United Nations A/HRC/EMRIP/2025/2



Distr.: General 6 May 2025

Original: English

English, French, Russian and

Spanish only

Human Rights Council

Expert Mechanism on the Rights of Indigenous Peoples
Eighteenth session
14–18 July 2025
Item 3 of the provisional agenda

Study and advice on the right of Indigenous Peoples to data, including data collection and disaggregation

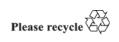
Right of Indigenous Peoples to data, including with regard to data collection and disaggregation

Draft study by the Expert Mechanism on the Rights of Indigenous Peoples*

Summary

The Expert Mechanism on the Rights of Indigenous Peoples has prepared the present study pursuant to Human Rights Council resolution 33/25 to analyse the right of Indigenous Peoples to data, including with regard to data collection and disaggregation, the role of data in achieving the right to self-determination, and the right to free, prior and informed consent in the context of data. In the study, the Expert Mechanism also discusses the role of Indigenous women in generating and preserving data and elaborates on data governance and sovereignty and the impact of artificial intelligence. Expert Mechanism Advice No. 18 (2025) on the right of Indigenous Peoples to data, including with regard to data collection and disaggregation, is annexed to the study.

^{*} Agreement was reached to publish the present document after the standard publication date owing to circumstances beyond the submitter's control.





I. Introduction

- 1. The right to data, including with regard to data collection and disaggregation, constitutes a fundamental human right for Indigenous Peoples, and data are a cultural, strategic and economic resource. Existing data and data infrastructure fail to recognize Indigenous knowledge and Indigenous world views and do not meet Indigenous Peoples' current and future data needs.¹
- 2. "Indigenous data" means data, information or knowledge, in any format or medium, that is about, from or may affect Indigenous Peoples and may include the language, culture, genetic data, environments or resources of Indigenous Peoples.² Indigenous Peoples have the right to Indigenous data sovereignty and Indigenous governance in respect of Indigenous data as an expression of their inherent sovereignty and overarching right to self-determination, as a critical enabler of collective well-being and sustainable development and as a tool to counter ongoing dispossession and discrimination.³
- 3. "Data" more broadly encompasses a wide array of materials collected for varied purposes, ranging from national statistics and administrative records to private sector datasets such as mobile phone usage records and supermarket loyalty programmes. Some data are collected explicitly in the public interest, such as through censuses or surveys, while others are generated incidentally during commercial activities. These distinctions matter, as the rights and expectations around data especially regarding self-identification, disaggregation and governance cannot be applied uniformly across all types of data or data holders.
- 4. To help situate the recommendations that follow, the present study recognizes several key categories of data producers and sources. Data producers include national statistical systems, civil society and human rights organizations, and private entities, each with different mandates and ethical obligations. Common sources of data include censuses, surveys, administrative records and other, emerging digital traces. It is important to differentiate between data explicitly about Indigenous Peoples, data that include them through disaggregation and data that may affect them indirectly. These distinctions are essential for ensuring that Indigenous Peoples' rights to data for example, with regard to self-identification, consent, access and governance are respected in ways that are meaningful and contextually appropriate.
- 5. Pursuant to paragraph 2 (a) of Human Rights Council resolution 33/25, the Expert Mechanism on the Rights of Indigenous Peoples decided, at its seventeenth session, that its next annual study would be an analysis of the rights of Indigenous Peoples to data, including with regard to data collection and disaggregation. The mandated annual intersessional seminar of the Expert Mechanism was cancelled in 2024 due to the liquidity crisis. The intersessional seminar is a key opportunity for experts to gather and for Indigenous Peoples, civil society and national human rights institutions and academia to bring to the attention of the Expert Mechanism relevant information that contributes to the work and analysis of the Mechanism.
- 6. In support of the work of the Expert Mechanism, the Asia Indigenous Peoples Pact, with the financial support of the Christensen Fund, organized an expert seminar, held in mid-December 2024 in Chiang Mai, Thailand, which contributed to the collection of information and provided inputs for the study. The study has benefited from the presentations made at the seminar and from the submissions from Indigenous Peoples, States, national human rights institutions, civil society organizations, academics and others.⁴

¹ A/73/438, para. 72.

² A/74/277, annex, para. 3.

³ See presentation by Tahu Kukutai, expert seminar organized by the Asian Indigenous Peoples Pact in Chiang Mai, Thailand, December 2024. Presentations made at the seminar are available at https://www.ohchr.org/en/events/events/2024/seminar-expert-mechanism-rights-indigenous-peoples.

⁴ The submissions are available at https://www.ohchr.org/en/calls-for-input/2025/call-inputs-study-indigenous-peoples-right-data-including-data-collection-and.

II. Overview of the existing international legal framework

- 7. As implied in articles 3–5, 15, 18–20, 23, 31–33, 38 and 42, the United Nations Declaration on the Rights of Indigenous Peoples affirms the right of Indigenous Peoples to access and control data related to their lives, cultures, lands, territories and resources. Article 16 of the Declaration guarantees non-discrimination in the dissemination and receipt of information, including through Indigenous Peoples' own media in their own languages. This includes receiving information on Indigenous Peoples' rights, how to realize those rights, and public services. Importantly, article 21 of the Declaration implies the importance of the collection of data in the context of improving the social and economic conditions of Indigenous Peoples.
- 8. The 2012 Association of Southeast Asian Nations (ASEAN) Human Rights Declaration promotes equality, non-discrimination and cultural integrity, supporting Indigenous Peoples' rights to their knowledge and data systems. The American Declaration on the Rights of Indigenous Peoples, in its article XVIII, stipulates that States are to take measures to prevent and prohibit Indigenous Peoples and individuals from being subject to research programmes, biological or medical experimentation, or sterilization without their free, prior and informed consent. Likewise, under the same article, Indigenous Peoples and individuals have the right, as appropriate, to access to their data, medical records, and documentation of research conducted by individuals and institutions, whether public or private.
- 9. Other instruments across the United Nations system also recognize existing rights in relation to data. They include article 8 (j) of the Convention on Biological Diversity, which emphasizes respect for and the preservation and maintenance of knowledge, innovations and practices of Indigenous Peoples embodying traditional lifestyles.
- 10. The World Intellectual Property Organization (WIPO) Treaty on Intellectual Property, Genetic Resources and Associated Traditional Knowledge adopted in May 2024 marks a significant milestone in international law. Of note is a clause that obliges States to require applicants for granting of a patent, where the claimed invention is based on genetic resources or traditional knowledge associated with genetic resources, to disclose the country of origin of the genetic resources or the source of the genetic resources, or the Indigenous Peoples or local community who provided the traditional knowledge associated with genetic resources or the source of the traditional knowledge associated with genetic resources. As a step in preventing the misappropriation of genetic resources and traditional knowledge, this is positive.
- 11. The WIPO Treaty on Intellectual Property, Genetic Resources and Associated Traditional Knowledge acknowledges the United Nations Declaration on the Rights of Indigenous Peoples and states that information systems, such as databases, containing information on Indigenous traditional knowledge may be established.⁵ Although a provision on the equitable sharing of benefits from the use of traditional knowledge and a framework for the protection of traditional knowledge, inter alia, are not currently included, this can be revisited during the review process.
- 12. The United Nations Educational, Scientific and Cultural Organization (UNESCO) maintains databases of tangible and intangible cultural heritage and monitors the situation of linguistic diversity. The participation of Indigenous Peoples in managing this information and its protection from misuse is of key importance.⁶
- 13. A requirement relating to the collection and use of disaggregated data concerning Indigenous Peoples is implicitly contained in the International Labour Organization Indigenous and Tribal Peoples Convention, 1989 (No. 169).
- 14. Human rights treaty bodies have declared data disaggregation to be an important tool to ensure non-discrimination. In its general recommendation No. 39 (2022) on the rights of Indigenous women and girls, the Committee on the Elimination of Discrimination against

⁵ See https://www.wipo.int/treaties/en/ip/gratk/summary_gratk.html.

⁶ Presentation by Alexey Tsykarev (in Russian), expert seminar, December 2024.

Women called upon States to systemically collect disaggregated data and undertake studies, in collaboration with Indigenous Peoples, to assess and inform measures to prevent violence against Indigenous women and girls. In its concluding observations, the Committee on the Elimination of Racial Discrimination has welcomed national censuses on population, on housing and on Indigenous communities. For example, in its concluding observations on the combined twenty-second and twenty-third periodic reports of Peru, the Committee welcomed the fact that, for the first time, the national census on Indigenous communities included an ethno-racial variable based on the principle of self-identification, thereby providing more complete information on the country's demographic composition.⁷

- 15. Indigenous Peoples are mentioned in the 2030 Agenda for Sustainable Development six times and, under the system of global indicators, data related to Indigenous Peoples are subject to collection and monitoring. A human rights-based approach to data collection and disaggregation is therefore part of the international obligations of States in the field of human rights.
- 16. In addition to international instruments, normative frameworks such as the CARE (collective benefit, authority to control, responsibility, ethics) Principles for Indigenous Data Governance have emerged as critical standards guiding the ethical collection, use and governance of data relating to Indigenous Peoples. Developed by the Global Indigenous Data Alliance, the CARE Principles complement existing human rights obligations by centring Indigenous Peoples' values, rights and decision-making in data practices.⁸

III. Challenges and opportunities in accessing and controlling data

- 17. Data are a cultural, strategic and economic resource for Indigenous Peoples. ⁹ However, statistical information has historically been tied to structural discrimination. Robust data are important for designing targeted measures to improve socioeconomic conditions for Indigenous Peoples, with a focus on health, housing and other issues. ¹⁰ The international community increasingly recognizes the importance of data-driven decision-making, and Indigenous Peoples find themselves at a crossroads between historical marginalization in data systems and emerging opportunities for data sovereignty.
- 18. Due to obstructions related to availability, relevance and cost, historically, Indigenous Peoples have had limited access to their data, even in traditional research data sets, national censuses, surveys and so forth. ¹¹ Indigenous Peoples are often excluded from research funding streams, which may be due to eligibility criteria, institutional affiliation requirements and approval systems based on Western cultural values and biased in favour of non-Indigenous research teams. This funding barrier reinforces the dependence on external organizations that continue to profit from Indigenous knowledge and research. ¹² Indigenous Peoples remain largely excluded from the collection, use and application of data about them, their lands and their cultures. Existing data and data infrastructure fail to recognize Indigenous knowledge and world views and do not meet Indigenous Peoples' current and future data needs. ¹³

⁷ CERD/C/PER/CO/22-23, para. 5.

⁸ See Chris Andersen and others, *Indigenous Statistics: From Data Deficits to Data Sovereignty*, 2nd ed. (New York, Routledge, 2025).

⁹ Presentations by Gam Awungshi Shimray and by Wilson Kipsang Kipkazi, expert seminar, December 2024.

Submission from the Canadian Human Rights Commission. See also the submission from the Soyuz Union of Indigenous Peoples and Salvation of Yugra (in Russian).

¹¹ Submission from IT for change.

¹² Submission from the Independent First Nations Alliance.

¹³ A/73/438, para. 72.

A. Challenges

- 19. The lack of legal recognition of Indigenous Peoples as distinct peoples with collective rights is challenging. States continue to deny the existence and rights of Indigenous Peoples by not reflecting the actual demographic situation and specific needs and priorities of Indigenous Peoples in national development plans and censuses.¹⁴
- 20. Variations in the definitions of Indigenous Peoples and the lack of respect for self-identification can complicate data collection and disaggregation. The failure to include questions on Indigenous identity and the lack of respect for the right of self-identification in all relevant data-collection exercises result in the inability to accurately capture identity and socioeconomic conditions.
- 21. Many States fail to disaggregate data by ethnicity or Indigenous status due to privacy concerns, definitional issues and fears of data misuse. ¹⁵ Financial, technological and intellectual investments by States in data-collection infrastructure, methodologies and human capacity are insufficient for robust and quality data disaggregation and use.
- 22. In countries where data disaggregation by ethnicity is conducted, such as Bangladesh, Kenya, Nepal and the Philippines, the data produced are often inaccurate and are not fully disaggregated due to lack of capacity and understanding among those conducting the data collection. Therefore, the right to data cannot be appropriately realized unless Indigenous Peoples are able to interpret the collected data and put them into a cultural context.
- 23. The most recent census in Cameroon, dating from 2005, did not provide any data disaggregated by ethnic group. Many births among Indigenous Peoples take place in the forest, which makes it difficult to declare births for the purposes of establishing birth certificates, hence the lack of official data on Indigenous Peoples.¹⁷
- 24. Norway does not currently disaggregate statistical data by ethnicity or Indigenous status due to the difficulties in quantifying ethnic group representation, concerns over privacy and data protection and the potential for the misuse of data, particularly in the light of historical misuse. ¹⁸ Information on ethnic background, language use or ethnic identity has been collected for various studies, but it is outside Sami control and ownership. ¹⁹ According to the State, there is no general data foundation for creating individual-based statistics on people with Sami ethnic affiliation and thematic statistics on the Sami as a group or on groups of Sami individuals. ²⁰
- 25. In a 2024 report entitled *No Data, No Story: Indigenous Peoples in the Philippines*, the World Bank emphasizes how the gaps, inconsistencies and lack of coordination in the collection of data on Indigenous Peoples represent a major barrier to recognizing Indigenous Peoples in the Philippines.²¹ In the report, the World Bank recommends that agencies and organizations focused on Indigenous Peoples in the country recognize the importance of strengthening efforts to collect data on Indigenous Peoples and place more emphasis on systematically collecting and harmonizing data, incorporating new criteria with their effective participation.
- 26. The colonial legacy in data systems is another challenge. The overwhelming predominance of colonial indicators and quantitative analysis results in a failure to incorporate Indigenous methodologies and data systems, leading to data-collection frameworks that reflect structural discrimination and colonial perspectives and methodologies that fail to capture Indigenous world views, knowledge systems and ways of

¹⁴ Presentation by Robie Halip, expert seminar, December 2024.

Submission from the Global Alliance of National Human Rights Institutions (GANHRI) Caucus on Indigenous Peoples' Rights.

Presentation by Robie Halip, expert seminar, December 2024.

¹⁷ Submission from the Cameroon Human Rights Commission (in French).

Norwegian National Human Rights Institution, A Human Rights-Based Approach to Sámi Statistics.

¹⁹ Submission from GIDA-Sápmi.

²⁰ Submission from Norway.

Presentation by Carlos Pérez-Brito, expert seminar, December 2024. See also World Bank, No Data, No Story: Indigenous Peoples in the Philippines (2024).

- life.²² These systems frequently impose external categories and classifications that conflict with Indigenous self-identification and cultural understanding.²³
- 27. In the province of British Columbia in Canada, First Nation, Inuit and Métis communities are highly diverse, but demographic studies do not account for differences between, and within, these Indigenous Peoples, which can further perpetuate colonial norms and undermine Indigenous self-determination.²⁴
- 28. In Chile, no specific legislation regulates the collection, use and protection of Indigenous data under a collective rights approach. Uniform criteria and protocols for including Indigenous variables are non-existent, and limited training in data management for Indigenous Peoples and digital divides hinder the active participation of Indigenous Peoples in data generation and management.²⁵ In Honduras, the Office of the National Commissioner for Human Rights has underscored the need to undertake a comprehensive process of legislative revision, as there is currently no specific regulation to ensure that Indigenous Peoples have access to data and information.²⁶
- 29. In Colombia, recent experiences, such as the population census carried out by the National Administrative Department of Statistics, resulted in mistrust among Indigenous Peoples about the inconsistent and uncertain use of demographic, sociocultural, geographical, linguistic and other data collected by third parties or institutions, and Indigenous Peoples have requested to participate and give free, prior and informed consent for such actions.²⁷
- 30. Indigenous Peoples lack adequate control over the collection, management and use of data. This undermines their right to self-determination.²⁸ Indigenous Peoples seek to govern the collection, ownership and application of their data, but existing frameworks often do not support this. There have been instances of "research fatigue" in Greenland over the years, with many Inuit feeling fatigued by constant research without experiencing any noticeable improvements in their communities or other benefits from participating in or contributing to a project.²⁹ Current practices around big data and open data, whether under the auspices of States or corporations, may move Indigenous Peoples' data interests even further away from where decisions affecting Indigenous Peoples' data are made.³⁰
- 31. Addressing these challenges requires a concerted effort to develop frameworks that respect Indigenous rights, promote equity and ensure that data governance aligns with Indigenous values and interests.

B. Opportunities

- 32. As Indigenous Peoples continue to confront structural barriers to data access and governance, they are also leading innovative efforts to reclaim and reshape data systems in ways that reflect their values, priorities and rights. Indigenous communities are designing their own monitoring tools, influencing national policies and developing culturally grounded frameworks for data collection and use. This represents a shift from data exclusion to data empowerment.
- 33. The Indigenous Navigator³¹ is a cross-border framework and a set of tools for and by Indigenous Peoples for systematically monitoring the level of recognition and implementation of their rights. It recognizes the need for Indigenous Peoples to own and

Submission from the Independent First Nations Alliance. See also the submission from the Ontario Native Women's Association.

²³ Presentation by Wilson Kipsang Kipkazi, expert seminar, December 2024.

²⁴ Submission from the Office of the Human Rights Commissioner, British Columbia, Canada.

²⁵ Submission from Chile (in Spanish).

Submission from the Office of the National Commissioner for Human Rights of Honduras (in Spanish).

²⁷ See, for example, submission from the Office of the Ombudsman of Colombia (in Spanish).

²⁸ Ibid.

²⁹ Submission from the Danish Institute for Human Rights.

³⁰ A/73/438, para. 72.

³¹ See www.indigenousnavigator.org.

manage the data that they collect and reinforces that they are the rightful owners of those data as a tool for governing themselves and their lands, territories and resources.³² The Indigenous Navigator gives Indigenous Peoples autonomy and decision-making power with regard to whether they want to make the data publicly available or whether they want them to remain accessible only within the community.³³

- 34. Through the Indigenous Navigator, initiatives are ongoing. In 2024, the Indigenous Livelihoods Enhancement Partners engaged with counterparts in the Government of Kenya and civil society to work on improving the collection of data on Indigenous Peoples in Kenya, using the Indigenous Navigator to raise awareness about the data generated by Indigenous Peoples.³⁴
- 35. In 2018, ethnic self-identification was included in the national census and housing census of Guatemala for the first time.³⁵ In 2019, in Kenya, persons belonging to specific Indigenous Peoples were counted as a part of the national census for the first time.³⁶ In Argentina, the 2022 census included a question about Indigenous self-identification for every household member. If the response was affirmative, additional questions were asked about the specific Indigenous group with which the person identified and whether the person spoke or understood the native language of that group.³⁷
- 36. In Canada, the Disaggregated Data Action Plan is aimed at filling data gaps and promoting data disaggregation as a standard practice. It is focused on collecting, analysing and disseminating data relating to the employment of, among others, Indigenous Peoples.³⁸
- 37. In Chile, despite challenges, more information about Indigenous Peoples is being gathered through the development of questionnaires, the generation of information, for instance, on housing, the economic and political participation of Indigenous women, and the status of Indigenous languages, and the validation of the results. The process includes validating data-collection instruments with Indigenous organizations to ensure the correct application of rights-based approaches from international instruments.³⁹
- 38. In the Russian Federation, Indigenous organizations proposed 80 locally relevant indicators to the Federal Agency for Ethnic Affairs to improve the collection of data on Indigenous socioeconomic and cultural conditions. At the regional level, the Khanty-Mansi Autonomous Okrug-Yugra developed an automated system to monitor Indigenous households and land use, which supports inter-agency coordination and facilitates dialogue with private companies on impact mitigation and compensation.⁴⁰
- 39. The Collaborative on Citizen Data, the United Nations Entity for Gender Equality and the Empowerment of Women (UN-Women), the International Union for Conservation of Nature and Natural Resources and the Statistics Division of the Department of Economic and Social Affairs plan to establish a working group to promote collaboration with Indigenous Peoples that will review existing tools and guidelines and make suggestions for the adjustment of national statistics on gender and the environment to better capture the realities and meet the needs of Indigenous Peoples.⁴¹

³² See presentation by Robie Halip, expert seminar, December 2024.

³³ Submission from the Indigenous Navigator Consortium.

³⁴ See

https://indigenousnavigator.org/files/media/document/Report%20Kenya%20IN%20Workshop.pdf.

³⁵ Submission from the International Council on Archives (in Spanish).

Office of the United Nations High Commissioner for Human Rights (OHCHR) and United Nations Development Programme (UNDP), "Human Rights and Voluntary National Reviews: Operational Common Approach Guidance Note", June 2022.

³⁷ Submission from the Office of the Ombudsman of Argentina (in Spanish).

³⁸ Submission from Canada.

³⁹ See, for example, submission from Chile (in Spanish).

⁴⁰ See, for example, submission from the Soyuz Union of Indigenous Peoples and Salvation of Yugra (in Russian).

⁴¹ See https://data.unwomen.org/resources/gender-and-environment-indicators.

IV. Role of data in achieving the right to self-determination

- 40. Indigenous Peoples' right to data is an expression of their right to self-determination. In the context of the right to development, disaggregated data enable self-determination by providing evidence for the purpose of ensuring the equitable participation of Indigenous Peoples within the State and also by informing the participation of Indigenous Peoples in evidence-based decision-making processes.⁴²
- 41. Without disaggregated data, it is difficult for Indigenous Peoples to measure the changes occurring within their communities, to present their needs and priorities to States and to assess the effectiveness of existing programmes.⁴³
- 42. In the Arctic, the Inuit Circumpolar Council has developed the Circumpolar Inuit Protocols for Equitable and Ethical Engagement and the National Inuit Strategy on Research, with its five priority areas, to support Inuit self-determination in science. Within these documents, the need to recognize, support and comply with Inuit rights to access, own and control data collected on Inuit is stated. Having guidelines in place that emphasize the importance for researchers and data collectors of engaging Inuit in their research, and being open to local and Indigenous knowledge in the field, not only will enhance the quality of the empirical data, but also could contribute to avoiding the reproduction of colonial structures. The National Inuit Strategy on Research and the Circumpolar Inuit Protocols for Equitable and Ethical Engagement emphasize the importance of research data, but other forms of data are also important for the self-determination of Indigenous Peoples. 45
- 43. In Latin America, Indigenous Peoples have initiated their own self-governed spaces for data production and preservation and have pursued regional and global alliances with other Indigenous organizations seeking to advance the goals of data protection within an Indigenous-led perspective. In Panama, Indigenous Peoples and their organizations have also been active participants in legal initiatives to ensure protection of their ancestral knowledge systems within current intellectual property legislation.⁴⁶
- 44. Indigenous Peoples in Southern Africa have long relied on oral traditions, storytelling and land-based knowledge. The digital revolution presents both an opportunity and a risk for preserving this knowledge. By maintaining control over their data, Indigenous Peoples can ensure that their cultural practices and languages are documented and shared in ways that align with their own values. For example, the San people are using digital archives to preserve their unique languages and oral traditions. This way, they are not subject to external interpretations but can manage how their culture is represented.
- 45. By working with strengths-based approaches, Indigenous Peoples are recognized as capable and as providing their own solutions to ongoing issues. This perspective supports improvements in living conditions through community empowerment, strengthening Indigenous self-determination with the aid of data. For instance, the decision to conduct the National Inuit Health Survey was taken through Inuit governance mechanisms, and it is being conducted by Inuit organizations that implement all aspects of the programme, from planning to the data-collection, analysis and dissemination phases.⁴⁸
- 46. In Mexico, this notion is particularly relevant when analysed in relation to the electoral rights of Indigenous Peoples. They face multiple challenges, including with regard to the protection of their data within electoral processes. Judicial institutions, in particular electoral

⁴² Submission from the Canadian Human Rights Commission.

⁴³ Norwegian National Human Rights Institution, "A Human Rights-Based Approach to Sámi Statistics in Norway", p. 37.

⁴⁴ Submission from the Danish Institute for Human Rights.

⁴⁵ See https://www.inuitcircumpolar.com/wp-content/uploads/EEE-Protocols-LR-WEB.pdf.

⁴⁶ Presentation by Miguel Gonzalez, expert seminar, December 2024.

⁴⁷ Presentation by Ivan Vaalbooi, expert seminar, December 2024.

⁴⁸ Presentation by Naluturuk Weetaluktuk, expert seminar, December 2024. See also https://nationalinuithealthsurvey.ca/.

courts, have played a significant role in highlighting how limited data affect the political and electoral rights of Indigenous Peoples.⁴⁹

V. Role of data regarding decision-making and free, prior and informed consent

- 47. The integration of free, prior and informed consent into data governance frameworks is essential for upholding Indigenous rights in an era of digital information and technological advancement. Free, prior and informed consent embodies the core principles of autonomy, respect and self-determination, which are foundational to Indigenous Peoples' rights as outlined in international frameworks such as the United Nations Declaration on the Rights of Indigenous Peoples.⁵⁰
- 48. In Cameroon, there are no official statistics collected and analysed on the participation of Indigenous Peoples. However, there are statistics generated and analysed by Indigenous Peoples' organizations on their participation in public affairs.⁵¹
- 49. In Canada, before each census, Statistics Canada initiates an extensive consultation programme that allows data users and interested parties across the country to share their views on both the content and dissemination strategy of the census. The 2026 census of population dissemination consultation team facilitated sessions with Indigenous data users and organizations to gather their valuable insight.⁵²
- 50. Namibia has taken steps to ensure that data-collection processes respect the rights of Indigenous Peoples by engaging with them in decision-making. This includes consultations about the purposes of data collection, the ownership of data and how they might be used in the future. South Africa has made efforts to engage with Indigenous Peoples through its national Indigenous knowledge systems office. This office facilitates consultations between communities and researchers, ensuring that Indigenous knowledge systems are respected and that communities have the authority to decide how their knowledge is shared.
- 51. Many States have yet to incorporate the right to free, prior and informed consent into national legislation, making a combination of mandatory and voluntary measures important for ensuring Indigenous participation. In the Russian Federation, while it is not explicitly regulated, some large mining companies have adopted corporate policies aligned with free, prior and informed consent. Many smaller firms, by contrast, often bypass consultations altogether. This gap hinders Indigenous Peoples from generating the data needed for sociocultural impact assessments and fair compensation. In response, Indigenous communities have launched independent monitoring efforts to collect data from both companies and authorities.
- 52. National statistical offices in Latin America have made significant progress, notably in population censuses. Examples include the creation of the National Statistical Commission for Indigenous, Afro-Ecuadorian and Montubio Peoples in Ecuador in 2007, and the free, prior and informed consent processes implemented in the censuses of Colombia in 2018 and Brazil in 2024. ⁵⁶ However, these advances are yet to become the standard across Latin America. The information available in the region is still underutilized. Once Indigenous

⁴⁹ Submission from Mexico (in Spanish).

Terry Mitchell and others, "Towards an Indigenous-informed relational approach to free, prior, and informed consent (FPIC)", *International Indigenous Policy Journal*, vol. 10, No. 4 (2019).

⁵¹ Submission from the Cameroon Human Rights Commission (in French).

⁵² Submission from Canada.

⁵³ See, for example, presentation by Alexey Tsykarev (in Russian), expert seminar, December 2024.

See, for example, submission from the Soyuz Union of Indigenous Peoples and Salvation of Yugra (in Russian).

⁵⁵ See, for example, presentation by Alexey Tsykarev (in Russian), expert seminar, December 2024.

See, for example, Laura Acosta and Bruno Ribotta, "Visibilidad estadística y mecanismos participativos de los pueblos indígenas en América Latina: avances y desafíos", *Documentos de Proyectos* (LC/TS.2021/188) (Santiago, Economic Commission for Latin America and the Caribbean (ECLAC), 2022) (in Spanish).

self-identification is available, it will be essential to disaggregate, disseminate and analyse the data. Strengthening national capacities, both those of State bodies and those of Indigenous organizations, is another pending challenge for the effective use of this information and its impact on policies. In recent decades, numerous training activities have been carried out in the region, but these measures need to be coordinated and sustained over the long term, for which the provision of resources is essential.⁵⁷

- 53. Data collection concerning Indigenous Peoples should follow the human rights norm of free, prior and informed consent at all levels and across the entire spectrum of Indigenous Peoples' rights. Data provide important leverage in Indigenous Peoples' dialogue with States and businesses. ⁵⁸ By contrast, the collection and digitization of data related to traditional knowledge and cultural and sacred sites might lead to the misappropriation or misuse of traditional knowledge or the desecration of cultural and sacred sites by companies or non-members of Indigenous communities without any prevention, mitigation and compensation measures and without any benefit-sharing agreed upon with Indigenous Peoples.
- 54. The digitization of information can lead to the erosion of cultural practices, as data become products that can be represented in ways that do not reflect reality or meet the needs of Indigenous Peoples. Lack of control by Indigenous Peoples over their information can result in the proliferation of harmful stereotypes and cultural appropriation. In Mexico, the lack of an Indigenous data sovereignty policy has resulted in a lack of free, prior and informed consent mechanisms for the collection and use of data, and the limited participation of Indigenous communities in data-collection, data analysis and data management processes.⁵⁹
- 55. Ultimately, respecting free, prior and informed consent in data governance is not only a legal obligation but also a pathway to fostering trust, collaboration and sustainable development that honours the heritage, values and knowledge of Indigenous Peoples.

VI. Role of data in achieving the right to development

- 56. Data are a central element of the 2030 Agenda for Sustainable Development, and effective collection of relevant and reliable data is a critical precondition for the sustainable development of Indigenous Peoples and the improvement of their economic and social conditions, as provided for in article 21 of the United Nations Declaration on the Rights of Indigenous Peoples.
- 57. However, State engagement with Indigenous Peoples in voluntary national review processes is either non-existent or limited, and a report on the Sustainable Development Goals indicated that progress has been slow.⁶⁰ Data disaggregation is most often limited to gender, age and geographical location and does not extend to ethnicity. There are some examples where Indigenous Peoples have been involved either in decision-making processes or in the preparation of national reports.⁶¹
- 58. The Indigenous Peoples Major Group for Sustainable Development has recommended establishing a separate framework for data generated by Indigenous communities, including recognizing the data-collection methods of communities and civil society, and not necessarily leaving data collection and analysis to statistics offices.⁶²
- 59. The Permanent Forum on Indigenous Issues has recognized the importance of data disaggregation, as noted in target 17.18 of the Sustainable Development Goals. The 2020 international expert group meeting on the theme "Peace, justice and strong institutions: the role of Indigenous Peoples in implementing Sustainable Development Goal 16"

⁵⁷ Submission from the ECLAC Population Division (in Spanish).

See Chidi Oguamanam, "Indigenous Peoples, data sovereignty, and self-determination: current realities and imperatives", *The African Journal of Information and Communication*, vol. 26 (2020).

⁵⁹ Submission from Kiado Cruz Miguel and Socorro Apreza Salgado (in Spanish).

⁶⁰ See submission from the Advisory Board on Ethics of the International Statistical Institute.

⁶¹ Presentation by Robie Halip, expert seminar, December 2024.

⁶² Ibid.

recommended more effective disaggregation of data by self-identified ethnicity. In support of that, the United Nations Economic Commission for Asia and the Pacific developed a statistical tool based on household survey data relating to ethnicity, language and religion.

- 60. Piloted in the Philippines in 1994, the community-based monitoring and information system⁶³ is a systematic process for data generation, collation, analysis and management led by Indigenous Peoples for the realization of their sustainable, self-determined development. The system is now being implemented in 13 countries, with a focus on five core domains: land, territories and resources; traditional knowledge; full and effective participation; traditional governance; and human rights. Currently, the system is being utilized by members of the Indigenous Peoples' Global Partnership on Climate Change, Forests and Sustainable Development⁶⁴ in Bangladesh, Brazil, Cameroon, the Democratic Republic of the Congo, Indonesia, Kenya, Nepal, Nicaragua, Paraguay, Peru, the Philippines, the United Republic of Tanzania and Viet Nam.
- 61. In 2019, the Organisation for Economic Co-operation and Development (OECD) released the first ever global study on Indigenous economies and regional development, which underscored the importance of high-quality Indigenous data. The report contains specific recommendations for OECD member States on improving Indigenous statistics and data governance.⁶⁵
- 62. In 2022, the Office of the United Nations High Commissioner for Human Rights and the United Nations Development Programme developed guidance to support Member States in integrating human rights into the development of voluntary national reviews on the 2030 Agenda for Sustainable Development.⁶⁶ The guidance has a separate section on the human rights-based approach to data.⁶⁷ Also in 2018, the Office of the High Commissioner published a guidance note on the human rights-based approach to data.⁶⁸
- 63. In its resolution 57/15 on human rights and Indigenous Peoples, the Human Rights Council encouraged States to collect and securely disseminate disaggregated data to develop, monitor, assess and improve the impact of laws, policies, strategies, programmes and services aimed at improving the well-being of Indigenous Peoples and, inter alia, to support work towards the achievement of the Sustainable Development Goals and the 2030 Agenda for Sustainable Development. In the same vein, in its resolution 79/159 on Indigenous Peoples, the General Assembly encouraged States to collect and disseminate disaggregated data, in order to monitor and improve the impact of development policies, strategies and programmes aimed at improving the well-being of Indigenous Peoples.

VII. Indigenous data governance and sovereignty

64. Indigenous data sovereignty is defined as the right of Indigenous Peoples to own, control, access and possess data that derive from them, and which pertain to their membership, knowledge systems, customs or territories. ⁶⁹ Indigenous data sovereignty is supported by Indigenous Peoples' inherent rights to self-determination, governance and control over their lands, territories and resources as affirmed in the United Nations Declaration on the Rights of Indigenous Peoples, as well as in existing treaties between Indigenous Peoples and States.

⁶³ See https://www.cbmis.tebtebba.org.

⁶⁴ See https://www.tebtebba.org/index.php/who-we-work-with/networks/elatia.

Organisation for Economic Co-operation and Development (OECD), Linking Indigenous Communities with Regional Development, OECD Rural Policy Reviews (Paris, OECD Publishing, 2019)

⁶⁶ See OHCHR and UNDP, Human Rights and Voluntary National Reviews.

⁶⁷ Ibid., pp. 15 and 16.

⁶⁸ See

https://www.ohchr.org/sites/default/files/Documents/Issues/HRIndicators/GuidanceNoteonApproachto Data.pdf.

⁶⁹ See https://iwgia.org/en/indigenous-data-sovereignty.html?filter_tag%5b0%5d=37.

- 65. Indigenous data sovereignty means the inherent rights and interests that Indigenous Peoples have in relation to the creation, collection, access, analysis, interpretation, management, dissemination, reuse and control of data relating to Indigenous Peoples. In the context of Indigenous data sovereignty, data are considered a strategic resource, and a framework for their ethical use is required to advance collective Indigenous Peoples' well-being and self-determination.
- 66. Indigenous data governance means the right of Indigenous Peoples to autonomously decide what, how and why Indigenous data are collected, accessed and used. It ensures that data on or about Indigenous Peoples reflect the priorities, values, cultures, world views and diversity of Indigenous Peoples. This includes the principles, structures, accountability mechanisms, legal instruments and policies through which Indigenous Peoples exercise control over Indigenous data. Whereas Indigenous sovereignty can only be realized by Indigenous Peoples themselves, Indigenous governance can be adopted and implemented by a wide range of actors that collect and hold Indigenous data, including Indigenous communities and organizations, national Governments, corporations and civil society. 73
- 67. Data governance includes matters relating to data collection, data disaggregation by identity and gender, data privacy and protection, data access, use and reuse, individual and collective consent, including free, prior and informed consent, data classification, metadata and data repatriation. It includes the use of data by data technologies, including deductive and generative artificial intelligence systems.⁷⁴
- 68. Indigenous Peoples are not only entitled to disaggregated data, but also have the right to access and be consulted on data on Indigenous Peoples that are contextual and disaggregated; have data on Indigenous Peoples that are relevant and empower sustainable self-determination and effective self-governance for Indigenous Peoples; have data structures that are accountable to Indigenous Peoples; and have data that are protective of and respect the individual and collective interests of Indigenous Peoples.⁷⁵
- 69. Indigenous sovereignty must also extend to data (personal and non-personal) and data-based digital intelligence (including algorithmic models and artificial intelligence systems) by recognizing Indigenous Peoples' rights, interests and control over their data. This is also seen in the Māori data sovereignty project in New Zealand, which upholds the tradition of sovereignty by grounding Māori rights in the collection, ownership and application of their own data.⁷⁶
- 70. Indigenous sovereignty networks have been established in Australia, Canada, New Zealand and the United States of America. The Australia, there is the Maiam Nayri Wingara Indigenous Data Sovereignty Collective; In Canada, the First Nations Information Governance Centre and the British Columbia First Nations Regional Information Governance Centre; and in the United States, the United States Indigenous Data Sovereignty Network.
- 71. While national Indigenous data sovereignty networks are best placed to respond to and advance data sovereignty for their peoples and communities, a global alliance to advocate for and advance a shared vision for Indigenous data sovereignty was needed, and the Global

⁷⁰ A/74/277, annex, para. 3.

⁷¹ See https://iwgia.org/en/indigenous-data-sovereignty.html?filter_tag%5b0%5d=37.

⁷² A/74/277, annex, para. 3.

⁷³ See presentation by Tahu Kukutai, expert seminar, December 2024.

⁷⁴ Ibid.

⁷⁵ A/74/277, para. 7. See also

 $https://www.ohchr.org/sites/default/files/Documents/Issues/Privacy/SR_Privacy/DraftRecommendationProtectionUseHealthRelatedData.pdf.$

⁷⁷ See presentation by Tahu Kukutai, expert seminar, December 2024.

⁷⁸ See https://www.maiamnayriwingara.org/.

⁷⁹ See https://fnigc.ca/.

⁸⁰ See https://www.bcfndgi.com/data-governance/.

⁸¹ See https://usindigenousdatanetwork.org/.

Indigenous Data Alliance (GIDA) was therefore created.⁸² The GIDA-Sápmi network, an extension of the Global Indigenous Data Alliance, is represented by academics and non-academics from Finland, Norway and Sweden, and promotes the use of CARE Principles for Indigenous Data Governance to achieve Sami data sovereignty and data governance for research data.⁸³

- 72. Released in September 2019, the CARE Principles for Indigenous Data Governance set minimum expectations for guiding the inclusion of Indigenous Peoples in data governance across governments', institutions', corporations' and organizations' data ecosystems. The CARE Principles have been affirmed or adopted by influential data actors and, more recently, the Global Indigenous Data Alliance produced a primer on Indigenous Peoples' rights in data, which draws a distinction between rights relating to data for Indigenous governance, and rights relating to the governance of Indigenous data.⁸⁴
- 73. In 2024, the Saami Council adopted the Sámi Ownership and Data Access principles, which are based on the CARE Principles. The purpose of these principles is to ensure that the Sami people and their representative institutions have the ability to control and administer data that they have been involved in producing.⁸⁵
- 74. In Australia, an example can be seen in the publication by the Australian Institute of Aboriginal and Torres Strait Islander Studies of a Code of Ethics for Aboriginal and Torres Strait Islander Research in 2020 to ensure that research with and about Indigenous Peoples in Australia involves meaningful engagement and reciprocity between the researcher and the individuals involved.⁸⁶
- 75. Botswana has initiated dialogues with the San people to explore how they can benefit from the documentation of their culture and language through digital platforms, while retaining ownership and control over their data.⁸⁷
- 76. Statistics Canada participates in the governmental working group on Indigenous data, which includes all federal departments and agencies and coordinates efforts on issues related to Indigenous data sovereignty. This working group supports a whole-of-government approach to implementing shared priority 30 of the United Nations Declaration on the Rights of Indigenous Peoples Act Action Plan. In addition, the 2023–2026 data strategy for the federal public service emphasizes the importance of Indigenous data sovereignty as a priority for supporting Indigenous self-determination. Over the next three years, initiatives developed jointly with Indigenous partners will establish a comprehensive approach to support First Nations, Inuit and Métis Nations peoples in achieving their data sovereignty goals.⁸⁸
- 77. In New Zealand, the Māori Data Governance Model was designed by Māori data experts for use across the public service. 89 The demand for data-driven and evidence-based decision-making has increased the collection, sharing, analysis and reuse of Māori data by government agencies, but without clear policies or guidance that place Māori values and priorities at the centre. Te Kāhui Raraunga highlights that a large amount of Māori data remains controlled externally to Māori communities and that the operationalization of the data governance model remains limited, particularly in government settings. 90
- 78. The Indigenous ombudsmen in four regions of the Russian Federation collect and analyse, in a culturally appropriate way, data on the compliance of health, education, transportation, economic and social support policies with national and subnational laws and make recommendations for legal and practical reform.⁹¹

⁸² See https://www.gida-global.org/whoweare.

⁸³ Submission from GIDA-Sápmi.

⁸⁴ See https://www.gida-global.org/data-rights.

⁸⁵ Submission from the Saami Council.

⁸⁶ Submission from Lynne Stuart. See also https://aiatsis.gov.au/research/ethical-research/code-ethics.

⁸⁷ Presentation by Ivan Vaalbooi, expert seminar, December 2024.

⁸⁸ Submission from Canada.

⁸⁹ See https://www.kahuiraraunga.io/maoridatagovernance.

⁹⁰ Submission from Te Kāhui Raraunga.

See submission from the Commissioner for the Rights of Numerically Small Indigenous Peoples in Krasnoyarsk Territory, Russian Federation (in Russian).

79. At the international level, the Food and Agriculture Organization of the United Nations, in coordination with the International Work Group for Indigenous Affairs and the Asian Indigenous Peoples Pact, is developing guidelines on the co-creation of knowledge and ethical engagement with Indigenous Peoples to promote and uphold Indigenous Peoples' rights in data generation and use. It is aimed at highlighting and complementing existing data sovereignty protocols designed by Indigenous Peoples. The guidelines will be shared and endorsed with Indigenous Peoples to ensure that they are involved and that their views are taken into account in the process. 92

VIII. Role of Indigenous women in data

- 80. Indigenous women face multiple, intersecting layers of systemic vulnerabilities and disadvantages; 93 being a woman and being Indigenous results in disproportionately high levels of discrimination in respect of healthcare, education and economic opportunities, inter alia. Women face an unbalanced duty of care towards their families and the community, which may further impact their right to self-identification and self-determination. 94 Women tend to be the bearers of intergenerational knowledge, culture and practical experiences. 95
- 81. Addressing the challenges faced by Indigenous women requires a multifaceted approach, combining policy reforms, targeted interventions and community engagement and empowerment. By highlighting disparities and areas of concern, data ensure that Indigenous women receive adequate resources and support. This requires a collaborative effort, involving Governments, non-government organizations, Indigenous Peoples and communities themselves, to create a supportive and inclusive environment for advancing Indigenous women and their rights.⁹⁶
- 82. The Food and Agriculture Organization, in its publication entitled "Indigenous women, daughters of Mother Earth", focuses on the main challenges that Indigenous women face, addresses the systemic lack of recognition of their rights and provides recommendations to eliminate barriers, in alignment with the 2030 Agenda for Sustainable Development. The document highlights the persistent lack of accurate and disaggregated data as a contributor to the invisibility of Indigenous women. This leads to gaps in research and information, subsequently affecting policies and programmes that can address the root cause of the challenges faced.⁹⁷
- 83. The Confederación de Nacionalidades Indígenas del Ecuador (Confederation of Indigenous Nationalities of Ecuador) has promoted empirical data, illustrating the consequences of the State's failure to produce culturally appropriate statistics on the social and legal status of Indigenous women and girls.⁹⁸
- 84. In Nepal, local governments reportedly misinterpret or do not possess quantitative data on Indigenous women suffering from health-related issues.⁹⁹
- 85. A strong example of Indigenous data governance in the area of health is the Māori Women's Welfare League survey, conducted in 1984, of over 1,000 Indigenous women, with extensive questions on health, culture and family, which incorporated Māori methodology.¹⁰⁰

⁹² Presentation by Yon Fernández-de-Larrinoa, expert seminar, December 2024.

⁹³ Submissions from Indigenous Peoples Rights International and the Confederación de Nacionalidades Indígenas del Ecuador (in Spanish); and from Shaheed Zulfikar Ali Bhutto Institute of Science and Technology (SZABIST) University.

⁹⁴ See presentation by Tasha Hohaia, expert seminar, December 2024. See also submission from Broken Chalk.

⁹⁵ Presentation by Tatiana Dyatlova (in Russian), expert seminar, December 2024.

⁹⁶ Presentation by Juhi Priyanka Horo, expert seminar, December 2024.

⁹⁷ See https://openknowledge.fao.org/handle/20.500.14283/cb0719en.

⁹⁸ Submission from Indigenous Peoples Rights International and the Confederación de Nacionalidades Indígenas del Ecuador (in Spanish).

⁹⁹ Submission from the National Indigenous Women's Federation of Nepal.

¹⁰⁰ See presentation by Tasha Hohaia, expert seminar, December 2024.

- 86. According to the Commission on Human Rights of the Philippines, Indigenous women often have lower levels of education and literacy. This can hinder their participation in data-collection processes, which is another barrier impeding accurate data gathering and the development of effective interventions. ¹⁰¹
- 87. Increasing education on information and communications technology, including artificial intelligence, is another acute need, as is encouraging women to pursue careers in science, technology, engineering and mathematics. In New Zealand, less than 1 in 20 girls consider a career in those fields compared with 1 in 5 boys. 102
- 88. In New Zealand, in a report entitled "Te Ohanga Whine Māori The 2024 Māori's Women's Economy", the Ministry for Women highlights the socioeconomic contributions of Indigenous women. The inclusion of labour and production captured in unpaid work would more than double their contribution to the economy as measured in official statistics. However, Māori women often carry out unpaid work and undertake tribal responsibilities, with their efforts not valued. 103
- 89. In the Russian Federation, Indigenous nomadic women have low incomes and live in the difficult conditions of their traditional way of life, which may lead them to migrate to settlements, resulting, in turn, in the migration of men and degradation of reindeer husbandry. Indigenous Peoples' organizations introduced an initiative to legally establish the status of mobile housing worker to ensure a competitive salary, improve living conditions and ensure the adoption of other social security measures, and support women's entrepreneurship in the creative economy. The realization of this initiative requires data on the number of nomadic women and on their incomes, families, housing, access to technology and the Internet, and education. 104

IX. Impact and role of technology and artificial intelligence in the context of Indigenous Peoples' right to data

- 90. The intersection of Indigenous Peoples and artificial intelligence raises important questions about equality, safety, cultural preservation and technological inclusion. As artificial intelligence systems increasingly shape global decision-making, it is essential to ensure that Indigenous perspectives, knowledge systems and rights are respected and integrated.¹⁰⁵
- 91. Artificial intelligence technologies, such as machine learning and natural language processing, can be used to preserve Indigenous languages, oral histories and cultural practices. Projects that digitize and document Indigenous knowledge can help to safeguard it for future generations but must be implemented with Indigenous consent and governance to prevent misuse or exploitation.
- 92. With the increasing growth of data connectedness, Indigenous data protection and data sovereignty maintenance for Indigenous Peoples become key challenges. States and international organizations should introduce strict regulations requiring artificial intelligence-based systems to recognize and accommodate Indigenous data and Indigenous data systems. Although artificial intelligence technologies are relatively new, they remain

Submission from the Commission on Human Rights of the Philippines. See also https://chr.gov.ph/written-statement-for-the-virtual-day-of-general-discussion-on-the-rights-of-indigenous-women-and-girls/.

¹⁰² See presentation by Tasha Hohaia, expert seminar, December 2024.

¹⁰³ Ibid. See also https://www.women.govt.nz/library/te-ohanga-wahine-maori-maori-womens-economy-

See, for example, presentation by Tatiana Dyatlova (in Russian), expert seminar, December 2024, and submission from the Soyuz Union of Indigenous Peoples and Salvation of Yugra (in Russian).

See Valmaine Toki, Indigenous Rights, Climate Change and Governance: Measuring Success and Data (Cheltenham, United Kingdom of Great Britain and Northern Ireland, Edward Elgar, 2024).

reliant on already-existing data – data whose narratives have historically excluded, erased, stereotyped and invalidated Indigenous Peoples, their knowledge and their voices. 106

- 93. The digitization of Indigenous data must be compliant with Indigenous Peoples' right to self-determination and data governance; their right to use data in accordance with their values and common interests; their free, prior and informed consent; their right to participate in decision-making; and their privacy and intellectual property rights. Implementation of due diligence principles, good faith consultations and free, prior, and informed consent would create space and opportunities for Indigenous Peoples to organize and govern data. Indigenous Peoples exercise self-determination to identify and eliminate gaps by fostering community-driven data collection. 107
- 94. Artificial intelligence technologies must respect Indigenous data sovereignty and incorporate Indigenous data governance principles to avoid perpetuating colonial narratives. Artificial intelligence can either perpetuate colonial narratives or serve as a revolutionary tool for Indigenous Peoples. Artificial intelligence has the potential to disrupt established practices by normalizing ways of thinking that deviate from the colonial legacy. However, if artificial intelligence is developed and used without accounting for the lived realities of Indigenous Peoples and their world views, the technology will reflect, perpetuate and potentially exacerbate existing inequities. 108
- 95. For instance, the information technology developer community is reflected in the algorithmic biases of artificial intelligence-based products and services. As they are made by a minority, members of which have similar backgrounds and views of the world, and use data sets biased by those views, their products are not representative.¹⁰⁹
- 96. In New Zealand, Māori are underrepresented in government data, which means that the use of artificial intelligence would impact Māori disproportionately. Supermarkets in the country have introduced facial recognition systems, and there have already been cases of Māori being misidentified.¹¹⁰
- 97. The real social power wielded by algorithms lies in their ability to determine and reorganize the boundaries of practices such as property ownership. For instance, the land records digitization programme of India dispossessed Indigenous Adivasi communities by failing to account for traditional practices of collective property rights that defy dominant notions of private and individual ownership. This pattern is also visible in Nagaland, where carbon datafication obscured communal understanding of lands, allowing for land management practices that serve carbon finance goals, resulting in the material reorganization of space and erosion of Indigenous access to and control over Naga land and resources.¹¹¹
- 98. With regard to emerging digital and technology issues, there are private projects involving emerging technologies for conservation activities and sustainable investments. These projects collect, digitalize and archive information concerning Indigenous Peoples and their territories (satellite images, and audio and video documentaries) without any protection for the rights of Indigenous Peoples over their intellectual property or data sovereignty. The information is converted into digital tokens (digital security assets) and traded as a financial product on blockchain or other ledger technology. 112
- 99. Technology can play an increasingly important role in promoting free, prior and informed consent, in particular for documenting, including through video and audio recording, the consultation process (with the consent of the parties) and publishing

¹⁰⁶ Ian Falefuafua Tapu and Terina Kamailelauli'i Fa'agau, "A New Age Indigenous instrument: artificial intelligence and its potential for (de)colonialized data", *Harvard Civil Rights-Civil Liberties Law Review*, vol. 57 (2022)

¹⁰⁷ See https://www.youtube.com/watch?v=2Z_SFE_rSyI.

Tapu and Fa'agau, "A New Age Indigenous instrument".

See UNESCO, Inteligencia artificial centrada en los Pueblos Indígenas: perspectivas desde América Latina y el Caribe (2023) (in Spanish).

¹¹⁰ See presentation by Tahu Kukutai, expert seminar, December 2024.

¹¹¹ Submission from IT for Change.

¹¹² A/HRC/54/31, para. 60.

information about it on the Internet. The documentation of the consultation process is necessary for the further monitoring of the implementation of the agreements reached and advancing the consultation practice in general. Blockchain, geospatial mapping and mobile applications offer tools that, when implemented with Indigenous collaboration and respect, can empower communities to assert their rights over data and land. Indigenous Peoples should be informed about the elements of sound data collection (which include purpose, methods and potential uses). The methodology must address different challenges, and respect the different cultural norms, to be able to accurately reflect the diversity of experiences within different Indigenous Peoples' communities. However, the challenges posed by the digital divide, cultural compatibility, data security and the high initial cost must be addressed to prevent technology from further entrenching inequalities.

- 100. In India, artificial intelligence is helping to foster inclusion through natural language processing to translate information into local languages, large data analysis, virtual assistants, consent management and predictive analysis, inter alia. By leveraging these technologies, organizations in India can make the process to obtain consent more transparent, efficient and inclusive.¹¹⁵
- 101. In New Zealand, Te Hiku Media, a charitable Indigenous media organization set up to revitalize and promote the Māori language, has developed its own artificial intelligence tools, including a natural language processing tool whereby third parties, mainly Indigenous radio stations, can upload their content.¹¹⁶
- 102. In 2024, in the Russian Federation, the Indigenous Peoples of the Yamal-Nenets Autonomous Okrug agreed with the regional government to upgrade the unified geoinformation system on Indigenous Peoples, known as "Yamal", to an artificial intelligence-based platform. The database will allow for more efficient implementation of support measures for Indigenous Peoples with regard to housing and economic conditions, with a focus on young, low-income and large families and families with no or few reindeer. The "IT-camp" project in Yugra allows for the participation of semi-nomadic Indigenous Peoples in the collection of information, access to public services and consultations. 117

¹¹³ Presentation by Alexey Tsykarev (in Russian), expert seminar, December 2024.

Submission from the Centre for Advanced Studies in Cyber Law and Artificial Intelligence, Rajiv Gandhi National University of Law.

Presentation by Juhi Priyanka Horo, expert seminar, December 2024.

See presentation by Tahu Kukutai, expert seminar, December 2024.

See, for example, presentation by Tatiana Dyatlova (in Russian), expert seminar, December 2024, and submission from the Soyuz Union of Indigenous Peoples and Salvation of Yugra (in Russian).

Annex

Expert Mechanism Advice No. 18 (2025): Right of Indigenous Peoples to data, including with regard to data collection and disaggregation

- 1. The Expert Mechanism provides the following advice regarding the right of Indigenous Peoples to data, including with regard to the collection and disaggregation of data, which are key to the effective implementation of the rights of Indigenous Peoples. Recommendations by other bodies, such as the Permanent Forum on Indigenous Issues, the Special Rapporteur on the rights of Indigenous Peoples, the United Nations human rights treaty bodies and other human rights mechanisms, are all relevant to the topic and should be taken note of by all parties.
- 2. States should collect and disaggregate data on Indigenous Peoples with the full and effective participation of Indigenous Peoples and with respect for their self-determination and self-governance.
- 3. States should develop data-processing algorithms to enable Indigenous Peoples to exercise their distinct collective rights as enshrined in the United Nations Declaration on the Rights of Indigenous Peoples, including their rights with regard to lands, territories, resources, cultures, languages, decision-making and free, prior and informed consent, self-governance, development and data governance and sovereignty.
- 4. Indigenous data should be collected, processed and governed in alignment with methods appropriate for Indigenous Peoples. Indigenous Peoples should have access to the data collected and participate in their analysis and interpretation in a manner respectful of their traditional knowledge, culture and decision-making systems. In their data-collection policies, States should address language, remoteness, technology and digital divide gaps. State-run data-collection and data storage systems should not prevent Indigenous Peoples from shaping their own culturally and ethically appropriate data-collection methodologies and mechanisms. Both State and Indigenous Peoples' data systems should ideally supplement each other and advance well-being and the self-determined development of Indigenous Peoples. During the collection of statistical data, the decision of individuals to self-identify as belonging to Indigenous Peoples should be respected.
- 5. States should enable Indigenous Peoples, including Indigenous women, to participate during the planning, design and use of statistical data-collection instruments. Data-collection personnel for the population census should be well trained and include Indigenous representatives to ensure non-discrimination and that the collected data correspond to the reality.
- 6. States should include Indigenous Peoples in and build the capacity of national statistical bodies and/or ensure the participation of Indigenous Peoples in data collection among Indigenous Peoples to enhance transparency and respect for Indigenous values in data practice.
- 7. States should harmonize the work of government agencies collecting data and avoid duplication. States should also ensure the effective participation of Indigenous Peoples in the processes of production, dissemination and analysis of information, including in the context of artificial intelligence systems and in the information technology developer community, which is key to improving the quality of data and avoiding algorithmic biases.
- 8. Data, especially personal data, information related to sacred sites and traditional knowledge, should be protected. Indigenous Peoples should have adequate education and access to technology to participate in data collection in remote territories.
- 9. States should invest in building the capacity and skills of professionals involved in the collection, storage, systematization and disaggregation of data, including the capacity on Indigenous Peoples' rights. Appropriate conditions should be created for

data collection, storage and access, including by using digital technologies and artificial intelligence. States should also invest in capacity-building of Indigenous Peoples with regard to data.

- 10. States should support the development of Indigenous-led data repositories that maintain Indigenous-sourced data for future applications. Indigenous Peoples should be encouraged to build and supported in building their own information systems and archives that allow for the preservation of a memory free from the biases that the archives of former colonial Powers have given to the documents preserved with respect to them.
- 11. States and private companies should recognize the sovereignty of Indigenous Peoples over data that are about them or collected from them and that pertain to Indigenous Peoples, knowledge systems, customs or territories, with a focus on Indigenous leadership and mechanisms of accountability.
- 12. States should recognize and protect Indigenous data sovereignty through bespoke laws, policies and frameworks. Indigenous data sovereignty requires Indigenous Peoples to be in control of their data on their own terms, according to their own cultural protocols and priorities. There should be an intentional focus on opportunities for creating data infrastructure, technologies and capacities that enable Indigenous Peoples to actively protect and derive benefit from their data, in particular with regard to traditional knowledge and culturally sensitive data.
- 13. States and private sector and civil society actors that collect, hold or process Indigenous data should recognize and give effect to Indigenous data governance, including in matters related to data collection and disaggregation by identity and gender, data privacy and protection, data access, use and reuse, individual and collective consent, data classification, metadata and data repatriation. This includes the use of data by data technologies, including deductive and generative artificial intelligence systems.
- 14. Indigenous women's sovereignty and governance of their data are critical due to the unique barriers that they face. Their full participation must also expand across the full cycle, from data generation to interpretation to dissemination.
- 15. The private sector should promote document management and archiving policies for the handling of all documents and data generated in the consultation process to obtain the consent of Indigenous Peoples whenever development projects are to be carried out on their lands.
- 16. States, civil society, and private sector actors should recognize and implement the CARE (collective benefit, authority to control, responsibility, ethics) Principles for Indigenous Data Governance as a normative framework to ensure that all data-related activities involving Indigenous Peoples align with their rights, world views and governance structures. In contexts where Indigenous data governance frameworks are not yet established, the CARE Principles provide a foundational baseline for ethical engagement, participatory governance and cultural respect in data practices.
- 17. Where Indigenous data governance frameworks and guidelines already exist, States, corporations and civil society should move to implement them.
- 18. States, Indigenous Peoples and civil society organizations are encouraged to use and to contribute to the Indigenous Navigator framework and other tools to strengthen the community-based monitoring of global commitments made under the United Nations Declaration on the Rights of Indigenous Peoples, at the World Conference on Indigenous Peoples and under the Sustainable Development Goals.
- 19. States and non-State actors should protect the privacy of digital communications and the enjoyment of the right to privacy by all individuals and ensure that restrictions on the right to privacy do not discriminate on the basis of Indigenous identity.
- 20. In empowering Indigenous Peoples in artificial intelligence, States and the private sector should engage in collaboration, show respect for Indigenous knowledge systems, and ensure adherence to free, prior and informed consent. They should create

spaces for open technological innovation for and by Indigenous Peoples, with their own perspective. States and international organizations should hold violators of intellectual property rights, including artificial intelligence producers and users, accountable.

- 21. States and the private sector are encouraged to invest in Indigenous-led artificial intelligence initiatives, ensuring that technology serves as a tool for the protection of Indigenous languages and cultural preservation, economic development and self-determination.
- 22. States should consider becoming parties to the World Intellectual Property Organization (WIPO) Treaty on Intellectual Property, Genetic Resources and Associated Traditional Knowledge and create, in consultation with Indigenous Peoples, transparent modalities for disclosing and exchanging data from databases across borders.
- 23. States, in consultation with Indigenous Peoples and in the light of the newly established subsidiary body on article 8 (j) and other provisions of the Convention on Biological Diversity related to Indigenous Peoples and local communities, should introduce modalities that will allow for culturally appropriate collection and analysis of data related to traditional knowledge.