

## INTELLECTUAL PROPERTY RIGHTS: WHAT IS THE POSITION OF ETHNOBIOLOGY?

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During the First International Congress of Ethnobiology held in Belem, Para (Brazil), July 19-22, 1988, scientists and native peoples from 35 countries met to discuss the importance of traditional knowledge and its application to the development of socially equitable and ecologically sustainable options for the Planet. Although the examples of indigenous knowledge systems, ecological variations in different regions of the world, and suggestions for applications of native concepts varied greatly, common themes appeared and reappeared throughout the Congress. The richness and relevance of traditional knowledge was evident in all cases, as was the global threat of extinction to native peoples and their cultures.

Industry and business discovered many years ago that indigenous knowledge sometimes means money. In the earliest forms of colonialism, extractive products were often the basis for colonial wealth. More recently, pharmaceutical industries have become the major exploiters of traditional medicinal knowledge for major products and profits.

The annual world market value for medicines derived from medicinal plants discovered from indigenous peoples is US \$43 billion. Estimated sales for 1989 from three major natural products in the US alone was: Digitalis (although not from an "indigenous" culture), US \$85 million; Resperine, US \$42 million; Pilocarpine, US \$28 million. (Source: Fundação Brasileira de Plantas Mediciniais—FBPM.)

Although no comparable figures are published for natural insecticides, insect repellents, and plant genetic materials acquired from native peoples, the annual potential for such products is easily that of medicinal plants. Research into these natural products is only beginning, with projections of their market values exceeding all other food and medicinal products combined. The international seed industry alone accounts for over US \$15 billion per year, much of which derived original genetic materials from crop varieties "selected, nurtured, improved and developed by innovative Third World farmers for hundreds, even thousands of years" (*South*, September 1985:95).

Likewise, natural fragrances, dyes, body and hair products are coming to account for major world markets. Figures from the Body Shop, considered to be one of the new stars of success in international enterprise, show an annual sales of \$90 million with a growth rate last year of 60% (*Time*, April 23, 1990:39). The 300 Body Shop products are derived from plants, are not tested on animals, and mostly come from "Third World" countries. These products are marketed as coming from ecologically sustainable projects managed by the native peoples themselves. The success of Anita Roddick, founder of the 14-year old British company, has earned her the title of Britain's "Retailer of the Year." Such renown will not go unnoticed by the hundreds of would-be clones that will appear to take up Anita's marketing strategy.

Growing interest and catapulting markets in "natural" food, medicinal, agricultural, and body products signals increased research activities into traditional knowledge systems. Now, more than ever, the Intellectual Property Rights of native peoples must be protected and just compensation for knowledge guaranteed. We cannot simply rely upon the "good will" of companies and institutions to "do right by" indigenous peoples. If something is not done now, mining of the riches of indigenous knowledge will become the latest—and ultimate—neo-colonial form of exploitation of native peoples.

### THE BASIC CONDITIONS FOR SURVIVAL

Basic conditions for survival of native peoples are spelled out in the United Nations International Labor Organization Convention 107, which was adopted in 1957. Major changes were recommended in 1987 in an effort to remove the "integrationist" language of the original Convention that is seen as contrary to native cultural sovereignty. An amended Convention, known as ILO 169, was improved in 1989 and is the only international instrument in existence that deals exclusively with indigenous rights. There are, however, many other declarations, international agreements, laws, and manifests that express concerns of and for native peoples.

Most conventions and declarations agree that the first condition for survival of native peoples is LAND. For this reason, right to land is viewed as a basic human right of all native peoples. Other essential conditions include: equal opportunities under the law, access to vocational and educational institutions, adequate social security and health assistance, right to decide which group(s) and individual(s) are to be considered "indigenous," and respect of native language laws, and customs.

There are no provisions anywhere for the protection of knowledge rights of native peoples. Despite repeated pleas from indigenous leaders that their traditional culture and knowledge systems are being exploited without just compensation, little action has been taken by legal, professional, environmental, non-governmental, governmental—or even human rights—groups to secure Intellectual Property Rights (IPR) for native peoples.

The World Intellectual Property Organization (WIPO) and UNESCO have both tried to work within the United Nations system to develop model conventions

to protect folklore and "artistic" aspects of indigenous knowledge. Nothing has gone beyond proposals, however, and currently there is no push to deal with IPR in any existing or future UN Conventions.

In July, 1988, representatives of native societies, scientists, environmentalists, and journalists from 35 countries met to discuss the relevance of indigenous knowledge to the future of the planet. This First International Congress of Ethnobiology produced a historic document called the "Declaration of Belem," which is the first international document specifically calling for the just compensation of native peoples for their knowledge and the legal defense of indigenous Intellectual Property Rights.

There is considerable opposition to IPR for native peoples—even ethnobiologists and anthropologists—who fear that they will have to drastically change their "lifestyles." Incomes from published dissertations and other books, slides, magazine articles, phonograph records, films and videos—all will have to include a percentage of the profits to the native "subjects." It will probably become normal that such "rights" be negotiated with native peoples prior to the undertaking of initial fieldwork. This kind of behavior has never been considered as part of the "professional ethic" of scientific research, but certainly will become so in the near future.

The strongest opposition to IPR comes—as no great surprise—from the companies that have been the major predators upon traditional knowledge in the past: the pharmaceutical industry and seed companies (now subsumed by the "biotechnology" label). Both groups would have to make major changes in the ways they do business—and paying for the basic information and genetic materials necessary to generate their profits would heavily pinch their profit margins.

### AN INDIGENOUS VIEW

Indigenous leaders lament the difficulties of their younger generations to see options for economic security without following the ecologically destructive ways of the "Industrialized World." How can traditional knowledge be defended and valued within a native society when, in fact, such knowledge offers little economic benefit to indigenous groups caught in the economic maze of consumerism and basic survival?

Kayapo chief, Paiakan, told in the opening ceremonies of the First International Congress of Ethnobiology how warriors from his people travelled to the Brazilian capital during the Constitution Convention in order to defend native peoples against proposals that, if included in the new constitution, would have stripped many groups of their protective status as Indians. Had the physical presence of the Kayapo lobby not been evident during the Convention, he explained, Indians would not have achieved the new laws that guarantee to them in the new Constitution the right to independent legal representation and decisions regarding their lands would still be signed "behind closed doors" by government officials.

Ironically, with all of the much-heralded biological and ecological richness of Amazonia, the only products that command stable and reasonable prices are

cattle, minerals, and timber—all of which require the destruction of tropical ecosystems in order to be attained. This pattern is repeated time and time again throughout the world.

The Kayapo were in a fortunate position: they are relatively wealthy Indians, whose money comes from mining and lumber extraction. It was with gold and timber money that the Kayapo sent on many occasions their 100+ warrior delegations on the costly 1,000 kilometer trip to the Capital, Brasilia. "If we had not had that money," explained Chief Paiakan, "Brazilian Indians would have had to sit helplessly on their reserves as the politicians did exactly what they wanted. The government certainly was not interested in funding our journeys to the Capitol. Indians these days must have financial resources too. Our people want radios and batteries for their tape recorders. We need the "White Man's" clothes when we go to the city—and we must go to the city to defend ourselves against those who would dispossess us of our lands and turn us all into 4th class citizens with no food, medicine, or money."

Native peoples must have economic sources—and, if such income is to preserve the land, the people and their cultures, then traditional knowledge itself must be compensated in financial terms. Otherwise, native peoples themselves must revert to ecological destruction, associated with atrophy of their own knowledge systems, in order to acquire the economic power they need to survive.

### FEARS OF TOO MUCH SUCCESS

Ecologists are justifiably concerned with the ecological impact of production of "natural products" that become too successful. The tendency is always toward monocultures of cash crops. Many worry that international demands may spell the end of biodiversity, rather than encourage conservation of natural resources as initially desired.

Michael Soule and Kathryn Kohm outline this concern in their recently published book, *Research Priorities for Conservation Biology*:

"Increased pressure on biological resources arises because of increasing human populations, changing consumption patterns, and new technologies. Although agricultural intensification will continue to be necessary, its impact on biological resources is not predetermined. Conservation poses important research questions relevant to the design of new production technologies and land use systems: Can biologically diverse and low energy technologies be extended and/or intensified? Can production systems be differentially intensified so as to maintain biological diversity in other parts of a system? How does increased exploitation of specific species affect other species and general system properties?"

Provocations of cultural changes can be equally disconcerting. By establishing mechanisms for "just compensation" of native peoples, are we not also establishing mechanisms for the destruction of their societies through the subversion of materialism and consumerism?

Given current realities, such concerns are reduced to romantic notions. The fact is that indigenous societies and their natural environments are being destroyed by the dramatic expansion of industrialized society NOW. And, besides, pharmaceutical companies and "natural products" companies have tasted success in their efforts: they will not go away.

Certainly the mechanisms of WHAT is "just compensation" and HOW such benefits would be distributed opens a "Pandora's Box." But to NOT open this Box is to accept the ethical and moral responsibility of "paternalism" (those from "advanced societies" know what is good for the "native" because "we" have already made the mistakes of squandering our cultural and natural wealth) that has undermined indigenous independence since the first wave of colonialism.

Native peoples must have the right to choose their own futures. Without economic independence, such a choice is not possible. The current devastation of native peoples and the ecological systems that they have conserved, managed, and intimately known for millennia, require that new and drastic steps be taken to reorient world priorities. All channels and organizations—governmental, non-governmental, professional, business—must work together to reverse the current momentum in loss of cultural, ecological and biological diversity of this planet.

Three major accomplishments must occur:

(1) giving economic value to the LIVING forest and natural habitats through the valorization of "natural products"; (2) recognition that native peoples hold the key to understanding the rational use and management of these living natural areas; and (3) developing legal and practical mechanisms for the "just compensation" of native peoples for their knowledge through the guarantees of Intellectual Property Rights for traditional knowledge.

I want to make it very clear that I DO NOT advocate the *imposition* of consumer capitalism and ties to market economies upon native peoples. Each group must have the option to enter into market economies or not—and to what extent and under which circumstances they want to do so—or not do so. I only wish to point out that pressures to exploit traditional knowledge are drastically increasing, and that native peoples ought to at least have the option of just compensation for their knowledge.

To secure Intellectual Property Rights and just compensation for traditional knowledge is critical to the survival of ethnobiology and anthropology, since indigenous peoples are increasingly leery of researchers and protective of their knowledge. At the same time, if "Green Consumerism" is to function to divert the all out destruction of remaining Planetary natural resources and native peoples, then preservation of the LIVING forests and LIVING peoples is essential. Ecologists tell us that that is the only way we can save the planet. This can be done only with secure protection of indigenous lands and economic independence for native peoples.

These complex issues will be discussed in several symposia of the Second International Congress of Ethnobiology in Kunming, China, 21–25 October, 1990.

This Congress will be the next step toward the development of a position of ethnobiologists toward IPR and the "just compensation" of native peoples for their knowledge. I hope that both the Society of Ethnobiology and the International Society of Ethnobiology will take the intellectual lead—as well as appropriate actions—toward the development of a new ethic that serves as a model for other disciplines.

I suggest the following action be taken:

- (1) Support an international call, through its members in all countries that participate in United Nations activities, for UN action on the question of IPR;
- (2) Seek national legislation to secure indigenous IPR rights in all countries where native populations exist;
- (3) Encourage funding agencies and development banks to support research into traditional knowledge, its practical applications, and ways that native peoples can be "justly compensated" for their knowledge;
- (4) Establish a special Working Committee to investigate the issues of IPR in relation to native rights and report to the Society with guidelines for international and national legislation;
- (5) Include on the agenda of an Ethics Committee the issues of IPR in relation to activities of researchers with indigenous populations.

**EDITOR'S NOTE:** It is important to point out that Posey's article on Intellectual Property Rights (IPR) is a position/opinion paper. It was completed on May 10, 1990 and arrived in my office approximately two weeks later. Although the present issue was about ready to go to press, I thought it important that this paper be published in Volume 10, No. 1 because date of issue of Volume 10, No. 2 will be after the meeting of the Second International Congress of Ethnobiology, at which time IPR "will be discussed in several symposia." IPR is a complex, multi-faceted issue. It is important that all aspects be intelligently and compassionately considered and assessed before this or any other society or organization makes any firm decisions or rulings about it. In this connection, then, I encourage members of the Society of Ethnobiology and readers of the *Journal* to contact Dr. Darrell Addison Posey as soon as possible and preferably no later than October 1, 1990, so that he will be aware of the many viewpoints on the many different aspects of IPR.

I wish to make it known that I did not send this paper out for peer review because of lack of time. I felt it was important that the readers of this journal be made aware of the complexities of IPR and be invited to make their opinions and facts at their disposal known so they can be taken into account during the discussions of IPR in China, 21-25 October, 1990. I recognize that many readers of the *Journal* will agree in whole or in part with this paper. At the same time other readers will object vehemently to it, again, either in whole or in part. Had there been time for the paper to have been peer-reviewed, it is likely that reviewers would have suggested revisions, given additional or what they might consider better sources of information; it's possible that one of the reviewers might have recommended that the paper not be published. I decided to publish this paper, which Posey himself recognizes is just a summary, so that any additional references, facts, figures, and viewpoints can be made available to the participants in the symposia at the Second International Congress of Ethnobiology. Please send/telephone/Fax any such information to Dr. Posey. I also suggest that you send a copy to the *Journal's* News and Comments Editor (see the inside front cover for his address).

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