

Indigenous Knowledge

Concept: Indigenous Knowledge

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Description Indigenous knowledge refers to detailed and complex systems of knowledge that Indigenous peoples have gathered and developed of their natural environment, including plant and animal ecology, climate, and other local conditions and resource management. While this is often learned or demonstrated in terms of specific activities or ideas, each part is but one facet of an overarching whole and a coherent way of understanding and respecting the world. In addition to the use and management of natural resources, indigenous knowledge encompasses cosmologies, as well as relationships with the natural environment. Simply put, indigenous knowledge refers to a system and body of knowledge based on Indigenous peoples' traditional livelihoods, practices, and skills.

The spiritual dimension has a central role in this system of knowledge. It emerges from the intimate relationship with the natural environment and should not be confused with narrow understandings of "religion." In the context of indigenous world views, spirituality is understood as the recognition that everything in the universe is alive and requires respect. Further, there is an emphasis on an understanding of the interdependence of all beings in the world.



(Photo: Daniel Buckles, IDRC-CRDI)

Indigenous knowledge is characterized as cumulative, holistic, and practice-oriented; that is, it is not fragmented into categories or abstractions. Indigenous knowledge is place-based in that it is inseparably linked to a specific location. Indigenous systems of knowledge recognize the significance of other than rational modes of knowing such as visions, dreams, and intuition. Indigenous knowledge is expressed and transmitted through language (oral history, stories, songs, narratives, place names), social organization, everyday and ceremonial practices, observation, values, institutions, and laws. The intergenerational accumulation and communication of knowledge is central in indigenous systems of knowing. Indigenous knowledge is mainly acquired by long-term direct observation and experience.

In many indigenous societies, women play a central role as keepers and teachers of knowledge. Women are often acquainted herbalists, ecologists, healers, and traditional seed custodians. Gender differences can also be found in ways of acquiring, preserving, and transmitting knowledge.

The problem of defining indigenous knowledge through Western or dominant epistemological conventions (norms regarding the nature and kinds of knowledge and how this relates to notions such as truth-value and belief) is widely recognized. In many ways, they represent two different systems of knowledge based on different conceptions of the world. Many Indigenous people have noted that imposing definitions from other epistemological conventions would violate the integrity of indigenous systems of knowledge and distort them. Erica-Irene Daes, the United Nations Special Rapporteur on Indigenous People and Their Relationship to the Land, has pointed out that "heritage of an indigenous people is not merely a collection of objects, stories and ceremonies, but a complete knowledge system with its own concepts of epistemology, philosophy, and scientific and logical validity" (Daes 1994, para. 8).

Another concern raised by many Indigenous people relates to recording, documenting, and archiving indigenous knowledge. While many agree that it is important to collect and preserve this information that has been largely lost due to legacies of colonialism for the future generations, others point out the potential dangers of decontextualizing and archiving living knowledge that takes its meaning from specific locations and cultural and historical circumstances. On the other hand, it has been pointed out that the indigenous knowledge process has several similarities with Western science (empiricism, tests for validity, observation) and thus it is possible to discuss "indigenous science" (see, for example, Cajete 2000; Colorado 1988, 1996; Deloria 1999). Types of indigenous scientific knowledge include ethnoecology, ethnozoology, ethnopharmacology, ethnobotany, and agroforestry.

Other terms used to refer to this type of knowledge system include "local knowledge," "traditional ecological knowledge," "customary law,"

"indigenous science" and "oral tradition." However, the term "traditional knowledge" is problematic and can be misleading. Emphasizing that a system of knowledge is "traditional" may imply that it belongs to the past and thus does not have validity in contemporary contexts. But as Marc G. Stevenson (1996, 280) notes: "it can be argued that all knowledge is contemporary, for it is given meaning and value from a frame of reference that is being continually updated and revised." It has also been suggested that traditional knowledge is "traditional" not in a sense that it belongs to the past but in the way it is acquired (Battiste and Henderson 2000, 46).

Indigenous rights advocates have long been calling attention to their systems of knowledge and their significance for discourses of sustainable development, resource management, and biodiversity. In 1987, the Brundtland Report, *Our Common Future*, was among the first international reports to recognize the sustainable ways of life of indigenous and tribal communities and the role of indigenous and tribal institutions and ideas in envisioning more sustainable futures for everybody in the planet. Other international instruments that refer to the significance of indigenous knowledge include the Convention on Biological Diversity and the Agenda 21 of the United Nations Conference on Environment and Development (1992). They both call for the recognition, preservation, and incorporation of indigenous knowledge in resource management, development projects, and other policies.

As a result of the increasing recognition of the value of indigenous knowledge, there are serious concerns of appropriation and commodification of this knowledge particularly by the pharmaceutical industry. Terms like "biopiracy" and "bioprospecting" refer to appropriating and patenting aspects of indigenous knowledge to be used in pharmaceutical and medical products without sharing the profits with the holders of this knowledge. The protection of indigenous knowledge has become a major concern and an issue of much debate internationally at organizations such as the United Nations, United Nations Educational, Scientific and Cultural Organization (UNESCO), and the World Intellectual Property Organization.

- Work Cited: **Battiste, Marie and James Youngblood Henderson.** 2000. *Protecting indigenous knowledge and heritage. A global challenge.* Saskatoon, SK: Purich.
- Cajete, Gregory.** 2000. *Native science: Natural laws of interdependence.* Santa Fe, NM: Clear Light Publishers.
- Colorado, Pamela.** 1988. Bridging native and Western science. *Convergence XXI* (2/3): 49-67.
- Colorado, Pamela.** 1996. Indigenous science. Dr. Pamela Colorado talks to Jane Carroll. *ReVision* 18 (3): 6-16.
- Daes, Erica-Irene A.** 1994. Preliminary report of the Special Rapporteur on the protection of the heritage of indigenous people. Document No.

E/CN.4/Sub.2/1994/31. Geneva: UN Sub-Commission on Prevention of Discrimination and Protection of Minorities. (accessed 31 January 2006)

Deloria, Vine Jr. 1999. Ethnoscience and Indian realities. In *Spirit and reason. The Vine Deloria Jr. Reader*, ed. Barbara Deloria, Kristen Foehner, and Sam Scinta, 63-71. Golden, CO: Fulcrum.

Stevenson, Marc G. 1996. Indigenous knowledge in environmental assessment. *Arctic* 49 (3): 278-91.

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