

Rethinking the Public Domain: A Challenge for Knowledge-Sharing Societies in the Information Age

By Margaret Raven

Historically treated as the heritage of humankind, biological and genetic resources are now the subject of an ever-increasing struggle over ownership involving governments, corporations, research institutions, and indigenous and local communities. Information management and traditional knowledge-sharing practices are creating a dilemma for the concept of public domain.

International negotiations are increasingly recognizing the importance of access to information and the issue of information ownership, and are trying to catch up with the ever-increasing digital revolution. The Convention on Biological Diversity (CBD, 1992), World Summit on Sustainable Development (WSSD, 2003), and World Summit on the Information Society (WSIS, 2003) have all highlighted the important role that technology, information, and knowledge play in helping to secure sustainable development and biodiversity conservation.

The availability of information about biodiversity is unsurpassed. International organizations, non-governmental organizations, research institutes, and indigenous organizations are only some of the many sources of online information. The CBD's Clearing House Mechanism, for example, aims to promote and facilitate scientific and technical cooperation by developing a global mechanism for exchanging and integrating information on biodiversity through national, regional, and thematic clearing-house focal points. Some of the thematic clearing-house focal points, such as NatureServ and BirdLife,¹ include electronic online databases. These databases contain vast amounts of information that is accessible to anyone who has access to the Internet.

The Consultative Group on International Agricultural Research (CGIAR) is another example of an organization that maintains open and free access to information and resources. CGIAR has placed over 600,000 samples of crop, forage, and agro-forestry genetic resources in the public domain, with 533,000 designated as "in trust" for the world community under agreements with the Food and Agriculture Organization of the United Nations (FAO). Organizations such as IUCN – The World Conservation Union, United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC), and Inter-American Biodiversity Information Network (IABIN) also maintain conservation databases and database networks. Such is the extent of these database networks that IABIN, which represents only the Americas, has access to over 70 databases on its website.²

Property rights vs. public domain

Online databases provide easy access to biodiversity information, but many of them have been set up quickly, often without a clear understanding of (or guidelines on access to and ownership of) the information that they hold. This outflow of information has been championed by those who believe it necessary to maintain the boundaries of the so-called "public domain". Public domain has generally been used to refer to information and resources that are freely available to the public (not secret) and whose use is for the public good.³ Traditional Western wisdom classified "products of nature, scientific theory, and folk knowledge to be public goods,

belonging to the public domain".⁴

The traditional boundaries of the public domain are now being challenged, however, by both the introduction of biotechnology (which can create new biological processes and life forms) and advanced information and communication technologies (which can store and transport large amounts of information at minimal cost). As a result, the classification of information and resources as "public" or "private" is beginning to change. Likewise, as new plant varieties become subject to patent law, and information about a particular species stored in databases is subject to private rights, it is becoming increasingly difficult to determine whether biological and genetic resources and associated traditional knowledge are public or private resources.

Free and open access to information and biological and genetic resources is an important tool for sustainable development and biodiversity conservation. Efforts to maintain and protect the public domain have led organizations such as the Creative Commons to promote new forms of intellectual property rights (IPR) that allow the provider to define a spectrum of access possibilities between full copyright (all rights reserved) and public domain (no rights reserved).

Traditional knowledge and the public domain

To date, the majority of attention on the public domain has focused on the challenge posed by IPR for public access to scientific knowledge, biological and genetic resources, and software and databases. The relationship between the public domain and rights over indigenous and traditional knowledge has generally been overlooked. With the assertion that access to information is a key factor in sustainable development and biodiversity conservation, and in recognition of the economic value of information, the "information commons" is seen as a field ripe for harvest and, thus, under increasing threat. This creates a scenario in which the claim of "public domain" can be used as justification for the misappropriation of indigenous and traditional knowledge.

Direct criticism of the application of "public domain" to indigenous and traditional knowledge has been made by, among others, the Tulalip Tribes of Washington, at the 5th session of the World Intellectual Property Organization's InterGovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore, held in July 2003 in Geneva. Their contention is that "the concept of public domain is not accepted by many indigenous peoples for their knowledge", and that "open sharing ... does not automatically confer a right to use the knowledge".⁵ Under this view, the notion of public domain as it now stands is seen as a colonial tool for the misappropriation of indigenous and traditional knowledge. This leads to the conclusion that the definition of public domain needs to accommodate a number of different world views with regards to the sharing of knowledge, in ways that are respectful of different indigenous and traditional means of knowledge-sharing.

Much traditional knowledge has been published without the prior informed consent of the owners, and is now considered to be in the public domain. In this light, the concept of public domain can be used

as a means for the expropriation of indigenous and traditional knowledge, and the push for access to information for biodiversity conservation and biotechnology development could be seen as a threat to the commons of indigenous and traditional peoples that could potentially lead to even further loss of control and increased misappropriation.

The UNU-IAS report on “The Role of Registers and Databases in the Protection of Traditional Knowledge”⁶ examines both the strengths and limitations of registers and databases for protecting traditional knowledge, and proposes the possibility that databases holding traditional knowledge should assume a voluntary trust arrangement that treats all traditional knowledge as being held on behalf of indigenous peoples. The report highlights the “Catch 22” position whereby indigenous peoples are required to have their knowledge registered in the public domain to prevent biopiracy, but in doing so lose control over its subsequent use.

Revising the concept of public domain

The dominant discourse on public domain tends to present a view that there is only one public domain. A contrasting view however, may be proposed based upon the experience of aboriginal peoples in Australia who have their own systems for sharing knowledge governed by specific customary law and practice. This leads to a proposal that there is not one, but rather a number of different, overlapping public domains or knowledge-sharing spaces – each defined according to a range of national, international, or community laws and practices. Indigenous peoples, for instance, have knowledge-sharing spaces that have served many purposes, including the conservation of information, knowledge, and biological and genetic resources. These spaces allow for access to relevant information subject to compliance

with specific cultural norms and practices, which may differ from those applicable under national or international law. Information shared freely within one knowledge-sharing domain may be shared subject to certain constraints on subsequent use; such sharing does not, therefore, necessarily imply an intention that the relevant information should become a part of the global public domain.

It is increasingly clear that we need to revisit the notion of “the public domain”. Examples such as the Peruvian “Protection Regime for the Collective Knowledge of Indigenous Peoples Derived From Biological Resources” and the South Pacific proposed model law on traditional knowledge directly challenge the belief that traditional knowledge is the common heritage of humankind, and cannot be protected after it has fallen into the public domain. These experiences demonstrate nascent attempts to develop appropriate mechanisms to secure traditional knowledge rights so that further loss of control and misappropriation cannot continue, and so that biodiversity conservation can continue in a fair and equitable manner.

- 1 See the NatureServe Explorer database at <http://www.natureserve.org/explorer/> and the World Bird Database at <http://www.birdlife.net/datazone/>.
- 2 See <http://www.iabin.net/english/bioinformatics/databases.shtml>.
- 3 Elizabeth Longworth, “The Role of Public Authorities in Access to Information: The Broader and More Efficient Provision of Public Content,” *Infoethics 2000*, p. 5, UNESCO.
- 4 Stephen Brush, “Bioprospecting the Public Domain,” *Cultural Anthropology* 14 (4):535-555, 1999.
- 5 Tulalip Tribes of Washington, *Statement by the Tulalip Tribes of Washington on Folklore, Indigenous Knowledge and the Public Domain July 09, 2003*, Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore, Fifth Session, Geneva, July 15-17, 2003.
- 6 Available online at http://www.ias.unu.edu/binaries/UNUIAS_TKRegistersReport.pdf.

Access Regimes and Intellectual Property Rights: Exploring the Interface for Drug Research

By Padmashree Gehl Sampath

Advancing the discussion on the interface between access regimes and intellectual property rights requires focus on questions of legal and institutional design at the national level, and calls for positioning of bioprospecting strategically within broader challenges in the area of intellectual property protection, drug R&D, and public health.

The policy interface between access regimes and intellectual property rights has been amongst the hardest to resolve in the debate regarding the relationship between the Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement and the Convention on Biological Diversity (CBD). This is due in part to the polarization of issues amongst countries, and in part to the overarching impact of intellectual property rights (IPR) on most issues within bioprospecting. Among the main aspects of this interface that have

received widespread attention in the past decade are:

- the limitations of an IPR-like *sui generis* right for protection of traditional knowledge;
- the potential of IPR to undermine benefit-sharing with local and indigenous communities;
- the documentation of traditional knowledge as “prior art” to prevent its undue appropriation;
- the viability of a certification system to trace the origin of genetic resources and/or traditional knowledge; and
- the inter-relationships between IPR and sustainable use and conservation of genetic resources.

Avid controversy on the interface between access regimes and IPR has ensued in various international forums, with several organizations (such as the World Intellectual Property Organization (WIPO), the Conference of the Parties to the CBD, and the World