UN environment programme

CBD/SBI/7/INF/2

Distr.: General
4 May 2026

English only

Convention on Biological Diversity

Subsidiary Body on Implementation
Seventh meeting
Nairobi, 4–12 August 2026
Item 7 of the provisional agenda*
Second assessment and review of the effectiveness of the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from Their Utilization

Analysis of information from the national reports and other sources for the second assessment and review of the effectiveness of the Nagoya Protocol**

Note by the Secretariat

Contents

* CBD/SBI/7/1.
** The present document is being issued without formal editing.

I. Introduction

1. In its decision NP-3/1, the Conference of the Parties serving as the meeting of the Parties to the Nagoya Protocol decided to conduct the second assessment and review of the effectiveness of the Protocol at its sixth meeting. In its decision NP-5/5, it agreed on a methodology for conducting the second assessment and review on the basis of the elements and sources of information as contained in the annex to the decision. The elements address various aspects of the implementation of the Protocol.

2. The Executive Secretary was requested to analyse and synthesize information on the implementation of the Nagoya Protocol, using the sources of information listed in the annex to the decision, and to measure the indicators in the framework of indicators contained in annex II to decision NP-3/1, and to make the information available to the Informal Advisory Committee on Capacity-building for the Implementation of the Nagoya Protocol, the Compliance Committee under the Nagoya Protocol and the Subsidiary Body on Implementation.

3. The current document includes, for each of the elements (a) to (i) identified in the annex to decision NP-5/5: (a) a summary and updated data for the framework of indicators contained in annex II to decision NP-3/1 A; and (b) an analysis of available information, including an analysis of all questions from the first national reports submitted for the Nagoya Protocol.

II. Methodology

4. As part of the methodology, the elements and sources of information for the second assessment and review were set out in the annex to the decision NP-5/5. The main sources of information for this document are the following:

(a) First national reports submitted by Parties to the Nagoya Protocol up to 9 March 2026. Ninety-six Parties had submitted their first national report by that date, out of the 142 Parties with an obligation to submit;[1]

(b) For those Parties that did not submit their first national report, information was collected from the ABS Clearing-House, the national biodiversity strategies and action plans (NBSAPs) and the associated targets and the seventh national reports on the implementation of the Convention;[2]

(c) Information in the ABS Clearing-House (used to complement other available information.).[3]

5. The document is organised around the elements as agreed to in decision NP-5/5. The elements include sections or sub-elements following the format of the national report. For each of those, quantitative information (numeric and in percentage) is provided based on the multiple-choice responses to the first national report. In addition, for each element, information is provided on which questions were analyzed from the first national reports as well as any other additional sources of information used in the analysis.

6. Even though the guidelines for the first national report provided guidance on the standardised set of three options to answer multiple choice questions (“yes,” “yes, to some extent”, and “no”), Parties seemed to have used different criteria to select one option or another. The information provided in the analysis reflects the responses as provided by Parties in their report. It should also be

[1] All national reports submitted on the Access and Benefit Sharing (ABS) Clearing-House are available at the following link: https://absch.cbd.int/en/reports
[2] See: https://ort.cbd.int/
[3] See: https://absch.cbd.int/en/

noted that each question was analysed independently, and as a consequence only the answers provided to that specific question were considered.

7. The analysis also provides a short summary of the information provided in free text entries, in particular focusing on challenges and lessons learned that could be of relevance for assessment and review. Examples are provided to illustrate different ways of implementing the Protocol or examples of tools or information shared.

8. Annex II of decision NP-3/1 contains a framework of indicators and reference points to measure progress. The indicators in the framework were largely based on questions from the format for the interim national report.

9. Reference points were included for most of the indicators, expressed mostly in numbers and percentages calculated on the basis of the total number of Parties (105) at the time of the 2018 analysis. These reference points determine a baseline against which progress can be measured in the future for each of the indicators. However, there were instances where no conclusive information could be drawn from the responses to the interim national report, therefore, a new text was suggested for those indicators, which was incorporated in the format for the first national report on the implementation of the Protocol. Those indicators include as reference points the text "Not conclusive data."

10. The updated data for the indicators as at 9 March 2026 is based on the available information from the identified sources. The information is presented in numbers and in percentages, calculated based on the number of Parties (142).

11. The framework was adopted as a flexible tool that can be adapted as further progress is made in implementation. Accordingly, some suggestions are made for changes to the indicators in light of changes to questions in the reporting format, changes in methodologies or to provide more clarity in relation to the indicator. Footnotes have been added as necessary to provide further explanation to the suggested changes to the framework of indicators.

III. Analysis of information

A. Extent of implementation of the provisions of the Nagoya Protocol and related obligations of Parties, including assessment of progress by Parties in establishing institutional structures and access and benefit-sharing measures to implement the Protocol

1. Ratification of the Protocol[4]

(a) Summary and indicator data

12. Since February 2018, 37 countries have ratified the Nagoya Protocol. In addition, six countries have indicated they are taking concrete steps towards ratification and twelve expressed plans to ratify.

Table 1
Indicators to measure progress in ratifying the Protocol

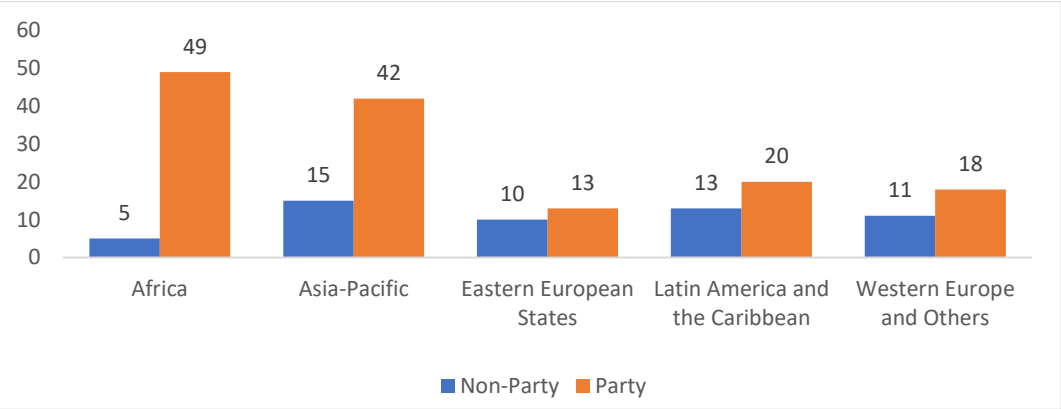
Framework of indicators	*Reference point (as at 22 February 2018)*	*9 March 2026*
Number and percentage of Parties to the Convention that have ratified the Nagoya Protocol	105 (54%)	142 (72%)

[4] Source: United Nations Treaty Collection and information submitted by non-Parties to the Protocol in the first national reports of the Nagoya Protocol, NBSAPs, targets, and the seventh national report under the Convention.

(b) Analysis of information available

13. Since February 2018, 37 countries have ratified the Nagoya Protocol. Of the 54 Parties to the Convention that are not Parties to the Nagoya Protocol, six countries have indicated they are currently taking concrete steps towards ratification. In addition, 12 countries have expressed plans to ratify the Protocol, although progress and timelines vary. The figure below provides a breakout by region of Parties to the Protocol and Parties to the CBD that have not yet ratified the Protocol (non-Parties)

Figure 1
Number of Parties and non-Parties to the Protocol by region



2. Institutional structures and access and benefit-sharing measures for the implementation of the Protocol[5]

(a) Summary and indicator data

14. As can be seen in table 2 below, there has been significant progress since February 2018 in the designation of authorities, such as competent national authorities and checkpoints to implement the Protocol, as well as moderate progress in putting in place the necessary ABS legislative, administrative and policy measures. Almost all Parties have designated national focal points.

15. It is clear that many Parties still need to adopt some type of ABS measure to make the Nagoya Protocol fully operational and to translate ABS measures and principles into practice. Often, the designation of competent national authorities and checkpoints is pending the adoption of legislative, administrative or policy measures on ABS.

16. The presence of dedicated personnel working on ABS, the establishment of effective coordination and communication channels among relevant authorities (such as committees or digital systems) and the availability of sustained institutional capacities and financial resources were identified as key factors for the effective implementation the Protocol at the national level.

17. Establishing a clear policy vision prior to drafting legislation was found to support the development of a stronger and more coherent legal framework. A solid framework that is also flexible enough for adapting to different circumstances can help ABS systems evolve as more experience with implementation is gained. Interim measures can help Parties gain that experience.

18. Even though progress has been made in publishing available national information in the ABS Clearing-House, more efforts need to be made to make all ABS information available, reliable and up to date.

[5] Source: responses to questions 3-7 of the first national report format, the ABS Clearing-House NBSAPs, targets and the seventh national report under the CBD for those Parties that did not submit a first national report. Questions related to publishing information in the ABS Clearing-House (questions 4.1, 5.1 and 7.1) are addressed in element F on the ABS Clearing-House.

Table 2
Indicators to measure progress in establishing structures and access and benefit-sharing measures for the implementation of the Protocol

Framework of indicators	*Reference point (as at 22 February 2018)*	*9 March 2026*
Number and percentage of Parties with ABS national focal points	103 (98%)	138 (97%)
Number and percentage of Parties with one or more competent national authorities	57 (54%)	105 (74%)
Number and percentage of Parties with one or more checkpoints	29 (27%)	65 (46%)
Number and percentage of Parties with legislative, administrative and policy measures on ABS	75 (71%)	110 (78%)
Number and percentage of Parties that have made information available to the ABS Clearing-House (CNA, checkpoint, ABS measures, IRCC)	54 (51%)	93 (66%)
Number and percentage of Parties that have information (CNA, checkpoint, ABS measures, permits) that have not yet been made available to the ABS Clearing-House	46 (44%)	68 (48%)

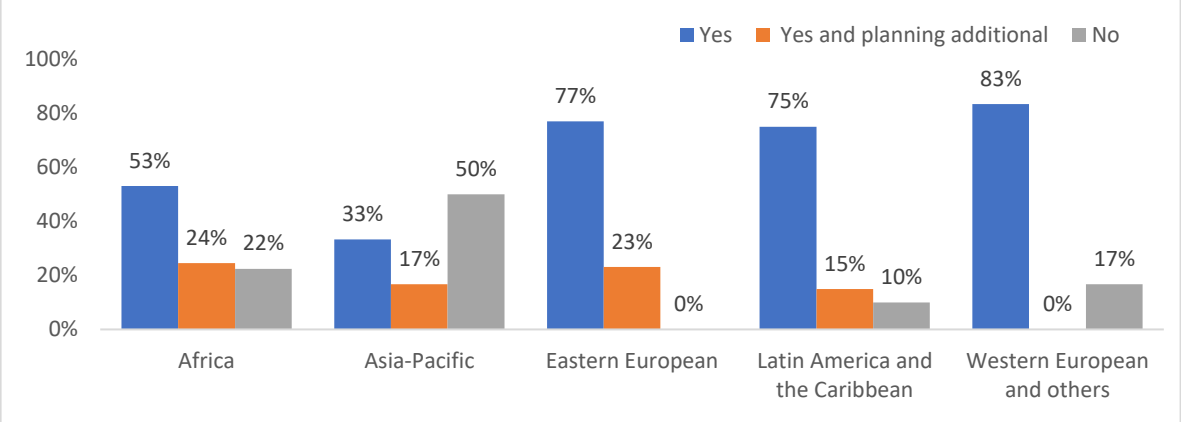
(b) Analysis of information available

19. As of 9 March 2026, most Parties (97%) had **designated a national focal point** (NFP)[6].

20. Many Parties have designated someone in the ministry in charge of environment or in a related institution as the national focal point. Often, the NFP is also part of the ministry of foreign relations or foreign affairs. It was mentioned that in some countries, the NFP not only works on ABS, and in the cases that he/she does, it can be a challenge to serve as the sole liaison with the CBD Secretariat and follow international negotiations, while being responsible for national implementation of the Nagoya Protocol and ABS agreements. Staff turnover was also mentioned as a challenge.

21. A total of 105 Parties (74%) have **established one or more competent national authorities (CNAs).**[7] Twenty-five of those Parties reported that are planning to designate additional CNAs. As the Figure bellow shows, fifty per cent of Asia Pacific region have not yet established CNAs.

Figure 2
Status of progress by Parties in the designation of one or more competent national authorities (percentage of Parties by region)



[6] Responses to questions 3 of the first national report format, the ABS Clearing-House, NBSAPs, targets and the seventh national report under the CBD for those Parties that did not submit a first national report.
[7] Responses to questions 4 of the first national report format, the ABS Clearing-House NBSAPs, targets and the seventh national report under the CBD for those Parties that did not submit the national report.

22. Of the 105 Parties that have established one or more CNAs, 83 Parties have made this information available to the ABS Clearing-House.

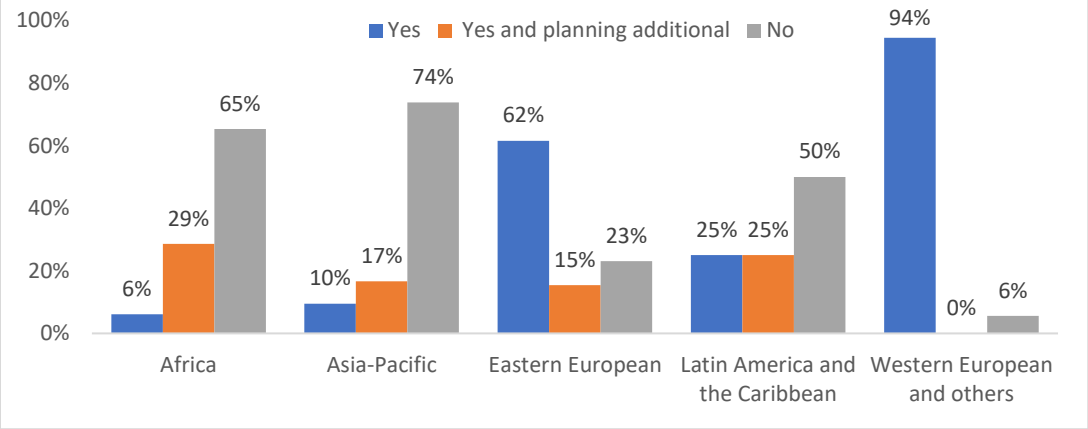
23. In their reports, many Parties that do not have CNAs in place, explained that the designation is pending the adoption of legislative, administrative or policy measures on ABS. Some reported having designated a body to serve as interim CNA (e.g. Angola, Central African Republic).

24. Most Parties have a single CNA, but some Parties have designated multiple CNAs responding to different approaches. For instance, Spain and Belgium established a CNA in each of their territories or sub-national jurisdictions of their countries. Similarly, but with a different approach, Malaysia and Argentina, established a central single CNA at a federal level but complemented with some type of territorial authorities with competence for granting access.

25. Some Parties have designated CNAs based on the type of genetic resources that are being accessed or the sectors involved or according to their use (e.g. for food and agriculture, medicine). Some of the sectors typically involved are wild genetic resources, microorganisms, forest, fisheries, agriculture and livestock, or traditional knowledge (e.g. Greece, Mexico, Republic of Korea).

26. Sixty-five Parties (46%) have established **one or more checkpoints**. Twenty-eight of those Parties reported that are planning to designate additional checkpoints.[8] In terms of progress by region, most progress has been done in Western European and others group, while 74% of Parties in Asia Pacific and 65% of Parties in Africa have not yet designated checkpoints.

Figure 3
Status of progress by Parties in the designation of one or more checkpoints (percentage of Parties by region)



27. Of the 65 Parties that have established one or more checkpoints, 48 have made this information available to the ABS Clearing-House.

28. Among those Parties that have not yet designated one or more checkpoints, many reported on their plans or work towards fulfilling this obligation. Some countries, like Côte d'Ivoire and Cameroon[9], have identified the checkpoints or have conducted studies to this end.

29. Often, Parties are waiting for the adoption of the relevant ABS measures to finalise the designation of checkpoints (e.g. Comoros, Plurinational State of Bolivia,). The difficulty of giving

[8] Responses to questions 5 of the first national report, the ABS Clearing-House, NBSAPs, targets and the seventh national report under the CBD for those Parties that did not submit a first national report.

[9] In Cameroon, a national study has proposed a model of checkpoints with the aim of providing the CNA with key information, including the name of the genetic resource, collection site, type of use, research domain, and local partner. This data is collected at various stages, such as thesis and dissertation defences; publication of research findings, transfers of genetic resources, associated traditional knowledge, and international scientific nomenclature, filing of intellectual property applications (e.g. patents, trademarks); applications for market authorization and certification. A regulatory order is currently being prepared to formalize the designation of these checkpoints.

mandates to other institutions not under the Ministry of Environment and resource constraints affecting cross-agency coordination, were identified as one of the main obstacles for establishing one or more checkpoints.

30. An examination of the information provided shows that Parties have designated or are planning to designate different types of authorities to serve as checkpoints.

31. In its report, the European Union provided information on the establishment of two checkpoints (competent authorities designated by individual Member States) which are applicable in all Member States, according to Regulation 511/2014 and that gather due diligence declarations: (a) from researchers carrying out research in the EU; and (b) at the final stage of product development.

32. For other Parties, the checkpoints most frequently identified include border control or quarantine offices at points of entry and exit (e.g. Albania, Bahrain, Indonesia, Zimbabwe), CNAs or other environmental agencies (e.g. Japan, Guyana, Romania, Mauritania), intellectual property rights offices (e.g. Spain, Ecuador, Bhutan, Switzerland) and agencies related to science or research and development (e.g. Ethiopia, Uganda, Uruguay). Other common checkpoints are agencies related to agriculture, food, plant protection or veterinary, research funding agencies, pharmacy or health agencies, or offices related to market approval.

33. In regard to the number of checkpoints designated, most Parties have one or two checkpoints, while several Parties have six or more (e.g. Kenya, Uganda, Slovakia).

34. For example, Ecuador reported having four checkpoints under the Nagoya Protocol: two related to environmental authorities, one linked to customs and the fourth associated with intellectual property rights. The Party also indicated that efforts are underway to strengthen coordination among these institutions.

35. The Republic of Korea has designated six national checkpoints located in different ministries. The checkpoints receive and process "procedural compliance reporting" from both nationals and non-nationals who utilize foreign genetic resources or associated traditional knowledge. In addition, where an allegation or indication of non-compliance with a provider country's ABS procedures arises, the national checkpoints may conduct administrative investigations. Where necessary, the checkpoints may also issue recommendations to users to ensure compliance with the relevant procedures.

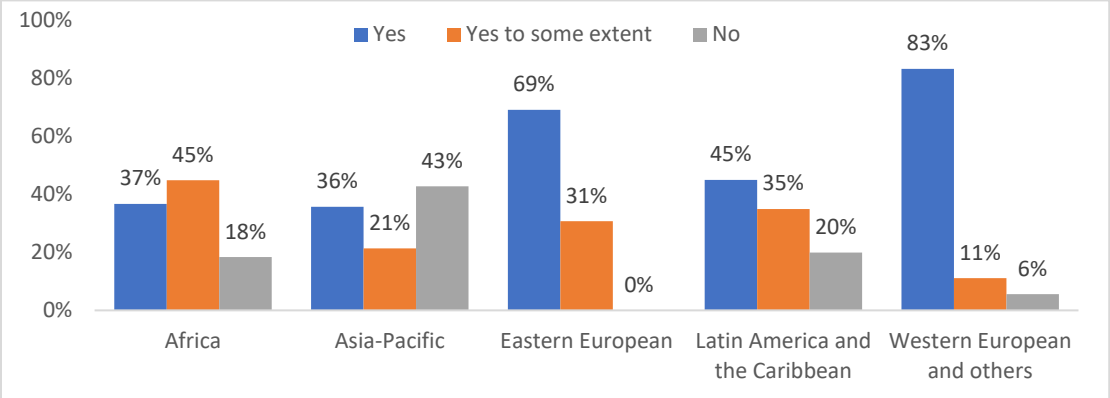
36. Ethiopia designated the Ethiopian Biodiversity Institute as a checkpoint and reported that the country is in the final stages of a legislative review to harmonize national laws with the Protocol which would enable the formal designation and operationalization of additional checkpoints across relevant sectors (including customs, patent offices, and research permitting bodies).

37. Even though, many Parties have designated checkpoints, there are still challenges in making them fully operational to implement Article 17 of the Nagoya Protocol. A very recurrent challenge mentioned in the reports is the need to establish channels of communication and coordinate among the potential or designated checkpoints and the ABS authorities.

38. One hundred and ten (78%) Parties have **established legislative, administrative or policy measures on ABS (ABS measures)**.[10] Sixty-six (46%) answered "yes" to the question indicating that they have the ABS measures necessary to implement the Protocol, while forty-four Parties (31%) answered "yes, to some extent" indicating that they have some ABS measures, but additional measures are required to fully implement the Protocol. As the figure below indicates 43% of the Parties in the Asia Pacific region have yet to establish ABS measures.

[10] Responses to question 7 of the first national report, the ABS Clearing-House NBSAPs, targets and the seventh national report under the CBD for those Parties that did not submit a first national report.

Figure 4
Status of progress by Parties in the establishment of ABS measures (percentage of Parties by region)



39. Out of the 110 Parties with ABS measures, 80 made this information available to the ABS Clearing-House.

40. Information provided in the national reports reveals that many Parties are still working on the development or revision of ABS measures. Even though many Parties now have ABS measures in place, many reported to have ongoing work to improve, expand or operationalise the legislative, administrative, or policy frameworks on ABS (e.g. Mongolia, Uganda).

41. Different Parties have taken different approaches for establishing ABS measures in accordance with the different legal systems and existing frameworks. The following examples illustrate some of the different approaches taken.

42. Some Parties have adopted strategies, policies and action plans as a precursor to the development of further ABS measures or as part of the framework to develop a national vision for ABS (e.g. Cameroon, Bhutan, Lao People's Democratic Republic, Togo).

43. In establishing ABS measures, some Parties have decided to adopt stand-alone ABS legislation (e.g. Panama, Slovakia, Zambia), while others have decided to revise their biodiversity or environmental laws to incorporate chapters or sections addressing ABS (e.g. Albania, Spain).

44. Often, ABS laws have remained focused on establishing general principles, mandates and procedures with specific aspects of applications left to regulations (e.g. Republic of Korea, Comoros).

45. Some Parties are also integrating ABS into sectoral legislation, for instance:

(a) In Kiribati, the Environment Act 2021 governs the Environment Scientific Research procedure, which incorporates ABS measures;

(b) In addition to the ABS Framework, Lao People's Democratic Republic has strengthened its legal basis for access regulation through the Law on Medicinal Resources (2024), which establishes procedures for authorization, management, and supervision of the collection and utilization of medicinal biological resources;

(c) In Norway, the utilization of genetic resources is regulated by the Marine Resources Act and the Nature Diversity Act, as well as two associated regulations: one on the use of genetic material originating from other countries, and one on the protection of traditional knowledge related to genetic material.

46. Several Parties have opted to adopt administrative measures (e.g. Ghana, Eswatini, Senegal) or interim measures (e.g. Angola, Uruguay) while they work towards putting in place a full ABS framework.

47. Depending on the national circumstances, some Parties have federal/national measures complemented by regional/state measures. For example, in Malaysia the primary national legislation is the Act 795, which provides the overarching legal framework for ABS in Malaysia. This Act is complemented by established state laws in Sabah and Sarawak.

48. Some regions have adopted a regional approach to the establishment of measures to be further complemented by national measures. This would be the case, for instance, of the European Union.

49. Overall, when reflecting on **lessons learned, what worked well and why, difficulties, challenges and underlying causes**,[11] the main challenges identified were the lack of human, technical and financial resources, including staff turnover, and lack of capacity. The importance of having dedicated personnel working on ABS and sustained capacity was emphasized by many.

50. Often Parties report experiencing challenges with internal coordination among different authorities or ministries, or among CNAs and checkpoints. Early engagement with relevant agencies, clarity of roles and responsibilities, and the development of internal protocols and procedures were identified as possible ways of addressing these challenges. Several Parties, such as South Africa, Spain, and Zambia, reported having established a coordinating body to facilitate intergovernmental cooperation.

51. Many Parties still need to adopt some type of ABS measure for making the Nagoya Protocol fully operational. For some, this step is still a challenge for various reasons, including political instability or government changes. Translating ABS measures and principles into practice is not straightforward for many Parties due to lack of capacity and human and financial resources, and the designation and operationalisation of checkpoints remain an important challenge for many Parties.

52. Parties mentioned the following as some lessons learned from the process for putting ABS measures in place:

(a) Having interim measures or provisional administrative procedures can help to gain experience while the legal framework is adopted (e.g. Angola);

(b) Having an ABS policy was a crucial starting point and having a clear policy vision before drafting laws helped build a stronger, more coherent legal framework later (e.g. Bhutan).

53. Parties identified the lack of digital systems and standardized mechanisms for traceability as an important technological challenge.

54. Some Parties highlighted the importance of making up-to-date ABS information available in the ABS Clearing-House as an important lesson learned.

3. Measures on access to genetic resources (Article 6)[12]

(a) Summary and indicator data

55. Seventy-four Parties (52%) reported that they require prior informed consent for access to genetic resources. This includes Parties at different stages of progress in putting access and benefit-sharing measures in place, including those that have developed draft measures or adopted general provisions on access and benefit-sharing.

56. As the indicators in table 3 below and the analysis demonstrate, there has been significant progress in implementing some of the requirements of Article 6, paragraph 3 of the Nagoya Protocol which aim to provide clear procedures and rules for access and legal certainty for users of genetic resources. Of the Parties requiring prior informed consent, the proportion that provide permits at the time of access and have clear procedures for developing mutually agreed terms was already high and

[11] Question 6 of the first national report format.

[12] Source: responses to questions 8,9, 10, 11, 12, 13 and 14 of the first national report format. Questions related to publishing information in the ABS Clearing-House (questions 10.1, 12.2 and 13.1) are addressed under element F on the ABS Clearing-House.

has shown moderate additional progress since 2018. These observations are linked to the progress made in adopting the necessary ABS measures and show a wider implementation of ABS since the reference point of February 2018.

57. Sixty-four Parties reported that they have issued permits or their equivalent during the reporting period. According to the information provided, this data also includes permits that may not necessarily be linked to the application of an ABS framework (e.g. export permits). Most of the permits reported are for non-commercial purposes, but at least 17 Parties reported having issued both permits for commercial and for non-commercial purposes.

Table 3
Indicators to measure progress in establishing measures related to access

Framework of indicators	*Reference point (as at 22 February 2018)*	*9 March 2026*
Number and percentage of Parties requiring prior informed consent for access to genetic resources[13] *(new indicator)*	new	74 (52%)
Number and percentage of Parties requiring prior informed consent for access to genetic resources that provide information on how to apply for prior informed consent as provided in Article 6.3 (c)	27 (73%)	68 (91%)
Number and percentage of Parties requiring prior informed consent providing for the issuance at the time of access of a permit or its equivalent as provided in Article 6.3 (e)	32 (86%)	69 (93%)
Number and percentage of Parties requiring prior informed consent for access to genetic resources that have rules and procedures for requiring and establishing mutually agreed terms as provided in Article 6.3 (g)	28 (76%)	64 (86%)
Number and percentage[14] of Parties that have issued permits or their equivalents	19 (18%)	64 (45%)

58. Parties highlighted the difficulty of having the different types of expertise required for appropriately dealing with access requests in the relevant national institutions, but identified some actions that could facilitate the process and result in enhanced benefit-sharing:

(a) Early engagement with users and indigenous peoples and local communities helps ensure acceptance and the applicability of access requirements;

(b) Developing simplified templates for applications for access and submission checklists facilitates the efficient and timely processing of ABS permits and can also serve as basis for developing online application system;

(c) User support systems, including online applications systems, can help enhance legal certainty for commercial users and contribute to a more predictable environment for investments;

(d) Keeping information in the ABS Clearing-House up-to-date and reliable strengthens credibility at both the national and international levels, enhances trust in the system and makes ABS requirements easier for foreign researchers and companies to understand and follow.

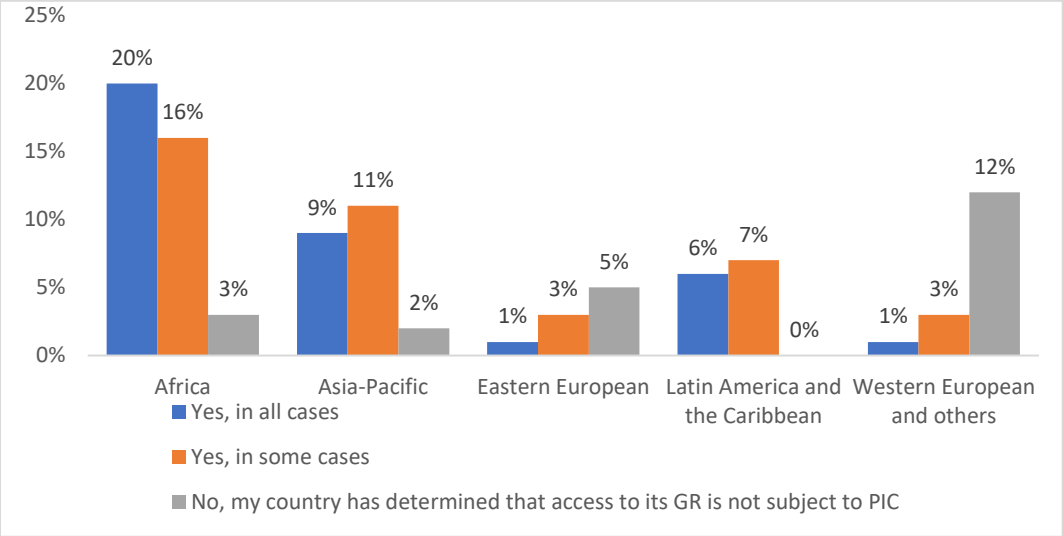
[13] A new indicator has been added to provide context for the other indicators, as some percentages are calculated based on the total number of Parties that require PIC for access to genetic resources (74). The indicator is based on responses to question 8 of the first national report format. It should also be noted, however, that under Article 6, paragraph 1, of the Protocol, prior informed consent for access to genetic resources is required unless otherwise determined by a Party.
[14] Percentage in this indicator has been calculated based on the total number of Parties to the Protocol at the time of reference.

(b) Analysis of information available

59. Seventy-four Parties (52%) responded **that access to genetic resources was subject to prior informed consent (PIC)**.[15] Of these, 36 Parties (38%) answered that access is subject to PIC in all cases, and 38 (40%) responded that access is subject to PIC in some cases.

60. Twenty-one Parties (22%) answered that their country has determined that access to its genetic resources is not subject to PIC. A regional breakdown is provided in figure 5 below.

Figure 5
Access to genetic resources is subject to prior informed consent (percentage of Parties that submitted a first national report)



61. In their responses, Parties reflected on the conditions and legal background for having access to genetic resources subject to PIC[16].

62. Some Parties reflected on the exceptions to the application of their existing ABS measures. Some of the exceptions mentioned included access to genetic resources for non-commercial research; human genetic resources; genetic resources used as bulk commodities; genetic resources acquired prior to the entry into force of the Convention on Biological Diversity; genetic resources for which access and benefit-sharing are governed by other international instruments (e.g. the International Treaty on Plant Genetic Resources for Food and Agriculture); derivatives accessed independently of genetic resources. These are some examples of exceptions made:

(a) Costa Rica explained that PIC is not required when it concerns an ex-situ collection established before April 2007 whose origin is uncertain;

(b) France reported that there are five specific regimes under which access to genetic resources is not subject to PIC: genetic resources from domestic or cultivated species, related wild species, forestry products, collected by laboratories for the prevention, monitoring, and control of health hazards concerning animals, plants, and food safety or serious risks to human health. Furthermore, genetic resources from model species commonly used in laboratories are also excluded from the general ABS regime.

63. Parties that answered that access to genetic resources was subject to PIC were invited to answer questions 9 to 14, related to access. The following presents the responses by the 74 Parties that indicated that PIC is required.

[15] Question 8 of the first national report format.
[16] This includes Parties with different levels of progress in putting in place ABS measures, including Parties with draft ABS measures or general ABS provisions.

64. Out of these 74 Parties, 71 (96%) responded that their **country has fair and non-arbitrary rules and procedures on accessing genetic resources** (45 Parties answered "yes" and 26 answered "yes, to some extent").[17]

65. In their responses, Parties often referred to relevant ABS measures dealing with access rules and procedures or their progress in putting the necessary measures in place. Some specified that their ABS requirements applied equally to national and foreign applicants (e.g. South Africa, Madagascar).

66. Others referred to transparent application processes, decision-making steps, timelines, including reasons for modifying, suspending or revoking licences. For example, Malaysia explained that the grounds for refusing a permit are explicitly listed in their ABS measures and that they cover areas such as national interest, ethical values, food security, environmental impact, and failure to comply with benefit-sharing obligations, thereby ensuring that any refusal is non-arbitrary.

67. Out of the 74 Parties that require PIC for access to their genetic resources, 68 (92%) responded that they **provide information on how to apply for prior informed consent** (41 Parties answered "yes" and 27 responded "yes, to some extent").[18]

68. In the information provided, Parties reported on different ways of providing information on how to apply for PIC, such as through the ABS measures, the NFP or CNA, guidelines and awareness-raising materials and websites. Many Parties mentioned the ABS Clearing-House as the tool to make the information on the procedures for PIC widely available.

69. Out of the 74 Parties that require PIC for access to their genetic resources, 68 (92%) Parties reported that they **provide for a clear and transparent written decision by a competent national authority** (51 answered "yes" and 27 Parties responded "yes, to some extent").[19]

70. Parties, in their responses, reflected on their ABS measures or the administrative procedures for engaging with the CNA.

71. The reports reveal that the written decision can take many forms, for instance: environmental licences (e.g. Cuba), contracts or ABS agreements (e.g. Plurinational State of Bolivia, Dominican Republic, India), permits (e.g. Burkina Faso, Zambia) or resolutions (e.g. Costa Rica, Panama). These differences reflect not only the diversity of national systems for administrative decisions, but the fact that, for example, in some countries permits or their equivalents are issued after the PIC has been obtained and mutually agreed terms has been agreed; while for others, contracts signed with the relevant actors are considered to be the written decision as per Article 6 of the Protocol.

72. Some Parties, such as Bhutan, Cameroon, Peru and Uruguay, provided information on the written procedures for requests for clarifications, additional information, rejections or approvals with conditions and other administrative and procedural details.

73. Out of the 74 Parties that require PIC, 69 (93%) reported that **they provide for the issuance of a permit or its equivalent at the time of access**[20], with 47 Parties answering "yes" and 23 Parties responding "yes, to some extent".

74. Parties reported on their process for issuance of the permit according to their national circumstances. As explained in the context of the previous question, Parties seem to use different approaches and terminology to explain what "the permit or its equivalent issued at the time of access" is in their national context. Sometimes the different terminology also reflects the differences in processes and on who can grant PIC and negotiate mutually agreed terms (MAT) (e.g. government

[17] Question 9 of the first national report format.
[18] Question 10 of the first national report format.
[19] Question 11 of the first national report format.
[20] Question 12 of the first national report format.

vs private owners or indigenous peoples and local communities). The following provides a few examples of some of the different national approaches taken:

(a) In Cameroon, the issuance of PIC by the CNA is valid for a period of one year. This authorisation enables the applicant to negotiate MAT with the resource providers. Any holder of a valid PIC and MAT can be issued an ABS permit, upon request;

(b) In Malta, a permit is provided in the form of a mutually agreed terms contract composed of declarative and conditional clauses;

(c) Peru issues two administrative documents as proof of PIC and MAT: a resolution to authorize access and the signing of the corresponding access contract, and an access contract signed between the user and the CNA.

75. Sixty-four Parties **have issued permits or their equivalent during the reporting period**.[21] According to the information provided, some of the permits reported include export permits, or other permits that are relevant for access to genetic resources but that may not have issued as a result of the application of an ABS legal framework. Most of the permits reported are for non-commercial purposes. Seventeen Parties reported having issued both permits for commercial and for non-commercial purposes.

76. Out of the 74 Parties that require PIC, 64 (86%) reported that they have **rules and procedures for requiring and establishing mutually agreed terms (**39 answered "yes" and 25 Parties responded "yes, to some extent"). [22]

77. In responding to this question, many Parties referred to the applicable legislative, policy or administrative measures. Many reported having some terms incorporated in their legislation and others referred to their model clauses and guidelines. For example:

(a) In Palau, the legislation requires every ABS agreement to include fourteen mandatory elements in MAT, including benefit-sharing, intellectual property rights, field of use limitations, duration, liability, and traditional knowledge provisions;

(b) Madagascar has a guide for negotiating and developing MAT between the CNA and national researchers, who are linked by collaboration agreements with external partners.

78. In some countries, the legal requirements still need to be published or the detailed procedure for MAT needs to be developed.

79. Overall, when reflecting on **lessons learned, what worked well and why, difficulties, challenges and underlying causes,**[23] many referred to the lack of financial and human resources, capacity and awareness, or the need to develop or revise existing measures to be in line with the Nagoya Protocol.

80. With regards to challenges related to access measures, it was mentioned that the specificity and technicality of the access requests or questions received sometimes presents a challenge for national focal points and competent national authorities. It was mentioned that ABS implementation sometimes requires specialists in biodiversity law, genetics, biotechnology and contract negotiations; skills that may be in short supply within regulatory institutions.

81. Among the lessons learned, some Parties reflected on the importance of:

(a) Promoting international cooperation and early engagement with users, relevant stakeholders and indigenous peoples and local communities;

[21] Question 12.1 of the first national report format.
[22] Question 13 of the first national report format.
[23] Question 14 of the first national report format.

(a) Involving all stakeholders during the drafting process of model clauses can facilitate and ensure acceptance and applicability;

(b) Developing simplified templates for applications for access and submission checklists can facilitate the timely processing of ABS permits;

(c) Keeping information in the ABS Clearing-House up-to-date and reliable can strengthen credibility both nationally and internationally, enhance trust and make the system easier for foreign researchers and companies to follow;

(d) Improving the user support systems and administrative measures that enhance legal certainty for commercial users and attract investments;

(e) Investing in technological and digital systems, including online application platforms and tools to facilitate information-sharing and coordination among relevant national authorities.

4. Measures on fair and equitable benefit-sharing (Article 5)[24]

(a) Summary and indicator data

82. Indicators on progress in implementing Article 5 of the Protocol reflect similar positive progress as those of access and institutions, which can be expected as all these areas are closely tied to progress made by Parties in putting the necessary ABS measures in place.

83. Parties reported on their implementation of the obligations set out in this Article from different perspectives or understandings. Some Parties reported on progress made to ensure benefit-sharing from utilization of genetic resources and associated traditional knowledge accessed within their jurisdiction. Others addressed the obligation to ensure benefit-sharing from the utilization of resources and knowledge accessed outside their country, and some reported ensuring benefit-sharing from both their domestic and foreign resources and knowledge

84. Parties emphasized that early engagement and consultation of all parties involved, and building capacity on contract negotiation contributes to the fair and equitable sharing of benefits. Inventories and documentation of genetic resources and associated traditional knowledge, and studies valorising those resources and knowledge are seen as helpful tools on that regard.

Table 4
Indicators to measure progress in establishing measures on fair and equitable benefit-sharing

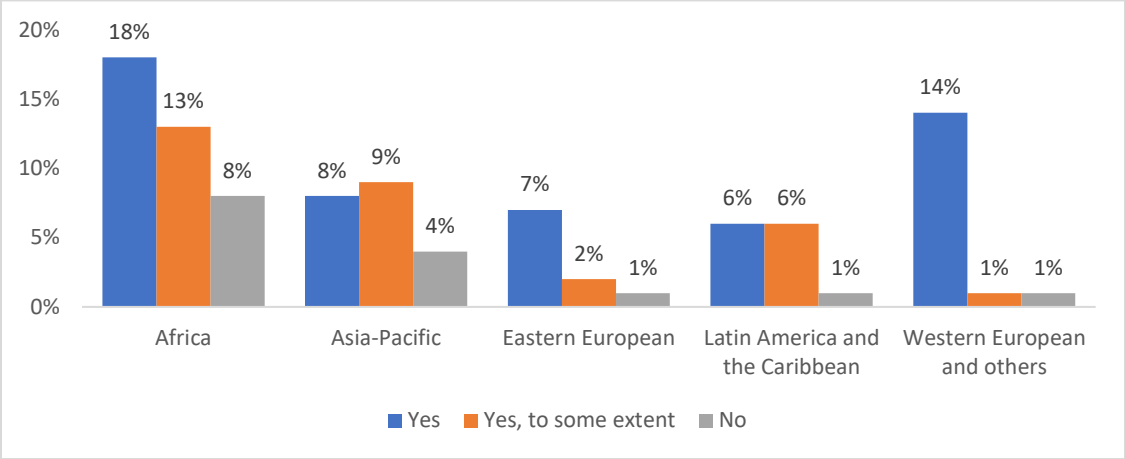
Framework of indicators	*Reference point (as at 22 February 2018)*	*9 March 2026*
Number and percentage of Parties with legislative, administrative or policy measures to implement Article 5.1 (genetic resources)	46 (44%)	81 (57%)
Number and percentage of Parties with legislative, administrative or policy measures to implement Article 5.2 (genetic resources held by indigenous peoples and local communities)	42 (40%)	74 (52%)
Number and percentage of Parties with legislative, administrative or policy measures to implement Article 5.5 (traditional knowledge associated with genetic resources)	41 (39%)	73 (51%)

(b) Analysis of information available

85. Eighty-one Parties (57%) responded that they have **measures in place requiring that benefits from the utilization of genetic resources, as well as subsequent applications and commercialization, be shared with the Party providing such resources**.[25] Out of the 81 Parties, 51 answered “yes” to the question and 30 answered “yes, to some extent.

[24] Source: responses to questions 15-18 of the first national report format.
[25] Question 15 of the first national report format.

Figure 6
Measures to implement Article 5.1 of the Protocol (percentage of Parties that submitted a first national report)



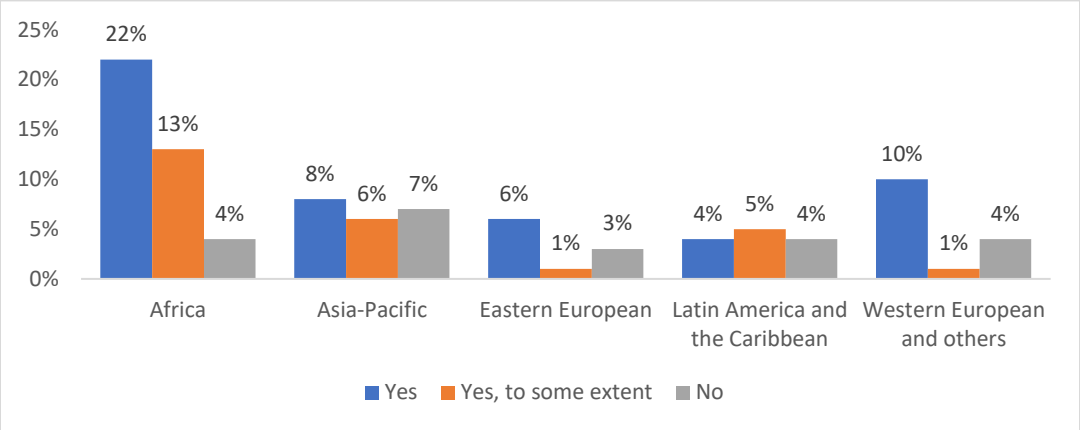
86. Examining the type of responses provided, Parties understood this question in different ways. Most Parties referred to the establishment of PIC and MAT requirements, emphasizing that they require benefit-sharing from users that wish to access the genetic resources in their country.

87. Others, such as Japan, the European Union and some of its Member States or Switzerland, understood the Article to require each Party to take measures to ensure that the benefits arising from the foreign genetic resources being utilized within their jurisdiction are shared with the provider country, and often mentioned measures taken related to compliance. For instance, the European Union ABS Regulation provides that "users shall exercise due diligence to ascertain that genetic resources and traditional knowledge associated with genetic resources which they utilise have been accessed in accordance with applicable access and benefit-sharing legislation or regulatory requirements and that benefits are fairly and equitably shared upon mutually agreed terms, in accordance with any applicable legislation or regulatory requirements."

88. Seventy-four Parties (52%) responded that they **have measures in place aiming to ensure that benefits from the utilization of genetic resources held by indigenous peoples and local communities are shared with the indigenous peoples and local communities concerned**.[26] Of these, 49 Parties answered "yes" to the question and 25 "yes, to some extent". See figure 7 for a breakdown by region.

[26] Question 16 of the first national report format.

Figure 7
Measures to implement Article 5.2 of the Protocol (percentage of Parties that submitted a first national report)



89. Similarly to the responses to the question above, Parties understood this question in different ways.

90. Some Parties provided information about the establishment of PIC and MAT requirements, emphasising that they require benefit-sharing from users that wish to access genetic resources held by indigenous peoples and local communities (IPLCs).

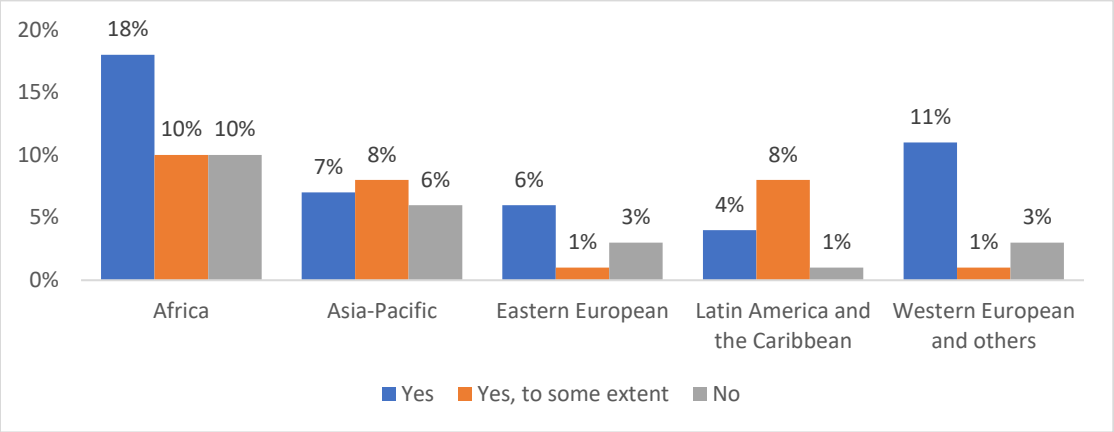
91. Others provided information on measures taken to ensure that the benefits arising from the utilization of genetic resources held by IPLCs in other countries are shared with the IPLCs concerned. For example, Japan reported that its ABS Guidelines encourage persons who utilize such genetic resources in Japan, if they are requested by the IPLCs to share benefits arising from their utilization, to conclude a contract to ensure the fair and equitable sharing of such benefits, according to the industry practices.

92. Because of the different understanding of the Article 5.2 of the Protocol some Parties explained that there were no IPLCs in their territory, or that the IPLCs within their territory do not hold rights over genetic resources.

93. Seventy-three Parties (51%) responded that they had taken **measures in order that benefits arising from the utilization of traditional knowledge associated with genetic resources are shared with IPLCs holding such knowledge**.[27] Out of the 73 Parties, 45 answered "yes" to the question and 28 responded "yes, to some extent". See figure 8 for a breakdown by region.

[27] Question 17 of the first national report format.

Figure 8
Measures to implement Article 5.5 of the Protocol (percentage of Parties that submitted a first national report)



94. Parties responded to this question similarly to the question above regarding genetic resources held by IPLCs and generally reflected on progress made in establishing those measures. In some Parties, this is regulated through measures which have as their primary objective the protection of traditional knowledge.

95. For example, in Norway, regulations related to the protection of traditional knowledge associated with genetic material adopted in 2016 address both access to associated traditional knowledge of IPLCs from Norway as well as from other countries where the other country requires PIC.[28]

96. Sixty-seven Parties provided information **on lessons learned, what worked well and why, difficulties, challenges and underlying causes**[29] of relevance to benefit-sharing measures and implementation of Article 5 of the Protocol.

97. In their responses, many of the countries referred to general difficulties such as lack of financial resources, capacity or awareness. Many responses focused on the challenges related to implementing the provisions related to IPLCs. These are addressed under the relevant section of this document (section 7 below).

98. Overall, the primary challenge identified was the absence of ABS measures in place, or the need to develop or revise existing measures to bring them into line with the requirements of Nagoya Protocol. Parties frequently mentioned the need to ensure genuine equity in negotiations, early engagement and consultation of all relevant actors, as well as capacity- building on contract negotiation.

99. Several Parties noted the importance of inventories and documentation of genetic resources and associated traditional knowledge, and of conducting studies to valorise those resources and knowledge.

[28] The Regulations relating to the protection of traditional knowledge associated with genetic material were adopted by Royal Decree of 25 and provide that access to and use by others of traditional knowledge associated with genetic material that is unique to or characteristic of an indigenous people or local community or that is linked to the traditional way of life of the community requires consent from a representative or decision-making body that is entitled to represent and make commitments on behalf of the indigenous people or local community. The regulations also apply to traditional knowledge relating to genetic material developed, used, sustained and passed on by indigenous peoples and local communities in other countries, provided that access to or use of such knowledge requires consent under the legislation of the state in question.

[29] Question 18 of the first national report format.

5. Measures on compliance with domestic legislation or regulatory requirements on ABS (Article 15) and monitoring the utilization of genetic resources (Article 17)[30]

(a) Summary and indicator data

100. The data for the indicators in table 5 below show significant progress on measures taken by Parties to implement Article 15 and moderate progress to implement Article 17 of the Protocol. The analysis of the information provided in the report also demonstrates an enhanced understanding by Parties of the compliance obligations under the Protocol since the first assessment and review process. However, the progress on providing information collected at checkpoints as checkpoint communiques has been slight.

101. Parties continue to experience challenges in implementing these articles in practice, and many still need to adopt new ABS measures or undertake further work to fully operationalise the compliance provisions, despite the progress made.

102. The levels of identified non-compliance with domestic ABS requirements relating to genetic resources remain very low. Only 19 Parties reported having encountered and addressed such cases, 11 Parties responded that they have cooperated with other Parties in specific cases of alleged violation of ABS measures, and most Parties reported that there was no need or occasion to do so. Much of the cooperation reported was initiated because of a checkpoint communique issued or received.

103. The number and percentage of Parties that require users of genetic resources to provide the information identified in Article 17.1 (a)(i), as appropriate, at a designated checkpoint has also increased (66 Parties representing 46% of the total number of Parties). This data is also consistent with the increase in the number of Parties that have designated checkpoints.

104. However, only the checkpoints of 33 Parties (23%) have collected or received information from users during the reporting period. Moreover, only 15 Parties (45%) have provided that information to national authorities and to the Party providing prior informed consent through the ABS Clearing-House using the checkpoint communiqué. Eleven Parties reported that they provided information collected or received by checkpoints through other means than the ABS Clearing-House. Reasons for these included issues of confidentiality and the information received not being adapted to the format of the checkpoint communiqué

105. This is consistent with other responses in the first national report indicating that operationalizing checkpoints is still a challenge for many Parties.

106. Generally, Parties indicated that they need support in relation to the designation and operationalization of checkpoints, monitoring the utilization of genetic resources and the use of digital systems, including for supporting access, benefit-sharing and compliance.

107. Digital systems, tools and databases can contribute to improving communication, reducing administrative burdens, and enhancing transparency and efficiencies. However, it was also noted that financing of digital tools often relies on short-term projects, and that they require continuous maintenance and further development, which poses a significant challenge for countries with limited financial and human resources or with less technical capacities. For these types of initiatives, projects should include plans for their long-term sustainability.

[30] Source: responses to questions 19 and 21-24 of the first national report format. Question 20 regarding implementation of Article 16 of the Protocol is examined in the context of element (e): Assessment of implementation of Article 16 in the light of developments in other relevant international organizations, including the World Intellectual Property Organization.

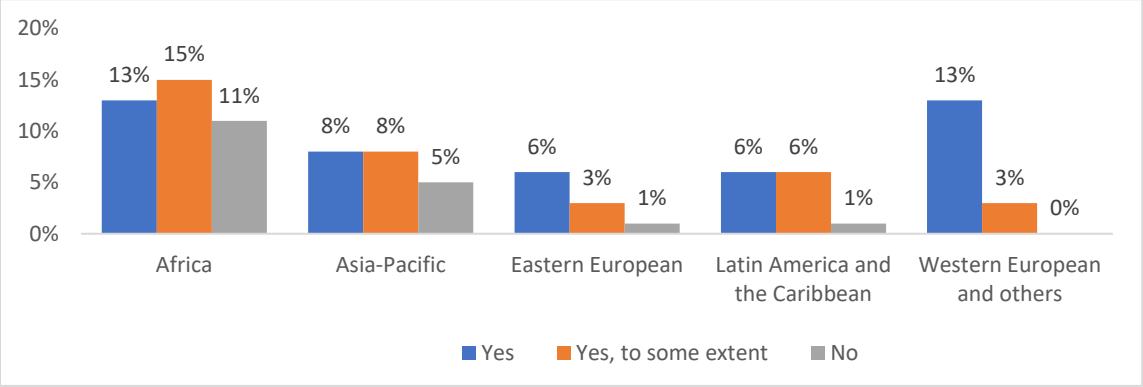
Table 5
Indicators to measure progress in establishing measures related to Article 15 and 17 of the Protocol

Framework of indicators	*Reference point (as of 22 February 2018)*	*9 March 2026*
Number and percentage of Parties that have taken appropriate, effective and proportionate legislative, administrative or policy measures to implement Article 15.1 (genetic resources)	36 (34%)	78 (54%)
Number and percentage of Parties that require users of genetic resources to provide the information identified in Article 17.1 (a)(i), as appropriate, at a designated checkpoint	41 (39%)	66 (46%)
Number and percentage of Parties that provide the information collected or received at a designated checkpoint to relevant national authorities, to the Party providing prior informed consent and to the ABS Clearing-House.	9 (9%)	15 (10%)

(b) Analysis of information available

108. Seventy-eight Parties (54%) responded that they **have taken appropriate, effective and proportionate measures to provide that genetic resources utilized within their jurisdiction have been accessed in accordance with PIC and that MAT have been established as required by the domestic ABS legislation or regulatory requirements of other Parties**.[31] Out of the 78 Parties, 44 answered "yes" to the question and 34 responded "yes, to some extent". Figure 9 below provides a breakdown of the responses by region.

Figure 9
Measures to implement Article 15.1 of the Protocol (percentage of Parties that submitted a first national report)



109. In responding to this question, some Parties reported on measures taken to ensure compliance with their own ABS measures, while others provided information on measures to ensure that the users within their jurisdiction comply with the ABS measures of the provider country. Some examples of measures taken are the following:

(a) In Cameroon, a 2023 decree requires any researcher outside the national research system holding a genetic resource of whatever origin and collaborating with a laboratory belonging to this system to present an ABS permit;

(b) In Malaysia, according to Act 795, the CNA is required to establish measures aimed at preventing the use or commercialisation within Malaysia of a biological resource or traditional knowledge that is not accompanied by a permit or its equivalent from the providing Party.

[31] Question 19 of the first national report format.

110. Many Parties reported that either new ABS measures need to be adopted or operationalised to implement Article 15. Practical implementation remains challenging for many Parties, and questions remain on how to identify the relevant users and ensure their compliance with ABS measures.

111. Nineteen (24%) of the 78 Parties that had put measures in place to implement Article 15.1, **encountered and addressed situations of non-compliance with these measures** and 11 Parties (14%) **have cooperated with other Parties in specific cases of alleged violation of ABS measures relating to genetic resources.**[32]

112. Most of the Parties responding to this question had not encountered or addressed situations of non-compliance (59 Parties). The remaining 19 Parties shared the different circumstances and experiences in addressing non-compliance with domestic ABS requirements. For instance, after requests for regularisation from users, Benin reported having regularised access done without PIC, while Côte d'Ivoire explained that due to the lack of legislation, they were not able to process the requests for regularisations, which were coming mainly from ex-situ collections.

113. Some Parties reflected on the consequences of non-compliance. For example, Dominican Republic and Ethiopia reported on cancellation or rescission of contracts in cases of non-compliance with MAT. In Kiribati, non-compliant researchers are prohibited from conducting future research in the country.

114. Germany has taken action in several instances of non-compliance where users were initially unable to provide PIC and MAT from the provider country. In two cases, fines were imposed. In the remaining cases, the users were able to submit the required documentation retrospectively. United Kingdom of Great Britain and Northern Ireland has issued 12 advisory letters to non-compliant entities which contain advice and guidance on how they can ensure compliance.

115. Most of the Parties (67) did not cooperate with other Parties in cases of alleged violation mainly because there was no need or occasion to do so. Among the eleven Parties that reported having cooperated with other countries, some Parties, such as Cameroon, France, Germany[33] and Spain, referred to communication among focal points regarding checkpoint communiqués issued or received.

116. Sixty-six Parties (46%) reported that they **require users of genetic resources to provide the information referred to in Article 17.1 (a)(i) to its designated checkpoint/s**.[34] Of these, 43 Parties answered "yes, in all cases" and 23 responded "yes, in some cases". Figure 10 below provides a breakdown of the responses by region.

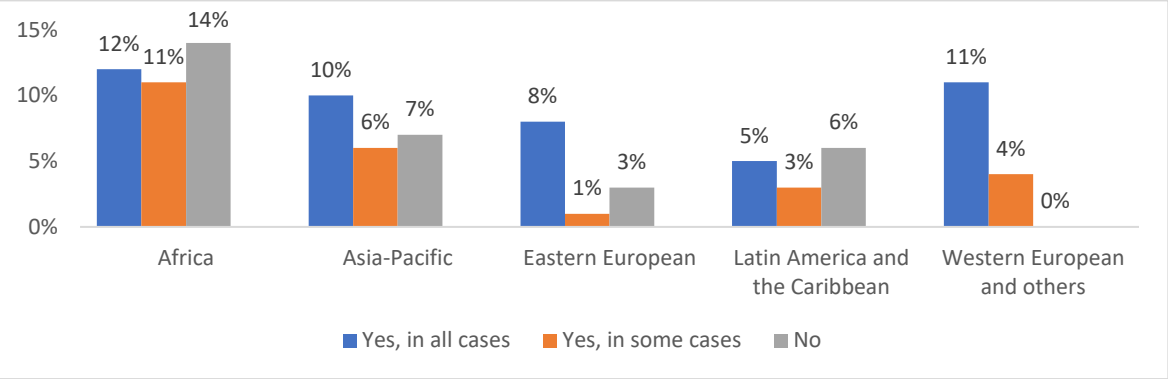
[32] Questions 19.1 and 19.2 of the first national report format.

[33] Germany provided some additional information on their experience: In the course of a checkpoint communiqué, a Party informed the German CNA, that the documents submitted were not valid ABS documents. The situation was resolved by requiring the user to apply for the necessary documentation, after which the documents were successfully issued in the provider country. In some cases, identified during user checks, the German CNA contacted the provider countries to clarify whether their national ABS measures applied to the specific situation and received constructive feedback. In other cases, however, the NFPs did not respond to the requests. As a result, the legal situation remained unclear and, although a violation of national ABS measures may have occurred, the proceedings had to be discontinued.

[34] Question 21 of the first national report format.

Figure 10

Requiring users of genetic resources to provide information at checkpoints as provided in Article 17.1 (a) (i) (percentage of Parties that submitted a first national report)



117. Out of the 66 Parties that require users to provide the required information to the designated checkpoint, 33 Parties (50%) **reported that their designated checkpoint/s collected or received information from users during the reporting period**.[35] A total of fifteen Parties to the Protocol (10%) have **published information on checkpoint communiques in the ABS Clearing-House**.[36]

118. These low numbers are consistent with other responses in the first national reports indicating that operationalising checkpoints is still a challenge.

119. The following provides some examples of information provided on the functioning of checkpoints:

(a) In Belarus, users of genetic resources are required to provide information on the results of utilization of genetic resources to the designated checkpoint annually, but no later than 1 February of the year following each year of the utilization. This requirement applies both to genetic resources transferred outside the Republic of Belarus and to those transferred into the country from other Parties to the Nagoya Protocol;

(b) According to the European Union Regulation 511/2014, users need to provide information as required by Article 17(1) of the Protocol to designated competent authorities in the European Union Member States. Annex II and III to the Commission Implementing Regulation specify the specific information requested from users;

(c) In Finland, in addition to the implementation of the European Union Regulation, a user who imports genetic resources or associated traditional knowledge to Finland needs to notify the competent authority within one month from the import date. The notification contains the same information required by the European Union Regulation.

120. Eleven Parties (8%) **have provided the information referred to in Article 17.1 (a)(i) to relevant national authorities and to the Party providing prior informed consent through other means than the ABS Clearing-House.**[37]

121. One of the possible reasons for providing the information through other means than the ABS Clearing-House could be issues of confidentiality, or information received not being adapted to the format of the checkpoint communique. For example, Germany indicated that if crucial information for publishing the checkpoint communiqué is indicated as confidential and it cannot be published, the authorities contact the competent national authorities of the country providing genetic resources.

[35] Question 21.1 of the first national report format.
[36] Information on checkpoint communiques is provided in the context of element (g): Review of implementation and operation of the ABS Clearing-House.
[37] Question 21.3 of the first national report format.

122. Sixty-five Parties (46%) reported that they **have taken measures to encourage users and providers to include provisions in mutually agreed terms to share information on the implementation of such terms**.[38] Out of the 65 Parties, 38 answered "yes" to the question and 27 "yes, to some extent".

123. In their responses, many Parties referred to existing applicable ABS measures that include this requirement (e.g. Belarus, Costa Rica), to model contractual clauses (e.g. Benin, Ethiopia, Malawi) or to their plans to do so once the draft measures or model clauses are adopted (e.g. Burundi, Democratic Republic of the Congo). Other Parties, such as Comoros or Uruguay, seem to incorporate this provision as best practice.

124. Some Parties like Peru and South Africa have included a requirement for annual reporting on the implementation of MAT. The obligation to share research results for non-commercial research permits also seems to be common among some Parties (e.g. Croatia, Ecuador, Malaysia, Panama, Tonga).

125. Few Parties, like Estonia, who do not regulate access to genetic resources also encourage users to include reporting requirements in MAT. This is also done through the implementation of Article 19 of the Nagoya Protocol (e.g. Switzerland).

126. Seventy-two Parties responded that their **country encourages the use of cost-effective communication tools and systems to monitor utilization and enhance transparency**.[39] Out of the 72 Parties, 47 answered "yes" to the question and 25 "yes, to some extent".

127. In addition to electronic communication, such as email, telephone or WhatsApp and virtual meeting platforms, many Parties provided further information on tools and systems being developed. Some of those systems are meant to facilitate access and benefit-sharing and others support implementation of the compliance provisions.

128. With regards to access, many Parties, such as Bhutan, Cameroon, Costa Rica, Ethiopia, Guyana, India, Malaysia, and Uganda, reported having online application portals or ABS permits management systems or reported on progress towards those systems (e.g. Namibia, Panama, Uruguay). These portals often include application forms and allow users to apply for and track access permits virtually.

129. For example, Malaysia has established a national ABS Clearing-House Mechanism, known as MyABS, which is intended to function as a one-stop information hub containing access requirements and details on permits, and there is ongoing work to support monitoring commercialization both domestically and abroad. In addition, Sabah and Sarawak regions have their own online systems.

130. Some Parties provided details on systems to track reports on implementation of MAT and benefit-sharing. For instance, Costa Rica reported that their platform[40] also monitors compliance with MAT and monetary and non-monetary benefit-sharing. Likewise, Uruguay explained that the country is working on an online system to facilitate information flow and reports on utilization with priority given to national indicators for the monitoring and evaluation of ABS national systems and NBSAPs.

131. In the Sarawak region of Malaysia, blockchain technology has been implemented to support an ABS project. The system enhances digital inclusivity by enabling indigenous communities to record and monitor activities through a mobile application, improving quality control and payment management. Each product carrying a QR code that allows consumers to verify authenticity and understand how their purchase contributes to the wellbeing of indigenous communities.

132. As regards to compliance, some Parties, such as the European Union, Japan and Norway, reported on work related to online submission of compliance related declarations. In particular, the EU-wide web-based system called DECLARE has been developed for users to submit due diligence

[38] Question 22 of the first national report format.
[39] Question 23 of the first national report format.
[40] https://www.conagebio.go.cr/Conagebio/login.xhtml .

declarations electronically to the competent authorities which operate as checkpoints. The portal is connected to the ABS Clearing-House thus allowing competent authorities to publish checkpoint communiqués in a cost-effective way.

133. The United Kingdom of Great Britain and Northern Ireland explained that given that the criteria for assessing whether research projects fall in the scope of the Nagoya Protocol are complex, data scientists at the CNA created an automated tool to analyse research projects to make this process more cost effective.[41]

134. In Peru, the National Commission against Biopiracy uses analytical tools to identify and manage biopiracy cases.

135. Burkina Faso reported that their country is planning to develop a platform to connect checkpoints for the sharing of information.

136. Sixty-six Parties provided **information on lessons learned, what worked well and why, difficulties, challenges and underlying causes, and any other information relevant to this section**.[42]

137. Overall, the main difficulty identified was the absence of having ABS measures in place, or the need to develop or review measures to be in line with the Nagoya Protocol. In their responses, many of the Parties referred to general difficulties, such as lack of financial resources and capacity in relation to the designation and operationalization of checkpoints, monitoring the utilization of genetic resources and the use of digital communication tools. Some Parties reported challenges related to the complexity of aligning mandates across multiple institutions and ensuring coordination. In addition, raising awareness among users of genetic resources about ABS remains a persisted challenge and is considered essential for promoting compliance with ABS measures.

138. Regarding the digital systems, tools and databases, some reflected on how they contribute to improve communication, reduce administrative burden, and enhance transparency. However, it was also noted that financing of digital tools often relies on short-term projects, but these tools require continuous maintenance and further development, which poses a significant challenge for countries with limited financial and human resources or with less technical capacity.

139. It was pointed out that for the European Union and its Member States, operationalizing the Protocol's definition of "utilization" remains a challenge. The definition helps to define the scope of their ABS measures, but interpretation and application of the definition is not straightforward.

140. It was mentioned that users also experience challenges complying with ABS requirements, in particular due to the lack of updated and reliable information in the ABS Clearing-House, the lack of prompt and clear responses from ABS authorities, and the fact that countries regulating access to their genetic resources have different ABS measures and approaches in implementation. Some Parties expressed concerns about the low level of user engagement and delays in reporting on the utilization of genetic resources once that access takes place.

6. Measures addressing special considerations (Article 8)[43]

(a) Summary and indicator data

141. As the indicators in table 6 below show, there has been significant progress in implementing the provisions in Article 8 of the Protocol, because of the overall progress made in adopting and implementing ABS measures. Parties have adopted different approaches in this regard. Most progress was made in the considerations related to research and non-commercial access and genetic resources

[41] This model assessed 62,973 research projects, which would not have been possible to do manually with the resources available. Projects identified by the model as potentially in-scope are then reviewed manually.
[42] Question 24 of the first national report format.
[43] Source: responses to question 30-33 of the first national report format.

for food and agriculture and moderate progress on the considerations related to imminent emergencies that threaten human, animal or plant health.

142. Measures addressing special considerations are also related to mutually supportive implementation with other international instruments relevant to the Protocol in accordance with its article 4, and it requires coordination among different administrations and instruments

143. The need for ABS rules and procedures to be simplified and streamlined in the context of Article 8 of the Protocol was also emphasized, particularly bearing in mind that most of the ABS permits (as demonstrated in the section on access above) are for non-commercial research. This could be complemented by establishing best practices for addressing the situations where there is a change of intent in the utilization of the genetic resource accessed.

Table 6
Indicators to measure progress in establishing measures addressing Article 8 considerations

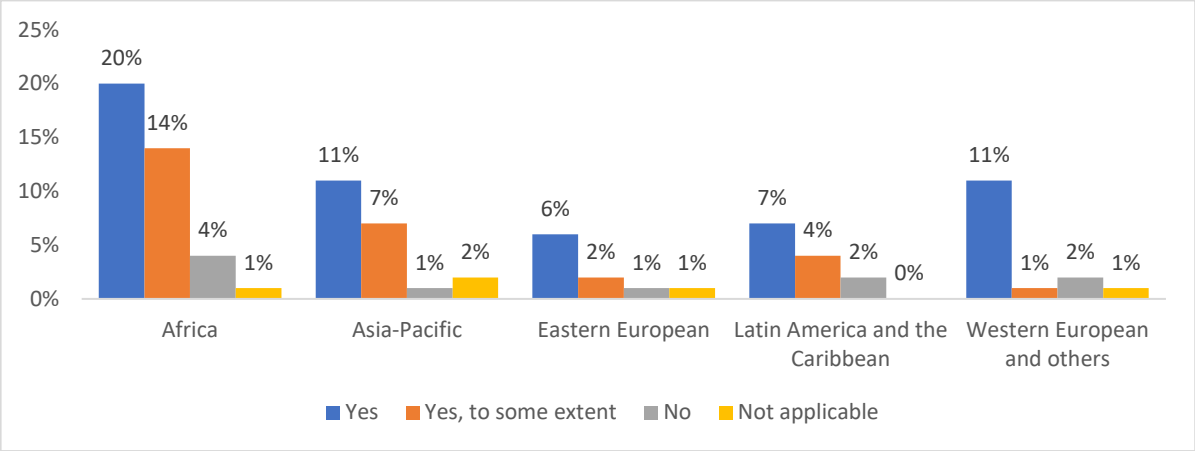
Framework of indicators	*Reference point (as at 22 February 2018)*	*9 March 2026*
Number and percentage of Parties that created conditions to promote and encourage research which contributes to the conservation and sustainable use of biodiversity as provided in Article 8(a)	48 (46%)	81 (57%)
Number and percentage of Parties that paid due regard to cases of present or imminent emergencies that threaten or damage human, animal or plant health as provided in Article 8(b)	39 (37%)	81 (57%)
Number and percentage of Parties that have taken into consideration the need for expeditious access to genetic resources and expeditious fair and equitable sharing of benefits arising out of the use of such genetic resources as provided in Article 8(b)	26 (25%)	42 (30%)
Number and percentage of Parties that have taken into consideration the importance of genetic resources for food and agriculture and their special role for food security as provided in Article 8(c)	48 (46%)	85 (60%)

(b) Analysis of information available

144. 81 Parties (57%) responded that **in the development and implementation of its ABS legislation or regulatory requirements, their country had created conditions to promote and encourage research which contributes to the conservation and sustainable use of biodiversity including through simplified measures on access for non-commercial research purposes**.[44] 54 Parties answered "yes" to this question and 27 answered "yes, to some extent". Figure XI provides a breakdown of the responses by region.

[44] Question 30 of the first national report format.

Figure 11
Conditions to promote and encourage research which contributes to the conservation and sustainable use of biodiversity (percentage of Parties that submitted the first national report)



145. When providing additional information, Parties referred to existing ABS measures addressing this issue or generally reported on having simplified procedures for non-commercial research.

146. Some Parties provided details on the differences in procedures for non-commercial research versus procedures for commercial research, for instance:

(a) In Malaysia, instead of having a full benefit-sharing agreement, researchers need to submit a Statutory Declaration declaring that they do not intend to use the resource for commercial purposes. Specific categories of researchers (e.g. persons employed or studying in public higher education institutions, public research institutions, or government agencies within Malaysia) are exempted from applying for a permit. There are also reduced fees, and a shorter timeline for decision-making;

(b) Uruguay has a special permit for researchers who are members of the national research system. Instead of a regular permit, researchers need to submit a form online with a sworn annual statement. No access fees are expected for these types of permits and researchers have access to technical assistance to help to fill the necessary forms;

(c) In Costa Rica, it has been observed that most applications relate to non-commercial uses. Their experience over the years has shown that such projects require greater flexibility in terms of requirements and procedures. A bill to reform the Biodiversity Act is currently being considered which proposes that PIC should be required only in cases of access for commercial purposes.

147. Some Parties answered "yes" to this question on the basis of not having requirements for access to genetic resources in their country. For example, the European Union explained that its regulation recalls that the Commission and the Member States should take appropriate complementary measures to enhance the effectiveness of the implementation of the regulation and to lower costs, particularly where this would benefit academic, university and non-commercial researchers and small and medium-sized enterprises.

148. A total of 81 Parties (57%) responded that **in the development and implementation of their ABS legislation or regulatory requirements, their country had paid due regard to cases of present or imminent emergencies that threaten or damage human, animal or plant health**.[45] Of which, 45 Parties answered "yes" and 16 answered "yes, to some extent".

149. Out of the 81 Parties that answered positively to the question above, 42 Parties (30% of the total of Parties) reported that in such cases, their country **considered the need for expeditious access**

[45] Question 31 of the first national report format.

to genetic resources and expeditious fair and equitable sharing, including access to affordable treatments by those in need.[46] Figures 12 and 13 below provides a breakdown of the responses by region.

Figure 12
Due regard to cases of present or imminent emergencies that threaten or damage human, animal or plant health (percentage of Parties that submitted a first national report)

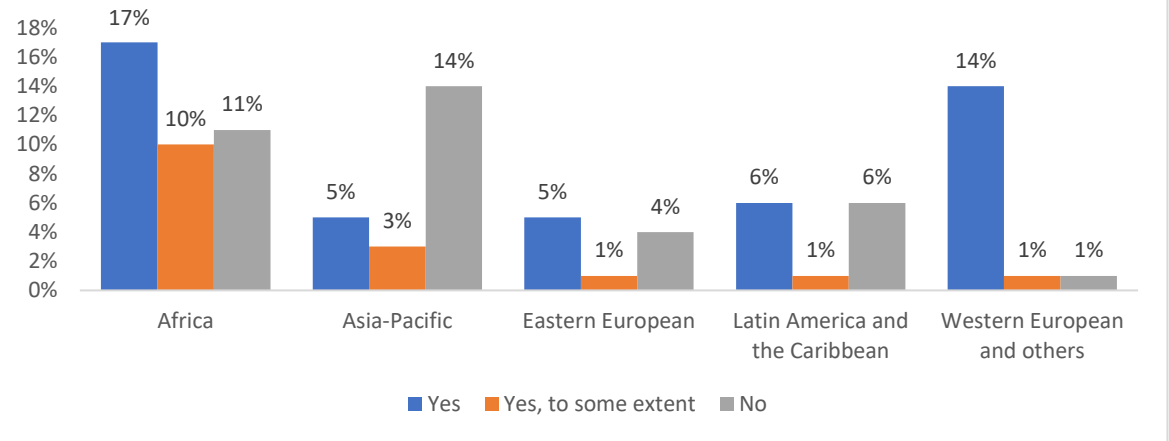
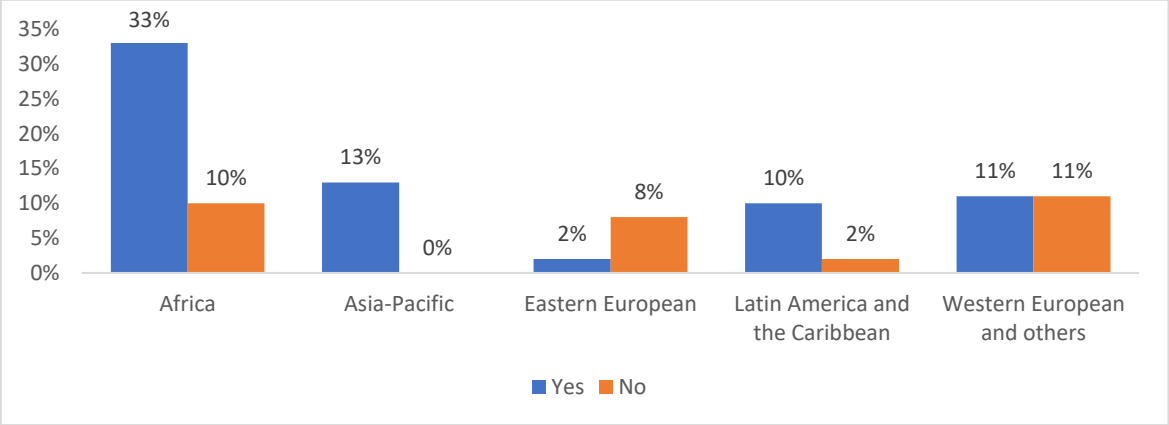


Figure 13
Consideration of the need for expeditious access and expeditious benefit-sharing (percentage of Parties that submitted a first national report)



150. The additional information provided in relation to these two questions was very similar. Some Parties stated that they paid due regard as required by Article 8 (b) without providing further details. Others referred to existing ABS measures addressing this issue or to draft measures under development or approval.

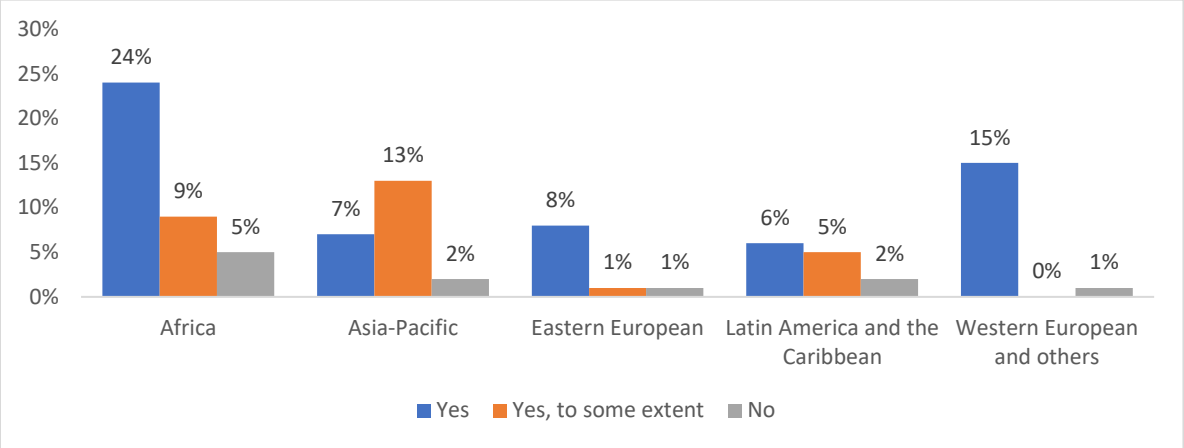
151. Some Parties explained how these cases are considered in the development and implementation of the ABS requirements. For instance, many Parties, such as Cameroon, India, Malawi, foresee an expedited and simplified process. France decided to exclude these cases from its ABS procedures. In Spain, these situations may entail an exceptional, provisional and immediate access authorization. However, the authorization is conditional on negotiating MAT after 6 months of the access to the resource. If the condition is not fulfilled, the applicant will undertake to return the net profits obtained during the provisional authorization period to Spain. Spain reported having experienced one case of this type of access.

[46] Question 31.1 of the first national report format.

152. Some Parties answered "yes" to this question based on not having requirements for access to genetic resources in their country. The European Union explained that the EU Regulation provides for a short temporal derogation from the compliance obligations for users acquiring a genetic resource that is determined to be, or is determined as likely to be, the causing pathogen of a present or imminent public health emergency of international concern.

153. Eighty-five Parties (60%) responded that in the **development and implementation of their ABS legislation or regulatory requirements, their country considered the importance of genetic resources for food and agriculture and their special role for food security**[47]. Of these 85 Parties, 65 answered "yes" and 27 responded "yes, to some extent". Figure 14 below provides a breakdown of the responses by region.

Figure 14
Consideration of the importance of genetic resources for food and agriculture and their special role for food security (percentage of Parties that submitted a first national report)



154. In providing additional information, many Parties mentioned the International Treaty for Plant Genetic Resources for Food and Agriculture (ITPGRFA) and its relationship with their national ABS frameworks to implement the Nagoya Protocol. For instance, the EU Regulation recalls Article 8(c) of the Protocol and explains that the ITPGRFA is a specialised instrument within the meaning of Article 4(4) of the Protocol.[48]

155. Additionally, some Parties provided other information on how genetic resources for food and agriculture and their role in food security is considered in the development and implementation of the ABS requirements. For instance:

(a) Cameroon reported that in the case of access to plant genetic resources for food and agriculture, the minister responsible for agriculture determines the applicable terms and conditions. The agriculture administration also participates in the country's national ABS committee.

(b) In France access to genetic resources from domestic or cultivated are excluded from the ABS procedures.

(c) In Malaysia, when determining whether to approve an access permit, the CNA is legally mandated to consider food security as a criterion.

[47] Question 32 of the first national report format.
[48] The Regulation also recognises that, where Parties have decided to use standard material transfer agreements for plant genetic resources for food and agriculture (PGRFA) which are not covered by ITPGRFA, but which are under their control and in the public domain, no due diligence declaration is required.

(d) The ABS measures of the Republic of Korea provide that where expedited access to or utilization of genetic resources is deemed necessary to ensure food security, access reporting procedures may be simplified or exempted.

156. Some Parties responded "yes" to this question on the basis that do not have access requirements for genetic resources in their country.

157. Sixty-two Parties provided **information on lessons learned, what worked well and why, difficulties, challenges and underlying causes**.[49]

158. Some Parties identified the need to address one or more of the special considerations in the revision or development of new ABS measures. Some Parties referred to the need for legal clarity and capacity for the implementation of Article 8, including having clarity on the scope of the different ABS regimes or the extent of the exclusions from the scope.

159. Some Parties reflected on aspects related to coordination among different administrations and instruments. For instance, the overlapping institutional mandates among ministries responsible for environment, agriculture, and health can be a challenge, as they are also responsible for implementing different international instruments. This results in fragmentation and hinders mutually supportive implementation of different international ABS instruments and makes intersectoral coordination particularly challenging. The need to raise awareness and improve understanding of different ABS frameworks was mentioned by many Parties.

160. For some, the establishment of a national coordination mechanism has been essential to facilitate inter-agency collaboration, but it was also noted that if human and financial resources are limited, such mechanisms could bring additional delays in administrative processes.

161. Many Parties expressed the need for ABS rules and procedures to be simplified and streamlined in the context of Article 8 of the Protocol.

162. It was mentioned that researchers regularly report lack of harmonized and simplified measures for access for research purposes, and the need to develop standard contractual clauses to facilitate access for non-commercial purposes.

163. In this regard, some Parties expressed concerned about how to address the change of intent, for example from non-commercial to commercial, or the use of PGRFA or biological samples collected for health research or pandemic response beyond their original intent. Clear guidance and monitoring mechanisms for handling the change of intent through ABS agreements was identified as a possible way to address these concerns.

7. Measures related to indigenous peoples and local communities (Article 6, 7 and 12)[50]

(a) Summary and indicator data

164. A total of 69 Parties reported that they have indigenous peoples and local communities in their country. As the indicators below demonstrate, very significant progress has been made by these 69 Parties in requiring the prior informed consent of indigenous peoples and local communities for access to their genetic resources, when they have established rights, and associated traditional knowledge.

165. This indicator has shown very significant progress since 2018. However, even though generally, the requirement for prior informed consent of indigenous peoples and local communities is included in access and benefit-sharing measures, many Parties have not fully operationalised the implementation of the prior informed consent requirement.

[49] Question 33 of the first national report.
[50] Source: responses to questions 34-41 of the first national report format.

166. It seems that there is a general lack of practical experience in implementation, and some pointed out that they have not received any requests for access for resources or knowledge of IPLCs. Challenges identified included the following:

(a) Clarifying what the term IPLCs meant in the national context, including providing clarity on the ownership of IPLCs over genetic resources and/or traditional knowledge associated with genetic resources;

(b) Lack of mechanisms for appropriate coordination for implementing the provisions of the Protocol related to indigenous peoples and local communities;

(c) Identifying the different groups of indigenous peoples and local communities, understanding the way they are organized, and being able to link traditional knowledge with the holder/s of such knowledge;

(d) Insufficient financial resources to build capacity, raise awareness and ensure effective participation of IPLCs in ABS processes, particularly when tailoring to the cultural and linguistic realities of the communities concerned;

(e) Fear of biopiracy or misappropriation, lack of trust, or historic conflicts can be part of the root causes for lack of IPLCs participation in ABS processes.

Table 7
Indicators to measure progress in establishing measures addressing Article 8 considerations

Framework of indicators	*Reference point (as at 22 February 2018)*	*9 March 2026*
Number and percentage of Parties with indigenous peoples and local communities in their country[51] *(new indicator)*	new	69 (48%)
Number and percentage of Parties where indigenous peoples and local communities have the established rights to grant access to genetic resources[52] with measures in place with the aim of ensuring the prior informed consent or approval and involvement of indigenous peoples and local communities as provided in Article 6.2	23 (47%)	47 (87%)
Number and percentage of Parties[53] with indigenous peoples and local communities in their country that have taken measures with the aim of ensuring that traditional knowledge associated with genetic resources that is held by indigenous peoples and local communities have been accessed with the prior informed consent or approval and involvement of these indigenous peoples and local communities and that mutually agreed terms have been established as provided in Article 7	21 (43%)	56 (81%)

(b) Analysis of information available

167. A total of 69 Parties (48%) responded that there are **indigenous peoples and local communities in their country (IPLCs)**.[54] Figure 15 below provides a regional breakdown of the responses. Those that responded "yes" to this question were invited to complete the questions in the rest of the section.

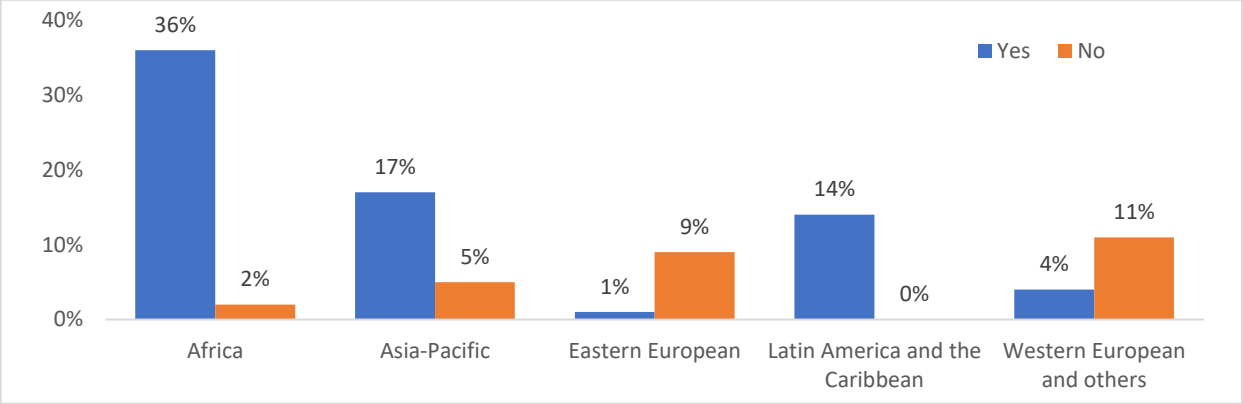
168. In providing further information, some Parties referred to formal recognition of indigenous peoples and local communities in their country's constitution or other legislation (e.g. Bolivia, Cuba,

[51] A new indicator has been added to provide context to the other indicators and is based on responses to question 34 of the first national report format.
[52] Percentages in this indicator has been calculated based on the number of Parties where indigenous peoples and local communities have the established rights to grant access to genetic resources.
[53] Percentages are calculated from the number of Parties that have IPLCs in their country
[54] Question 34 of the first national report format.

Democratic Republic of Congo). Other Parties reported the existence of these groups but clarified that there is no legal or distinct recognition in their national framework (e.g. Albania, Bangladesh, Bhutan).

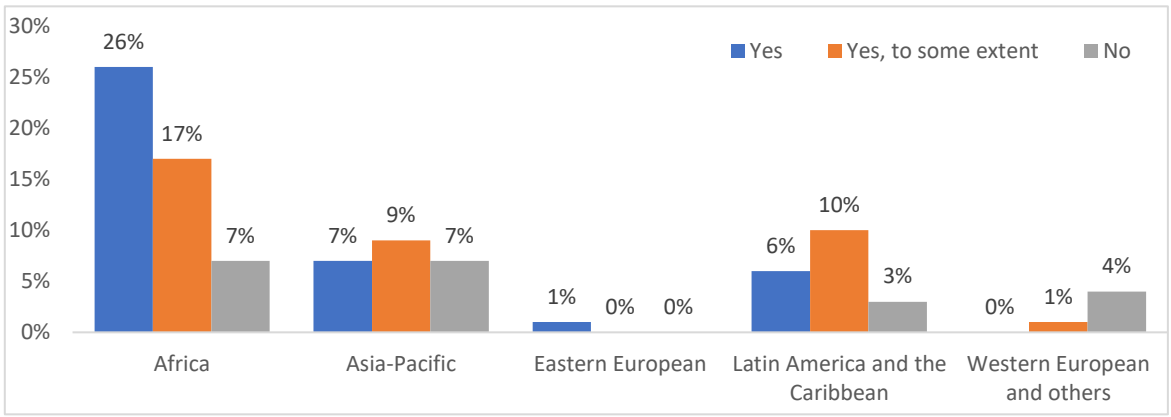
169. Some expressed that they only have either indigenous peoples in their territory (e.g. Finland, Guyana), or only local communities (e.g. Ghana, Zambia, Qatar), while other Parties stated having both (e.g. the Bolivarian Republic of Venezuela, South Africa, Kiribati).

Figure 15
Parties with indigenous peoples and local communities (percentage of Parties that submitted a first national report)



170. Out of the 69 Parties that have IPLCs in their country, 54 Parties (78%) responded that the **indigenous peoples and local communities have the established right to grant access to genetic resources according to their country's domestic law**.[55] 28 Parties answered "yes" to this question and 26 answered "yes, to some extent". Figure 16 provides a regional breakdown of the responses. In providing further information, Parties referred to existing measures, progress made in adopting the necessary measures or to the fact that PIC from IPLCs is required for access.

Figure 16
Established rights of indigenous peoples and local communities to grant access to genetic resources (percentage of Parties that submitted a first national report)



171. Out of the 54 Parties where IPLCs have the established right to grant access to genetic resources, 47 Parties (87%) responded that they have **measures in place with the aim of ensuring that the prior informed consent or approval and involvement of indigenous peoples and local communities is obtained for access to genetic resource** (28 Parties answered "yes" and 19 "yes, to some extent"); and 45 Parties (83%) reported that their **country sets out criteria and/or a process for obtaining prior informed consent or approval and involvement of indigenous peoples and**

[55] Question 35 of the first national report format.

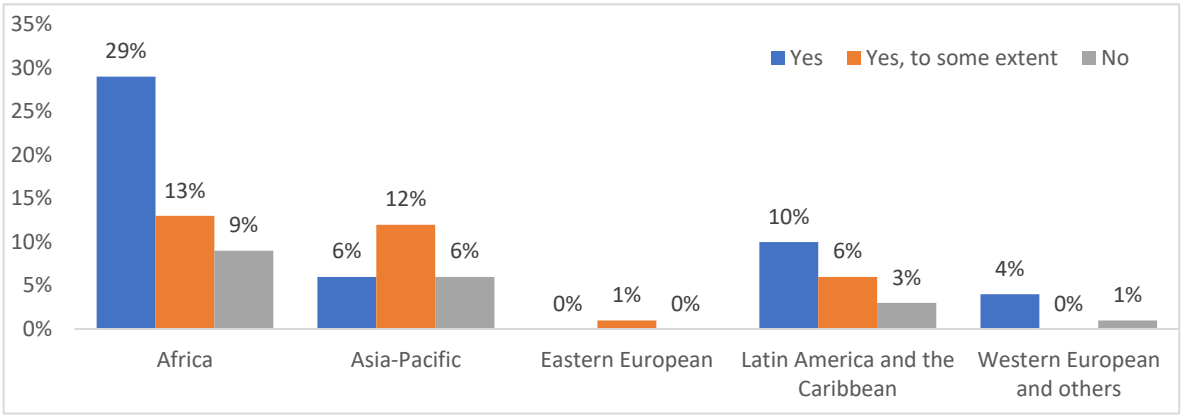
local communities for access to genetic resources (31 Parties answered "yes" and 17 "yes, to some extent").[56]

172. Those Parties that responded "yes, to some extent" or "no" were invited to provide more information, and many provided information on the existing measures or the need to have further measures adopted. Generally, the requirement for PIC of IPLCs is included in the ABS measures, but often Parties have not fully operationalised the implementation of the PIC requirement either through more detailed measures or in practice.

173. For instance, Costa Rica explained that the relevant measures still need to be approved as they require a consultation process with indigenous peoples from 24 territories. The consultations have not taken place yet due to lack of financial resources.

174. Out of the 69 Parties that have IPLCs in their country, 56 Parties (81%) reported that their country has **taken measures with the aim of ensuring that traditional knowledge associated with genetic resources that is held by indigenous peoples and local communities within their country is accessed with their prior informed consent, or their approval and involvement, and that mutually agreed terms have been established** (34 Parties answered "yes" and 22 "yes, to some extent").[57]

Figure 17
Measures to implement Article 7 (percentage of Parties that submitted a first national report)



175. Parties, in providing additional information, referred to the ABS measures in place and the legal requirements for PIC and MAT. Some Parties noted that they have not fully operationalised these provisions and some mentioned the lack of practical experience or the fact that no requests for access have been received.

176. In this regard, Mexico, for the moment, is opting for a flexible approach, and while the obligation to involve communities and establish mutually agreed terms is embedded in the legal framework, practical procedures are currently applied with flexibility and, on a case-specific basis.

177. Some Parties provided details on the relationship between the CNA and IPLCs for granting PIC and MAT. For instance:

(a) In Benin, IPLCs are supported in the ABS process by a person designated by the CNA;

(b) While in Ethiopia the CNA negotiates and concludes MAT based on the community's PIC, in Côte d'Ivoire, the IPLCs negotiate themselves MAT;

(c) In Madagascar, the application for access submitted to the CNA needs to include the PIC of the holders of the associated traditional knowledge.

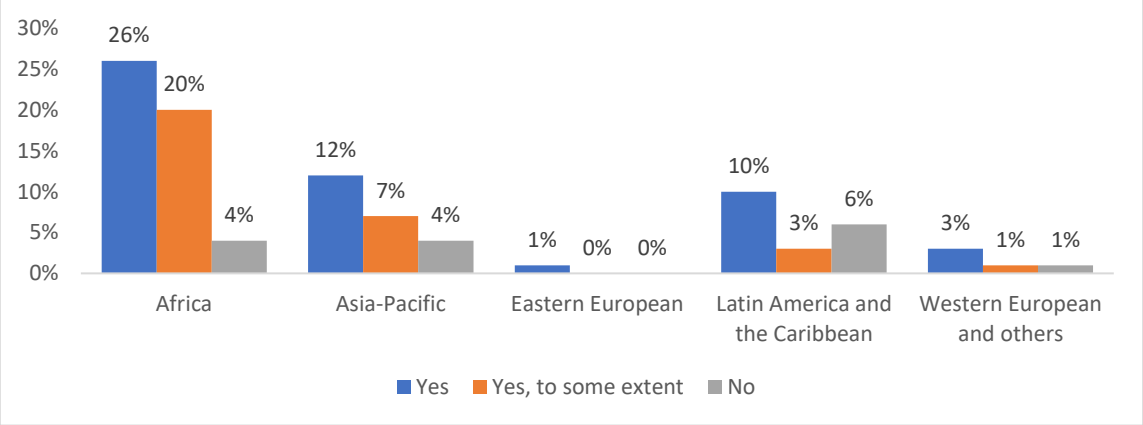
[56] Questions 35.1 and 35.2 of the first national report format.
[57] Question 36 of the first national report format.

(d) Ecuador reported that PIC and MAT are agreed in assembly or according to the decision-making process of the specific IPLCs;

(e) In Finland, the Sami Parliament manages a database in which traditional knowledge of the Sami people associated with genetic resources intended for research and development purposes can be recorded. Applications to access the knowledge in this database can be submitted to the competent authority, who notifies the Sami Parliament. The MAT between the Sami Parliament and the user are to be approved by the CNA. Where necessary, the CNA negotiates with the Sami Parliament about MAT.

178. Out of the 69 Parties that have IPLCs in their country, 58 Parties (89%) **reported that their country has considered IPLCs' customary laws, community protocols and procedures with respect to traditional knowledge associated with genetic resources in implementing the Protocol**.[58] Of these 58 Parties, 36 Parties answered "yes" and 22 responded "yes, to some extent". The figure below provides a regional breakdown of the responses.

Figure 18
Measures to implement Article 12.1 (percentage of Parties that submitted a first national report)



179. Parties provided information on relevant laws addressing recognition of customary laws and some also indicated having considered customary laws in their ABS measures. Many Parties reported having supported the development of community protocols and the role such protocols play in the legal framework of the country.

180. The following provides some examples of the approaches taken by Parties to implement Article 12.1 of the Protocol:

(a) In Bhutan, a standard document needs to be provided to document community consent, while the process needs to respect community-specific protocols and customary decision-making processes.

(b) Ecuador is envisaging the registration of community protocols in the National Service of Intellectual Property Rights to give them legal recognition.

(c) Guyana's policy emphasizes respect for community governance systems, cultural norms, and traditional authorities such as Village Councils as outlined in the Amerindian Act.

(d) The Republic of Korea has a defensive protection system for traditional knowledge, including a national traditional knowledge database and the Korean Journal of Traditional Knowledge has been used as prior art for patent searches to prevent the acquisition of patent rights

[58] Question 37 of the first national report format.

over traditional knowledge originating from Korea, both domestically and internationally. Malaysia also reported a similar system (MyTKDL) with over 8,600 entries of traditional knowledge.

181. Out of the 69 Parties that have IPLCs in their country, 50 Parties (72%) reported that their **country established mechanisms, with the effective participation of indigenous peoples and local communities concerned, to inform potential users of traditional knowledge associated with genetic resources about their obligations**.[59] Of these, 26 Parties answered "yes" and 24 responded "yes, to some extent".

182. In their reports some Parties referred to mechanisms for participation of IPLCs rather than mechanisms to inform potential users about their obligations.

183. Parties often mentioned awareness-raising activities or materials (e.g. brochures, videos), workshops, development of guidelines or documents, or digital means, such the ABS Clearing-House, websites or registries of traditional knowledge as means to inform potential users.

184. Out of the 69 Parties that have IPLCs in their country, 59 Parties (85%) **reported that their country endeavoured not to restrict the customary use and exchange of genetic resources and associated traditional knowledge within and among indigenous peoples and local communities** (41 Parties answered "yes" and 18 responded "yes, to some extent").[60]

185. Many Parties noted that nothing in their legislation restricted customary use and exchange. Other Parties reported addressing this issue in the existing relevant ABS measures, most commonly by excluding customary use and exchange from the legislation (e.g. Cuba, France, Peru, Uganda)

186. 51 Parties provided **information on lessons learned, what worked well and why, difficulties, challenges and underlying causes**.[61]

187. A number of Parties reflected on the lack of experience with access applications or cases that would involve PIC from IPLCs or absence of the necessary ABS measures. Several mentioned institutional issues or lack of mechanisms for appropriate coordination as one of the challenges for implementing the IPLC-related provisions of the Protocol.

188. Some highlighted the importance of having procedural flexibility in countries with more cultural diversity to adapt to the context of each community.

189. Identifying the different groups of indigenous peoples and local communities, understanding the way they are organized, and being able to link traditional knowledge with the holder/s of such knowledge is still considered a challenge by many Parties. The creation of a national catalogue of IPLCs or inventories and registries of traditional knowledge was considered by some as a way to address some of these challenges.

190. Many Parties noted that building capacity, raising awareness and ensuring effective participation of IPLCs in ABS processes require substantial financial resources, particularly where activities need to be tailored to the specific cultural and linguistic context of the communities concerned. In the absence of such support, Parties observed a persisted asymmetry in knowledge and capacities between IPLCs, users and authorities which can hinder the fair and equitable sharing of benefits. Some Parties further indicated that concerns related to biopiracy or misappropriation, lack of trust, in certain cases, r historical conflicts may also constitute underlying root causes limiting IPLCs participation in ABS processes.

191. Some Parties provided details on their practical experience. For instance, South Africa explained that with the signing of the Rooibos agreement in 2019, the local communities gained practical contract drafting and negotiation experience which contributed to the successful negotiation

[59] Question 38 of the first national report format.
[60] Question 40 of the first national report format.
[61] Question 41 of the first national report format.

of the additional benefit sharing agreements on two other plant species, namely, Buchu and Honeybush.

8. Transboundary cooperation (Article 11) [62]

(a) Summary

192. Ninety-six Parties (68%) responded that they endeavour to cooperate, with the involvement of indigenous peoples and local communities concerned where applicable, in instances where the same genetic resources are found in situ within the territory of more than one and where the same traditional knowledge associated with genetic resources is shared by one or more indigenous peoples and local communities in several Parties.

193. Transboundary cooperation under Article 11 of the Nagoya Protocol remains limited in practice, despite broad recognition of its relevance, willingness to cooperate among Parties and the existence of enabling legal and policy frameworks.

194. Limited implementation is largely driven by contextual and structural factors, including the absence of triggering cases, geographic and ecological realities, and, in some jurisdictions, the absence or non-recognition of IPLCs for cooperation in associated traditional knowledge, or genetic resources held by IPLCS when applicable.

195. Where cooperation does occur, it tends to rely on informal, regional, or ecosystem-based arrangements, with existing conservation and community frameworks serving as the primary vehicles in the absence of concrete ABS-specific cases.

(b) Analysis of information available

196. Ninety-six Parties (68%) responded that they endeavour **to cooperate, with the involvement of indigenous peoples and local communities concerned where applicable, in instances where the same genetic resources are found in situ within the territory of more than one Party** .[63] A clear majority of responses (68) indicated that no cooperation had taken place, with 48 Parties replying “no” and a further 20 indicating that the question was “not applicable”. The remaining 28 Parties reported some level of cooperation, including 10 responding “yes” and 18 “yes, to some extent”.

197. The same ninety-six Parties (68 percent) also responded to the question regarding **efforts to cooperate in instances where the same traditional knowledge associated with genetic resources is shared by one or more indigenous peoples and local communities in several Parties[64]**. Again, most responses (71) indicated that no such cooperation has taken place, with 43 Parties replying “no” and a further 28 indicating that the question was “not applicable”. The remaining 25 Parties reported some level of cooperation, including 9 responding “yes” and 16 “yes, to some extent”.

198. Responses to both questions point to a shared underlying pattern: while Parties broadly acknowledge the relevance of, and the existence of domestic legal or policy frameworks for, transboundary cooperation for both shared genetic resources and associated traditional knowledge, practical experience remains limited. This is mainly due to:

(a) The absence of concrete triggering cases, with many Parties reporting that no access requests or situations involving shared genetic resources or shared traditional knowledge have arisen.

(b) Geographic and ecological factors, including island geography, high levels of endemism, or nationally contained ecosystems, which reduce the likelihood of transboundary situations.

[62] Source: responses to questions 47-49 of the first national report format.
[63] Question 47 of the first national report format.
[64] Question 48 of the first national report format.

(c) The absence or non-recognition of IPLCs in some national jurisdictions, leading to a number of Parties to consider cooperation with IPLCs not applicable.

199. In cases where cross-border interaction does occur, it often takes place through informal, community-level, cultural, conservation, or regional arrangements, rather than through ABS-specific procedures, as the two examples below illustrate:

(a) The Central African Republic referred to cooperation within the Trinational Sangha landscape shared with Cameroon and the Republic of Congo, where IPLCs exchanging traditional knowledge related to wildlife and resource use across borders, reflecting a long-standing community interaction;

(b) Malaysia highlighted cooperation under the Heart of Borneo Initiative with Indonesia and Brunei Darussalam, focusing on conservation, scientific coordination, and IPLC engagement within a shared rainforest ecosystem that hosts vast genetic resources.

200. These examples also highlight elements that Parties commonly associate with good practice in transboundary contexts, including reliance on existing regional frameworks and ecosystem-based cooperation frameworks, continuity of community engagement across borders, and the use of established conservation or cultural cooperation mechanisms in the absence of concrete ABS cases. Parties also highlighted the establishment of legal provisions and early consideration of IPLCs in transboundary contexts as valuable.

9. Awareness-raising (Article 21) [65]

(a) Summary

201. Information provided demonstrates that most of the Parties (94 Parties) have taken measures to raise awareness of the importance of genetic resources and traditional knowledge associated with genetic resources and related ABS issues. These efforts are largely activity-based, with forty of these Parties reported having adopted some form of awareness-raising strategy for ABS. The extent and consistency of implementation of awareness-raising activities and strategies is uncertain and uneven among Parties, as it is closely linked to available resources and capacities.

202. Some Parties expressed that activities were sporadic, insufficiently systematic, or concentrated around specific moments such as the ratification of the Protocol or the preparation of national reports. Others cited inadequate financial and technical resources as a constraint.

203. Many Parties emphasized that raising awareness of the Nagoya Protocol and ABS across different stakeholder groups and governance levels is a necessary precondition for effective implementation of the Protocol.

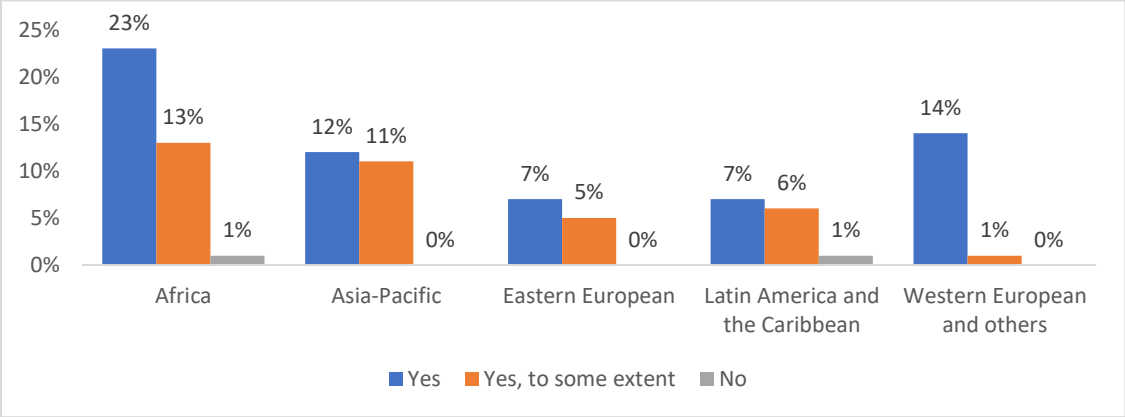
204. Further progress in implementing the Nagoya Protocol may require a renewed emphasis on more systematic, sustained, and strategically anchored awareness-raising efforts, beyond one-off activities.

(b) Analysis of information available

205. Ninety-four Parties (66%) confirmed that they took **measures to raise awareness of the importance of genetic resources and traditional knowledge associated with genetic resources and related access and benefit-sharing issues**.[66] Of this total, 60 responded to the **question regarding whether they had endeavoured to cooperate, with the involvement of IPLCs, in cases where the same genetic resources are found in situ within the territory of more than one Party** responded "yes" to the question and 34 responded "yes, to some extent". The figure below provides a regional breakdown of the responses provided.

[65] Source: responses to question 53 of the first national report format.
[66] Question 53 of the first national report format.

Figure 19
Measures to implement Article 21 (percentage by Parties that submitted a first national report)



206. The most frequently reported tools for raising awareness include workshops, seminars, training sessions, and multi-stakeholder consultations, which targeted a broad range of audiences including government officials, researchers, universities, IPLCs, traditional healers, the private sector, and civil society organizations.

207. Several countries also developed dedicated websites and/or national clearing-houses (e.g. Bangladesh, Czechia, Denmark), informational brochures (e.g. Belarus, Eritrea, Guyana, Japan, Uruguay), and email communication channels including helpdesks (e.g. Hungary, Japan, the Netherlands, and Spain) to reach potential users of genetic resources and disseminate information on compliance with the Nagoya Protocol and applicable national legislation.

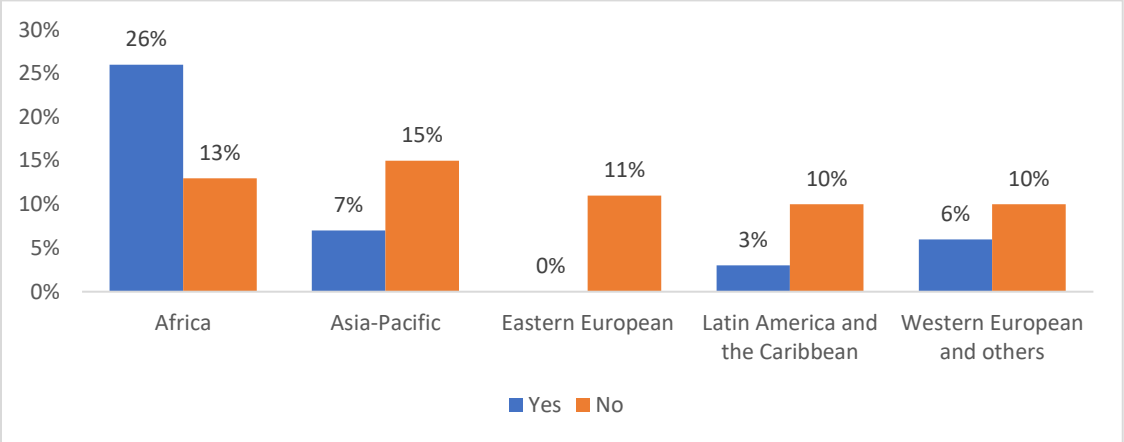
208. Close to 40% of Parties that provided information framed their awareness-raising efforts within broader national frameworks, including national biodiversity strategies and action plans (e.g. Sudan), ABS laws and regulations, and Global Environment Facility (GEF)-funded or regionally supported projects (e.g. Morocco). Awareness-raising activities frequently addressed not only the obligations of users of genetic resources but also IPLC rights, the negotiation of mutually agreed terms, and the links between biodiversity conservation and sustainable development. Some Parties incorporated ABS themes into academic curricula, radio programs, social media campaigns, and participation in local and international conferences and exhibitions.

209. Fourteen Parties acknowledged limitations in their awareness-raising efforts, noting that activities were sporadic, insufficiently systematic, or concentrated around specific moments such as the ratification of the Protocol or the preparation of national reports. A small number of Parties cited inadequate financial resources as a constraint.

210. Of the ninety-five Parties that responded positively to the question above forty (42%) **reported having adopted an awareness-raising strategy for the Nagoya Protocol on ABS**.[67] This indicates that a significant majority of Parties have yet to formally adopt a dedicated awareness-raising strategy for the Nagoya Protocol on ABS.

[67] Question 53.1 of the first national report format.

Figure 20
Percentage of Parties with an ABS awareness-raising strategy (percentage of Parties that submitted a first national report)



211. Among those that answered affirmatively, the types of strategies vary considerably in form and scope. Examples of awareness-raising strategies adopted by Parties are the following:

(a) Standalone national ABS communication or awareness plans, such as Cameroon's 2024 Communication, Education, and Public Awareness Plan on ABS;

(b) ABS communication or awareness plans embedded in national ABS strategies as in the case of Chad’s national strategy and action plan on ABS which includes a dedicated awareness-raising component;

(c) ABS communication or awareness plans incorporated into updated NBSAPs, for example Burkina Faso’s NBSAP 2025–2030, together with its communication plan, incorporates an awareness-raising strategy on ABS.

212. In terms of scope, the awareness-raising strategies were reported to target a range of stakeholders with some including the general public (e.g. Malawi), and others prioritizing certain stakeholders such as IPLCs (e.g. South Africa and Dominican Republic), sectoral engagement through associations and consortia (e.g. United Kingdom of Great Britain and Northern Ireland); academic communities and private sector (e.g. Uruguay); and targeted engagement with the bioprospecting community (e.g. South Africa).

213. Of the fifty-five Parties that have yet to adopt an awareness-raising strategy for the Nagoya Protocol on ABS, seventeen (30%) have indicated that they have a strategy under development or have plans to develop one in the future, while sixteen (29%) countries report that they have been implementing awareness-raising activities in the absence of a formal strategy.

214. The Central African Republic, which reported not having a national awareness-raising strategy, noted that at the subregional level, the Central African Forests Commission (COMIFAC) has developed a communication, education and public awareness tool on the Nagoya Protocol on ABS. This tool is currently being applied in the Central African Republic pending the development of a national awareness-raising strategy tailored to the country’s context.

215. The most cited reasons for not developing an awareness-raising strategy include financial constraints, the absence or pending adoption of national ABS legislation, competing institutional priorities, insufficient capacity, and recent ratification of the Protocol.

10. Measures related to other international instruments (Article 4)[68]

(a) Summary

216. A total of 71 Parties (54%) responded that they are a Party to a specialized international access and benefit-sharing instrument, namely, the International Treaty for Plant Genetic Resources for Food and Agriculture (ITPGRFA), the World Health Organization Pandemic Influenza Preparedness Framework (WHO PIP framework), and the 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 (BBNJ Agreement).

217. Parties also reported on ongoing work on the WHO Pandemic Agreement on pathogen Access and Benefit-sharing System (PABS).

218. Out of the 71 Parties, 66 responded that they have adopted measures to implement the specialized international ABS instrument. However, mutually supportive implementation among ABS instruments could be further reinforced as insufficient institutional coordination and fragmented mandates, or lack of awareness and legal clarity are still important constraints for some Parties.

219. The assessment further indicates that Parties generally understand the relationship between the Nagoya Protocol and specialised international instruments as one based on a division of scope and complementarity, rather than overlap or substitution. Specialized instruments are typically viewed as governing clearly defined categories of generic resources or specific contexts, while the Nagoya Protocol continues to provide the overarching framework for access and benefit-sharing in all other cases within national jurisdiction. This functional understanding has supported implementation in many Parties, particularly where the scope of instruments is clearly articulated in national legal and institutional arrangements.

220. At the same time, the assessment highlights that effective and mutual supportive implementation depends not only on formal participation in specialised instruments, but also on the existence of strong enabling conditions at the national, regional, and international levels. Where coordination mechanisms clearly designate focal points, harmonized policies and sustained capacity building efforts are in place, Parties are better able to operationalise coherence between specialised instruments and the Nagoya Protocol. Conversely, gaps in institutional coordination, legal clarity, or awareness continue to limit the realisation of mutually supportive implementation in some context.

(b) Analysis of available information

221. A total of 71 Parties (54%) responded that they are a **Party to a specialized international access and benefit-sharing instrument**.[69]

222. Most Parties reported being Parties to at least one specialized international ABS instrument, mainly the International Treaty for Plant Genetic Resources for Food and Agriculture (ITPGRFA) and the World Health Organization Pandemic Influenza Preparedness Framework (WHO PIP framework) which governs access to and sharing of influenza viruses with human pandemic potential. These instruments were generally reported as established and operational arrangements that are already integrated into national public health and ABS systems.

223. A smaller group of Parties also reported participation in negotiations of the WHO Pandemic Agreement, including discussions on the development of a broader Pathogen Access and Benefit-sharing System (PABS). As these negotiations are still underway, references to PABS were typically framed in terms of prospective or future obligations rather than existing legal or operational arrangements.

224. In addition, several Parties also reported progress toward ratification of the Agreement under the United Nations Convention on the Law of the Sea on the Conservation and Sustainable Use of

[68] Source: responses to question 66 of the first national report

[69] Question 66 of the first national report.

Marine Biological Diversity of Areas beyond National Jurisdiction (BBNJ Agreement). These references were often presented as complimentary to Parties' engagement in other specialised instruments relevant to access and benefit-sharing.

225. At the same time, the assessment indicates some variation in how Parties interpret and report on Article 4, paragraph 4. In a number of cases, references to WHO-related instruments were framed in broad or generic terms, without specifying the particular legal or operational framework concerned. This variation highlights challenges in ensuring consistent interpretation and reporting and limits the ability to draw precise conclusions regarding the application of Article 4(4) across Parties, underscoring the need for continued clarification to support coherent understanding of the relationship between the Nagoya Protocol and other international instruments.

226. Parties further referenced participation in other relevant organisation, such as the World Intellectual Property Organization (WIPO), the Commission of Genetic Resources for Food and Agriculture (CGRFA).

227. Other instruments mentioned include the International Health Regulations under the WHO and regional ABS instruments such as the Andean Community Decision 391 and the Swakopmund Protocol on the Protection of Traditional Knowledge and Expressions of Folklore within the Framework of the African Regional Intellectual Property Organization.

228. Out of the 71 Parties that answered "yes" to the previous question, 66 (46%) Parties responded that they have **adopted measures to implement the specialized international ABS instruments**[70]. Forty-three of these Parties answered "yes" and 23 "yes, to some extent"

229. Across reports, Parties described the adoption of legal, administrative and institutional measures to implement or coordinate with specialized instruments, noting different levels in implementation. Some Parties reported legal exclusions for specialized instruments such as Malaysia's ABS Act 795, which excludes species under the multilateral system from domestic ABS procedures.

230. Parties also established or designated institutional structures to support implementation of the ITPGRFA and the WHO PIP Framework. These include National Focal Points (e.g. Burkina Faso, Ghana) and coordination bodies such as gene banks, PGRFA committees and national implementation units (e.g. Estonia, Malawi, Kenya, Sudan, Uruguay). Many Parties reported systematic use of standardized procedures, including the Standard Material Transfer Agreement for the multilateral system transactions (e.g. Austria, Lao PDR) and application of public health mechanisms aligned with WHO PIP obligations (e.g. Croatia, Denmark).

231. Soft law and policy alignment measures were widely reported and play an important role in ensuring mutually supportive implementation under Article 4.4. Several Parties integrate ABS obligations into national biodiversity strategies, agricultural policies and sectoral planning instruments and ABS frameworks. For example, Eritrea incorporates its commitments on plant genetic resources into national biodiversity planning, while Mongolia integrates ITPGRFA requirements into sectoral laws and institutional arrangements. France aligns obligations under the ITPGRFA, BBNJ and WHO PIP Framework within national policy frameworks. Japan's ABS guidelines distinguish between Nagoya Protocol and specialised instruments. These alignment efforts illustrate how Parties use policy instruments and soft law mechanisms to ensure coherence across ABS obligations and specialised regimes.

232. Parties described a wide range of national processes for recognizing and operationalising specialized instruments. Several adopted hierarchical approaches such as India and Malaysia which legally exclude genetic resources governed by specialised instruments like the ITPGRFA or WHO PIP from national ABS procedures. Others emphasised mutual supportiveness, including the European Union, Ethiopia and Zambia, which align national ABS frameworks with specialised

[70] Question 66.1 of the first national report.

instrument obligations. Parties further described practical mechanisms for compliance such as mandatory use of SMTAs (e.g. Austria, Belgium, Lebanon), establishment of inter institutional coordination mechanisms (e.g. Uruguay's ABS-ITPGRFA cooperation committee), and pending legislative reforms aimed at harmonizing ABS with specialised instruments, for example, ITPGRFA (e.g. Lebanon, Madagascar, Togo).

233. Reports also described the relationship between the Nagoya Protocol and specialized international instruments by distinguishing between division of scope at the international level and legal exclusion at the national level. Several Parties emphasized that these instruments operate through a clear delineation of scope, whereby specialised regimes govern certain specific categories of genetic resources while the Nagoya Protocol applies to all others.

234. In this regard, a number of Parties highlighted a clear division of scope between regimes. For example, Malaysia and India reported that genetic resources listed under Annex I of the ITPGRFA are governed by the Treaty's Multilateral System, while non-Annex I plant genetic resources remain subject to national ABS measures under the Nagoya Protocol.

235. Other Parties emphasized the complementary nature in relation to geographic scope. For instance, Spain, Mexico and India noted that the BBNJ Agreement applies to marine genetic resources in areas beyond national jurisdiction whereas the Nagoya Protocol continues to govern access and benefit-sharing within national jurisdiction.

236. More broadly, several Parties underscored that specialised instruments and the Nagoya Protocol are intended to operate in a mutually supportive manner. In this context, specialized instruments regulate defined categories of genetic resources not covered by those instruments as reported by Belgium, Malaysia, India, Uruguay.

237. Parties identified several challenges and underlying causes affecting implementation. These include limited national implementation capacity, lack of legal clarity or pending laws, insufficient institutional coordination and fragmented mandates, low levels of stakeholder awareness, and financial and human resource constraints.

238. Finally, Parties highlighted a range of enabling conditions that support effective implementation of the Nagoya Protocol and strengthen coordination between specialized instruments and national ABS systems. These conditions were often described as critical for ensuring coherence across regimes and for facilitating practical implementation on the ground.

239. Several Parties pointed to the role of well functioning national institutions in supporting joint implementation. In particular, the presence of designated focal points and gene banks and national committees on PGRFA committees was reported to facilitate coordination between the ITPGRFA and national ABS frameworks, as demonstrated in Estonia, Sudan, Ghana and Burkina Faso.

240. Other Parties emphasized the value of dedicated coordination mechanisms. Examples include Uruguay's cooperation committee on ABS and the ITPGRFA, and Costa Rica's institutional competence agreement, which were reported to help ensure clear division of responsibility and mutually supportive implementation across regimes.

241. At the regional and international levels, Parties noted that cooperative platforms further reinforce coordination efforts. The multilateral system of the ITPGRFA, supported by regional and international cooperation mechanisms, was highlighted as playing a key role. In addition, FAO was noted as supporting coordination on plant genetic resources across several Parties, while WHO's GISRS facilitates implementation of the PIP Framework in countries such as Croatia, Japan and Kenya. The Amazon Cooperation Treaty Organization (ACTO) was also cited as providing a regional platform for ABS collaboration among Parties, including Ecuador.

242. Taken together, these enabling conditions, combined with harmonized national policies and ABS frameworks as reported by countries such as India and Uruguay, and donor supported capacity-

building programs across many Parties, illustrates how Parties are seeking to operationalise coherence among specialised instruments and the Nagoya Protocol.

B. Assessment of effectiveness [71]

1. Summary and indicator data

243. As indicators in table 8 demonstrate, good progress has been made in establishing measures and creating some of the conditions for access necessary to operationalise the Protocol since the reference point that established baselines in 2018. This includes progress in providing for the issuance of permits or their equivalent, issuing internationally recognized certificates of compliance, and in implementing the special considerations included in Article 8 of the Protocol.

244. Despite this progress, a number of conditions must be met before Parties and indigenous peoples and local communities can receive benefits. First, ABS measures and the associated institutional structures need to be established and fully operational. Users must apply for access and obtain prior informed consent, mutually agreed terms must be concluded and permits or their equivalent issued.

245. Depending on the benefit-sharing terms agreed, the process from access to genetic resources to their utilization and potential benefit-sharing may take many years or even decades, particularly in the case of commercial use. Compliance provisions and systems to monitor the utilization of genetic resources and related benefit-sharing help ensure that benefits are shared once the genetic resource leave the provider country.

246. While the impact of the Nagoya Protocol depends in part on the stage of implementation reached by Parties, effective fair and equitable benefit-sharing requires all Parties, indigenous peoples and local communities, and business and scientific communities to fully engage in ABS processes.

247. Therefore, even though many Parties have made progress in some of those initial steps, for some Parties this has not yet translated into benefit-sharing outcomes.

248. Of the Parties requiring PIC, 37% reported having received monetary benefits from granting access to genetic resources for their utilization (28 Parties), and 14% of the Parties with indigenous peoples and local communities in their country reported receiving monetary benefits from granting access to traditional knowledge associated with genetic resources (10 Parties).

249. Most Parties that indicated having received benefits reported access fees and upfront payments is the most common forms of monetary benefit-sharing received, followed by research funding, grants and scholarships.

250. A significant number of Parties reported on the establishment of ABS funds or plans to establish such funds to support tracking of benefits received and to channel benefits towards the conservation and sustainable use of biodiversity or to the custodians of biodiversity.

251. Twenty-three Parties provided numerical information on benefits generated from access to genetic resources and associated traditional knowledge, often presenting aggregated figures covering both types of access. Many other Parties indicated that they are not able to report on benefits received, citing the absence of systems to account or track such benefits. This challenge is widely recognized as significant, as it also points to limitations in the ability to monitor benefit-sharing outcomes and the implementation of MAT and ABS agreements. In some cases, other Parties report having the information, but it is considered confidential, and therefore it is not shared.

252. It is estimated that approximately $53 million were received as benefits from access to genetic resources and associated traditional knowledge since the entry into force of the Protocol. It can be

[71] Source: responses to questions 10, 12, 19, 30–32 and 43–45 of the first national report format and information submitted by the seventh national report under the CBD with regard to monetary and non-monetary benefit-sharing for measuring progress in Goal C and Target 13.

inferred from all available data in other parts of the reports that benefits from traditional knowledge accounts for a small percentage of the total amount. For example, taking into account the IRCCs issued, it shows that only 3% of the total have been granted for access to associated traditional knowledge.

253. Of the reported benefits received ($53 million), 82% went to three Parties, reporting the highest values: India ($34,600,000), Costa Rica ($5,322,750) and South Africa ($4,621,072) while ten Parties reported comparatively small amounts, each below $100,000. In terms of the number of countries reporting the receipt of benefits, Africa was the leading region, followed by the Asia-Pacific region.

254. In summary, monetary benefits arising from access to genetic resources are reported to accrue in substantial amounts to a relatively limited number of Parties. Benefits generated from access to traditional knowledge represent a comparatively small share of the total benefits, both in terms of the amounts reported and the number of Parties receiving them. This illustrates that ABS has potential when fully operationalized and experience is gained in implementation. As Parties advance in implementation, benefit-sharing would be more widespread and contribute to the conservation and sustainable use of biological diversity.

255. With regards to non-monetary benefits, 80% of Parties requiring prior informed consent for access to genetic resources reported having received non-monetary benefits arising from the granting of access to genetic resources for their utilization (59 Parties). In addition, 39% of Parties with indigenous peoples and local communities in their territory reported having received non-monetary benefits from granting access to traditional knowledge associated with genetic resources (27 Parties). Sharing of information and research results is the most common type of non-monetary benefit-sharing received, followed by scientific collaboration and joint publications and capacity-building, capacity development and training

256. Parties provided specific examples of how benefit sharing and implementation of the Protocol have contributed to local economies and conservation and sustainable use of biodiversity. Some of these benefits are also reported by Parties that are still in the process of developing measures operationalising their legal and institutional frameworks. For instance, Parties indicated that the Protocol has led to:

(a) Raising awareness of the value of genetic resources and associated traditional knowledge.

(b) Sustainable management of resources relevant for ABS value chains and development of products, including through the development of nurseries, sustainable harvesting and post-harvest processing.

(c) Local employment.

(d) More systematic documentation of genetic diversity and of best practices in collection and utilization of genetic resources.

(e) Researchers being more open and cooperative in sharing the results of their studies and being more encouraged to align their activities with conservation objectives;

(f) Enhanced Capacity building, information exchange, technology transfer and co-authorship arrangements, which significantly enhance national research capacity;

(g) Enhanced IPLC participation in biodiversity governance and strengthened ownership and sustainability of efforts;

(h) Universities, research centres, gene banks public institutions students, or local laboratories benefitting from non-monetary benefits.

Table 8
Indicators to measures progress on effectiveness of implementation of the Nagoya Protocol

Framework of indicators	*Reference point (as at 22 February 2018)*	*9 March 2026*
Number and percentage[72] of Parties requiring prior informed consent for access to genetic resources that provide information on how to apply for prior informed consent as provided in Article 6.3 (c)	27 (73%)	68 (91%)
Number and percentage[73] of Parties requiring prior informed consent providing for the issuance at the time of access of a permit or its equivalent as provided in Article 6.3 (e)	32 (86%)	69 (93%)
Number and percentage of Parties that have published internationally recognized certificates of compliance (IRCCs) in the ABS Clearing-House	12 (11%)	34 (24%)
Number and percentage of Parties that created conditions to promote and encourage research which contributes to the conservation and sustainable use of biodiversity as provided in Article 8(a)	48 (46%)	81 (57%)
Number and percentage of Parties that paid due regard to cases of present or imminent emergencies that threaten or damage human, animal or plant health as provided in Article 8(b)	39 (37%)	81 (57%)
Number and percentage of Parties that have taken into consideration the need for expeditious access to genetic resources and expeditious fair and equitable sharing of benefits arising out of the use of such genetic resources as provided in Article 8(b)	26 (25%)	42 (30%)
Number and percentage of Parties that have taken into consideration the importance of genetic resources for food and agriculture and their special role for food security as provided in Article 8(c)	48 (46%)	85 (60%)
Number and percentage[74] of Parties requiring prior informed consent for access to genetic resources for their utilization which received monetary benefits from granting access to genetic resources since entry into force of the Protocol	Not conclusive data	28 (37%)
Amount of monetary benefits (in United States dollars) received from granting access to genetic resources for their utilization since entry into force of the Protocol	Not conclusive data	$53 million[75]
Number and percentage[76] of Parties requiring prior informed consent for access to genetic resources that received non-monetary benefits from granting access to genetic resources since entry into force of the Protocol	Not conclusive data	59(80%)
Number and percentage[77] of Parties with indigenous peoples and local communities in their country that received monetary benefits from granting access to traditional knowledge associated with genetic resources since entry into force of the Protocol	Not conclusive data	10 (14%)

[72] Percentage in this indicator has been calculated based on the total number of Parties requiring PIC for access to genetic resources (74).
[73] Percentage in this indicator has been calculated based on the total number of Parties requiring PIC for access to genetic resources (74).
[74] Percentage in this indicator has been calculated based on the total number of Parties with IPLCs in their country (69).
[75]This amount includes benefits shared from access to both genetic resources and associated traditional knowledge. As the information on monetary benefits received reported by Parties in their first national reports on the Nagoya Protocol and their seventh national reports on the Convention could be interpreted in different ways, this figure is based on the average of the minimum and maximum values that resulted from applying different interpretations.
[76] Percentage is calculated from the total number of Parties requiring PIC for access to genetic resources (74).
[77] Percentage is calculated from the total number of Parties with IPLCs in their country (69).

Framework of indicators	*Reference point (as at 22 February 2018)*	*9 March 2026*
Amount of monetary benefits (in United States dollars) received from granting access to traditional knowledge associated with genetic resources for its utilization since entry into force of the Protocol	Not conclusive data	$53 million[78]
Number and percentage[79] of Parties with indigenous peoples and local communities in their country that received non-monetary benefits from granting access to traditional knowledge associated with genetic resources	Not conclusive data	27(39%)
Number and percentage of Parties that reported that implementation of the Nagoya Protocol has contributed to conservation and sustainable use of biodiversity in their country	Not conclusive data	73 51%)

2. Analysis of information on implementation of Article 9 of the Protocol[80]

257. A total of 86 Parties (60%) responded that their **country encourages users and providers to direct benefits arising from the utilization of genetic resources towards the conservation of biological diversity and sustainable use of its components**[81]. Sixty Parties responded “yes”, and [26] “yes, to some extent”.

258. Some Parties referred to existing relevant ABS measures addressing this issue (e.g. Cameroon, the European Union, Malawi). Others, such as Benin or Cuba, reported addressing this issue in MAT or that the CNA has the responsibility to encourage users and providers to direct benefits towards conservation and sustainable use of biodiversity, including through awareness-raising activities (e.g., Kenya, Rwanda, Sudan).

259. The establishment of funds were mentioned by some Parties, such as Bhutan, Malaysia, Malta, and Namibia. Some funds are ABS specific while others are general environmental funds. The following provides some examples of Parties’ approaches to implementation of Article 9 of the Protocol.

260. In Uruguay all monetary benefit-sharing is directed to the National Environment Fund from the Environmental Ministry, the fund is used to finance biodiversity project aligned with the NBSAPs. The ABS permits also requires applicants to indicate how their research project can contribute to conservation and sustainable use and this becomes part of the user commitment to get access.

261. Ethiopia’s legal framework mandates that a significant portion of benefits be reinvested into conservation. The portion of monetary benefits remaining after the local community's share is deducted must be specifically allocated for the conservation of biodiversity and the promotion of community knowledge. These funds are held in a centralized "Access Fund," and are to be used to finance development projects that support sustainable utilization and benefit the custodian communities

262. A total of 10% of monetary benefits derived from the utilization of genetic resources provided from the Republic of Belarus must be transferred to a special account of the Institute of Genetics and Cytology of the National Academy of Sciences of Belarus, and these funds are allocated specifically

[78] This amount includes benefits shared from access to both genetic resources and associated traditional knowledge. As the information on monetary benefits received reported by Parties in their first national reports on the Nagoya Protocol and their seventh national reports on the Convention could be interpreted in different ways, this figure is based on the average of the minimum and maximum values that resulted from applying different interpretations.

[79] Percentage is calculated from the total number of Parties with IPLCs in their country (69).

[80] Responses to questions 10, 12, 19, 30–32 of the first national report format are analysed in the relevant sections in the document.

[81] Question 42 of the first national report.

to activities related to the conservation and sustainable use of biological, including research and development activities.

263. Cameroon's ABS Law of 2021 provides that a portion of the benefits must be directed to nature protection, sustainable use of resources or the development of villages and local communities. When an ABS contract is signed, it must include clauses specifying how the resource will be used sustainably and how the benefits will be shared. The National ABS Committee monitors compliance to ensure that everything is carried out in line with conservation and sustainable development objectives.

264. In Mexico, among other things, scientific collection permits include a condition to deposit samples of the material in Mexican scientific collections.

265. In line with Article 13 of Regulation 511/2014, the European Commission and the Member States shall encourage users and providers to direct benefits from the utilisation of genetic resources towards the conservation of biological diversity and the sustainable use of its components in accordance with the provisions of the Convention. The European Commission, when assessing applications for recognition of best practices encourages the applicants to incorporate this aspect into their proposed best practice.

266. Seventy-three Parties (51%) reported that **implementation of the Nagoya Protocol has contributed to conservation and sustainable use of biodiversity in their country**.[82] Thirty-four of which, answered "yes", and 39 "yes, to some extent"

267. While the impact of the Nagoya Protocol depend in part on the stage of implementation reached by Parties, many countries that are still in the process of developing measures or operationalising their legal framework and institutional frameworks reported that the Nagoya Protocol has contributed to raising awareness of the value of genetic resources and associated traditional knowledge and strengthening their governance arrangements. In several cases, the process of drafting and adopting ABS measures itself is considered a tangible benefit, as it supports awareness-raising and capacity-building among the actors involved, including IPLCs, users and relevant government institutions, and promotes greater recognition of, and engagement with of indigenous peoples and local communities in ABS related processes.

268. Many Parties reported that implementing the Protocol has contributed to a more systematic documentation of genetic diversity and of best practices in collection and utilization of genetic resources. It was noted that researchers are more open and cooperative in sharing the results of their studies and that implementation of the Protocol encourages researchers to align their activities with conservation objectives.

269. Some Parties provided more details on some of the benefits shared, or how the benefits resulting from agreements were used. The following provides some examples provided.

270. In Bhutan, the ABS Fund channels monetary benefits into community-based biodiversity management, conservation initiatives and capacity-building programs. For instance, the projects around *Swertia chirayita* cultivation and the Pangtse Makhu project, which included supporting nursery development, plantation management, and post-harvest processing while providing livelihood and conservation benefits. Implementation of the Protocol has also contributed to sustainable product development, for example, the sustainable production of essential oils following ethical harvesting practices from species like *Rhododendron anthopogon*. Bhutan has also introduced an ABS logo that ensures products comply with conservation and ethical standards, enhancing market visibility.

[82] Question 43 of the first national report format.

271. Cameroon reported the creation of community nurseries and the sustainable management of local plants integrated into ABS contracts.[83]

272. Ethiopia reported that the implementation of ABS schemes has created economic incentives that prioritize conservation. A notable example is the commercialization of *Osyris* species (East African Sandalwood); once its economic value was realized through a benefit-sharing agreement, it became a high-priority resource for conservation, leading to the establishment of nurseries for its reintroduction into rangelands. Osyris Project created over 130 permanent jobs and provided Lemat Village with a 24-hour pumped water supply by funding the necessary electricity infrastructure.

273. France has identified 370 actions resulting from non-monetary benefit-sharing, including capacity-building, exchange of information, etc. Monetary benefits shared have contributed to different biodiversity related projects.

274. India reported that, overall, more than 210 individual benefit claimers and 10,414 biodiversity management committees have benefited from access and benefit-sharing payments. These benefits have contributed to strengthened in-situ conservation and enhancing community participation in biodiversity governance.

275. The Sarawak Biodiversity Centre in Malaysia has facilitated ABS agreements with indigenous communities (including Bidayuh, Kelabit, Lun Bawang, Iban, and Melanau) for the development of products. These agreements provide monetary payments and capacity building to communities, incentivizing the sustainable use and stewardship of the biological resources.

3. Analysis of information on monetary benefits received

276. The first national report format invited Parties to indicate whether their country had received monetary benefits from granting access to genetic resources for their utilization during the reporting period and for traditional knowledge associated with genetic resources. Parties replying in the affirmative were further invited to provide details on the type of benefits received.[84]

277. In the seventh CBD National Report, CBD Parties were invited to report on progress towards Goal C and Target 13 of the Kunming-Montreal Global Biodiversity Framework using headline indicators. C.1 monitors progress on monetary benefits received in accordance with applicable internationally agreed ABS instruments.

278. A total of 28 Parties reported having **received monetary benefits from granting access to resources for their utilization.** This represents the 38% of Parties requiring prior informed consent for access to genetic resources.

279. Ten Parties reported in the first national report that the country **received monetary benefits from granting access to traditional knowledge associated with genetic resources** during the reporting period. This represents 14% of the Parties with indigenous peoples and local communities in their territory (69 Parties).

280. As illustrated in the figures 21, 22 and 23 below, the trends for monetary benefits arising from access to genetic resources and associated traditional knowledge are broadly similar.

281. Africa, followed by Asia-Pacific region has the highest proportion of Parties reporting receipt of monetary benefits. Access fees and upfront payments are reported as the most common forms of monetary benefit-sharing, followed by research funding, grants and scholarships.

[83] Notably Echinops giganteus in Magha-Bamumbu, Mondia whitei in Babadjou and Lewoh, as well as Balanites aegyptiaca and Acacia nilotica in Kaélé,

[84] Questions 44.A, and 44.A.1 of the first national report format for genetic resources and 45.A and 45.A,1 for associated traditional knowledge.

Figure 21
Monetary benefits received from access to genetic resources (percentage by Parties that submitted a first national report)

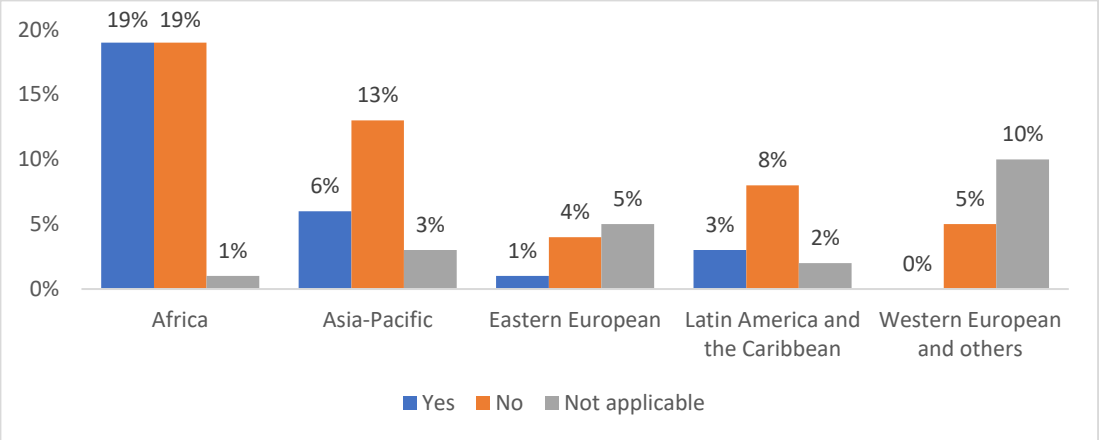


Figure 22
Monetary benefits received from access to associated traditional knowledge (percentage by Parties that submitted a first national report)

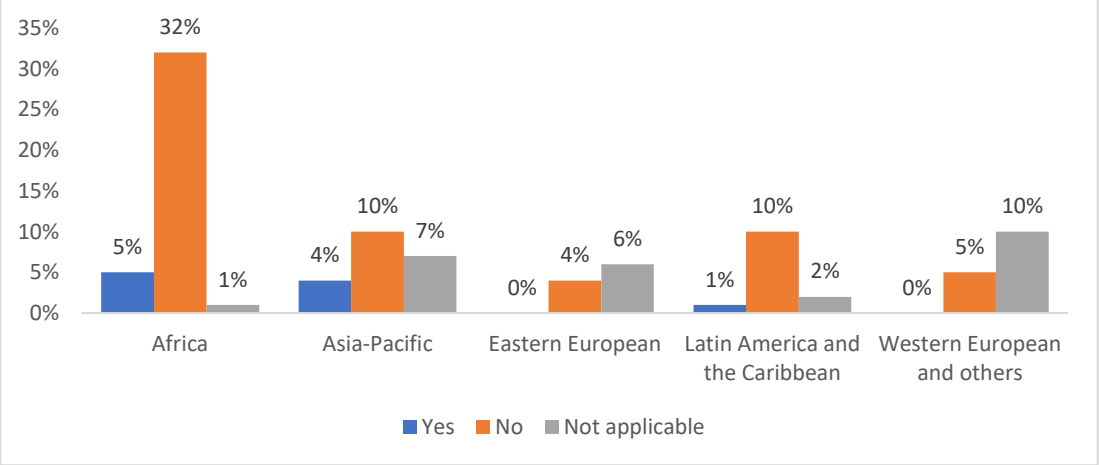
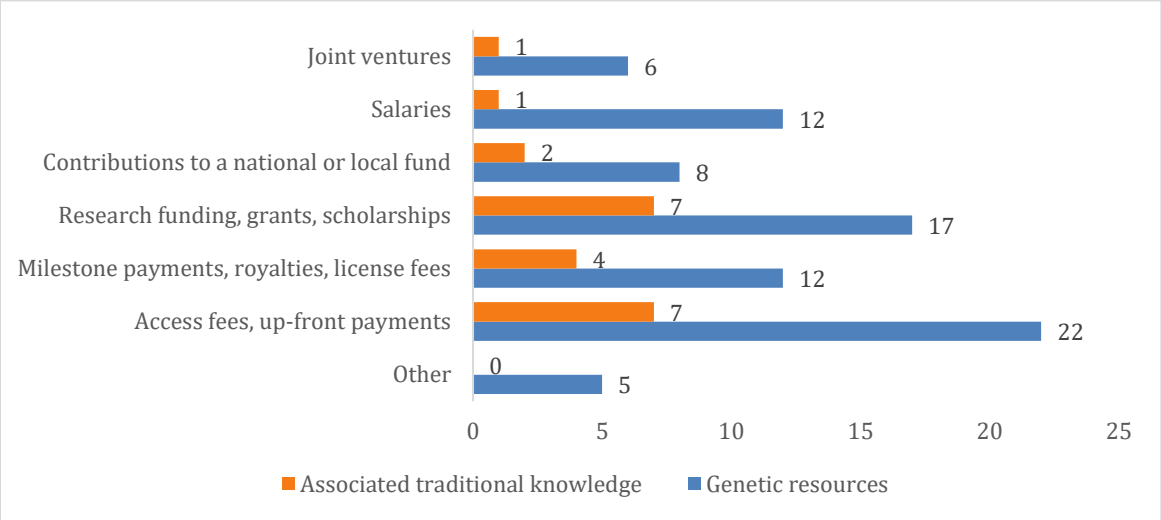


Figure 23
Type of monetary benefit-sharing received from access to genetic resources and from access to associated traditional knowledge (number of Parties)



282. Regarding the **amounts of monetary benefits received**, consolidating the data provided by Parties across both the Nagoya Protocol[85] and the CBD national report[86] present a number of challenges. In some cases, Parties reported differing information in the two reports; in others the data were provided in different currencies[87] or covered different reporting periods[88]. In addition, Parties may have applied varying methodologies or criteria when reporting monetary benefit-sharing amounts, which further complicates comparability across submissions.

283. With regard to the reporting of monetary benefit arising from access to traditional knowledge, the monetary information provided in the CBD national report was not always presented in a disaggregated manner. As a result, benefits derived from genetic resources and associated traditional knowledge are in some cases reported together. In the first national reports submitted under the Nagoya Protocol monetary benefits related to traditional knowledge were at times reported as a component of the monetary benefits arising from access to genetic resources, while in other instances they were reported as a separate amount.

284. At this stage, given the inconsistency of information provided by Parties, the following, presents only an estimate of monetary benefits received from access to both genetic resources and associated traditional knowledge.

285. A total of 23 Parties reported approximately 53 million United States dollars in benefits received[89] from access to genetic resources and associated traditional knowledge. Of that total amount, 82% was accounted for by the three Parties reporting the highest value: India ($34,600,000), Costa Rica ($5,322,750) and South Africa ($4,621,072) while 10 Parties reported comparatively small amount, each below $100,000 of benefits.

[85] Question 44.A.2 of the first national report format.
[86] Information provided under indicator C.1
[87] The amounts were converted to United States dollars using the average conversion rate for the year it was reported for. When available the conversion rates used were from United Nations Operational Rates of Exchange from the Treasury: https://treasury.un.org/operationalrates/OperationalRates.php
[88] The first national report under the Nagoya Protocol asked in question 44A2 about the amount of benefits received during the reporting period. In the CBD national report, the amounts were inputted by year and in a variety of currencies.
[89] This sum is based on the average of the minimum and maximum values coming from the different interpretation of the amounts provided.

286. Forty-three Parties provided **additional information on monetary benefits received from access to genetic resources.**[90] In doing so, they highlighted a ranged of issues. Some Parties explained that no monetary benefits had been realized because no access permits had been granted, or because permits issued related exclusively to non-commercial research. In other c, Parties noted that while access for commercial purposes had been granted, monetary benefits had not yet been generated due the time typically required between the completion of the utilization phase and the commencement of commercial activity.

287. Some Parties provided more information on the amount of benefits received. South Africa, for example, clarified that the information on amount received does not include monetary benefits paid directly to harvesters or collectors for collection of genetic resources. Ethiopia indicated that because of changes in exchange rates, the $71,022 they report understates the actual value at the time many agreements were concluded. For example, one agreement included a $50,000 upfront payment, an annual $2,000 license fee, and a 3.5% royalty on net profits. The financial value of such agreements should therefore be understood in the context of the exchange rate prevailing at the time they were executed.

288. The Republic of Korea explained that monetary figures related to benefit-sharing are not disclosed to safeguard corporate trade secrets. As part of the review of applications for access to genetic resources, 6 commercial dossiers have been processed. These applications generated processing fees, which were paid into the Environmental and Sustainable Development Fund.

289. For Parties that reporting that they had not received monetary benefits, the reasons cited included being in the process of establishing access measures or experiencing slower progress in implementation.

290. Thirty-five Parties provided **additional information on monetary benefits received from access to associated traditional knowledge**.[91] Few Parties have experience or information on granting access to traditional knowledge and receiving monetary benefits.

291. Bhutan, however, provided some details on their experience with benefits arising from access to associated traditional knowledge. Bhutan received $35,539 in monetary benefits from granting access to traditional knowledge associated with genetic resources. Out of this amount, $29,096 was paid directly to the community groups that provided access to the resources and knowledge. The remaining $6,443 was deposited into the ABS Fund. [92]

292. Peru mentioned that users considered the benefit-sharing rate for access to traditional knowledge set at 15% of the net sales too high, which may have contributed to difficulties in negotiating access agreements to date.

4. Analysis of information on non-monetary benefits received

293. The first national report format invited Parties to report on whether their country had received non-monetary benefits from granting access to genetic resources for their utilization during the reporting period and for traditional knowledge associated with genetic resources. Those Parties responding affirmatively were invited to provide details on the type of benefits.[93]

[90] Question 44.A.3 of the first national report format.
[91] Question 45.A.3 of the first national report format.
[92] The source of benefit includes the execution of below mentioned MATs or Benefit Sharing Agreements: (a)Zingiber cassumunar: Community-led production of massage balms and liniment oils with technical support from the National Biodiversity Centre (NBC) (b) Curcuma caesia and soap nut: Development of a sanitary soap and a health supplement capsule in partnership with Menjong Sorig Pharmaceutical Corporation Ltd. under a tripartite ABS agreement between the community, the company and the Government (c) Artemisia vulgaris: Development of a wellness foot-soak product for joint relief under a tripartite ABS agreement involving the community, a private company and the Government (d) Shilajit: Development of a health supplement under a bilateral ABS agreement between a private company and the Government, as the specific provider community could not be identified.
[93] Questions 44.B and 44.B.1 of the first national report format for benefits from access to genetic resources and 45.B and 45.B.1 for benefits for access to associated traditional knowledge.

294. In the seventh CBD National Report, CBD Parties were invited to report on progress towards Goal C and Target 13 of the Kunming-Montreal Global Biodiversity Framework using headline indicators. C.2 monitors progress on non-monetary benefits received in accordance with applicable internationally agreed ABS instruments.[94]

295. When taken together, a total of 59 Parties reported having **received non-monetary benefits from granting access to resources for their utilization.** This represents the 76% of Parties requiring prior informed consent for access to genetic resources.

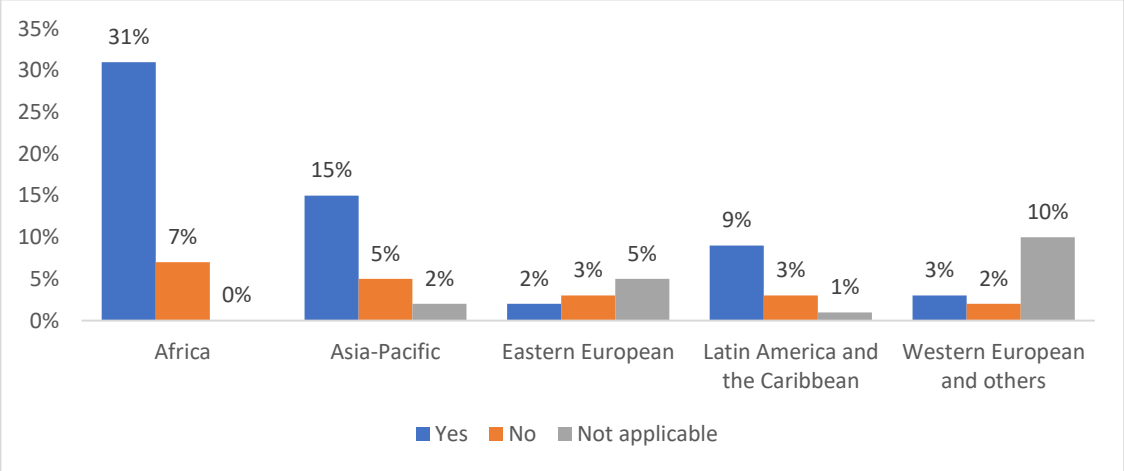
296. With regards to benefit-sharing from traditional knowledge, information provided in the CBD national report was not presented in a disaggregated manner, and the benefits from genetic resources and associated traditional knowledge are presented together. In addition, data that may have contradicted the information in the first national report was not included.

297. Twenty-seven Parties reported in the first national report that the country **received non-monetary benefits from granting access to traditional knowledge associated with genetic resources** during the reporting period. This represents 39% of the Parties with indigenous peoples and local communities in their territories (69 Parties).

298. As illustrated in the figures below, the trends for monetary benefits from access to genetic resources and associated traditional knowledge are very similar.

299. Figures 24, 25 and 26 below illustrates that the African region followed by Asia-Pacific have the highest percentage of Parties reporting having received non-monetary benefits. Sharing of information and research results is the most common type of non-monetary benefit-sharing received, followed by scientific collaboration and joint publications and capacity-building, capacity development and training.

Figure 24
Non-monetary benefits received from access to genetic resources (percentage by Parties that submitted a first national report)



[94] Information on indicator C.2 is available in the metadata sheets of the monitoring framework for the GBF.

Figure 25
Non-monetary benefits received from access to associated traditional knowledge (percentage by Parties that submitted a first national report)

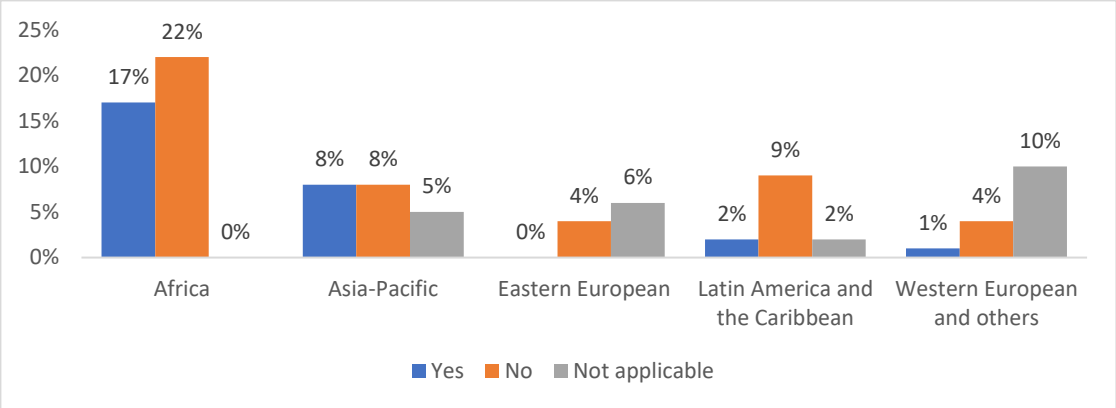
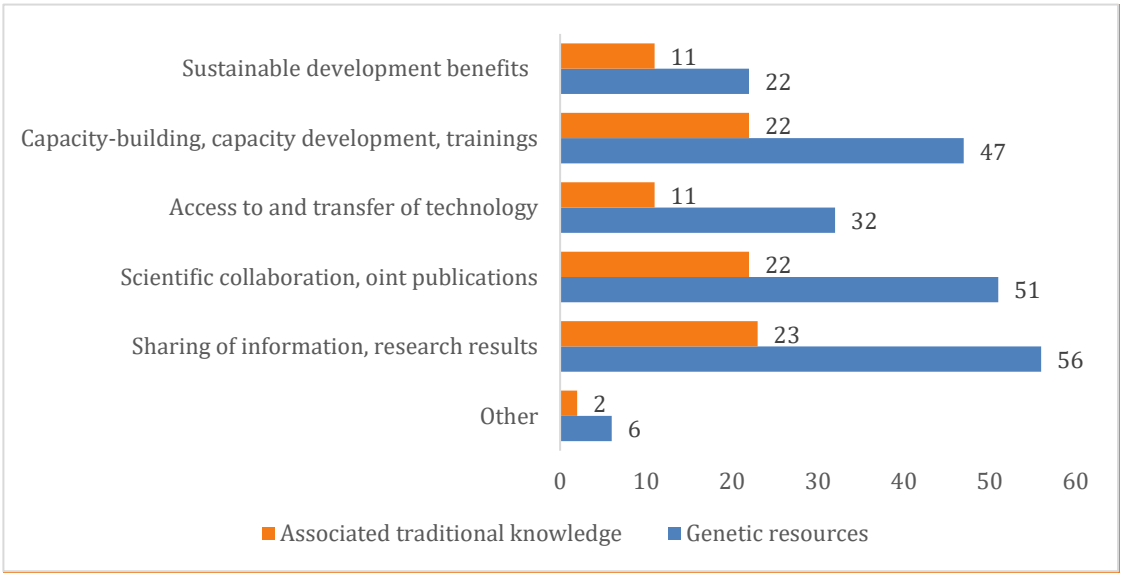


Figure 26
Type of non-monetary benefit-sharing received from access to genetic resources and from access to associated traditional knowledge (number of Parties)



300. Fifty-seven Parties provided **additional information on non-monetary benefits from access to genetic resources**. Many Parties reported that most of the non-monetary benefits are directed towards universities, research centers, gene banks public institutions students, or local laboratories. For example, in Malawi capacity-building benefits included hands-on laboratory training for Malawian researchers in genomic analysis in country and in laboratory of partner institutions outside of Malawi, training of early-career researchers through joint field research, and biotechnology education seminars. Long-term training support included funding for several PhD students in partner institutions and MSc students at local and international colleges of partner institutions, including tuition, research costs, and laptops.

301. Some Parties provided some details on non-monetary benefits received. For example, since 2017, as many as 395 access approvals in India have included non-monetary benefit sharing in the form of capacity-building and development activities. In Costa Rica since 2020, 99 final research projects and 33 scientific publications have been shared.

302. Spain provided detailed information on non-monetary benefit-sharing received following the access authorizations for non-commercial research.[95]

303. Forty-three Parties provided **additional information on non-monetary benefits from access to associated traditional knowledge**[96]. Few Parties reported having experience or information on granting access to traditional knowledge and receiving non-monetary benefits. Ethiopia explained that non-monetary benefits from access to traditional knowledge were limited and not systematically captured in a centralized datasets and benefits have typically been indirect (feedback of research results to communities, local trainings, and recognition of customary norms) rather than structured technology transfer packages. Ethiopia indicated that it has been developing standardized reporting fields in MAT templates to enable consistent tracking of traditional knowledge related non-monetary benefits in the next cycle.

5. Lessons learned, what worked well and why, difficulties, challenges and underlying causes

304. Fifty-five Parties provided information to this question.[97] In addition to the usual challenges related to lack of capacity, resources or not having all the necessary measures in place, Parties mentioned the following challenges related to benefit-sharing.

305. Some Parties highlighted a lack of guidance tools, limited capacity to negotiate benefits, and the insufficient mechanisms to monitor the implementation of MAT and benefit-sharing arrangements, particularly in cases when there is a change the intended use of genetic resources or traditional knowledge. Parties also noted challenges in defining what constitutes fair and equitable benefit sharing, as well as difficulties in coordinating the equitable distribution of benefits among multiple community groups.

306. Some Parties reflected on challenges related to regulating or implementing the provisions concerning indigenous peoples and local communities, particularly with regard to ensuring fair and equitable benefit-sharing arising from the use of associated traditional knowledge.

307. Many Parties reflected on the fact that non-monetary benefit-sharing are undervalued and that even limited access activities can generate non-monetary benefits that can contribute to local capacities and conservation and sustainable use.

308. Some of the lessons learned shared in the reports are the following:

(a) Having local networks/companies for transformation and commercialisation of genetic resources and the valorization of associated traditional knowledge is key for channelling ABS benefits to the country;

(b) Pilot projects can help demonstrated the feasibility of ABS agreements that integrate non-monetary benefits;

(c) Model agreements and training modules contributes to standardizing procedures and strengthening the capacities of the actors involved;

(d) Capacity-building, technology transfer, and co-authorship arrangements significantly enhance national research capacity and ensure meaningful participation of local institutions and communities; and

[95] (a) Exchange of research and development results: 10 authorizations; (b)Admission to ex situ genetic resource facilities and databases: 2 authorizations; (c) Access to scientific information relevant to the conservation and sustainable use of biological diversity, including biological inventories and taxonomic studies: 2 authorizations; (d) Institutional and professional relationship that may arise from an access and benefit-sharing agreement and subsequent collaborative activities: 1 authorization; (e)Access to and transfer of technology: Participation in product development: 1 authorization (f) Contributions to the local economy and social recognition: 1 authorization

[96] Question 45.B.3 of the first national report format.

[97] Question 46 of the first national report format.

(e) Direct support to community-based conservation institutions strengthens ownership and sustainability.

309. In their report, Costa Rica reflected on their experience with commercial agreements and explained that at the beginning of ABS implementation in the 90s those were focused on the pharmaceutical sector and have not resulted in significant benefit-sharing given the specificities of the sector. However, in the last decade, Costa Rica has been working with other sectors, such as cosmetics, phytomedicine, and supplements, and these take shorter time to get to the commercialization phase and benefit-sharing.

C. Assessment of support available for implementation

1. Capacity (Article 22)[98]

(a) Summary and indicator data

310. The majority of Parties (59%) have taken steps to build human and institutional capacity for Nagoya Protocol implementation, most commonly through training, awareness raising, and legal and institutional strengthening, often supported by international capacity-building initiatives, notably with support from GEF and implemented through agencies such as UNDP and UNEP, as well as other partners including GIZ.

311. The documented increase of 44 capacity-building and development initiatives between 2018 and 2026 contrasts sharply with the recording of only four additional initiatives in the ABS Clearing-House, pointing to a persistent gap between the expansion of implementation activities and their systematic documentation and knowledge-sharing through the ABS Clearing-House. Over the same time period there has been a significant increase in the number of awareness-raising and capacity-building tools made available to the ABS Clearing-House.

312. Capacity-building activity is highly uneven across regions, with Asia-Pacific dominating in numbers trained, workshops held, and initiatives reported, driven overwhelmingly by India, while Africa's main strength lies in the breadth of initiatives rather than scale of training.

313. Capacity-building focuses strongly on government authorities and research institutions central to national implementation of the Protocol. In a number of cases, Parties also undertook complementary, targeted awareness-raising and compliance-support activities for commercial users of genetic resources, with varying levels of engagement across regions.

314. Approximately a third of Parties (34%) have supported capacity-building in other countries, mainly through experience-sharing, technical assistance, and regional or bilateral cooperation, rather than through direct financial support.

315. Effective ABS implementation is consistently linked to targeted stakeholder engagement, strong legal and institutional frameworks, peer learning, and inclusive community-centred approaches, while the most persistent obstacles are financial and human resource constraints, low awareness, staff turnover, and reliance on short-term donor-funded projects.

[98] Source: responses to questions 54-56 of the first national report format, the Access and Benefit-sharing Clearing-House

Table 9
Indicators to measures progress building and developing capacity for the implementation of the Nagoya Protocol

Framework of indicators	*Reference point (as at 22 February 2018)*	*9 March 2026*
Number and percentage of Parties that received external support for building and developing capacity for the implementation of the Nagoya Protocol since entry into force of the Protocol[99] *(indicator suggested for deletion)*	45 (43%)	No information available to provide data
Number and percentage of Parties that have taken measures to build and develop its capacity and strengthen its human resources and institutional capacities to effectively implement the Protocol[100] *(new indicator)*	NEW	84 (59%)
Number and percentage of Parties that provided external support for building and developing capacity for the implementation of the Nagoya Protocol *since entry into force of the Protocol*[101] *(sentence suggested for deletion)*	27 (26%)	48 (34%)
Number of capacity-building and development initiatives made available completed or initiated after the adoption of the Nagoya Protocol in 2010 and are providing, or have provided, direct support for country level activities contributing to the ratification and implementation of the Nagoya Protocol	90	134
Number of capacity-building and development initiatives made available to the ABS Clearing-House	57	61
Number of capacity-building and awareness-raising tools (virtual library resources)[102] and resources made available as reference records in the ABS Clearing-House	34	367

(b) Analysis of information available

316. Eighty-four Parties (59%) reported having **taken measures to build and develop capacity and strengthen human and institutional resources for the effective implementation of the Protocol.**[103] Of these, forty-five (46%) responded "yes" and thirty-nine (40%) "yes, to some extent".

317. Across the countries reporting "yes" or "yes, to some extent," reported capacity-building measures can be broadly classified into a set of recurring types. Most commonly, Parties rely on training workshops, seminars, and awareness-raising activities to strengthen understanding of ABS concepts including PIC and MAT, compliance procedures, permitting processes, and protection of traditional knowledge. These efforts are frequently complemented by legal and institutional strengthening measures, including updating of ABS legislation, establishing and reinforcing NFPs and CNAs, and developing SOPs and model clauses. A notable trend is the expansion of digital systems such as ABS permit platforms, genetic resource databases, and ABS Clearing-House integration, alongside targeted scientific and technical training, covering biotechnology, eDNA, and DSI with specialized support often provided through international collaboration.

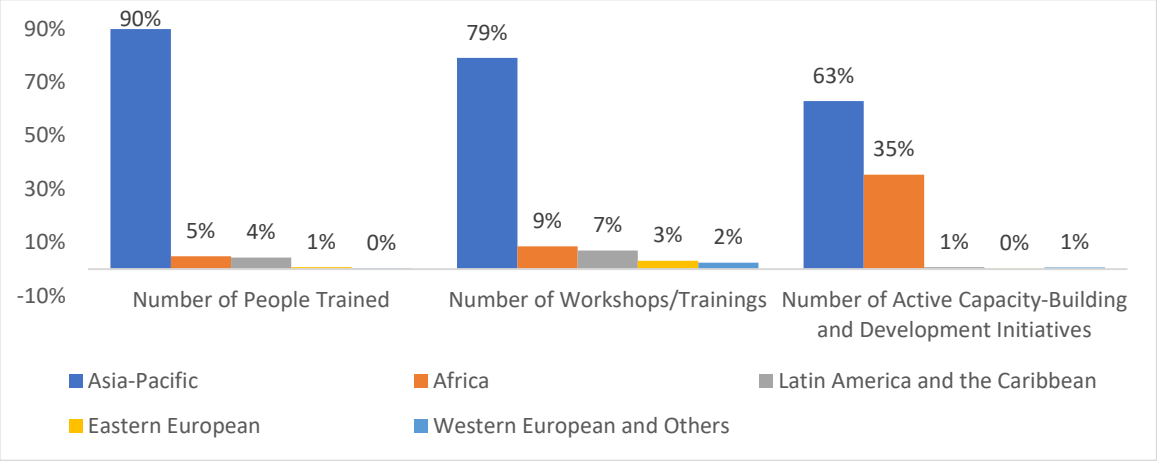
318. Several Parties relied on international projects - particularly those supported by the GEF and implemented through partners such as GIZ - to deliver training, support the develop of regulatory

[99] The format of the first national report does not allow for the collection of this information. It is suggested that this indicator be deleted.
[100] A new indicator has been added to reflect the question that was added to the format of the first national report.
[101] Question 55 of the first national report format does not specify that the information provided is since entry into force.
[102] Suggested addition to provide clarity that the indicator data is based on the information available as virtual library resource records.
[103] Question 54 of the first national report format.

frameworks, and produce ABS guidance tools, as well as to facilitate peer-learning opportunities and technical assistance.

319. Fifty-four Parties provided **information on capacity building activities implemented during the reporting period**, and fifty-nine Parties provided **additional information**[104], revealing substantial regional variation (see figure 27). Of the total number of people trained (342,307), workshops and training activities conducted (5,073) and active initiatives reported (1,390), the Asia-Pacific region accounted for the largest share (90% people trained, 79% workshops and 63% initiatives respectively). This pattern is largely driven by India's reported figures 256,393 trainees, 3,724 workshops, and 600 initiatives with additional contributions from Indonesia, Japan, Bhutan, and Malaysia. While Africa recorded a comparatively much smaller share of trainees and workshops or training activities, the region stands out in terms of the number of active capacity-building initiatives, reflecting broad engagement across a diverse range of national ABS programmes. By comparison, Eastern European States, Latin America and the Caribbean, and the Western European and Others Group reported more modest levels of activity across the indicators considered. implementation overall.

Figure 27
Capacity-building activities implemented (percentage of Parties that submitted a first national report



320. When India's figures are removed from the dataset, regional trends shift. Asia-Pacific remains the leading region in terms of the number of people trained (59 per cent), while Africa assumes a more prominent position with respect to the number of workshops and training activities conducted (32 per cent, compared to 21 per cent for Asia-Pacific) and the number of active capacity-building initiatives (62 per cent, with Asia-Pacific accounting for 35 per cent).

321. Capacity-building efforts continue to focus primarily on government institutions, including competent national authorities, ministries, ABS national focal points, inspectors, and local officials, as well as researchers from academic and scientific institutions, with IPLCs being targeted where traditional knowledge is relevant to ABS implementation. Engagement of private sector actors, such as, bio-trade companies, SMEs, patent attorneys, and biotechnology industries, is reported less consistently.

322. Across Parties, capacity-building efforts most frequently target the individual level, with the majority of countries reporting extensive training activities for government officials, researchers, IPLCs, enforcement officers, and legal professionals. Organizational level capacity-building is also widely reported, reflected in the establishment or strengthening of competent national authorities, dedicated ABS units, inter-ministerial coordination bodies, and digital administrative systems such

[104] Questions 54.1 and 54.2 of the first national report format.

as permit platforms and databases. Capacity-building at the level of the enabling environment is reported less consistently, though it remains significant, with many Parties undertaking actions such as updating or developing ABS legislation, adopting national ABS strategies, or improving integration with the ABS Clearing-House.

323. Examples of capacity-building activities conducted by countries are the following:

(a) **Institutional integration** in Belarus: central to its approach is the National Coordination Centre on ABS, established under national legislation, which coordinates ABS procedures, monitors the use of genetic resources, provides guidance, and conducts extensive awareness-raising activities. The Ministry of Natural Resources and Environmental Protection supports implementation at national and international levels, ensuring that capacity-building is embedded across institutional structures. Since 2018 Belarus has organized a wide range of training workshops, scientific conferences, seminars, and field visits, covering ABS procedures, legal frameworks, traditional knowledge, biotechnology, and compliance. The country also produced numerous scientific publications, dictionaries, and expert reports, strengthening knowledge across institutions and stakeholder groups.

(b) **Multi-sector approach** in Bhutan: institutional capacity was strengthened through the reinforcement of the National Biodiversity Centre as the national focal point and the establishment of interagency mechanisms across key ministries and enforcement bodies. Bhutan carried out extensive training programs for government officials, researchers, enforcement agencies, community leaders, and local communities, covering PIC, MAT, IP rights, compliance, and benefit-sharing. Community level capacity-building was linked to biodiversity-based livelihood initiatives. The country also developed SOPs, model MAT clauses, benefit-sharing templates, community protocols, and disseminated ABS tools in local languages to improve accessibility. Technical capacity was further supported through international partnerships with GEF Small Grants Programme, UNDP, and regional ABS networks, as well as the integration of global best practices such as ethical sourcing and traceability standards.

(c) **Digital transformation** in Costa Rica has focused its capacity-building efforts on modernizing and strengthening its national ABS system through digital transformation and improved legal and administrative processes. The country is implementing a project to upgrade the national virtual platform for ABS permits managed by CONAGEBIO, enhancing its interoperability to enable direct communication with the ABS Clearing-House. This integration will allow the electronic issuance of IRCCs, improving efficiency, traceability, and transparency in access procedures. Costa Rica also aims to strengthen legal certainty for users and providers by standardizing information reported internationally. Additionally, the project includes the creation of an operational accounting system to track both monetary and nonmonetary benefits arising from ABS permits, supporting compliance and fair benefit-sharing.

(d) Malaysia has adopted a comprehensive, **legally anchored approach** to capacity-building for Nagoya Protocol implementation. Capacity development is mandated under Section 8(e) of Act 795 and further supported by the National Policy on Biological Diversity 2022–2030, which prioritizes strengthening ABS implementation. Institutional capacity is reinforced through the Malaysia Biodiversity Centre and an Advisory Body providing scientific, legal, and technical guidance. Malaysia has implemented extensive, targeted training programs for regulators, enforcement officers, researchers, and IPLCs, including residential workshops on contract negotiation, compliance monitoring, and drafting pathogen related regulations. Additional initiatives include community dialogues, national seminars for IPLC advocates, and technical training sessions for major research institutions. Subnational training, such as the Sarawak Biodiversity Centre's Regulatory Awareness Programme, further strengthens capacity across sectors.

324. Forty-eight Parties (34%) reported **having taken measures to build and develop the capacity and strengthen human resources and institutional capacities of other Parties to**

effectively implement the Protocol[105], divided evenly between those answering 'yes' (24) and those answering 'yes, to some extent' (24).

325. Parties that responded affirmatively reported contributing to capacity-building primarily through experience-sharing technical assistance, and regional or bilateral cooperation initiatives, as illustrated by the following examples:

(a) Belgium supported Burundi in developing ABS legislation and awareness campaigns and assisted the Democratic Republic of the Congo in establishing export procedures and informing researchers of their ABS obligations;

(b) Germany has supported global ABS capacity-building for two decades, including through the ABS Capacity Development Initiative as well as other ABS-related programmes led by GIZ, extending assistance to countries in Africa, Asia-Pacific and Latin America and the Caribbean. Germany also provided experts to the CBD Informal Advisory Committee on Capacity Building;

(c) Japan, through the Asian Consortium for the Conservation and Sustainable Use of Microbial Resources (ACM) and the Asia ABS Academic Forum (AAAF), supports multiple Asian countries by coordinating regional information-sharing, hosting annual symposia, and facilitating capacity-building on microbial resources and ABS procedures;

(d) South Africa carried out bilateral ABS exchanges with Brazil, Botswana, Lesotho, Mozambique, and Namibia, sharing experience on legislative implementation and practical ABS procedures.

326. Sixty-two countries (44%) provided information **on lessons learned, what worked well and why, difficulties, challenges and underlying causes**. Some clear themes emerged regarding good practices in effective ABS implementation, including:

(a) Targeted awareness-raising and sustained stakeholder engagement were identified as critical enablers of effective ABS implementation, with participatory approaches and locally tailored communication improving understanding, trust and engagement among stakeholders;

(b) Strong legal and institutional frameworks were consistently associated with smoother implementation, particularly where clear procedures, defined institutional roles and user-friendly tools (such as guidelines and model contracts) supported transparency and regulatory understanding.

327. Peer learning and regional exchanges were highlighted as valuable for strengthening implementation capacity, particularly where practical, experience-based engagement helped officials refine national frameworks and negotiation approaches.

328. Inclusive community-centred approaches resulted in enhanced ownership and compliance, especially where IPLCs were engaged as active partners and ABS information was delivered in local languages or linked to tangible livelihood benefits.

329. The most commonly identified challenges reported by Parties include persistent financial and human resource constraints; continuing gaps in general ABS awareness and implementation capacity related to ABS among researchers, communities, and policy-makers; difficulties in building the capacity of IPLCs; high staff turnover and the resulting loss of institutional memory; and a continued heavy reliance on donor supported time-bound projects.

2. Financial resources (Article 25) and resource mobilization[106]

(a) Summary and indicator data

330. As the table below demonstrate there has been good progress on the mobilization of financial resources.

[105] Question 55 of the first national report format.
[106] Source: responses to questions 59-65 of the first national report format.

331. Even though, the number of Parties that made financial resources available to other Parties remain the same (13), the relative percentage has decreased because of having more Parties to the Protocol. Those financial resources are mostly through the Parties' contributions to the GEF.

332. The indicators also show a higher percentage of Parties that have received financial resources from other Parties and institutions. GEF is the main source of funding and based on the submissions GIZ/BMZ appeared as the next main donor after the GEF.

333. Many Parties indicated a strong reliance on external financing to advance implementation of the Nagoya Protocol. In the absence of sufficient domestic budgetary allocation, such reliance may result in short-term, fragmented and project-based interventions, often focused primarily on capacity building activities.

334. Parties emphasized that diversifying the mix of financial and non-financial resources, including combining national funding with external project financing, private-sector engagement, and technology-transfer partnerships, can help mitigate these risks and support more sustained implementation. Without such diversification, sustainability challenges may arise, particularly with respect to maintaining technological systems, ensuring long-term stakeholder engagement and sustaining institutional capacity and stability.

335. The indicators presented in table 10 below also show a moderate increase in the proportion of Parties that have established mechanisms for allocating budgetary resources to support the implementation of the Nagoya Protocol. Diversifying funding sources and combining national budgetary allocations with external project-based financing can help sustain efforts to implement ABS over the long term. In addition, integrating ABS considerations into broader biodiversity finance strategies can enhance sustainability, coherence, and visibility across government systems.

336. The indicators below show that the average staff dedicated to ABS implementation is four staff members. Staffing levels reported during the first assessment and review were inconclusive. At the same time, many Parties rely on part-time personnel or staff with multiple responsibilities across biodiversity-related and multilateral environmental agreements. Frequent staff turnover, limited personnel, and reliance on project-based staffing were consistently cited as factors constraining sustained implementation.

337. The availability of financial resources is essential for the effective implementation of the Nagoya Protocol. However, mobilizing, resources both domestically and internationally, including through the GEF, remains challenging, as ABS is often accorded lower priority compared to broader environmental, climate-related or poverty-reduction initiatives and national development objectives.

Table 10
Indicators to measure progress by Parties in mobilization financial resources

Framework of indicators	*Reference point (as at 22 February 2018)*	*9 March 2026*
Number and percentage of Parties that made financial resources available to other Parties	13 (12%)	13 (9%)
Number and percentage of Parties that received financial resources from other Parties or financial institutions for the purposes of implementation of the Protocol as provided in Article 25	35 (33%)	59 (61%)
Number and percentage of Parties that established a mechanism for budgetary allocations of funds for the implementation of the Nagoya Protocol	24 (23%)	44 (31%)
Average number of full-time staff working to administer functions directly related to the implementation of the Nagoya Protocol in each Party	Not conclusive data	4

(b) Analysis of information available

338. Thirteen Parties (9%) reported that they **made financial or other resources available to other Parties for the purposes of implementing the Protocol**.[107]

339. Some of those Parties, such as Germany, Switzerland and Norway United Kingdom of Great Britain and Northern Ireland, referred to the multilateral contributions through the Global Environment Facility (GEF). Contributions to other projects were also mentioned.[108]

340. Most Parties reported no provision of financial resources to other Parties during the reporting period due to limited budgets, capacity constraints, or lack of prioritization of domestic implementation. However, several Parties, such as Albania and Netherlands, contributed non-financial assistance, such as technical cooperation and experience sharing, legal resources, and participation in regional training initiatives. Overall, direct bilateral financial transfers were minimal while knowledge-sharing and multilateral contributions through GEF and similar mechanisms were more common.

341. A total of 59 Parties (61%) reported having received **financial or other resources from other Parties or financial institutions for the purpose of implementing the Protocol during the reporting period**.[109] Figure 28 below provides the regional breakdown of the responses provided.

342. Out of the 59 Parties that received financial or other resources:

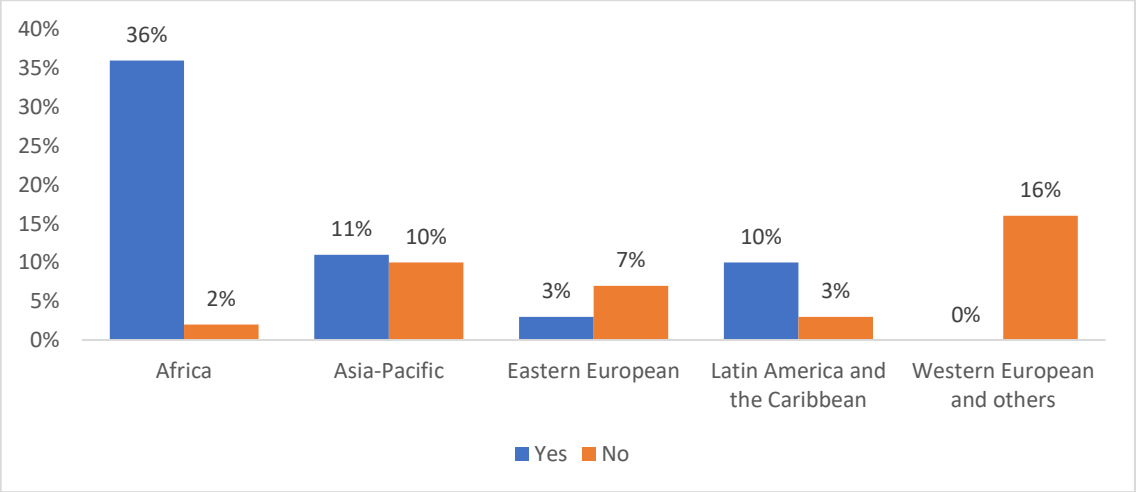
(a) Forty-seven Parties reported receiving resources from the GEF,

(b) Sixteen Parties received the resources from other financial institutions other than the GEF, for instance the World Bank, GIZ/BMZ, FAO, and UNESCO.

(c) Thirteen Parties reported receiving the resources from other Parties, mainly Germany.

(d) Twenty-four Parties selected other sources, but in the information provided the GIZ was often mentioned.

Figure 28
Percentage of Parties that have received financial or other resources from other Parties or financial institutions during the reporting period



343. These financial resources supported activities such as legal and institutional strengthening, national reporting, development of ABS regulatory frameworks, technology transfer,

[107] Question 59 of the first national report format.
[108] Such as Biotrade from UN Trade and Development, ABioSA project, the ASEAN–India Green Fund and the CEBioS programme
[109] Questions 60 and 60.1 of the first national report format.

community-level capacity building, research and value-chain development, awareness raising, and digital infrastructure.

344. Out of the 59 Parties that received financial and other resources, 23 provided information on **the amount of resources received (in United States dollars) during the reporting period.**[110] The total received amounts to $48,272,831.

345. However, the amounts of financial resources reported by Parties varied substantially with significant differences in access to ABS-related financing across Parties.[111]

346. 44 Parties (31%) reported that their country **established a mechanism for budgetary allocations of funds for the operation of their national ABS framework**[112]. Out of these, 26 answered "yes" and 18 "yes, to some extent"

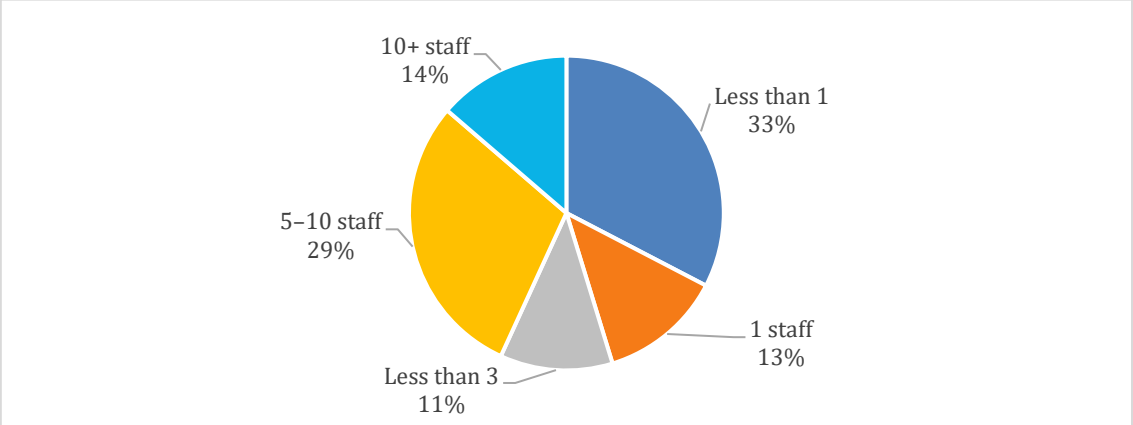
347. Parties reported varied arrangements. Some, like Bhutan and Namibia, have dedicated budget mechanisms, such as specific budget lines, or annual allocations with combined national and international financing (e.g. Albania). Some Parties reported working towards establishing an ABS fund (e.g. Bangladesh, Bhutan)

348. Many Parties integrate ABS implementation into general institutional budgets without specific allocations. This is the case for example, of Indonesia and Finland. Several Parties reported not having an established mechanism citing ongoing work to develop legal frameworks or budgetary structures (e.g. Botswana, Guinea, Lesotho and Morocco). Others, such as Cameroon, reported depend primarily on project-based external funding.

349. Some Parties reported ongoing work under Biodiversity Finance Initiative (BIOFIN) to improve biodiversity financing (e.g. Honduras, Malawi) or work on financial plans under the NBSAP update process to cover ABS funding (e.g. Eritrea).

350. A total of 64 Parties (45%) **reported having full-time staff working in functions directly related to the implementation of the Nagoya Protocol** and provided information on available full-time staff.[113]

Figure 29
Staff available to work in functions directly related to the implementation of the Nagoya Protocol globally (percentage of Parties that submitted a first national report)



[110] Question 60.2 of the first national report format.
[111] Several countries received significant funding, such as (in United States dollars) India ($15,505,930), Lesotho ($9,496,330), Mozambique ($4,500,000), South Africa ($6,300,000), and Gambia ($3,074,866). Others received moderate allocations, including Albania ($200,000), Belarus ($380,480), Costa Rica ($248,000), Côte d'Ivoire ($716,530), Dominican Republic ($1,023,200), Madagascar ($2,430,154), and Mexico ($2,194,506). Several Parties reported very small allocations, such as Burkina Faso ($130), Liberia ($30), Chad ($10,000), and Eritrea ($27,000).
[112] Question 61 of the first national report format.
[113] Questions 62 and 62.1 of the first national report format.

351. Parties reported highly variable staffing arrangements as the figure shows. Some Parties have ten or more full time staff. For example, Ethiopia has 12 active full-time staff members dedicated to ABS functions within the Ethiopian Biodiversity Institute. The average number of staff globally is 4.

352. According to the information provided some of the full-time staff identified may be working on other biodiversity issues and not only on ABS. Many Parties rely on part-time staff or staff with multiple responsibilities across biodiversity and multilateral environmental agreements

353. Frequent staff turnover, limited personnel, and reliance on project-based staffing were identified as common constraints

354. A total of 67 Parties provided **information on experiences related to the mobilization of resources in support of the implementation of the Protocol**.[114]

355. Parties reported mixed experiences with resource mobilization, noting a continued heavy reliance on external financing, most commonly through the GEF, with UNDP and UNEP acting as implementing agencies and/or through regional partnerships and bilateral donors such as GIZ/BMZ.

356. Parties emphasized the importance of having a diverse mix of financial and non-financial resources, combining national budgetary allocations with external project financing, private sector engagement, and technology-transfer partnerships. This is the case, for instance, of Bhutan, India and South Africa. Bhutan in addition to the national allocation benefited from external funding from different sources, including funding coming from ABS agreement. The country is also working on establishing an ABS fund as a long-term financing mechanism to channel monetary benefits from ABS agreements into conservation and community development. These approaches illustrate how combining national, multilateral, regional, and private-sector support can enhance financial resilience for ABS implementation.

357. However, mobilizing domestic resources is not without challenges for many Parties. For many, budgetary allocations remain limited as ABS activities must compete with other high-priority poverty reduction and national development goals (Ethiopia, Kiribati and Comoros). These challenges reveal that although some ABS-related tasks occur within broader sectoral budgets, sustained domestic funding remains difficult for many Parties.

358. Without allocation of sufficient domestic resources, many Parties rely on external funding to implement the Protocol, which can lead to short-term, fragmented and project-specific actions primarily focused on capacity building activities, such as training, awareness, and technical support for ABS implementation. The reliance on donor funding also creates sustainability risks, particularly in maintaining technology systems, ensuring long-term community engagement and institutional stability.

359. Some Parties also reflected on challenges related to access to GEF funds, and competition with other Convention priorities within national GEF STAR allocation. Eswatini noted that ABS competes directly with other biodiversity and MEA priorities, limiting its ability to secure GEF funds under the national STAR envelope. Lao PDR reported unsuccessful attempts to access STAR allocations for ABS activities due to competing national needs. Cote d'Ivoire described preparing a GEF ABS project concept note but noted that fund-raising is still pending due to competing funding demands across biodiversity sectors. These cases highlight that ABS often receives lower prioritization relative to broader environmental, climate or poverty-reduction investments, affecting Parties' ability to access the financial mechanism.

360. Some Parties are integrating ABS financing needs into broader national finance frameworks. Peru, through BIOFIN, is developing a national biodiversity financing plan that incorporates ABS actions into multi-sectoral budgeting and long-term financial planning. Comoros is using BIOFIN to identify biodiversity financing gaps and map international and domestic funding opportunities,

[114] Question 63 of the first national report format.

including those relevant to ABS. These examples demonstrate how integrating ABS into broader biodiversity finance strategies can improve sustainability and visibility across government systems.

361. Sixty-six Parties **provided information on the status of funds mobilized in support of the implementation of the Protocol**.[115]

362. The status of funds mobilized varied widely. Some Parties reported significant mobilization, such as Bhutan ($451,718), South Africa ($350,000 in 2019 plus $6.2 million under GEF-6), Ethiopia ($69, 801) or Madagascar (multi-source mobilization from GEF, GIZ, NGOs and public institutions).

363. Other Parties reported partial mobilization, often tied to individual projects, while several Parties reported minimal or no mobilization, relying solely on national budgets or having exhausted previous allocations. Limited national allocations and strong dependency on donor-funded projects were mentioned as recurring challenges.

364. 60 Parties provided information on **lessons learned, what worked well and why, difficulties, challenges and underlying causes**.[116]

365. Parties reiterated similar challenges and lessons learned from those shared in the previous sections: Among the lessons learned many Parties shared the importance of combining national budgets and external funds to provide stability and sustainability for implementation activities. Establishing clear legal frameworks for ABS, having adequate resources and institutional capacity, including for issuing and monitoring permits in a timely manner, was highlighted as essential to mobilize private sector funding, including through the sharing of monetary benefits.

366. Key challenges included the lack of dedicated national funding, limited technical capacity, limited IT and connectivity infrastructure that constrain ABS operations, staff turnover, insufficient legal frameworks, and difficulties attracting private-sector engagement due to insufficient scientific and valuation capacity, reliance on donor-driven, short-term projects. Parties cited as chronic public finance limitations, fragmented institutional responsibilities and limited awareness among policymakers as some of the underlying causes complicating long-term planning and resource mobilization.

D. Assessment of effectiveness of Article 18 (extent of implementation)[117]

1. Summary and indicator data

367. As the indicators in table 11 below demonstrate, good progress has been made in the implementation of Article 18 since the last reference point in February 2018.

368. The information provided by Parties points out to a lack of experience on cases of dispute resolution in ABS.

369. As regards to Article 18, paragraph 1, Parties reported that provisions on dispute resolution in mutually agreed terms could be included in ABS measures, model contractual clauses or in both. However, there are other provisions in Article 18, paragraphs 2 and 3, that are often implemented at the national level through existing contractual law, private international law, and domestic measures related to access to justice laws rather than through the ABS measures. These later aspects have shown moderate progress.

370. It was noted that those developing ABS measures and/or implementing the Protocol may not be aware of all applicable legislation dealing with contractual law, private international law or domestic measures related to access to justice. It was suggested that developing model contractual clauses or introducing some specific aspects in ABS measures can help the capacity of institutions implementing ABS to have clear guidance when negotiating MAT. These efforts could be built on

[115] Question 64 of the first national report format.
[116] Question 65 of the first national report format.
[117] Source: responses to questions 25–29 of the first national report format.

best practices for ensuring compliance with mutually agreed terms coming from other fields of legal expertise.

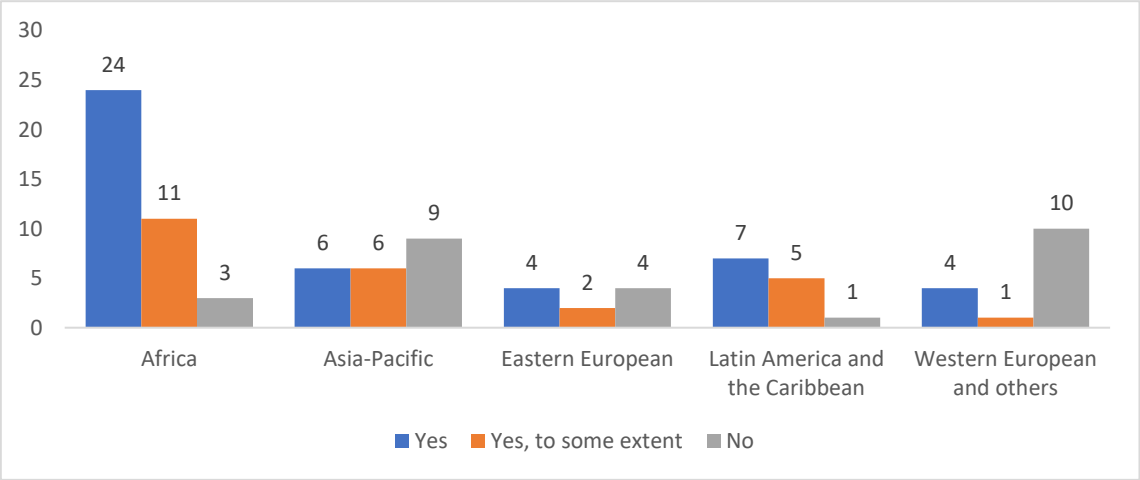
Table 11
Indicators to measures progress on implementation of Article 18 of the Nagoya Protocol

Framework of indicators	*Reference point (as at 22 February 2018)*	*9 March 2026*
Number and percentage of Parties that encourage the inclusion of dispute resolution provisions in mutually agreed terms as provided in Article 18.1	36 (34%)	65 (46%)
Number and percentage of Parties with opportunity to seek recourse available under their legal systems in cases of disputes arising from mutually agreed terms as provided in Article 18.2	51 (49%)	83 (58%)
Number and percentage of Parties with measures regarding access to justice	47 (45%)	84 (59%)
Number and percentage of Parties with measures regarding utilization of mechanisms regarding mutual recognition and enforcement of foreign judgements and arbitral awards	38 (36%)	65 (45%)

2. Analysis of available information

371. A total of 65 Parties (46%) reported **encouraging the inclusion of provisions on dispute resolution in mutually agreed terms**.[118] Forty-four of them answered "yes" and other 25 responded "yes, to some extent". The figure below provides a regional breakdown of the responses.

Figure 30
Inclusion of provisions in MAT to cover dispute resolution (percentage of Parties that submitted a first national report)



372. Approaches for encouraging this inclusion varies among Parties. Some Parties, such as Cuba or United Republic of Tanzania, reported addressing this issue through their ABS measures; while others (e.g. Belarus, Benin, Panama) reported having dispute resolution clauses included in MAT, permits or available model contracts, or in both (e.g. Cameroon). Some Parties, such as Croatia, Montenegro or Senegal, mentioned that dispute resolution is addressed by other applicable laws, normally administrative or private law.

[118] Question 25 of the first national report format.

373. With respect to the methods for dispute resolution, some Parties specifically mentioned that priority was given to amicable solutions, and for instance, Malaysia[119] and Malawi[120] provided details on a multi-tiered system approach for dispute resolution.

374. A total of 83 Parties (58%) responded that their country **ensures that opportunity to seek recourse is available under their legal systems in case of disputes arising from mutually agreed terms.**[121] 63 of which responded "yes" and 20 Parties "yes, to some extent"

375. Most of the Parties reported that the opportunity to seek recourse was addressed by other legislation in the country and not necessarily by the ABS measures. For instance, Parties mentioned the constitution (e.g. Estonia, Bolivarian Republic of Venezuela), civil or contract law (e.g. Croatia, United Kingdom of Great Britain and Northern Ireland), arbitration measures and other.

376. In Sweden, consistent with applicable jurisdictional requirements, cases of disputes arising from MAT can be brought before a Swedish civil and criminal court of first instance (called district court or, in Swedish, "tingsrätt"). Sweden's chambers of commerce offer arbitration and mediation services to Swedish and international parties who wish to have their disputes resolved outside of the public

377. Bhutan and Palau provided information on how this issue is addressed by their ABS measures. For instance, according to national ABS legislation the courts of the Republic of Palau have exclusive jurisdiction over any dispute arising under an ABS Agreement. Parties to an agreement may alternatively contract to enter binding arbitration conducted within Palau under rules established by the Supreme Court.

378. Some Parties answered "no" based on not having ABS specific legislation to address this issue, while at the same time recognizing that they still have applicable national laws regarding dispute resolution.

379. A total of 84 Parties (59%) reported that **they have taken measures regarding access to justice**. Sixty-one of which responded "yes" and 23 Parties "yes, to some extent".[122]

380. Similarly, to the responses provided to the previous question, the majority of Parties that provided further information reported that access to justice was addressed by other legislation in the country and not necessarily by ABS measures.

381. Sixty-five Parties (45%) **reported having taken measures regarding utilization of mechanisms on mutual recognition and enforcement of foreign judgements and arbitral awards.** Forty-one answered "yes" and 24 "yes, to some extent".[123]

382. The majority of Parties that provided further information to this question reported that the mechanisms for mutual recognition and enforcement of foreign judgements and arbitral awards were addressed by existing legislation in the country and some referred to applicable international and regional treaties.

[119] Malaysia's User's Guide to the Act provides a Model Benefit Sharing Agreement which explicitly outlines mechanisms for the "Settlement of disputes": (a) parties must first seek a solution by negotiation; (b) if negotiation fails, Parties may jointly seek the good offices of, or mediation by, a third Party; (c) any proceedings involving IPLCs must be conducted with due regard to their customary laws, practices, or protocols; (d) parties may refer the matter to the Malaysian courts only after exhausting the negotiation and mediation processes.

[120] Malawi's model contract includes a clause on dispute resolution, which outlines a tiered approach. First, the Parties are encouraged to attempt in good faith to resolve any dispute through direct negotiation. If negotiation fails, the second option is mediation with a neutral third-party mediator. As a third option, the Parties may proceed to arbitration at a mutually convenient time. One of the challenges with arbitration is determining the seat of arbitration. To address this, the contract allows the Parties to agree on the use of the arbitration rules of an international body. Additionally, the contract specifies a default seat of arbitration to apply if the Parties cannot reach agreement. The outcome of arbitration, whether under the agreed rules or at the default seat, is binding on both Parties.

[121] Question 26 of the first national report format.

[122] Question 27 of the first national report format.

[123] Question 28 of the first national report format.

383. Many Parties answered "no" to this question because of the lack of experience on recognition of foreign judgements and arbitral awards in the context of a dispute regarding MAT.

384. Sixty-three Parties provided in information on **lessons learned, what worked well and why, difficulties, challenges and underlying causes.**

385. Generally, there seem to be a lack of experience on dispute resolution for specific ABS cases. Many Parties reflected on the importance of building capacity for negotiating MAT, having model contractual clauses in place, and of building trust and long-lasting partnership between users and providers. Some reflected on the need to build the capacity of judges on ABS, and the fact that there is lack of expertise on those matters among the CNAs and NFPs.

386. Some of the lessons learned on implementation of Article 18 of the Protocol are the following:

(a) Malawi reported that they specify the governing law in their ABS contracts while also providing some flexibility in selecting an internationally recognized arbitration body. The contracts also clearly stipulate that the arbitration award will be final and binding on all parties;

(b) Mexico reflected that even when there are existing national and international frameworks to address Article 18 of the Protocol, the provisions of this article should be articulated as well as part of the ABS framework

E. Assessment of implementation of Article 16 in the light of developments in other relevant international organizations, including the World Intellectual Property Organization[124]

1. Summary and indicator data

387. The indicators in table 11 below suggest that significant progress has been made on measures to implement Article 16. For many Parties measures taken for implementation of Article 16 are the same as for implementation Article 15 (genetic resources).

388. Nevertheless, looking at the information provided on implementation of this Article together with the data from implementation of IPLCs provisions and compliance provisions, it can be noted that even though many Parties have put measures in place, those are often not fully operationalised or there is a general lack of practical experience in implementation.

389. According to the information provided in the reports, experience addressing cases of non-compliance with measures for access to associated traditional knowledge seems merely anecdotal. For instance, the Peruvian National Commission Against Biopiracy was one of the few specific examples of cooperation in specific cases of alleged violation of ABS measures relating to traditional knowledge associated with genetic resources.

390. Regarding progress made at the World Intellectual Property Organization, the Treaty on Intellectual Property, Genetic Resources and Associated Traditional Knowledge was adopted on 24 May 2024. Three Parties have ratified the treaty so far.

391. The Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore will continue its work to protect traditional knowledge and traditional cultural expressions and in 2027 the General Assembly will take stock of progress made and decide whether to convene a diplomatic conference and/or continue negotiations. The decision will be based on the maturity of the text(s), including levels of agreement on objectives, scope, and nature of the instrument(s).

[124]Source: responses to question 20 of the first national report format and the reports of, inter alia, the Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore of the World Intellectual Property Organization

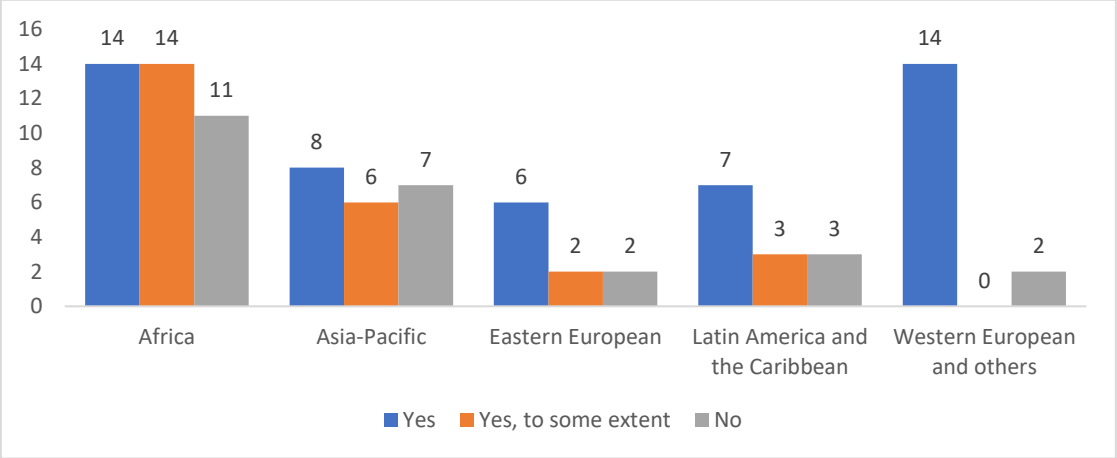
Table 12
Indicators to measure progress in implementation of Article 16 of the Protocol

Framework of indicators	*Reference point (as at 22 February 2018)*	*9 March 2026*
Number and percentage of Parties that have taken appropriate, effective and proportionate legislative, administrative or policy measures to implement Article 16.1 (traditional knowledge associated with genetic resources)	33 (31%)	71 (50%)

2. Analysis of information available

392. Seventy-one Parties (50%) reported that their country **has taken appropriate, effective and proportionate measures to provide that traditional knowledge associated with genetic resources utilized within its jurisdiction has been accessed with the prior informed consent or approval and involvement of indigenous peoples and local communities and that mutually agreed terms have been established in accordance with the domestic requirements of the Party where such indigenous peoples and local communities are located**.[125] Of those, 47 Parties answered "yes" and another 24 a partial yes ("yes, to some extent").

Figure 31
Measures to implement Article 16.1 of the Protocol (percentage of Parties that submitted a first national report)



393. In their responses most Parties referred to the same compliance measures adopted for access to genetic resources. Parties with IPLCs in their country, such as the Dominican Republic, Madagascar, and Peru, often commented on ABS measures and safeguards in place to make sure that associated traditional knowledge is accessed with PIC and that IPLCs are involved.

394. Parties that answered "no" to this question often cited the absence of IPLCs in their territory or the absence of ABS measures or work underway to adopt the relevant measures.

395. Out of the 71 Parties that reported having measures in place, eleven Parties responded that their **country encountered and addressed situations of non-compliance with these measures**[126]. According to the information provided in the reports, it is unclear that these are all cases of non-compliance with measures for access to associated traditional knowledge. Four of the eleven Parties referred to access to genetic resources in their submission, and the information provided by most other Parties is not specific enough to determine whether these were cases of non-compliance with measures for access to associated traditional knowledge.

[125] Question 20 of the first national report format.
[126] Question 20.1 of the first national report format

396. Only Ecuador provided an example where the CNAs are examining the potential misappropriation of genetic resources and associated traditional knowledge from a community in the Amazon. The community raised the issue with the government, and there have been several meetings with the community and academics involved with a view to define possible actions.

397. Out of the 71 Parties that reported having measures in place, only three Parties reported that they **cooperated with other Parties in specific cases of alleged violation of ABS measures relating to traditional knowledge associated with genetic resources**. Two of them referred in their reports to the Peruvian National Commission against Biopiracy who collaborates with the Andean Community countries (i.e. Bolivia, Ecuador and Colombia).

3. Developments under the World Intellectual Property Organization Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore

398. The World Intellectual Property Organization (WIPO) Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGC) was established in 2000 and aims, since 2009, to reach an agreement on one or more international legal instruments to ensure the protection of genetic resources, traditional knowledge and traditional cultural expressions.

399. In July 2022, WIPO Member States decided to convene a Diplomatic Conference to conclude an International Legal Instrument Relating to Intellectual Property, Genetic Resources and Traditional Knowledge Associated with Genetic Resources no later than 2024. After a special session in September 2023 and discussions at the forty-ninth meeting of the Intergovernmental Committee session in December 2023, the Diplomatic Conference adopted the World Intellectual Property Organization Treaty on Intellectual Property, Genetic Resources and Associated Traditional Knowledge on 24 May 2024.[127]

400. The Treaty's central provision is set out in Article 3 which establishes a disclosure requirement for patent applications. Under this provision, , Parties to the Treaty are to required to ensure that patent applicants disclose specified information where a claimed invention is based on genetic resources or on traditional knowledge associated with genetic resources. In the case of inventions based on genetic resources, the information to be disclosed is the country of origin of the genetic resources. In the case of inventions based on traditional knowledge associated with genetic resources, the information to be disclosed is the indigenous peoples or local community who provided the traditional knowledge associated with genetic resources. In both cases, where the information is not known, the applicant is to disclose the source of the genetic resources or the source of the traditional knowledge associated with genetic resources (Articles 3.1 and 3.2). In cases where none of this information is known to the applicant, Parties are to require the applicant to make a declaration to that effect, affirming that the content of the declaration is true and correct to the best knowledge of the applicant (Article 3.3).

401. In Article 2 of the Treaty, "based on" is defined to mean "that the genetic resources and/or traditional knowledge associated with genetic resources must have been necessary for the claimed invention, and that the claimed invention must depend on the specific properties of the genetic resources and/or on the traditional knowledge associated with genetic resources". In the same article, it is stated that "source of genetic resources" refers to any source from which the applicant has obtained the genetic resources, such as a research center, gene bank, Indigenous Peoples and local communities, the Multilateral System of the International Treaty on Plant Genetic Resources for Food and Agriculture, or any other ex situ collection or depository of genetic resources". In addition, in Article 2, "source of traditional knowledge associated with genetic resources" is defined to mean "any source from which the applicant has obtained the traditional knowledge associated with genetic

[127] Document GRATK/DC/7 and more information and resources are available at: https://www.wipo.int/en/web/traditional-knowledge/wipo-treaty-on-ip-gr-and-associated-tk

resources, such as scientific literature, publicly accessible databases, patent applications and patent publications".

402. Article 3.5 provides that Parties are not to place an obligation on their patent offices "to verify the authenticity of the disclosure," while Article 3.6 provides that each Party is to "make the information disclosed available in accordance with patent procedures, without prejudice to the protection of confidential information."

403. Article 8 of the Treaty addresses "review" and provides that the Parties "commit to a review of the scope and contents of the Treaty, addressing issues such as the possible extension of the disclosure requirement in Article 3 to other areas of intellectual property and to derivatives and addressing other issues arising from new and emerging technologies that are relevant for the application of the Treaty, four years after the entry into force of the Treaty".

404. In the preamble to the Treaty, it is recognized that "[the] Treaty and other international instruments related to genetic resources and traditional knowledge associated with resources should be mutually supportive." This is reinforced in Article 7 of the Treaty, in which it is stated that "[the] Treaty shall be implemented in a mutually supportive manner with other international agreements relevant to [the] Treaty".

405. The Treaty will enter into force three months after the deposit of 15 instruments of ratification or accession (Article 17). As of 28 of February, 44 countries have become signatories to the Treaty and three countries have ratified it.[128]

406. The adoption of the Treaty on Intellectual Property, Genetic Resources and Associated Traditional Knowledge did not end the mandate of the Intergovernmental Committee. At the sixty-sixth session of the General Assembly of WIPO in July 2025, the Assembly adopted a decision[129] in which it renewed the mandate of the Intergovernmental Committee for the biennium 2025/2026, agreeing that the Committee would continue its work in the protection of traditional knowledge and traditional cultural expressions. The Committee will build its existing work, including text-based negotiations, with a primary focus on narrowing existing gaps and reaching common understanding on core issues.[130] The General Assembly in 2027 will take stock of progress of made and based on the maturity of the text(s), including levels of agreement on objectives, scope, and nature of the instrument(s), decide on whether to convene a diplomatic conference and/or continue negotiations.

F. Stocktaking of the use of model contractual clauses, codes of conduct, guidelines, best practices and standards, as well as the customary laws, community protocols and procedures of indigenous peoples and local communities

1. Community protocols and procedures of indigenous peoples and local communities[131]

(a) Summary and indicator data

407. The indicators below show significant increase in the number of community protocols published in the ABS Clearing-House since the last assessment and review in 2018 (from 3 to 48 community protocols). However, these were developed in relative low number of countries (14) and mostly in the context of cooperation or capacity-building projects.

408. Developing and implementing community protocols is a key element in translating the provisions of the Nagoya Protocol related to IPLCs into a practice in a participatory and context specific manner. For IPLCs seeking to engage in ABS processes, the development of community

[128] See: https://www.wipo.int/documents/d/treaties/docs-en-gratk.pdf
[129] The decision, under item 12 (v) is available here.
[130] More information on the WIPO Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore can be found at: https://www.wipo.int/en/web/igc .
[131] Source: responses to question 39 of the first national report format, the ABS Clearing-House.

protocols is often a critical first step, as it enables communities to articulate their values, customary practices and aspirations and to communicate these effectively to users and government authorities.

409. Community protocols can also support governments in implementing the IPLC-related provisions of the Protocol and provide greater clarity and legal certainty for potential users regarding the conditions under which access to genetic resources and/or associated traditional knowledge held by IPLCs may be granted.

410. It appears that much of the work to support the development and implementation of community protocols is done through capacity-building projects and initiatives, and that Parties and indigenous peoples and local communities require additional resources and capacity to conduct that work. For instance, many of the community protocols currently published in the ABS Clearing-House are the results of different GEF projects

411. Community protocols are being developed and used in a variety of contexts, including but not limited to ABS. Incorporating ABS elements in existing community protocols dealing with resource or land management or biotrade may facilitate the process.

412. Sharing information on community protocols through the ABS Clearing-House helps potential users to understand how to access traditional knowledge associated with genetic resources within a community. Parties can also publish the information as part of the national framework in the ABS Clearing-House.

413. Sharing existing experiences and lessons learned from the development and implementation of community protocols and procedures could be useful for those working on the development of protocols or that are planning to do so.

Table 13
Indicators to measure progress on community protocols

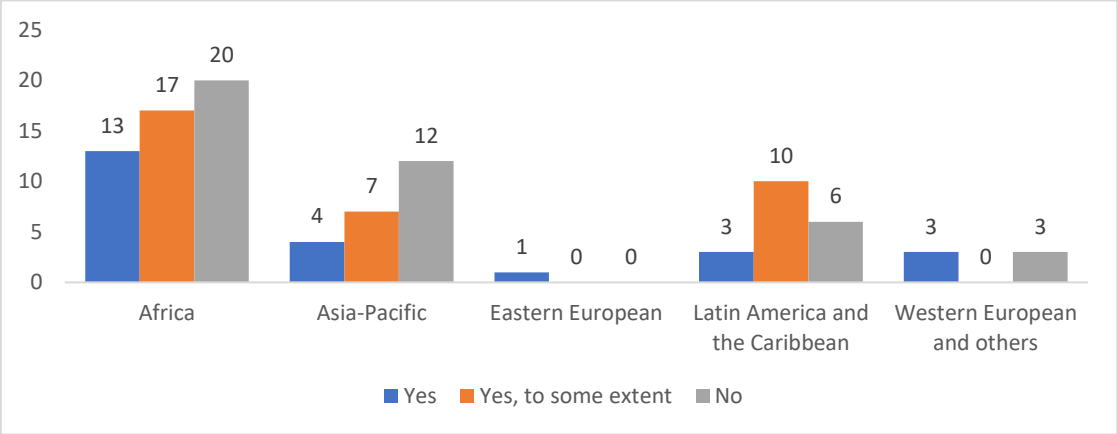
Framework of indicators	*Reference point (as at 22 February 2018)*	*9 March 2026*
Number of indigenous peoples and local communities' community protocols and procedures developed	Not conclusive data	48
Number of indigenous peoples and local communities' customary laws, community protocols and procedures made available made available as reference records in the ABS Clearing-House[132]	3	44 (92%)

(b) Analysis of information

414. Out of the 69 Parties that have IPLCs in their country, 41 Parties (59%) reported **having supported the development by indigenous peoples and local communities, including women within these communities, of community protocols, minimum requirements for mutually agreed terms and model contractual clauses**.[133] Out of which 17 Parties answered "yes" and 24 responded "yes, to some extent".

[132] The indicator has been modified to clarify that it considers information submitted as reference records in the record category "community protocols and procedures and customary law"
[133] Question 39 of the first national report format.

Figure 32
Support the development by indigenous peoples and local communities of the tools provided in Article 12.3 (percentage of Parties that submitted a first national report)



415. Many of the reports asserted that the country supports the development of community protocols, and some shared information on their progress or plan to support community protocols, including information on awareness-raising and capacity-building activities.

416. As of 9 March 2026, and according to information available,[134] 48 community protocols have been developed and 44 of those have been included in the ABS Clearing-House as reference records.[135] Parties reported that they supported the development of these tools but did not provide new information on community protocols that have been developed as a result.

417. The ABS Clearing-House provides countries the possibility of publishing community protocols as national records, therefore as part of the countries' national framework and profile. As of this date, no country has made use of this possibility.

418. It is worth noting that these were developed in relative low number of countries (14) and mostly in the context of cooperation or capacity-building projects; namely eight countries from the African region, five from Latin America and the Caribbean and one from Asia. Twenty-one out of the 44 community protocols were developed in Mexico mostly with the support of the GEF-UNDP-SEMARNAT project: "Strengthening of National Capacities for the Implementation of the Nagoya Protocol"; while 8 other community protocols were developed in Ecuador.

419. Community protocols are being developed and used in a variety of contexts, including but not limited to ABS. Some deal with biotrade or land issues and include some ABS elements as part of a bigger context. Communities can use protocols in response to a particular challenge or a specific opportunity that arises regarding a community's genetic resources or associated traditional knowledge.

420. Communities can also use community protocols to help define their values and community goals and identify the steps in order to achieve these goals and use that to support communication with potential users and national governments. This may lead to parallel developments in different areas. IPLCs that want to participate and benefit from ABS can also benefit from the process for developing the community protocols as the process itself can contribute to multiple goals.

421. Community protocols can also help governments to implement the IPLC-related provisions of the Protocol, and they provide greater clarity and legal certainty to users regarding the conditions under which access to genetic resources and/or associated traditional knowledge held by IPLCs may be granted.

[134] Information provided in the first national reports, and the ABS Clearing-House.
[135] Record type: community protocols and procedures and customary law.

422. The following provides some examples of community protocols[136] recently published in the ABS Clearing-House:

(a) Biocultural community protocol for Lewoh community in Cameroon[137]: The main objective this Biocultural Community Protocol is to ensure that the community of Lewoh's needs, rights and concerns relating to the conservation, use and access to genetic and associated traditional knowledge are well articulated and to facilitate partnerships with the government and private sector. The Protocol is presented in French and English, as many other community protocols, it includes information on the community, including institutions, culture, livelihood and biodiversity references and how it is used by the community as a background to the community protocol. The lessons learned from this process and the development of another community protocol has informed the development of a methodological guide for the inventory of traditional knowledge associated with genetic resources in Cameroon;

(b) The community protocol of Bengou community in Niger contains similar information. It also includes the description of the community competent authority and a checklist with questions and the information necessary for them to be able to grant PIC, a description of the steps necessaries for granting access to genetic resources and a specific section on access to genetic resources for food and agriculture;[138]

(c) The Community Protocol mushuk yuyay (nuevos conocimientos) San Antonio in Ecuador was an initiative from the community of San Antonio, and that with the support of different governmental institutions and NGOs, developed a document to support the management of their traditional knowledge. The document contains details on all the steps necessary for accessing their knowledge, including those related to complying with Ecuador's ABS legislation. The steps include workflows, and a monitoring plan;[139]

(d) The Microregional Community Protocol of Oaxaca:[140] Mexico covers three Zapotec indigenous communities who produce maguey plants (Agave Spp.) in the central and south Oaxaca. This document contains a synthesis of information for these communities, as the geographical, biocultural heritage, and general data regarding the importance of Agave Spp. plants for the life and economy. The last chapter contains the access and benefit-sharing procedures designed by the representatives of these three communities. The procedures can be used for any beneficial or potentially detrimental initiative in the territory, and not exclusively for access to genetic resources and associated traditional knowledge;

(e) The Biocultural community protocol MASAVI group and Juan de Herrera community in the Dominican Republic[141] includes management and decision-making rules for use and access to genetic resources and associated traditional knowledge. Among other things, it includes conditions for mutually agreed terms, including environmental and Actions done by countries

423. Parties, and other actors, also support the development of community protocols through capacity-building resources, guides and activities. For example:

(a) Ecuador developed with the support of the GEF-UNDP Global Project a step-by-step guide for the development of community protocols.[142] In addition to explaining why the protocols are important and the applicable legal framework in Ecuador, the document provides different practical tools to support their development. For instance, it includes a table detailing the components

[136] All community protocols can be found at the ABS Clearing-House. There are two additional records whose intended purpose is to serve as guides or capacity-building resources for community protocols.
[137] More information: https://absch.cbd.int/en/database/CPP/ABSCH-CPP-SCBD-280886-2
[138] More information: https://absch.cbd.int/en/database/CPP/ABSCH-CPP-SCBD-273091-1
[139] More information: https://absch.cbd.int/en/database/CPP/ABSCH-CPP-SCBD-265931-1
[140] More information: https://absch.cbd.int/en/database/CPP/ABSCH-CPP-SCBD-255094-1
[141] More information: https://absch.cbd.int/en/database/CPP/ABSCH-CPP-SCBD-264496-1
[142]More information: https://absch.cbd.int/en/database/CPP/ABSCH-CPP-SCBD-255068-1 .

and elements to be addressed and goes further in explaining and providing methodological suggestions and content for each of those components and elements;

(b) Cameroon has developed a practical guide for developing and using biocultural community protocols in Cameroon, available in French and English[143]. The guide has multiple targeted audiences, IPLCs, government authorities, private sector and academia, legal practitioners, etc. It also includes a list of the possible elements of community protocols and clear guidance and methodologies for engaging with the community, organizing a capacity-building workshop, or technical and tools for research and information gathering among other topics;

(c) The publication community protocols in Africa: lessons learned for ABS implementation [144] draws lessons from the work by Natural Justice and the ABS Capacity Development Initiative supporting a number of communities on the African continent to develop their community protocols.

2. Model contractual clauses and codes of conduct, guidelines, best practices and standards (Article 19 and 20) [145]

(a) Summary and indicator data

424. As a result of changes made in the methodology applied, [146] the results coming from this stocktaking exercise are not directly comparable with those from the 2018 reference point (see table 14 below). In addition, some documents encompass multiple types of tools within them (for instance a single document may include both ABS standards and model contractual clauses). Therefore, there is an overlap between the tools reported under Article 19 and those reported under Article 20.

425. User organizations and networks play an important role in addressing the needs of their members by developing tools that can bring clarity on how ABS can be incorporated in their practice and assisting their member organizations to comply with ABS requirements. The tools identified in Articles 19 and 20 are only some of the possible means that organizations can support and encourage compliance by users, and users' organizations and other relevant actors have developed a wealth of materials and resources, including internal online systems, checklists, trainings, or advisory services, for instance, to support their membership or constituency to comply with ABS requirements.

426. In the first national reports, sixty-two Parties (43%) reported that their country has encouraged other actors to develop, update and use model contractual clauses for mutually agreed terms, and sixty-eight Parties (48%) reported that their country encouraged other actors to develop, update and use of codes of conduct, guidelines and best practices or standards.

427. Sharing Article 19 and 20 tools through the ABS Clearing-House helps other organizations to develop similar documents adapted to their circumstances as well as providing guidance to users of genetic resources and associated traditional knowledge that may not be aware of those tools and that want to adopt best practices for their own work.

[143] More information: https://absch.cbd.int/en/database/CPP/ABSCH-CPP-SCBD-281672-1.
[144] More information: https://absch.cbd.int/en/database/VLR/ABSCH-VLR-SCBD-277611-1
[145] Source: response to question 50-52 of the first national report and the ABS Clearing-House.
[146] The previous stocktaking exercise of tools developed under Article 19 and 20 conducted with the first assessment and review process of the Protocol included as part of these tools information on national model clauses and national guidelines that are part of the national or regional framework and tools and resources developed by countries to support compliance with their own systems or with the ABS domestic requirements of other countries as required by Article 15 and 16 of the Protocol. However, this information is now analysed separately as the goals of those tools are very different. This allows for the assessment of tools developed by users and relevant organizations independently from those developed by countries. The tools developed by countries as part of their national framework are now analysed and accounted for only in the context of element (a) addressing establishing institutional structures and access and benefit-sharing measures to implement the Protocol.

Table 14
Indicators to measure progress on Article 19 and 20 of the Protocol

Framework of indicators	*Reference point (as at 22 February 2018)*	*9 March 2026*
Number of model contractual clauses developed *(change of methodology)*	29	12
Number of codes of conduct, guidelines, best practices and standards developed *(change of methodology)*	33	29
Number and percentage of model contractual clauses made available as reference records in the ABS Clearing-House[147] *(change of methodology)*	17 (59%)	12 (100%)
Number and percentage of codes of conduct, guidelines, best practices and standards made available as reference records in the ABS Clearing-House [148] *(change of methodology)*	25 (75%)	29 (100%)

(b) Analysis of information

428. According to information available in the ABS Clearing-House, as of 9 March 2026, a total of 12 model contractual clauses have been developed in the context of Article 19 of the Protocol, and a total of 31 codes of conduct, guidelines, best practices, and/or standards have been developed in the context of Article 20 of the Protocol.

429. Some documents contain various tools within them (for instance a document may contain both ABS standards and model contractual clauses). Therefore, there is an overlap between tools in Article 19 and Article 20.

430. The previous stocktaking exercise of tools developed under Article 19 and 20 conducted with the first assessment and review process of the Protocol included as part of these tools, information on national model clauses and national guidelines that are part of the national or regional framework. However, this information is now analysed separately as the goals of those tools are very different. This allows for the assessment of the tools developed by users and relevant organizations independently from those developed by countries.

431. It must further be noted that users' organizations and other relevant actors have developed a wealth of materials and resources, including internal online systems, checklists, trainings, or advisory services, for instance, to support their membership or constituency to comply with ABS requirements. Therefore, the tools identified in Articles 19 and 20 are only some of the possible means that organizations can support and encourage compliance by users.

432. An analysis of the twelve **model contractual clauses** published as reference records[149] in the ABS Clearing-House shows that these have been published by organisations and were developed mostly for a specific sector or to be used across sectors and generally intended to assist their membership. Some of the tools published in this category are the result of capacity-building efforts or the objective is to build capacity on the subject matter. Some examples of documents published on model contractual clauses are:[150]

(a) Biotechnology Innovation Organization (BIO), a trade association representing mainly biotechnology companies and research centres involved in the research and development in

[147] The indicator has been modified to clarify that it only measures model contractual clauses submitted as reference records and that it does not include those that Parties have submitted as national records and that constitute part of the national ABS framework

[148] The indicator has been modified to clarify that it only measures codes of conduct, guidelines, best practices and standards made available as reference records and that it does not include guidelines or other documents submitted by Parties as national records and that constitute part of the national ABS framework.

[149] Record type: Model contractual clauses and codes of conduct, guidelines, best practices and standards.

[150] All model clauses published as reference records can be found at the following link in the ABS Clearing-House.

healthcare, agricultural, industrial and environmental biotechnology products, has developed "Guidelines for BIO Members Engaging in Bioprospecting and Suggested Model Material Transfer Agreement" for its members;

(b) The Swiss Academy of Sciences developed a manual entitled "Agreement on Access and Benefit-sharing for Academic Research – A toolbox for drafting Mutually Agreed Terms for access to Genetic Resources and to Associated Traditional Knowledge and Benefit-sharing". This manual contains a set of model clauses to enable users and providers of genetic resources and/or traditional knowledge to set up an agreement that is adapted to the individual academic research situation;

(c) The European Culture Collections' Organisation (ECCO) has produced "The ECCO core Material Transfer Agreement for the supply of samples of biological material from the public collection" for their members, holders of biological cultures, and for users of these cultures;

(d) Likewise, the Global Genome Biodiversity Network (GGBN) is an international network of gene banks, and they have developed model contractual clauses for their members and for users of genes entitled "Global Genome Biodiversity Network Guidance: Material Transfer Agreements";

(e) Germany reported that the German Research Foundation (Deutsche Forschungs Gemeinschaft - DFG) has developed model contractual clauses for researchers applying for funding;

(f) The "African Union Guidelines for Coordinated implementation of the Nagoya Protocol on ABS: the Practical Guidelines" also include model contractual clauses.

433. Some model contractual clauses developed are targeted for use by both users and providers and they can be used in a variety of sectors, for instance the World Intellectual Property Organization (WIPO) produced "Draft Intellectual Property Guidelines for Access to Genetic Resources and Equitable Sharing of the Benefits arising from their Utilization" for both providers and recipients of genetic resources that negotiate an agreement, contract or license.

434. As regards to **codes of conduct, guidelines, best practices and standards** (Article 20), 29 of those tools have been published by organisations as reference records.[151] Some also contain model clauses. Most of them were developed for a specific sector and some are to be used across sectors. Some of tools published in this category are the result of capacity-building efforts or the objective is to build capacity on the subject matter. Some examples of these tools are:[152]

(a) The Botanic Gardens Conservation International (BCGI) has produced standards on access to genetic resources and benefit-sharing for participating institutions.

(b) The Microbial Resource Research Infrastructure (MIRRI) developed "MIRRI Best Practice Manual on Access and Benefit Sharing" for users of microbial and genetic resources from a network of research institutes across Europe.

(c) The International Federation of Pharmaceutical Manufacturers and Associations (IFPMA) produced "Guidelines for IFPMA Members on Access to Genetic Resources and Equitable Sharing of Benefits Arising out of their Utilization" for their members, which are mainly biopharmaceutical companies around the world.

(d) The Consortium of European Taxonomic Facilities (CETAF) developed a "Code of Conduct and Best Practices on Access and Benefit-Sharing and Material Transfer Agreement Templates" for their members (a network of natural science and history museums, botanical gardens and biodiversity research centres) as providers of ex-situ genetic resources and others wanting to use

[151] Record type: Model contractual clauses and codes of conduct, guidelines, best practices and standards. There are two additional records with information published by countries that constitutes part of their national framework.
[152] All a codes of conduct, guidelines, best practices and standards published as reference records can be found at the following link in the ABS Clearing-House.

these resources. This tool is recognized as best practice in the context of the European Union Regulation 511/2014.

(e) The Wellcome Sanger Institute Best Practice aims to provide assurance that the institute has initiated and carries out appropriate processes and procedures to enable compliance with global ABS measures and compliance with the ABS legislation from the United Kingdom of Great Britain and Northern Ireland. The document includes tools, processes and procedures, including internal policies.

(f) The Union for Ethical BioTrade (UEBT) produced the "Ethical BioTrade Standard" for its members across sectors.

(g) The Molecular Ecology and Molecular Ecology Resources guidelines provides editorial guidelines for authors for reporting Data Accessibility and Benefit-Sharing.

435. Sixty-two Parties (43%) reported that their country has **encouraged other actors to develop, update and use model contractual clauses for mutually agreed terms** (38 answered "yes" and 24 "yes, to some extent").[153]

436. In providing additional information, many Parties referred to existing ABS measures in their legislation that contain MAT obligations or to model clauses developed to implement their national frameworks. Some Parties reported that they encourage users to adapt the national model clauses when negotiating MAT.

437. Other Parties indicated that they are encouraging different actors to develop model contractual clauses. For instance, in line with Regulation 511/2014, the European Commission and the Member States encourage the development of codes of conduct, model contractual clauses, guidelines and best practices, particularly when they would benefit academics, university and non-commercial researchers, and small and medium-sized enterprises

438. Japan's ABS guidelines provides that the Minister responsible for the Environment, in cooperation with other competent line ministers, encourages efforts to develop, update and use cross-sectoral model contractual clauses for mutually agreed terms.

439. Sixty-eight Parties (48%) reported that their country **encouraged other actors to develop, update and use of codes of conduct, guidelines and best practices or standards** (39 answered "yes" and 29 "yes, to some extent").[154]

440. Similarly to the question above, many Parties reflected on the use of guidelines or standards as part of the national ABS framework. Several Parties indicated that they are encouraging the development, update and use of codes of conduct, guidelines and best practices by different actors in their ABS measures.

441. The European Union and Switzerland have set up a process for recognition of best practices. The European Union's Regulation provides that associations of users or other interested parties may submit an application to the European Commission to have a combination of procedures, tools or mechanisms recognized as best practice. The European Commission has so far received three applications and is in dialogue with the applicants to make sure that the applications fulfil the standards set up in the EU ABS Regulation and the Commission Implementing Regulation. Similarly, in Switzerland, there are ongoing processes for the recognition of best practices and collections according to Articles 6 and 7 of the Nagoya Ordinance.

442. Fifty-nine Parties provided information on **lessons learned, what worked well and why, difficulties, challenges and underlying causes.**[155] Most of the information provided related to the challenges and lessons learned on establishing or implementing national ABS frameworks.

[153] Question 50 of the first national report format.
[154] Question 51 of the first national report format.
[155] Question 52 of the first national report format.

G. Review of implementation and operation of the Access and Benefit-sharing Clearing-House [156]

1. Summary and indicator data

443. Overall, as the indicators in table 15 below demonstrate there has been significant progress made in the publication of available national information in the ABS Clearing-House for all record types of types.

444. Notably, the number of certificates published has increased since 2018 from 146 to 6269, and the number of Parties publishing them from 12 to 34. The use of checkpoints communiques went from 0 to 371 with records published by 15 Parties.

445. However, given the central role that the ABS Clearing-House plays in the implementation of the Protocol efforts need to be made to make sure that the 68 Parties (48%) that have information available to publish, do so in a timely manner, and that the national information in the ABS Clearing-House is accurate, reliable, complete and up-to-date.

446. Africa and the Latin America and the Caribbean are the regions with more available information that needs to be published in the ABS Clearing-House

447. Often Parties cited the fact that measures or institutions are not fully operational as one of the reasons for not publishing the information in the ABS Clearing-House. Parties also pointed out to the need for better understanding the role of the ABS Clearing-House and the obligations under the Protocol. The need for more capacity-building related to monitoring the utilization of genetic resources, including internationally recognized certificates of compliance, checkpoints and checkpoint communiques was also highlighted.

448. For reference records, the indicators below also show that publication of the different types of records have increased. Methodological changes in some of the types of records are the reason behind an apparent decrease in numbers.

449. The traffic on the ABS Clearing-House website has also significantly increased since the reference point of 2018.

Table 15
Indicators to measure progress on the ABS Clearing-House

Framework of indicators	*Reference point (as at 22 February 2018)*	*9 March 2026*
Number and percentage of Parties that have published information on competent national authorities in the ABS Clearing-House	45 (43%)	83 (58%)
Number and percentage of Parties that have published information on legislative, administrative or policy measures on ABS in the ABS Clearing-House	45 (43%);	80 (56%)
Number and percentage of Parties that have published information ABS procedures[157] *(new indicator)*	NEW	30 (21%)
Number and percentage of Parties that have published national model contractual clauses [158] *(new indicator)*	NEW	11 (8%)

[156] Source: The ABS Clearing-House, responses to questions 4.1 5.1, 7.1, 10.1 and 12.1, 13.1 and 21.1 of the first national report format which relate to progress in publication in the ABS Clearing-House.
[157] A new indicator has been added to measure progress in the publication of ABS procedures, given the importance of publishing this information for potential users of genetic resources of associated traditional knowledge.
[158] A new indicator has been added to measure progress in the publication of national model contractual clauses, given the importance of publishing this information for potential users of genetic resources of associated traditional knowledge.

Framework of indicators	*Reference point (as at 22 February 2018)*	*9 March 2026*
Number and percentage of Parties that have published national websites and databases[159] *(new indicator)*	new	45 (32%)
Number and percentage of Parties that have published information on checkpoints in the ABS Clearing-House	20 (19%)	48 (34%)
Number and percentage of Parties that have published internationally recognized certificates of compliance (IRCCs) in the ABS Clearing-House	12 (11%)	34 (24%)
Number of IRCCs available in the ABS Clearing-House	146	6269
Number and percentage of Parties that provide the information collected or received at a designated checkpoint to relevant national authorities, to the Party providing prior informed consent and to the ABS Clearing-House[160]	9 (9%)	15 (10%)
Number of checkpoint communiques published in the ABS Clearing-House	0	371
Number and percentage of Parties that have made information available to the ABS Clearing-House (CNA, checkpoint, ABS measures, IRCC)	54 (51%)	93 (66%)
Number and percentage of Parties that have information (CNA, checkpoint, ABS measures, permits) that have not yet been made available to the ABS Clearing-House	46 (44%)	68 (48%)
Number of non-Parties that have published national information (ABS measures, CNAs or checkpoints) in the ABS Clearing-House	8	8
Number of indigenous peoples and local communities' customary laws, community protocols and procedures made available as reference records in the ABS Clearing-House[161]	3	44 (92%)
Number and percentage of model contractual clauses made available as reference records in the ABS Clearing-House *(change of methodology)* [162]	17 (59%)	12 (100%)
Number and percentage of codes of conduct, guidelines, best practices and standards made available as reference records in the ABS Clearing-House *(change of methodology)* [163]	25 (75%)	29 (100%)
Number of capacity-building and development initiatives made available as reference records to the ABS Clearing-House	57	104
Number of capacity-building and awareness-raising tools (*virtual library resources)*[164] and resources made available as reference records in the ABS Clearing-House	34	367

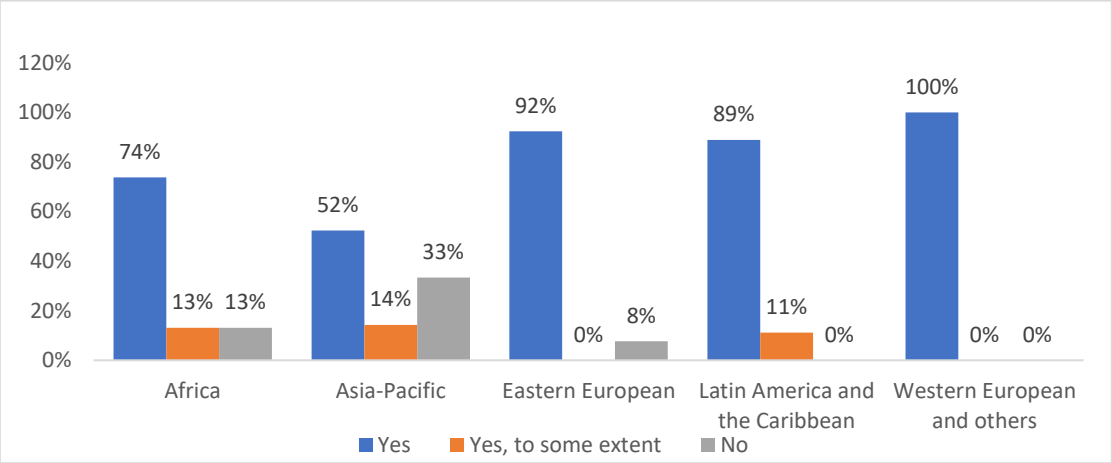
[159] A new indicator has been added to measure progress in the publication of national websites and databases, given the importance of publishing this information for potential users of genetic resources of associated traditional knowledge.
[160] The indicator measures the number of Parties and percentage that have published checkpoint communiques as per information provided in the national report and the ABS Clearing-House. It is proposed that this indicator also assists in measuring progress on the implementation and operation of the ABS Clearing-House.
[161] The indicator has been modified to clarify that it considers information submitted as reference records in the record category "community protocols and procedures and customary law".
[162] The indicator has been modified to clarify that it only measures model contractual clauses submitted as reference records and that it does not include those that Parties have submitted as national records and that constitute part of the national ABS framework.
[163] The indicator has been modified to clarify that it only measures codes of conduct, guidelines, best practices and standards made available as reference records and that it does not include guidelines or other documents submitted by Parties as national records and that constitute part of the national ABS framework.
[164] Suggested addition to provide clarity that the indicator data is based on the information available as virtual library resource records.

Framework of indicators	*Reference point (as at 22 February 2018)*	*9 March 2026*
The number of visitors to the ABS Clearing-House per year[165]	18,709 visitors	85,000 visitors

2. Analysis of information available

450. According to the information available, 105 (74%) Parties have **one or more competent national authority (**CNA) in place.[166] Out of the 105 Parties, 83 (79%) have included this information in the ABS Clearing-House and 23 Parties (22%) have designated CNAs that are yet to be published in the ABS Clearing-House. The following provides the percentage of Parties per region that have published that information in the ABS Clearing-House.

Figure 33
Progress in publication of information on designated CNAs in the ABS Clearing-House (percentage of Parties by region)



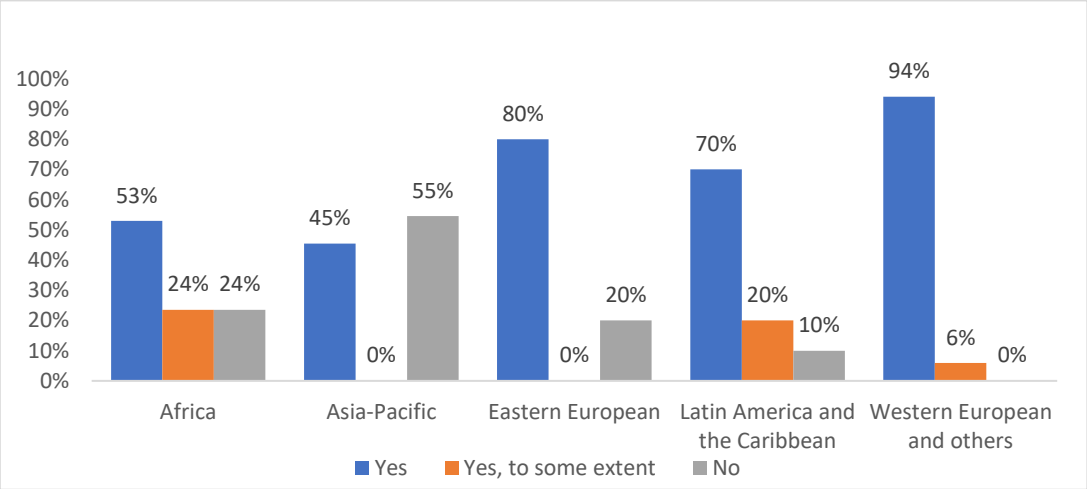
451. In their national reports, seventy-five Parties (53%) reported that they have published information on their competent national authorities in the ABS Clearing-House.[167] 65 of which answered "yes" and 10 "yes, to some extent".

452. Among the Parties that responded "yes, to some extent" or "no", several provided additional information in the free-text field. Most Parties cited challenges in finalizing their legal and institutional frameworks as the reason for not publishing. Some of the reasons provided by Parties suggests possible misunderstanding on the meaning of the question or regarding Parties' obligations to publish information through the ABS Clearing-House.

453. According to the information available, 65 (46%) Parties have **one or more checkpoints** in place.[168] Out of the 65 Parties, 48 (34%) have included this information in the ABS Clearing-House and 20 Parties (14%) have one or more checkpoints that have not yet been published in the ABS Clearing-House. The following provides the percentage of Parties per region that have published that information in the ABS Clearing-House.

[165] This indicator is calculated based on the total of visits during the year before the date of reference (e.g. from 9 March 2025 to 9 March 2026, for this reporting period). Approximated data is provided for this indicator.
[166] Source: First national report of the Nagoya Protocol, and information provided in NBSAPs and the seventh national report under the CBD for those Parties that did not submit the national report and the ABS Clearing-House.
[167] Question 4.1 of the first national report format.
[168] Source: First national report of the Nagoya Protocol, and information provided in NBSAPs and the seventh national report under the CBD for those Parties that did not submit the national report and the ABS Clearing-House.

Figure 34
Progress in publication of information on designated checkpoints in the ABS Clearing-House (percentage of Parties by region)



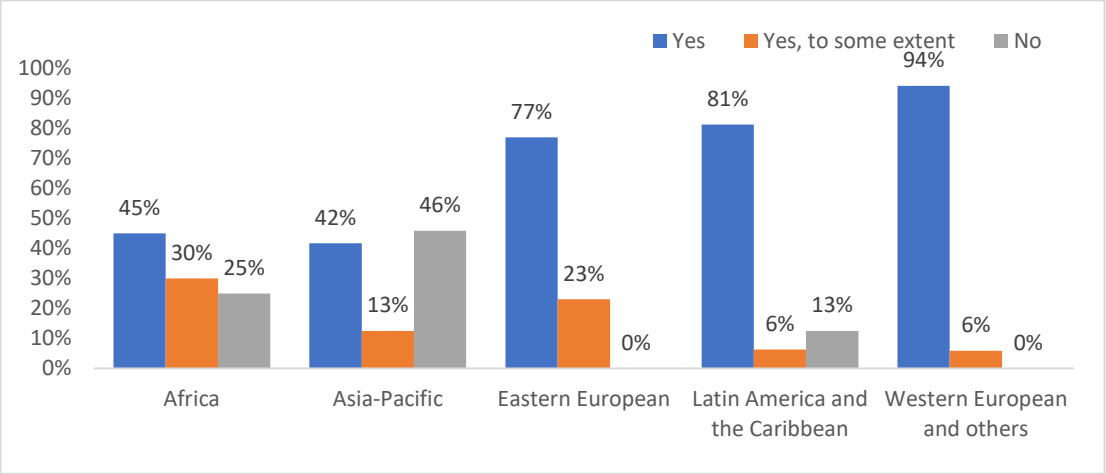
454. In their national reports, forty-five Parties (32%) reported that they have published information on their checkpoints in the ABS Clearing-House.169 Thirty-eight of which answered "yes" and 7 "yes, to some extent".

455. Among the Parties that responded "yes, to some extent" or "no", some Parties reported that, while checkpoints exist in practice, they have not been published in the ABS Clearing-House due to the absence of formally designation. In other cases, Parties provided that their checkpoints have been formally designated but are not yet operational as a reason for not publishing them.

456. According to the information available, 110 (78%) Parties have **ABS measures** in place.[170] Out of the 110 Parties, 80 (56%) have included this information in the ABS Clearing-House and 20 Parties (14%) have ABS measures in place that have not yet been published in the ABS Clearing-House. The following provides the percentage of Parties per region that have published that information in the ABS Clearing-House.

[169] Question 5.1 of the first national report format.
[170] Source: First national report of the Nagoya Protocol, and information provided in NBSAPs and the seventh national report under the CBD for those Parties that did not submit the national report and the ABS Clearing-House.

Figure 35
Progress in publication of information on ABS measures in place in the ABS Clearing-House (percentage of Parties by region)



457. Seventy-three Parties (51%) reported that they have published information on their ABS measures in the ABS Clearing-House (55 Parties answered "yes" and 18 "yes, to some extent").[171]

458. Among the Parties that responded "yes, to some extent" or "no", most Parties responded that their ABS measures were not yet finalized and would be published as soon as they were adopted.

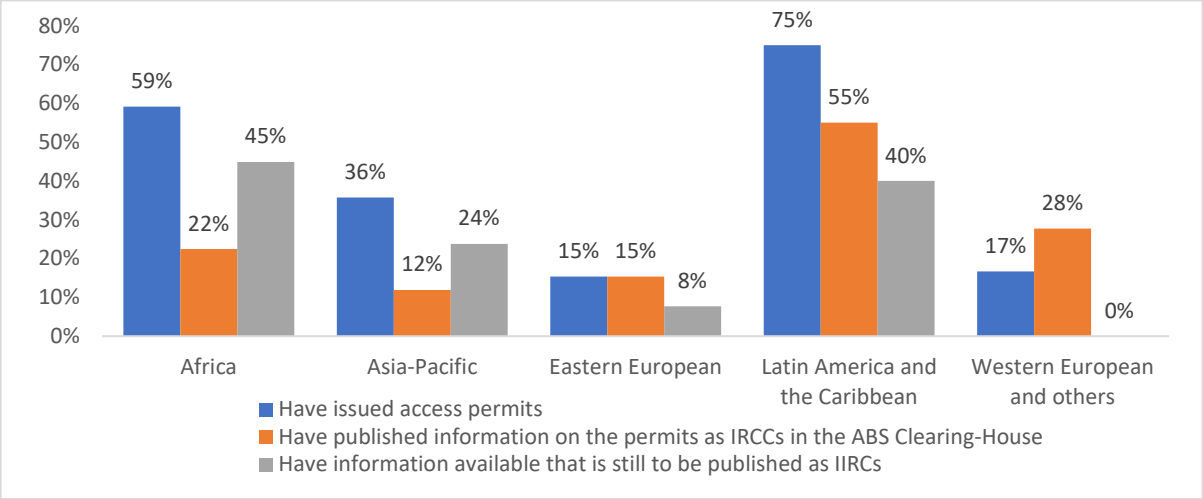
459. 30 Parties (21%) have published **ABS procedure**s in the ABS Clearing-House. Thirty-seven Parties (26%) responded that their country published information on how to apply for PIC on the ABS Clearing-House through the ABS Procedures common format (27 Parties answered "yes" and 10 "yes, to some extent").[172]

460. Among the Parties that responded "yes, to some extent" or "no", many Parties responded that their ABS legal framework was not yet finalized and would publish ABS Procedures once measures were in place and operational. Some Parties responded that they had published ABS Procedures records but have plans to update them or add additional procedures. Some Parties responded that they had already provided similar information through the ABS measures records and presumably found no need to make available the same information again under another record type.

461. According to information available, 64 Parties (45%) have issued access permits.[173] Thirty-four of them (24%) have published information on the permits as **internationally recognized certificates of compliance** (IRCCs) in the ABS Clearing-House, and 41 Parties (29%) have information available that is still to be published as IRCCs.

[171] Question 7.1 of the first national report format.
[172] Question 10.1 of the first national report format.
[173] Source: First national report of the Nagoya Protocol, and information provided in NBSAPs and the seventh national report under the CBD for those Parties that did not submit the national report and the ABS Clearing-House.

Figure 36
Progress in publication of information on permits as IRCC in the ABS Clearing-House (percentage of Parties by region)



462. Thirty-two Parties (22%) country published relevant information on permits or their equivalent as IRCCs to the ABS Clearing-House (19 Parties answered "yes" and 13 "yes, to some extent").[174]

463. Among the Parties that responded "yes, to some extent" or "no", many Parties acknowledged they had permits to publish and were in the process of doing so.. From the question 12.1 approximately 24,253 permits have been issued by Parties. Some Parties acknowledged the permits they had issued, which they referred to as authorizations, approvals, or recommendations, did not meet the requirements for publication as certificates, citing factors such as the absence of MAT or insufficient legal basis. A few Parties responded they had uploaded permits to national ABS clearing-houses, which may suggest a misunderstanding regarding Parties' obligations to publish information through the ABS Clearing-House.

464. Eleven Parties (8%) have published **national model contractual clauses** as part of their national records. In their reports, 18 Parties (13%) reported that their country had published this information to the ABS Clearing-House (15 Parties answered "yes" and 3 "yes, to some extent"). [175]

465. Among the Parties that responded "yes, to some extent" or "no", some Parties responded that their model contractual clauses were included in their ABS measure, therefore not submitted as a separate national model contractual clause record. Other Parties indicated that their national model contractual clauses were available already on their national websites. A number of Parties indicated that national model contractual clauses were in development, or pending completion of their ABS measures, and would be published once finalized.

466. Fifteen Parties (10%) have published a total of 371 **checkpoint communiques** in the ABS Clearing-House. In their reports, 17 Parties (7%) responded that they have published the information collected or received by the checkpoint to the ABS Clearing-House through the Checkpoint Communiqué common format[176]. Thirteen of which responded "yes" and 4 "yes, to some extent".

467. Among the Parties that responded "yes, to some extent" or "no", many Parties also indicated that either no information had been gathered by their checkpoints or that the information gathered was deemed not relevant for publication on the ABS Clearing-House, for example Parties mentioned that the information was sometimes confidential, incorrect, or that it didn't fall under the definition of utilization, that the genetic resources utilized were domestic. Some Parties indicated they had not

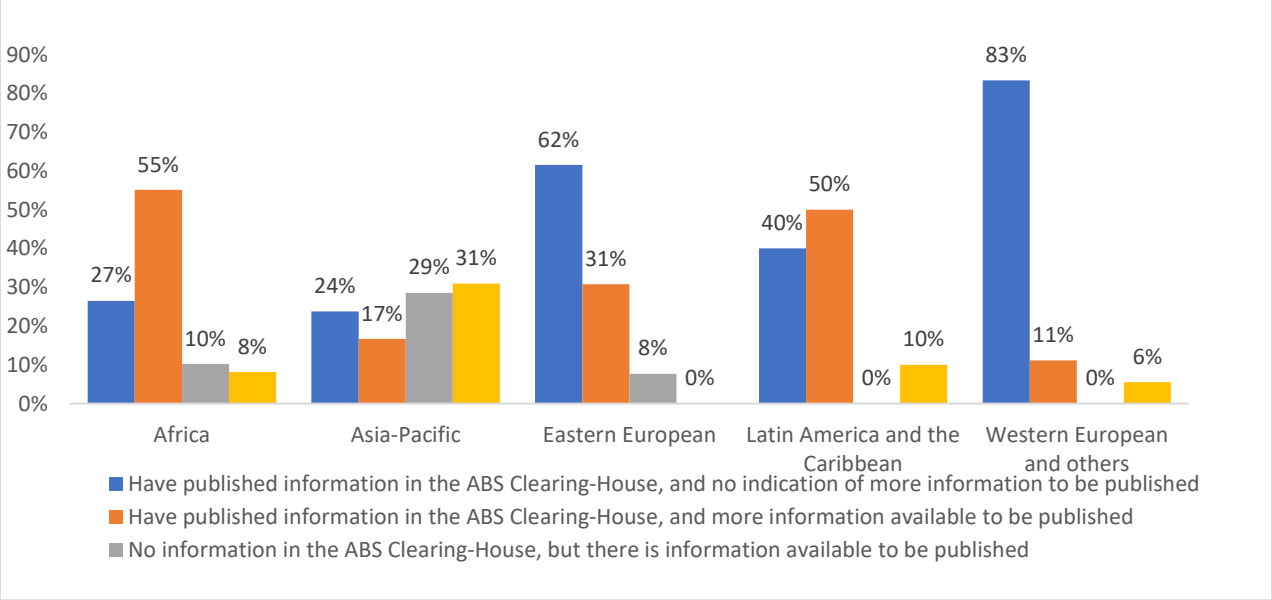
[174] Question 12.2 of the first national report format.
[175] Question 13.1 of the first national report format.
[176] Question 21.2 of the first national report format.

finalized the designation or operationalization of the checkpoints and cited a lack of understanding, technical capacity or resources as the main constraints.

468. In addition, some responses suggest that certain Parties may not fully understand the role of checkpoints and the system for monitoring utilization under the Nagoya Protocol and a few Parties appear to have interpreted the question as referring to checkpoint communiqués that identify them as the source country of the genetic resources and indicated uncertainty and a lack of understanding how to use such information.

469. Overall, 93 Parties, (66%) have made information available to the ABS Clearing-House (CNA, checkpoint, ABS measures, or IRCC); 68 Parties (48%) have some information in the ABS Clearing-House but there is more information available to be published, and 46 Parties (32%) and have no information in the ABS Clearing-House, but according to information available there is information to be published. Africa and the Latin America and the Caribbean are the regions with more available information that needs to be published in the ABS Clearing-House.

Figure 37
Status of progress by Parties in publishing information in the Access and Benefit-sharing (percentage of Parties by region)



H. Progress on the implementation of Article 10, on a global multilateral benefit-sharing mechanism[177]

470. Article 10 of the Nagoya Protocol[178] has been under consideration since shortly after the adoption of the Protocol in 2010. Work over the years has included the submission of views, online discussions, expert meetings and the commission of studies.[179]

471. Following the entry into force of the Protocol, the first meeting of the Conference of the Parties serving as the meeting of the Parties to the Protocol was held in October 2014. The meeting adopted

[177] Source: Relevant documents prepared for the consideration of the Conference of the Parties serving as the meeting of the Parties to the Nagoya Protocol

[178] Article 10 provides that "Parties shall consider the need for and modalities of a global multilateral benefit-sharing mechanism to address the fair and equitable sharing of benefits derived from the utilization of genetic resources and traditional knowledge associated with genetic resources that occur in transboundary situations or for which it is not possible to grant or obtain prior informed consent. The benefits shared by users of genetic resources and traditional knowledge associated with genetic resources through this mechanism shall be used to support the conservation of biological diversity and the sustainable use of its components globally."

[179] See www.cbd.int/abs/art10.shtml for a summary of work done on the matter since the adoption of the Protocol.

decision NP-1/10 on 'the need for and modalities of a global multilateral benefit-sharing mechanism' (Article 10). The decision (a) invited the submission of views on a number of topics relevant to Article 10 of the Protocol; (b) requested the Executive Secretary to commission a study; and (c) called for the convening of an expert meeting to review a synthesis of the views submitted and the commissioned study with a view to reaching a common understanding on the areas requiring further examination as identified in the report of an expert meeting on Article 10 held in September 2013.[180]

472. The work requested was undertaken and the report of the expert meeting was submitted to the second meeting of the Conference of the Parties serving as the meeting of the Parties to the Protocol which adopted decision NP-2/10 on the matter. In the decision, the COP-MOP invited the submission of: (a) information on different aspects related to Article 10; and views on the way forward in relation to Article 10.

473. A document synthesizing the views and information received was considered by the Subsidiary Body on Implementation which made a recommendation to COP-MOP 3. In decision NP-3/13, the COP-MOP:

(a) Invited submissions on information on specific cases which may support the need for a global multilateral benefit-sharing mechanism that are not covered under the bilateral approach, accompanied by an explanation as to why such cases cannot be covered under the bilateral approach set out in the Nagoya Protocol; and options for possible modalities for addressing those cases, including through a global multilateral benefit-sharing mechanism;

(b) Requested the Executive Secretary to commission a study to identify specific cases of genetic resources and traditional knowledge associated with genetic resources that occur in transboundary situations or for which it is not possible to grant or obtain prior informed consent.

474. This work was undertaken and submitted to the third meeting of the Subsidiary Body on Implementation which made a recommendation to COP-MOP 4. At its fourth meeting (December 2022), the Conference of the Parties serving as the meeting of the Parties to the Protocol considered the recommendation by the Subsidiary Body on Implementation and decided to revisit the issue of the need for and modalities of a global multilateral benefit-sharing mechanism at its fifth meeting (decision NP-4/10).

475. The fifth meeting of the Conference of the Parties serving as the meeting of the Parties to the Nagoya Protocol (October 2024) considered the issue of a global multilateral benefit-sharing mechanism on the basis of a document[181] and decided to revisit at its sixth meeting the issue of the need for and modalities of a global multilateral benefit-sharing mechanism as provided in Article 10 of the Nagoya Protocol, taking into consideration the analysis and synthesis of information for the second assessment and review of the Protocol (decision NP-5/7).

I. Progress on the implementation of Article 23, on technology transfer, collaboration and cooperation[182]

1. Summary and indicator data

476. As shown in the indicators below there has been moderate progress in the percentage of Parties that have collaborated and cooperated in technical and scientific research and development programmes as a means to achieve the objective of the Protocol as provided in Article 23.

477. Parties reported a variety of cooperation and technology transfer modalities, such as laboratory upgrades and establishment of conservation /gene bank facilities, provision of equipment, joint research projects, scientific exchanges, knowledge and skills transfer, co-authored publications,

[180] UNEP/CBD/ABSEM-A10/1/3.
[181] CBD/NP/MOP/5/10.
[182] Source: responses to questions 57-58 of the first national report format.

technology-transfer through MATs or permits and structured partnerships and digital biodiversity platforms.

478. Technology transfer in the ABS context is closely linked to benefit-sharing arrangements under the Nagoya Protocol. As discussed in the section on benefit-sharing, technology transfer reported by Parties often occurs both within negotiated ABS agreements and through broader cooperation mechanisms beyond ABS, with MAT playing a central role where access-related obligations apply.

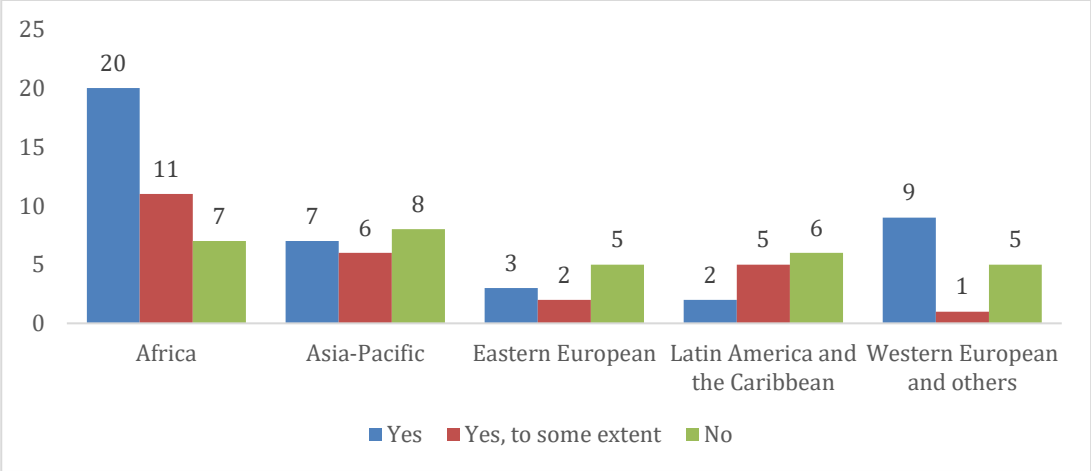
Table 16
Indicators to measure progress on technology transfer

Framework of indicators	*Reference point (as at 22 February 2018)*	*9 March 2026*
Number and percentage of Parties that have collaborated and cooperated in technical and scientific research and development programmes as a means to achieve the objective of the Protocol as provided in Article 23	46 (44%)	66 (47%)

2. Analysis of available information

479. Sixty-six Parties responded that their **country collaborated and cooperated in technical and scientific research and development programmes related to ABS during the reporting period.**[183] Of which 40 Parties "yes" and 25 "yes, to some extent."

Figure 38
Collaboration and cooperation as provided in Article 23 (percentage of Parties that submitted a first national report)



480. The majority of Parties reported full or partial cooperation in technical and scientific ABS-related programmes with institutions in Europe, Asia, and Africa, often facilitated through GEF and UNDP projects and regional networks.

481. Parties mentioned several networks in their reports, for instance:

(a) The Association of Southeast Asian Nations (ASEAN) functions as a regional capacity-building and technical cooperation platform, particularly through institutions like the ASEAN Centre for Biodiversity (ACB). The information provided in the reports show it supports training on taxonomy, biodiversity data management, ABS compliance, and coordinated scientific

[183] Question 57 of the first national report format.

research. For example, Malaysia collaborates with ACB to strengthen regional training and standardized biodiversity methodologies.

(b) The Central African Forests Commission (COMIFAC) provides a regional policy and technical cooperation framework for Congo Basin countries. It supports alignment on ABS procedures and provides technical guidance. The Central African Republic reported receiving technical support, harmonized ABS guidelines, and shared experiences through COMIFAC.

(c) Southern African Development Community (SADC) supports regional science-funding, biodiversity research, and technical cooperation. Projects funded under SADC enable acquisition of new molecular research skills, digital systems (e.g., biodiversity data portals), and lab methodologies. Tanzania reported benefitting from SADC-linked grants (e.g., Nelson Mandela Research Chair awards) that strengthened national R&D capacities in molecular biology and nanotechnology.

(d) EU Horizon/ EU Research Framework Programmes and its precursor Horizon 2020 provide major international scientific cooperation platforms, funding multinational research projects involving biodiversity genomics, microbial resources, and genetic resource management. Several Parties, such as Czechia and Greece, reported participation in Horizon projects.

(e) Nordic Cooperation / Nordic Genetic Resources Initiatives. It supports shared technical expertise, development of standard procedures, and harmonization of technological tools relating to biodiversity monitoring and genetic resources policy. Finland reported participation in the project involving experts from across the region and jointly developing guidance on genetic resource management.

482. These regional and subregional networks can play an important and increasingly strategic role in supporting access and benefit-sharing implementation by facilitating scientific cooperation, technical capacity building, technology transfer and policy exchange. Where effectively resourced and aligned with national priorities, such networks can help address gaps in technical capacity, improve access to scientific tools, and foster peer learning and coordination across Parties. Their contribution is particularly relevant in supporting coherence and experience-sharing at regional and sub-regional levels.

483. Parties reported a variety of cooperation and technology transfer modalities, as presented below.

(a) Laboratory upgrades and establishment of conservation /gene bank facilities;[184]

(b) Provision of equipment;[185]

(c) Joint research projects;[186]

(d) Scientific exchanges, knowledge and skills transfer;[187]

(e) Co-authored publications;[188]

[184] For instance, Bhutan's upgraded bioprospecting laboratory enabling biodiscovery research, training and ABS implementation; Japan supporting Indonesia in constructing microbial conservation facilities under the "Sleeping Microbial Beauties" project; Tanzania's establishment of biodiversity data portals and molecular research support under SADC-linked programmes.

[185] Some examples of this are, for instance, Malawi's receipt of DNA sequencing tools, portable molecular laboratory equipment and eDNA technologies and Liberia's adoption of forest-monitoring software and biodiversity data systems that support ABS monitoring and compliance.

[186] For instance, Cameroon's collaboration on eDNA sequencing with IRAD and international laboratories; Burundi's medicinal plant research with Meise Botanic Garden; Mongolia's co-authored studies with foreign universities; and Indonesia's R&D with Japanese and German partners on functional foods, breeding and biotechnology.

[187] Such as, Bhutan's training under UNDP, ICIMOD and UEBT partnerships; Ethiopia's technical exchanges with Kew Gardens and Darwin Initiative; Malawi's genomics and biotechnology training in the UK or Liberia's ranger and technician training for biodiversity monitoring systems.

[188] Such as, Japan through NITE and SATREPS programmes engages in research across Asia, frequently generating joint publications and results of regional projects; Malaysia's co-authorship emerging from R&D partnerships with universities and research institutions, especially under the Heart of Borneo Initiative and EU technical collaboration; and Malawi's ABS

(f) Technology-transfer through MATs or permits and structured partnerships;[189]

(g) Digital biodiversity platforms.[190]

484. These collaborations collectively enhanced national research capacity, supported compliance with ABS frameworks, strengthened scientific institutions, and generated non-monetary benefits such as upgraded infrastructure, improved technical skills, enhanced monitoring systems, and long-term institutional partnerships.

485. Those that did not reported having collaborated or cooperated as provided in Article 23 often cite lack of capacity and resources, absence of ABS measures or being in early stages of ABS implementation.

486. 57 Parties **provided information on lessons learned, what worked well and why, difficulties, challenges and underlying causes**.[191]

487. Many Parties reported that effective collaboration often involved hands-on scientific work, joint field research, capacity building, and structured MAT requirement. Examples of these effective partnerships are for instance:

(a) Bhutan's collaborations with UNDP, GEF, ICIMOD, the University of Melbourne and corporate partners such as Chanel P and UEBT supported bioprospecting, product development, and lab upgrades, leading to nine ABS-compliant products launched in 2025.

(b) Comoros - the ABS partnership between Comoros and PHARMAMAR (Spain) provided a comprehensive model for cooperation, involving training of divers, taxonomy experts, provision of laboratory equipment, funding for doctoral studies, and collaboration on marine invertebrate research and training of trainers. This partnership delivered technology transfer, capacity building and research support in a structured, long-term arrangement.

(c) Malawi reports that their integrated R&D partnerships with the UK research institutions, the Department of Fisheries, the Department of National Parks and Wildlife, and national universities resulted in strengthened institutional capacity, including establishment of DNA sequencing systems, eDNA technologies, cryopreservation facilities, and a mobile laboratory. These collaborations were supported by joint field research, genomics training in the UK, co-authored publications and structured ABS compliance through national authorities.

488. Across Parties, several underlying causes were identified as limiting effective collaboration, technology transfer, and implementation of ABS related R&D. Challenges include: (a) limited laboratory capacity and equipment, making difficult to receive or absorb advanced technologies; (b) Insufficient or inadequate legal frameworks; (c) weak institutional coordination and fragmented mandates lead to insufficient institutional mechanisms to link research activities with national ABS authorities; (d) short project cycles, dependence on donors, staff turnover, and lack of consistent funding undermine long-term cooperation; (e) Lack of capacity in negotiation, monitoring and MAT implementation; and (f) Limited data management systems, lack of connectivity, or lack of DSI monitoring and tracking capacities.

partnerships that produced co-authored scientific papers through cooperation between the Department of Fisheries, UK institutions, and national research agencies.

[189] For example, Malaysia's ABS measures legally mandate collaboration with local institutions to ensure technology transfer. In Cameroon MAT clauses explicitly include cooperation provisions enabling acquisition of sequencing and analytical skills this enabled national institutions to acquire DNA extraction and sequencing capabilities, Ethiopia requires domestic participation in research through its ABS measures, ensuring that technology transfer occurs through joint implementation, Bhutan and Malawi promote technology transfer through ABS partnerships that include model contractual clauses for knowledge exchange, laboratory strengthening, and co-development of products.

[190] Such as those of Liberia and Malawi.

[191] Question 58 of the first national report format.

489. Parties noted the importance of the ABS regulations national coordination, regional networks, donor-funded programmes, and strong research institutions in supporting effective cooperation and as necessary enabling conditions.