

**COMMUNITY INTELLECTUAL RIGHTS IN THE BIODIVERSITY
LAW OF COSTA RICA**

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INTRODUCTION:

One of the most relevant aspects in the Biodiversity Law of Costa Rica, No. 7788 is the expressed recognition of the existence and validity of different forms of knowledge and innovation, as well as the need to protect them through the appropriate legal mechanisms for each specific case (Art. 77). In this way, at the same time that it endorses some forms of intellectual property of individual type or for enterprises, under patents and plant breeders' rights, it also accepts the *sui generis* "community intellectual rights" (see Chart 1).

Chart 1.

ARTICLE 82- *Sui generis* intellectual community rights

The State expressly recognizes and protects, under the common denomination of *sui generis* intellectual community rights, the knowledge, practices and innovations of indigenous peoples and local communities related to the use of components of biodiversity and associated knowledge. This right exists and is legally recognized by the mere existence of the cultural practice or knowledge related to genetic and biochemical resources; it does not require prior declaration, explicit recognition nor official registration; therefore it can include practices which in the future acquire such status.

This recognition implies that no form of intellectual or industrial property rights protection regulated in this chapter, in special laws and in international law shall affect such historic practices.

The above-mentioned article accepts, that a group of ancestral traditions related to the forms of knowledge, use, interchange, cultivation and protection of the elements of biodiversity, especially in peasant and indigenous communities, will become subject of the positive right. In some cases, the law establishes certain conditions to the individual intellectual property rights if they impact negatively the processes and products considered basic for Costa Ricans' food and basic health. (See the second paragraph of Chart 1 and numbers 6 and 7 of Chart 2.).

Chart 2

ARTICLE 78- Limits and means of protection

The State shall grant the protection indicated in article 77, by means of patents, trade secrets, and plant breeders' rights, sui generis intellectual community rights, copyrights and farmers' rights, among others. These rights shall not apply to:

1. - DNA and RNA sequences per se.
2. - Plants and animals.
3. - Non genetically modified microorganism.
4. - Essentially biological processes for the production of plants and animals.
5. - Natural processes or cycles as such.
6. - **Inventions essentially derived from knowledge associated to Traditional or cultural biological practices in the public domain.**
7. - **Inventions which, if commercially exploited in a monopolist way, would Affect farming or fishing processes or products considered basic for Food and health of the inhabitants of the country.** (Emphasis added)

The objective of Article 83 (see Chart 3) is to give some initial notions in relation to community intellectual rights, with the willingness to collaborate with local and indigenous communities in the construction of these innovative rights.

Chart 3.

ARTICLE 83-Participatory process to determine the nature and scope of the sui generis intellectual community rights.

Within eighteen months following the entry into force of this law, the Commission, by means of its Technical Office and in association with the Indigenous Peoples Board and the Small Farmers Board, shall define a participatory process with indigenous and small farmer communities to determine the nature, scope and requirements of these rights for their definitive regulation. The Commission and the organizations involved shall prepare the form, methodology and basic elements of the participatory process.

Following the above-mentioned introductory articles and commentaries, this paper will consider the following two topics:

1. A brief analysis of the situation that has laid down the need to transform a customary law into a national law. This analysis also includes some comparative elements considering if small agricultural producers can or should ask for patents.
2. An initial discussion of the main conceptual elements to develop the intellectual community rights having as framework Costa Rica's biodiversity law.

1. THE SPARK THAT STARTED THE NEED TO PROTECT COMMUNITY INTELLECTUAL RIGHTS.

The need to protect the community intellectual rights did not happen by chance, nor corresponds to a revindication without struggle. On one hand, the hegemonic society --be it in the North or in the South--, has been imposing the idea that food security is a question of trade, investment or of technological fix; not a question of domestic self-sufficiency. Among its assumptions, it establishes that agricultural problems and hunger in the world will be solved with the "modernization" of agriculture, this time not as a result of the green revolution, but of the biotechnological revolution, especially genetic engineering.

According to this position, if a farmer can assume that "modernization" process, that is fine; if he or she cannot, theoretically the market will absorb him or her, in some other type of work. With this kind of thinking, the demise of peasants as social class has smaller importance than the extinction of a plant with promissory extracts for industrial purposes. Plants perhaps deserve more care than the man or woman that has taken care or nurtured them.

Inside this paradigm, there is an argument in favor of the 1994 General Agreement of Tariffs and Trade (GATT), and specifically its Trade Related Intellectual Property Rights (TRIPs). This agreement, subscribed by approximately 140 countries, have the clear tendency to commodify the tangible or physical resources of biodiversity so as the intangible elements, and it is to say the knowledge associated to those resources.

In the case of biotechnological processes, since most of them are time consuming and expensive, the enterprises charge them a high price in order to recover not only the investments but also to obtain substantial profits. One way to fulfill this condition is through intellectual property rights, which are temporary monopolic controls upon the processes used, or the products manufactured. The intellectual property rights have been imposed by the industrialized countries to the rest of the world through legal and standard conventions such as TRIPs. This means that all the signatory countries should harmonize their corresponding legal instruments with the globalized agreement. As a consequence countries are in fact transferring their national sovereignty to the international organisms accepting among other things, the broadening of intellectual property rights in time and subject matter. In the case of biodiversity resources the intellectual property rights are granted for the first time in history with a life span of twenty-years.

This new demand by GATT, whose agreements are actually being implemented by the World Trade Organization, is the spark that triggers explosive and additional challenges to the already precarious small farmer's conditions of our countries (see chart 4).

Chart 4.

IMPACTS OF PATENTS ON AGRICULTURAL SYSTEMS

In 1992, Pat Mooney prevented that patents on life forms would mean the negation of the traditional rights of peasants to keep their seeds, since, if they plant them back next year, without

paying the corresponding royalties, they would be blamed as of making a non- authorized photo copy of the patented seed. Peasants would be forced to pay royalties for each seed and animal, or farm products of a patented species, and forced to be more dependent on fertilizers, pesticides, herbicides and the machinery made by the same companies that first collected the traditional seeds, and then return them as derived seeds, highly dependent on chemical inputs (mentioned by Burrows and others. 1992:7).

It even questions some of the terms exposed in the Convention on Biological Diversity (CBD), signed in 1993, before the GATT agreements (see Chart 5):

Chart 5.

EXCERPTS OF THE BIOLOGICAL DIVERSITY CONVENTION:

1. Subject to its national legislation, (each contracting party) will respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices (Art. 8j).
2. It outlines the obligation of contracting parties that, insofar as possible, protect and encourage customary use of biological resources, in accordance with traditional cultural practices that are compatible with conservation or sustainable use requirements (Art. 10c)
3. The contracting parties, recognizing that patents and other intellectual property rights, may have an influence on the implementation of the Convention will cooperate in this regard subject to national legislation and international law in order to ensure that such rights are supportive of and do not run counter to its objectives (Art. 16.5).
4. The objectives of the Convention have to do with biodiversity conservation, the sustainable use of its components, and the fair and equitable sharing of the benefits origins out of the utilization of genetic resources (Art. 1).

The proponents of the CBD give enough evidence in the Convention Preamble and in the above-mentioned articles, of the relationship between the genetic and the cultural erosion. This position is also expressed by some other authors, who explain how the enclosure of the commons, in this case knowledge through intellectual property rights, will contribute to their greater deterioration (Shiva 1997).

Another study (Alvarez 1988) demonstrates that patents and plant breeder's rights were conceived to protect a type of knowledge that didn't correspond to the characteristics of collective knowledge. Rural and indigenous peoples' techniques and products cannot not fulfill the requirements to acquire them (see Chart 6); the costs for application and patents maintenance, are unavailable for their economic possibilities; and last but not least, because according to their own culture and cosmovision, this type of rights run against their own production systems and beliefs (see Chart 7).

Chart 6.

TYPES OF INTELLECTUAL PROPERTY ON LIFE FORMS

Patent: is a type of intellectual property right, granted to the person or persons who formulate an invention or new idea that solves a problem in the sphere of technology. The owner of patent is entitled to exclude others from the use of his or their invention for a certain time (Kenney 1992:56). The requirements to obtain patents are: the invention must have novelty that means to correspond to something really new; inventiveness, meaning that the object of patentability is not obvious; and practical utility: meaning industrial or commercial application.

Plant Breeder’s Right (PBR): is an intellectual property right, slightly different from a patent. It grants the breeder a limited monopoly over the reproductive material of the new variety. The conditions asked for Union for the Protection New Varieties of Plants (UPOV), to grant this right are: the new variety needs to show uniformity (homogeneity), to be distinctive and stable, to have commercial novelty and an acceptable denomination (UPOV 1995:3).

In the following tables, I present a comparative analysis between the requirements to grant intellectual property rights on life forms, either through patents (Chart 7.) or through plant breeder’s rights (Chart 8), and the nature of indigenous and small farmers’ knowledge.

Chart 7.

COMPARISON BETWEEN THE REQUIREMENTS TO GRANT PATENTS AND THE NATURE OF INDIGENOUS AND SMALL FARMERS’ PRODUCTION

REQUIREMENTS TO GRANT PATENTS	NATURE OF INDIGENOUS AND SMALL FARMERS’ PRODUCTION
<p>The patents are granted basically for processes and products “not essentially biological”</p> <p>There is a scientific-legal written protocol to apply, renew the patent and defend it in case of trials</p> <p>The product should have industrial or commercial uses. The utility of a variety is not valued from the perspective of the producer-consumers, neither from its sustainability.</p> <p>Last but not least, if not as a requirement but as a consequence, patents freeze the flow of knowledge, innovation and</p>	<p>These types of processes and products are performed by genetic engineers, not small farmers</p> <p>These procedures and costs are totally alien to or impossible to deal with by indigenous cultures (patent’s application costs vary from country to country but they may be around US\$10,000 and its cost of maintenance around \$250,000 along the 20 years of the monopoly time span)</p> <p>Most small farmers and indigenous population don't have, or even cannot have, as a priority a large-scale or industrial production. Their activities and innovations fill subsistence or small-scale commercial goals.</p> <p>Peasants and indigenous agricultural or cattle raising systems are improved through free interchange and innovation. Since way back in history, peasants keep part of their harvest to plant the seeds back as a reward</p>

interchange. They forbid farmers or cattle raisers to keep seed to replant and cattle's semen for reproduction coming from the patented varieties.	of their hard work of sowing, caring and harvesting them. The same happens with the free use of their domestic animals semen.
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Chart 8.

COMPARISON BETWEEN REQUIREMENTS TO GRANT PBRs AND THE NATURE OF INDIGENOUS AND SMALL FARMERS' PRODUCTION

REQUIREMENTS TO GRANT PLANT BREEDERS' RIGHTS	NATURE OF INDIGENOUS AND SMALL FARMERS' PRODUCTION
<p>The new varieties should be homogeneous, distinct and stable</p> <p>The new varieties should have commercial utility. The utility of a variety is not valued either from the perspective of the small producers or in sustainable terms (Gaia-Grain 1998b).</p> <p>As in the case of patents, there are very high costs to carry out technical trials, register a variety and maintain the right in force.</p>	<p>Peasants' and indigenous peoples' varieties are diverse and not always stable through the years. For these producers, it could be very dangerous to manage only few varieties for their livelihood, and lose the rest of them due to the massive introduction of homogeneous and stable varieties</p> <p>As it is mentioned in the case of patents, most small farmers and indigenous population don't have, or even cannot have, as a priority a large-scale or industrial production. Their activities and innovations fill subsistence or small-scale commercial goals</p> <p>Indigenous peoples and small-scale farmers cannot fulfill these economic requirements.</p>

In addition to the reasons that reinvigorate peasants' and indigenous peoples' right to remain as social classes, are there some other underlying justifications for their struggle, in favor of their right to keep not only their tangible resources (or the physical resource itself), but also the intangible (that related to knowledge) ¹? The answer to this question is yes, according to more pragmatic reasons. Indeed, there is recent recognition and very well documented revaluation, of the ecological principles and cultural solidarity that influence, the production systems of rural and indigenous peoples. These characteristics, have contributed to biodiversity conservation in benefit of the whole humankind.

At the same time that small farmers produce food and medicinal plants, they also preserve the biological diversity, by the free interchange of knowledge, innovations and varieties of seeds and animals. They do that guided by a wise strategy for the sake of the tropical-environment conservation, where they blend species diversity, variability of ages, heights, and know-how to manage mutualism and disputes of plants and animals for space and light. The impact caused by

these local systems is far less compared to the ones produced by many farmers working with homogeneous varieties and their concomitant technological packages.

In summary, the review and reevaluation of peasants' and indigenous cultures as a whole, concludes that the protection of the biological resources necessarily claims for the protection of their production and livelihood systems. From here, we derive the justification to fight in favor of the recovery of these systems, which at present are endangered, among other things, due to the individual appropriation of the genetic and biochemical resources, through patents and plant breeder's rights. Therefore, it seems that one of the few available and remaining answers is the peremptory need to establish a type of "sui generis" community knowledge protection.

According to Colchester (1994: 2), indigenous peoples have at the present several objectives to avoid biopiracy, among others: to protect the sacred nature of most of their traditional knowledge; to defend the integrity and identity of the indigenous societies; to maintain the independence of the agricultural systems; and to financially compensate them for the commercialization of their knowledge. Colchester notices that, even though, these objectives are not easily compatible, the common element to all of them is "to maintain the control of their own patrimony."

Some people say that a way to achieve those objectives is to go from customary to formal law in relation to traditional knowledge protection, but this suggestion cannot avoid taking risks and contradictions. Many indigenous peoples from the South and Southeast Asia have pointed out this risk, declaring that:

“... The legal recognition of their intellectual property can accelerate more than slow down the commodification of their knowledge and their natural resources” (Colchester 1995:10).

Those groups conceive the notion of intellectual property rights as a sophisticated way to usurp their resources and knowledge. On the other hand, they also debate that doing nothing means to approve passively a new type of expropriation of their biological-resources and their knowledge-systems, all of which would contribute also to their destruction and, in consequence, the disappearance of the ecosystems where they live.

We see then the need to overcome some difficulties and to set some minimum conditions, before establishing the legal protection, in order for those groups not to lose more than what they win. In other words, they cannot run the risk of legalizing a process in exchange of insignificant economic benefits and other false promises, and as counterpart pay a high price, alienating their resources and culture received by the actual generation as a heritage from their ancestors, with the mandate to keep them for the sake of the future generations.

2. CONTRIBUTION TO THE CONCEPTUAL FRAMEWORK ABOUT THE NATURE OF COMMUNITY KNOWLEDGE

The construction of a legal framework for the community rights requires to implement some steps of juridical type, linked to the definition of the object and the protection requirements

of those rights; to the concretion of the holder or holders; to the establishment of mechanisms to give those rights territorial validity; and to the requirements for the administration and the enforcement of those rights (Cfr. Bogosian 1996:13).

On its part, the special legislative environmental commission, that proposed the current text of the Costa Rican Biodiversity Law, included some mandatory aspects of a participatory process for the establishment of the community intellectual *sui generis* rights, stressing out that this process should include the information, discussion and decisions making on:

- The socioeconomic goals and cultural impacts of the different systems of intellectual property and of these types of rights.
- The listing of all the requirements, procedures and titleholders, in order to recognize the "sui generis" rights.
- The framework of a registration system according to the cultural practices and the interests of the local communities and the indigenous peoples.
- The duties and rights conferred by the system, and the possibilities to grant licenses
- The identification of nullity or cancellation causes of the rights granted upon the knowledge related to practices and collective innovations,

The present paper doesn't aspire to answer the former points, task that should be done by an inter disciplinarian team. It only suggests some initial ideas to start a discussion to review, enrich or modify them.

A conceptual framework requires, in the first place, the agreement on the meaning of certain key words that will help to define the object of the subject matter. In this way, it is necessary to accord in certain words such as: community, community rights, and intellectual community rights. That is the intention of this section.

The word **community** is frequently defined in relation to territorial limits, or as a geographical unit, where people interact and develop social relations. However, for our purposes we need to understand "community" from a different point of view, as a social category. According to classic Sociology, a social category is an ensemble of people that share certain common characteristics. To belong to a social category, it is not necessary " . . . to have either mutual contact or reciprocal communication, not even vicinity" (Fichter 1969:76).

According to this, we can speak that children in school age constitute a social category. The same applies for the inhabitants of suburbs, and, in our case, for people that share similar ways to know, use and take care of biotic resources, independently if they live or not in the same area or if they have face-to-face relations. Therefore, the definition of community according to geographical or territorial criteria will only be taken as a reference point, complementary and elastic.

Community rights in general are then domain powers that a society grants ---tacitly or explicitly--, either as result of a steady custom or by means of a specific law, on some tangible object (the physical resource), or on some intangible object (knowledge, culture), to a social category, whose members as a whole share those rights because they have or have accrued some

common characteristics in relation with those objects.

There are several community rights in the rural areas, dialectically interrelated and complemented. For example, peasants and indigenous peoples have developed production systems and their consequent value systems, which cannot be alienated, such as the rights: to possess their territories (in the case of the indigenous peoples); to sow and hold back part of their crop and use it as seed for the next season; to exchange seeds with their neighbors; to carry out innovations in the germplasm; to sell their products and receive the necessary support from the society in general to continue living according to their traditional way of life.

All of them are part of the **farmer's rights**. In an implicit association we can find the germ of the intellectual community rights, since in all the above-mentioned practices and customary uses there are decisions and actions taken according to collective knowledge, in constant reconstruction.

For the time being, we can say that the **intellectual community rights** (and not intellectual property rights whose meaning is linked to individual rights) are granted to a social category built in and shaped because of the common links created among diverse people that share similar knowledge and uses of the natural resources belonging to generally common ecosystems. The application of knowledge (the intangible element) in an effective way on these elements and components of nature (the tangible elements), transforms them into resources, that is to say, the intellectual component is so important that a resource cannot be taken as such, without the associated knowledge.

In view of the fact that such knowledge has been created and enriched collectively through the years, nobody can act in his/her own name demanding individual rights upon that lore or on its subsequent innovations. Rather, each generation receives knowledge as a common heritage with the moral mandate to care for it and transfer it enriched, to the future generations. According to indigenous persons, an "awapa" or shaman is not even the private owner of his knowledge on plants, the animals and the secrets of life. Because shamans are people with special gifts in the community, they inherit the lore from their ancestors for their custody, with the command to improve it, to use it for the common good, and to transfer it, on due time, to those who deserve that honor. A shaman concentrates in his/her own self, a valuable millennial knowledge, as a patrimony that should not be used in his or her own and single benefit.

According to this, the Biodiversity Law of Costa Rica foresees the possibility to elaborate a voluntary register (Art. 84) of each one of the resources that communities ask to be protected. In this way it will be possible to define the territoriality and in each case the realm of the "community" that knows and shares the same resources, so that all their members become beneficiaries of the corresponding community intellectual right.

In relation with the risks of moving from a consuetudinary to a positive right, with the chance of losing more than winning, just as Colchester prevents, we consider that we can learn some lessons from the principles of the International Labor Organization Convention 169, ratified in Costa Rica under Law 7316, which deals with the protection of indigenous peoples' rights against the commodification and monopolization of their resources, and in favor of keeping safe their lifestyles and cultural practices, and the right to redefine their contribution to innovations in science and technology.

Colchester (1994: 3) suggests three important concepts in connection with indigenous peoples and their relation to the land: the first one is the reaffirmation of the collective or communal ownership, in opposition to the individual property, characteristic of the western societies; second, the rights to "territories" and not to "land," by which indigenous people assert the control of complete ecosystems; third, the concept of "inalienability" by which "... indigenous people mean not just that the land cannot be taken over by outsiders but that indigenous peoples cannot alienate themselves from their own territories"

For our purposes, I would like to stress the concept of "inalienability" of the land in order to compare it with other rights. Indigenous people affirm that they can live upon and commercialize the fruits of the land, but in no way they can lose the land itself, which should not be either sold or changed. When we compare the land with the living resources, -which have the virtue to have a reproducible nature in contrast with the land--, considering the "inalienability" concept, we can say that thanks to this consuetudinary right, the different generations have been able to secure the control of the life base. Inspired by that principle, people sell the fruits of their harvests, of animal breeding, or of the regeneration of soil microorganisms, but without the alienation of the conditions of reproduction. It would be as selling the eggs but never ever the rooster and the hen. It would be as the example given by farmers, of selling the crop but keeping some of the best as seed. For a new season. In this way, the control of the life base is not lost, it is inalienable.

If we compare the land with knowledge, in relation with the concept of "inalienability," we can say that the local communities and indigenous peoples can, of course, trade if they want to the products of their intellect with a market value, but keeping with zeal the guardianship of the base of that knowledge, without allowing anybody, to individually appropriate and monopolize for twenty years or more, this common good. This is the only way to guarantee the control and the sustainability of the basic process of life that ought not to be alienated or sold.

After the presentation of these ideas for the discussion, we need to conclude that the remaining process to build the community intellectual rights, is still long and requires a methodological design and strategy for wide discussions and consultations so that we can speak of an effective participation of those who are the main subjects of these rights. The law opens up the space and grants rights in a general way so that local communities and the indigenous peoples assert their domain on the resources and their knowledge, in order that they become effective instruments at their service.

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