. 22 October 2019, OJ No. 34225, Art. 8 (including by non-requirement of establishment of MAT (Argentina, Annex III)).
- ¹³⁴ Mexico's ABS law, according to de la Torre, 2016.
- ¹³⁵ The definition of "Research other than bioprospecting" in the Bioprospecting, Access and Benefit-Sharing Regulations 2008 (accessed 4 November 2022. The version of 2008 was repealed but the one of 2015 continues to use the term, albeit without defining it afresh) read together with the catalogue of the South African National Biodiversity Institute (SANBI) on non-bioprospecting research activities. The latter is available online at https://www.sanbi.org/resources/infobases/biodiversity-collection-permits-in-south-africa/ (accessed 4 November 2022).
- ¹³⁶ Peru: Act No. 27.811, 2002 establishing the regime for the protection of collective knowledge of Indigenous Peoples associated to biological resources 2001, Art. 2.
- ¹³⁷ Biodiversity Law, 2008, Art. 3(28).
- ¹³⁸ Normativo de Investigaciones e Investigadores de la Diversidad Biológica 2020, Art. 2(f).
- ¹³⁹ Environmental, Management and Coordination (Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing) Regulation, 2006, s. 2.
- ¹⁴⁰ Loi n 2016-1087 du 8 aout 2016 pour la reconquete de la biodiversite, de la nature et des paysages (1) Titre V: Accés aux ressources genetiqués et partage juste et equitable des avantages 2016, Art. 37, Art. L- 412-5.
- ¹⁴¹ Ibid.
- 142 Ibid.
- ¹⁴³ Avant Projet de loi n° 56-17 sur l'accès aux ressources génétiques et le partage juste et équitable des avantages découlant de leur utilisation (undated), Art. 5 (draft law).
- ¹⁴⁴ Protection of Traditional Knowledge, Genetic Resources and Expressions of Folklore Act 2016, s. 30(3)).
- ¹⁴⁵ Protection of Traditional Knowledge and Cultural Expressions Act No. 33, 2016 (PTKCEA), s. 22(2): compulsory licence possible.
- ¹⁴⁶ Procedures and Guidelines for Access and Collection of Genetic Resources in Malawi 2002 (under heading E, 8). Available online at https://absch.cbd.int/api/v2013/documents/0D99AF1D-68C7-153A-3E31-2D7CB1534221/attachments/211881/Malawi-access96.pdf (accessed 15 October 2022).
- 147 Décret n° 2017-848 du 9 mai 2017 relatif à l'accès aux ressources génétiques et aux connaissances traditionnelles associées et au partage des avantages découlant de leur utilisation, 2017, Art. 1 Art R. 412–28 I (MAT).

 148 Ethiopian Biodiversity Institute (EBI).

- ¹⁴⁹ Act No. 6 of 2019: Protection, Promotion, Development and Management of Indigenous Knowledge Act 2019 (BSA: South Africa establishes the National Indigenous Knowledge Systems Office that issues licences for the use of TK and assists communities in negotiating BSA).
- ¹⁵⁰ Raika Biocultural Protocol 2009. See http://www.pastoralpeoples.org/wp-content/uploads/2020/01/Raika Biocultural Protocol.pdf (accessed 15 October 2022).
- 151 Samburu Community Protocol, 2009. See http://community-protocols.org/wp-
- content/uploads/documents/Kenya-Samburu_Community_Protocol.pdf (accessed 15 October 2022).
- 152 National Environment (Access to Genetic Resources and Benefit Sharing) Regulations, 2005, 2005, s. 10.
- ¹⁵³ Decree No. 59/2017/ND-CP of the Government dated 12 May 2017 on the management of access to GR and the sharing of benefits arising from their utilization 2017, Art. 6.1, 26.
- ¹⁵⁴ Procedures and Guidelines for Access and Collection of Genetic Resources in Malawi 2002 (under heading E, 8). Available online at https://absch.cbd.int/api/v2013/documents/0D99AF1D-68C7-153A-3E31-
- 2D7CB1534221/attachments/211881/Malawi-access96.pdf (accessed 15 October 2022).
- ¹⁵⁵ National Environment (Access to Genetic Resources and Benefit Sharing) Regulations, 2005, s. 10.
- ¹⁵⁶ NEMA (2014b) Kenya's Access and Benefit Sharing Toolkit for Genetic resources and Associated Traditional Knowledge, Nairobi, 2014, p58. Available online: https://absch.cbd.int/api/v2013/documents/F3AB1BBD-08C1-4E30-1BA7-6562A31098FE/attachments/203706/ABS%20TOOL%20KIT%20FINAL.pdf (accessed 15 October 2022); Environmental, Management and Coordination (Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing) Regulation 2006, First Schedule, 2.0 (a) (can be interpreted as striving towards such cooperation in East Africa).
- ¹⁵⁷ Access to Biological Resources and Benefit Sharing Act 2017, s. 63 (3) (4).
- ¹⁵⁸ Law No. 13,123 of May 20, 2015 (Access and Benefits Sharing of Genetic Resources and Associated Traditional Knowledge) 2015, Art. 17(5)(II) (exempts farmers with annual gross income equal to or less than a prescribed maximum limit).
- ¹⁵⁹ Environment Protection and Biodiversity Conservation Regulation 2000, s. 8A.12.
- ¹⁶⁰ Guidelines on Access to Biological Resources and Associated Knowledge and Benefits Sharing Regulations 2014, see ss. 3–15.
- ¹⁶¹ Official Gazette No 38 of 23/09/2013 Law No. 70/2013 of 02/09/2013 Governing Biodiversity in Rwanda 2013.
- ¹⁶² Protected Areas Act 2010.
- ¹⁶³ Joint DENR-DA-PCSD Administrative Order No. 1, May 18, 2004 Joint Implementing Rules and Regulations (IRR) Pursuant to Republic Act No. 9147 2004, s. 15 (no benefit-sharing obligations, except requirement to collaborate with local researcher as a form of benefit-sharing).
- ¹⁶⁴ Administrative Decision No. 410 of the Argentine Secretariat of Environment and Sustainable Development that regulates basic common standards for the access and utilization of genetic resources in Argentina. 22 October 2019. OJ No. 34225 (PIC by province may nonetheless be required).
- ¹⁶⁵ Spanish Government 2021. Ministry for the Ecological Transition and the Demographic Challenge. According to pers. comms by Humphries *et al.*, 2021, p. 32.
- ¹⁶⁶ Guidelines on Access to Biological Resources and Associated Knowledge and Benefits Sharing Regulations 2014, Annexure 1.
- ¹⁶⁷ National Environment (Access to Genetic Resources and Benefit Sharing) Regulations, 2005, s. 20(2)(h).
- ¹⁶⁸ Access to Biological Resources and Benefit Sharing Act 2017, s. 11(2)(14)).
- 169 the Walloon Region in Belgium (Décret relatif à l'accès aux ressources génétiques et au partage juste et équitable des avantages découlant de leur utilisation 2020, Annexes 1 and 2).
 170 Ibid.
- ¹⁷¹ Guidelines on Access to Biological Resources and Associated Knowledge and Benefits Sharing Regulations 2014, s. 17 (c).
- ¹⁷² Environmental, Management and Coordination (Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing) Regulation, 2006, s. 3(a).
- ¹⁷³ Access to Genetic Resources and Community Knowledge, and Community Rights Proclamation No. 482/2006, Federal Negarit Gazeta Year 13 No. 13, 27 February, 2006, Art. 8(1).
- ¹⁷⁴ Model contractual documents are uploaded on the ABSCH at https://absch.cbd.int/en/countries/BJ (accessed 20 October 2022).
- ¹⁷⁵ Model contractual documents are uploaded on the ABSCH at https://absch.cbd.int/en/countries/CM/PRO (accessed 20 October 2022).
- ¹⁷⁶ A pdf version of "Model contract for benefit-sharing from the use of genetic resources" has been uploaded on the ABSCH at https://absch.cbd.int/en/countries/FR/NMCC (accessed 20 October 2022).
- ¹⁷⁷ A word version model of "Benefit sharing agreement has been uploaded on the ABSCH at https://absch.cbd.int/en/countries/ZA/NMCC (accessed 20 October 2022).
- ¹⁷⁸ National Environmental Management: Biodiversity Act, No. 10 of 2004 (NEMBA), s. 85; Bioprospecting, Access and Benefit-Sharing Regulations 2015 (BABS Regulations), r. 40.

- ¹⁷⁹ Brazil: Law nº 13,123 of May 20, 2015 (Access and Benefits Sharing of Genetic Resources and Associated Traditional Knowledge), Art. 30.
- ¹⁸⁰ Genetic Resources Act 2017, Art. 13 (1) 2.
- ¹⁸¹ EU: Regulation (EU) No 511/2014 of the European Parliament and of the Council of 16 April 2014 on compliance measures for users from the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization in the Union. OJ 2014 L 150/59 (hereinafter Regulation (EU) 511/2014).
- ¹⁸² Norway, Nature Diversity Act 2009, s. 59.
- ¹⁸³ Access to Biological Resources and Benefit Sharing Act 2017, s. 30.
- ¹⁸⁴ https://absch.cbd.int/countries/ZA/CP (accessed 9 November 2022).
- ¹⁸⁵ Access to Biological Resources and Benefit Sharing Act 2017, s. 30.
- ¹⁸⁶ Genetic Resources Act 2017, Art. 15 (1).
- ¹⁸⁷ Ibid.
- ¹⁸⁸ Access to Biological Resources and Benefit Sharing Act 2017, s. 30.
- ¹⁸⁹ Access to Biological Resources and Benefit Sharing Act 2017, s. 31.
- ¹⁹⁰ Patents Amendment Act of 2015, s. 3A, 3B.
- ¹⁹¹ Access to Biological Resources and Benefit Sharing Act 2017, s. 34.
- ¹⁹² Genetic Resources Act 2017, Art. 14, 15 (2).
- ¹⁹³ Access to Biological Resources and Benefit Sharing Act 2017, s. 34.
- ¹⁹⁴ Access to Biological Resources and Benefit Sharing Act 2017, s. 35, 38, 40–44.
- ¹⁹⁵ Genetic Resources Act 2017, Art. 16.
- ¹⁹⁶ Genetic Resources Act 2017, Art. 14 (2).
- ¹⁹⁷ Regulation (EU) 511/2014, Art. 2 (1); Guidance document, s. 2.1.1.
- ¹⁹⁸ Regulation (EU) 511/2014, Art. 2 (4); Guidance document, s. 2.1.2.
- ¹⁹⁹ Regulation (EU) 511/2014, Art. 2 (4); Guidance document, s. 2.1.2.
- ²⁰⁰ Guidance document, s. 2.2.
- ²⁰¹ Regulation (EU) 511/2014, Art. 2 (2); Guidance document, s. 2.3.1.1.
- ²⁰² Guidance document, s. 2.3.1.3.
- ²⁰³ Guidance document, s. 2.3.1.5.
- ²⁰⁴Guidance document, s. 2.3.3.2.
- ²⁰⁵ Guidance document, s. 2.3.4.
- ²⁰⁶ Guidance document, s. 2.3.5.
- ²⁰⁷Guidance document, s. 2.5.
- ²⁰⁸ Regulation (EU) 511/2014, Art. 4.

DRAFT ONLINE QUESTIONNAIRE ON THE IMPLICATIONS OF ACCESS AND BENEFIT-SHARING MEASURES FOR THE USE AND EXCHANGE OF GENETIC RESOURCES FOR FOOD AND AGRICULTURE AND FOR BENEFIT-SHARING

Please provide some background information about yourself and/or the institution you work for or represent. Please identify your role in responding to this survey. GROUP I (Commission Members/National Focal Points or Coordinators): • FAO Commission Member • National Focal Point for the Commission on Genetic Resources for Food and Agriculture • National Coordinator for Animal Genetic Resources for Food and Agriculture • National Focal Point for Aquatic Genetic Resources • National Focal Point for Forest Genetic Resources • National Focal Point for Plant Genetic Resources for Food and Agriculture • National Focal Point for Biodiversity for Food and Agriculture	ıre
 FAO Commission Member National Focal Point for the Commission on Genetic Resources for Food and Agriculture National Coordinator for Animal Genetic Resources for Food and Agriculture National Focal Point for Aquatic Genetic Resources for Food and Agriculture National Focal Point for Forest Genetic Resources National Focal Point for Plant Genetic Resources for Food and Agriculture National Focal Point for Biodiversity for Food and Agriculture 	
 National Focal Point for the 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 National Focal Point for the International Plant Treaty on Plant Genetic Resources for Food and Agriculture Other (please provide details) 	
GROUP II (Stakeholders/user communities): Intergovernmental organization Public research organization/Academia/University Genebank collection Farmer organization Fisher organization Livestock keeper organization Forester organization Private sector Responding as an individual e.g. researcher Other (please provide details) GROUP III (Indigenous Peoples and/or Local Communities):	
Please provide details if you so wish	
2 Please provide the title and address of the entity you represent or where you work.	
Full name Title	
Name of entity	
Function	
Street	
City	
Postcode	
Country 3 May we contest you for further information?	
3 May we contact you for further information?	
Yes, no	
If yes, please provide contact information: O Phone	
o Email	

	Part B.1: Application of national legislative, administrative and policy measures on
	access and benefit-sharing to genetic resources for food and agriculture
4	GROUP I: Does your country have ABS measures?
	Yes, no, I don't know
	If yes, do they require PIC?
	Yes, no, I don't know
	If yes, do they require fair and equitable benefit-sharing?
	Yes, no, I don't know
4	GROUP I: Do the ABS measures of your country apply to genetic resources for food and
bis	agriculture (GRFA)?
4	Yes, no, I don't know
4	GROUP I: Do the ABS measures of your country require compliance with the ABS
ter	measures of other countries providing access to genetic resources?
5	Yes, no, I don't know GROUP I: Do the ABS measures of your country include special provisions for (specific
3	or all) GRFA?
	Yes, no, I don't know
	(a) If yes, please identify the genetic resources for which the ABS measures of your country
	provide special provisions:
	All genetic resources for food and agriculture
	Plant genetic resources for food and agriculture
	Aquatic genetic resources for food and agriculture
	Forest genetic resources for food and agriculture
	Microorganism genetic resources for food and agriculture
	Invertebrate genetic resources for food and agriculture One of the first state of the control of the
	(b) If yes, please identify the type(s) of special provisions and the GRFA to which they apply:
	Exemptions of GRFA from scope of the ABS measures
	If yes, please specify relevant GRFA
	if yes, please specify relevant ORTA
	Special (e.g. simplified) authorization procedures for GRFA and/or activities related to GRFA
	If yes, please specify procedure, relevant GRFA and/or activities related to GRFA
	Special provisions on benefit-sharing
	If yes, please specify provisions and relevant GRFA
	Other provisions for GRFA
	If yes, please specify provision(s) and relevant GRFA
6	GROUP I: Do the ABS measures of your country apply to privately held genetic
	resources?
	Yes, no, I don't know?
	(a) If was the state and but a minutally held CDEA?
	(a) If yes, do they also apply to privately held GRFA?
7	Yes, no, I don't know GROUP I: Have efforts been made to inform stakeholders who utilize GRFA for
'	research and development on ABS measures, as they apply to GRFA?
	Yes, no, I don't know
7	GROUP II: Have you been informed on ABS measures as they apply to GRFA?
bis	Yes, no, I don't know
	If yes, how have stakeholders been informed?
	ABS Clearinghouse (https://absch.cbd.int/en/)
	National Clearinghouse

Information seminars Guidance documentation Other (if other, please provide details) 8 GROUP I: Has your country granted ABS permits for the use of genetic resources for research and development? Yes, no, I don't know (a) If yes, how many ABS permits has your country granted for the use of GRFA for research and development? Less than 10 Between 11 and 50 More than 50 I don't know (b) Please specify the GRFA for which ABS permits have been granted by your country (*Please specify all that apply*): Animal genetic resources for food and agriculture Plant genetic resources for food and agriculture Aquatic genetic resources for food and agriculture Forest genetic resources for food and agriculture Microorganism genetic resources for food and agriculture Invertebrate genetic resources for food and agriculture I don't know Part B.2 Application of measures on access and benefit-sharing for traditional knowledge associated with genetic resources (TK) that is held by indigenous peoples and/or local communities GROUP I: Does your country have ABS measures in place requiring that TK that is held 10 by indigenous peoples and/or local communities is accessed with their prior informed consent (PIC) or their approval and involvement and that mutually agreed terms (MAT) have been established? Yes, no, I don't know 10 GROUP III: Does your country have ABS measures in place requiring that TK is accessed with your prior informed consent (PIC) or your approval and involvement and bis that mutually agreed terms (MAT) have been established? Yes, no, I don't know 11 GROUP I: Have efforts been made to inform stakeholders on ABS measures, as they apply to TK? Yes, no, I don't know If yes, how? ABS Clearinghouse (https://absch.cbd.int/en/) National Clearinghouse Information seminars Guidance documentation Other (*if other, please provide details*) GROUPS II & III: Have you been informed on ABS measures, as they apply to TK? 11 bis Yes, no, I don't know If yes, how? ABS Clearinghouse (https://absch.cbd.int/en/) National Clearinghouse Information seminars Guidance documentation Other (*if other, please provide details*) GROUP III: Have you or your community approved access to TK? 12 Yes, no, I don't know

- (a) If yes, in how many cases have you or your community approved access to TK associated with genetic resources?
 - Less than 5
 - Between 5 and 10
 - More than 10
- (b) Have you or your community approved access to TK associated with any of the following genetic resources? (*Please specify all that apply*)
 - Animal genetic resources for food and agriculture
 - Plant genetic resources for food and agriculture
 - Aquatic genetic resources for food and agriculture
 - Forest genetic resources for food and agriculture
 - Microorganism genetic resources for food and agriculture
 - Invertebrate genetic resources for food and agriculture

GROUP I: Has access to TK been approved by indigenous peoples and/or local communities in your country?

If yes, in how many cases have indigenous peoples and/or local communities approved access to TK associated with genetic resources?

- Less than 10
- Between 10 and 50
- More than 50

Part B.3 Application of measures for access to genetic resources where indigenous peoples and/or local communities have the established right to determine access to such resources

GROUPS I & II: Does your country have measures in place, which provide indigenous peoples and/or local communities with the right to determine access to its genetic resources?

Yes, no, I don't know

If yes, are there measures in place in your country which aim at ensuring that the PIC or approval and involvement of indigenous peoples and/or local communities is obtained for access to their genetic resources?

Yes, no, I don't know

GROUP III: Does your country have measures in place which provide your community with the right to determine access to its genetic resources?

Yes, no, I don't know

If yes, are there measures in place in your country which aim at ensuring that the PIC or approval and involvement of your community is obtained for access to your genetic resources? Yes, no, I don't know

14 GROUPS I–III: Are stakeholders informed of the need for consultation or approval of indigenous peoples and/or local communities when seeking access to their genetic resources?

Yes, no, I don't know

If yes, how are stakeholders informed?

- ABS Clearinghouse (https://absch.cbd.int/en/)
- National Clearinghouse
- Information seminars
- Guidance documentation
- Other (*if other, please provide details*)

15 GROUP III: Have you or your community approved access to the genetic resources of your community?

Yes, no, I don't know

- (a) If yes, in how many cases has your community approved access to its genetic resources?
 - Less than 10
 - Between 10 and 50

ı	
	• More than 50
	(b) Has your community approved access for any of the following genetic resources? (<i>Please specify all that apply</i>)
	 Animal genetic resources for food and agriculture
	 Plant genetic resources for food and agriculture
	 Aquatic genetic resources for food and agriculture
	 Forest genetic resources for food and agriculture
	 Microorganism genetic resources for food and agriculture
	Invertebrate genetic resources for food and agriculture
	Part C.1: Exchange experience – GRFA
16	GROUPS I-III: Do you use or exchange GRFA for research and development?
	Yes, no, I don't know
	(a) If yes, please specify which (<i>Please specify all that apply</i>):
	Animal genetic resources for food and agriculture Plant agreetic resources for food and agriculture The standard ag
	Plant genetic resources for food and agriculture A guestic genetic resources for food and agriculture
	 Aquatic genetic resources for food and agriculture Forest genetic resources for food and agriculture
	Microorganism genetic resources for food and agriculture
	Invertebrate genetic resources for food and agriculture
	(b) Please identify the GRFA you are most knowledgeable about or familiar with (<i>Please</i>
	select only one):
	Animal genetic resources for food and agriculture
	Plant genetic resources for food and agriculture
	Aquatic genetic resources for food and agriculture
	Forest genetic resources for food and agriculture
	Microorganism genetic resources for food and agriculture
	Invertebrate genetic resources for food and agriculture
For t	he remainder of this part, please limit your answers to the GRFA you have identified as the one
you c	re most knowledgeable about or familiar with.
17	GROUPS I-III: During the last five years, have you/your institution/your community
	exchanged (provided or received) GRFA?
	Yes, no, I don't know
	(a) If yes, how many exchanges on average per year?
	(b) If yes, how many samples on average per year?
	(c) With whom of the following have you exchanged (provided or received) GRFA during the last five years? (<i>Please specify all that apply</i>)
	Intergovernmental organization
	Domestic public research organization/academia/university
	Foreign public research organization/academia/university
	Domestic indigenous people/local community
	Foreign indigenous people/local community
	Domestic genebank collection
	Foreign genebank collection
	Domestic private sector
	Foreign private sector
	Domestic individual, e.g. researcher Foreign individual, e.g. researcher
	• Foreign individual, e.g. researcher • Other (plags specify)
	Other (please specify)(d) Have the exchanges been made pursuant to ABS measures?
	(a) That one exchanges seen made parsuant to ADS measures:

	Yes, always
	• Yes, in most cases
	• Sometimes
	• Rarely
	• Never
	Don't know
	(e) If yes, how long, on average, did it take to negotiate the agreement?
	(f) After conclusion of the agreement, how long, on average, did it take before GRFA could
	be accessed?
18	GROUPS I-III: Have you received any monetary or non-monetary benefits in return for
	providing access to GRFA?
	Yes, no, no but expecting
	If yes, please specify which:
	Capacity development/training Output Development training Output Development training
	Results of research/development on the GRFA provided Transfer of an access to tack a large.
	 Transfer of or access to technology Other non-monetary benefits (please specify)
	 Other hon-monetary benefits (please specify) Monetary benefits (please specify if you wish)
19	GROUP II: Have you provided one or more of the following in return for receiving
17	GRFA?
	Capacity development/training
	Results of research/development on the GRFA provided
	Transfer of or access to technology
	• Other non-monetary benefits (please specify)
	 Monetary benefits (please specify if you wish)
20	GROUPS I-III: During the last five years, have you ever been denied access to GRFA as
	a result of ABS measures?
	(a) If yes, what were the reasons for the denial?
	I did not receive a reply
	I received a reply, but no reasons were given
	Absence of ABS measures or implementing regulations Output Description:
	No agreement was reached on access modalities and/or benefit-sharing Non-compliance with angliable rules and/on proceedings.
	 Non-compliance with applicable rules and/or procedures Other reasons (<i>please specify</i>)
	(b) During the last five years, how many and what percentage of your access requests have
	been denied?
	(c) Countries where access to GRFA has been denied are located in the following region(s)
	(Please specify all that apply) 208 :
	• Africa
	• Asia
	• Europe
	Latin America and the Caribbean
	Near East
	North America
•	Southwest Pacific
20	GROUPS I-III: Could you share additional information about factors contributing to
bis	you and your community being able to obtain access to GRFA or not?
21	GROUP I: In the last five years has the competent authority in your country denied access to GRFA as a result of ABS measures?
	Yes, no, I don't know
	(a) If yes, for which reasons?
<u> </u>	(a) 11 Jes, 101 winen reasons:

- Absence of ABS measures or implementing regulations
- No agreement was reached on access modalities and/or benefit-sharing
- Other reasons (please specify)
- (b) During the last five years, how many and what percentage of requests for access to GRFA have you rejected?

Part C.2: Exchange experience – TK

22 GROUPS I-III: Do you use or exchange TK?

Yes, no, I don't know

- (a) If yes, please specify to which GRFA the TK applies (*Please specify all that apply*):
 - Animal genetic resources for food and agriculture
 - Plant genetic resources for food and agriculture
 - Aquatic genetic resources for food and agriculture
 - Forest genetic resources for food and agriculture
 - Microorganism genetic resources for food and agriculture
 - Invertebrate genetic resources for food and agriculture
- (b) Please identify the GRFA you are most knowledgeable about or familiar with (*Please select only one*):
 - Animal genetic resources for food and agriculture
 - Plant genetic resources for food and agriculture
 - Aquatic genetic resources for food and agriculture
 - Forest genetic resources for food and agriculture
 - Microorganism genetic resources for food and agriculture
 - Invertebrate genetic resources for food and agriculture

For the remainder of this part, please limit your answers to TK associated with the GRFA you have identified as the one you are most knowledgeable about or familiar with.

GROUPS I–II: During the last five years, have you/your institution/your community exchanged (provided or received) TK?

Yes, no, I don't know

- (a) If yes, how many exchanges on average per year?
- (b) With which of the following have you exchanged (provided or received) TK during the last five years? (*Please specify all that apply*)
 - Intergovernmental organization
 - Domestic public research organization/academia/university
 - Foreign public research organization/academia/university
 - Domestic indigenous people/local community
 - Foreign indigenous people/local community
 - Domestic genebank collection
 - Foreign genebank collection
 - Domestic private sector
 - Foreign private sector
 - Domestic individual, e.g. researcher
 - Foreign individual, e.g. researcher
 - Other (*please specify*)
- (c) Have the exchanges been made pursuant to ABS measures?
 - Yes, always
 - Yes, in most cases
 - Sometimes
 - Rarely
 - Never
 - Don't know
- (d) If yes, how long, on average, did it take to negotiate the agreement?

Yes, no

(e) After conclusion of the agreement, how long on average did it take before TK could be 24 GROUPS I & II: Have you provided one or more of the following in return for receiving TK that was held by indigenous peoples and/or local communities? Yes, no, no but expecting • Capacity development/training • Results of related research/development • Transfer of or access to technology • Other non-monetary benefits (*please specify*) • Monetary benefits (please specify if you wish) GROUP III: Have you received one or more of the following in return for providing TK? 25 • Capacity development/training • Results of related research/development • Transfer of or access to technology • Other non-monetary benefits (*please specify*) • Monetary benefits (please specify if you wish) 26 GROUPS I-II: During the last five years, have you been denied access to TK as a result of **ABS** measures? (a) If yes, what have been the reasons for the denial? (Please specify all that apply) • I did not receive a reply • I received a reply, but no reasons were given • Absence of ABS measures or implementing regulations • No agreement was reached on access modalities and/or benefit-sharing • Non-compliance with applicable rules and/or procedures • Other reasons (please specify) (b) During the last five years, how many and what percentage of your requests to access TK have been denied? (c) Countries where access to TK has been denied are located in the following region(s) (Please specify all that apply): 208 • Africa • Asia • Europe • Latin America and the Caribbean Near East • North America • Southwest Pacific GROUP I-III: Could you share additional information about factors contributing to you 26 being able to obtain access to TK or not? bis GROUPS I & III: In the last five year's has access to TK in your country been denied as a result of the ABS measures? Yes, no, I don't know (a) If yes, for which reasons? • Absence of ABS measures or implementing regulations • No agreement was reached on access modalities and/or benefit-sharing • Other reasons (please specify) (b) During the last five years, how many and what percentage of requests for access to TK have been rejected? **Part D: ABS Elements** GROUPS I-III: Are you familiar with the publication Elements to facilitate domestic implementation of access and benefit-sharing for different subsectors of genetic resources for food and agriculture with explanatory notes (ABS Elements) by FAO in 2019

- (a) If yes, how important have the ABS Elements been in guiding interactions on ABS policy development and implementation in your opinion?
 - Very important
 - Important
 - Somewhat important
 - Not important
 - I don't know
- (b) If yes, please specify the genetic resources for which the ABS Elements have been guiding interactions on ABS policy development and implementation?
 - All genetic resources for food and agriculture
 - Animal genetic resources for food and agriculture
 - Plant genetic resources for food and agriculture
 - Aquatic genetic resources for food and agriculture
 - Forest genetic resources for food and agriculture
 - Microorganism genetic resources for food and agriculture
 - Invertebrate genetic resources for food and agriculture
 - I don't know
- GROUP I: In using the ABS Elements in the implementation or development of ABS measures, which challenges, if any, have you face?

APPENDIX E LIST OF DOCUMENTS

Working documents

CGRFA/TTLE-ABS-6/23/1 Rev.1 Provisional agenda and time-table

CGRFA/TTLE-ABS-6/23/2 Access and benefit-sharing and genetic resources for food and agriculture

CGRFA/TTLE-ABS-6/23/3 Digital sequence information and genetic resources for food

Information documents

and agriculture

CGRFA/TTLE-ABS-6/23/Inf.1 Members of the Team of Technical and Legal Experts on Access and Benefit-Sharing CGRFA/TTLE-ABS-6/23/Inf.2 Rev.1 Access and benefit-sharing: comments and inputs CGRFA/TTLE-ABS-6/23/Inf.2 Add.1 Access and benefit-sharing: comments and inputs -Addendum CGRFA/TTLE-ABS-6/23/Inf.3 The role of digital sequence information in the conservation and sustainable use of genetic resources for food and agriculture: Opportunities and challenges The role of digital sequence information: comments on an CGRFA/TTLE-ABS-6/23/Inf.4 inputs to the draft study The role of digital sequence information: comments on an CGRFA/TTLE-ABS-6/23/Inf.4 Add.1 inputs to the draft study - Addendum CGRFA/TTLE-ABS-6/23/Inf.5 Report of the Twelfth Session of the Intergovernmental Technical Working Group on Animal Genetic Resources for Food and Agriculture CGRFA/TTLE-ABS-6/23/Inf.6 Report of the Fourth Session of the Intergovernmental Technical Working Group on Aquatic Genetic Resources for Food and Agriculture CGRFA/TTLE-ABS-6/23/Inf.7 Report of the Seventh Session of the Intergovernmental Technical Working Group on Forest Genetic Resources CGRFA/TTLE-ABS-6/23/Inf.8 Report of the Eleventh Session of the Intergovernmental Technical Working Group on Plant Genetic Resources for Food and Agriculture – Advance copy CGRFA/TTLE-ABS-6/23/Inf.9 List of documents

Background Study Papers

Background Study Paper No. 70: Survey of access and benefit-sharing country measures accommodating the distinctive features of genetic resources for food and agriculture and associated traditional knowledge

Background Study Paper No. 68: Exploratory Fact-Finding Scoping Study on "Digital Sequence Information" on Genetic Resources for Food and Agriculture

Other documents

ABS Elements: Elements to Facilitate Domestic Implementation of Access and Benefit-Sharing for Different Subsectors of Genetic Resources for Food and Agriculture with Explanatory Notes