

4.10 Indigenous rights and ways of knowing

As part of a broader shift to recognize and ensure the rights of Indigenous peoples, many government policymakers, researchers and others are coming to accept that Indigenous people should have control over data-collection processes, and that they should own and control how this evidence is used. Building on the First Nations data principles of ownership, control, access and possession (sometimes called the <u>OCAP</u> principles), the International Indigenous Data Sovereignty Interest Group developed the CARE Principles for Indigenous Data Governance (with CARE capturing the first letters of collective benefit, authority to control, responsibility, and ethics). These principles were designed to complement the FAIR guiding principles for scientific data management and stewardship (with FAIR capturing findable, accessible, interoperable, and reusable). The goal is that stewards and users of Indigenous data will be 'FAIR' and 'CARE.' Such evidence-related rights should be understood as part of a much broader set of rights established through the <u>United Nations Declaration on the Rights of Indigenous Peoples</u>.

Indigenous ways of knowing is a term that reflects the diversity and complexity of Indigenous approaches to learning and teaching. The diversity arises from the many Indigenous peoples or nations that developed their own ways of knowing, ways that evolved over centuries before the colonization of their lands began, and in the time since then. The complexity arises from many factors, including the many sources of knowledge. While there are commonalities among Indigenous forms of knowledge (e.g., a holistic view of individuals as being interconnected with the people around them and with the land), it is best never to generalize. The table here was developed under the guidance of commissioner Daniel Iberê Alves da Silva (of the M'byá Guarani people), whose biography appears in **appendix 8.2**, as an entry point for discussions about Indigenous ways of knowing. Further discussions should always be led by Indigenous people, as was this one.

Domains	Details
Sources of Indigenous ways of knowing	 Knowledge comes from the relationships of the individual with the world, which has both a material dimension and an inseparable spiritual dimension Sources of knowledge include plants, animals, other humans, and elements of the land (such as mountains and rivers), as well as dreams, spirits and other manifestations of the spiritual world The world of water, for example, includes lakes and rivers and also the spirits that inhabit them. More generally the physical territory where a culture of Indigenous people was born and developed over centuries is inhabited by many 'things' that possess spirit, making them 'beings' (and this makes forced relocation particularly damaging) The physical environment can serve as a prompt or inspiration for the spiritual dimension to help shape a course of action (e.g., watching a river flow can allow an approach for addressing an issue to come to the watcher) Learning comes from doing alongside someone who holds the knowledge about the 'secret' in how to do it
Characteristics of Indigenous ways of knowing	 Indigenous knowledge is holistic and connected with the history, culture and territory of each people (e.g., their creation stories and how they relate to other 'beings') 'Knowing' manifests itself in the experiences or 'being' of individuals (e.g., rites of passage are processes in which the experience of discovering the nature of things is 'lived' by individuals) Knowledge is shared within and across Indigenous peoples and with others, and is refined over time (e.g., a canoe is made differently today than it was two centuries ago) Knowledge can be acquired through the use of one's own senses (in the traditional sense of the physical senses, but also through clothing, diets, drawings and songs) and through both speaking (what can be said) and contemplation (what cannot be said)
How 'things' are classified within Indigenous ways of knowing	 Categories are perceived differently by different individuals and by different Indigenous peoples in relation to their culture, history or territory (e.g., a plant may be classified one way by one Indigenous people based on its use in healing, and by another based on its association with death) Categories can shift over time (e.g., some plants were once people) and be understood in terms of their intrinsic 'spirit'

How Indigenous ways of knowing are passed on	 Indigenous knowledge can be transmitted orally (spoken words but also chanting, gestures and silence), by a 'way of being' (learning by doing as well as contemplation), and by the 'memory of things' (narrative history) A story keeper may combine the memory of things and chanting to deliver the right chant – from among hundreds – for the right occasion and at the right time Knowledge holders safeguard and share the knowledge in a specific territory (e.g., the medicinal value of a local plant) and do so in a way that emphasizes common purpose (over individual gain), charitable purpose (over power or domination), and ethical purpose (over hoarding the knowledge) Learning may also come from the 'beings' in the forest (e.g., animals and rivers)
Relationships of Indigenous ways of knowing to Indigenous worldviews	 Each Indigenous people has their own worldview, while Indigenous peoples also share worldviews that bring them together Worldviews can be forgotten, erased, denied and borrowed, as well as constructed for the cultural resistance of today's Indigenous peoples Worldviews and forms of knowledge are intrinsically intertwined; Indigenous peoples interpret their 'worlds' from their diverse forms of knowing and knowledge
Relationships of Indigenous ways of knowing to scientific ways of knowing	 The knowledge of each people is in its own physical and spiritual territory, and this knowledge has often been taken from Indigenous peoples without acknowledgement Scientists need to learn to recognize, coexist with and respect Indigenous knowledge in all its complexity and diversity Government policymakers and other decision-makers need to recognize that science is sometimes being misused to advance the violation of Indigenous territories, including with deforestation and other activities that threaten the future of Indigenous peoples