INDIGENOUS KNOWLEDGE AND ITS PROTECTION

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Protecting the intellectual property of communities

Indigenous Knowledge (IK) has been used for centuries by indigenous and local communities and has been the mainstay of their existence specially in the key sectors of food and health. Western science has recently begun looking at IK as a source of new drugs specially since the cost of putting new drugs on the market is becoming very high The growing phenomenon of biopiracy shows the somewhat hypocritical attitude of western science to IK. Scavenging it on the one hand and claiming patents on all kinds of products derived from IK (turmeric, ayahuasca, neem, etc.) yet refusing to acknowledge its economic value and ownership.

Despite the growing recognition of IK as a valuable source of knowledge, western intellectual property laws continue to treat it as a component of “public domain”, freely available for use by anybody. Moreover, in some cases, diverse forms of IK have been appropriated under intellectual property rights by researchers and commercial enterprises, without any compensation to the knowledge’s creators or possessors.

Similarly, the use and continuous improvement of farmers' varieties (landraces) is essential in many agricultural systems. In many countries, seed supply fundamentally relies on the decentralized, local system of seed production which operates on the basis of the diffusion of the best seed available within a community and local farmers ensure that the farming community is supplied with planting material. The knowledge of farmers about crop varieties and their special characteristics has been central to the development of new plant varieties and for global food security.

The importance of IK has gained growing recognition in international fora. Thus, in 1981 a WIPO-UNESCO Model Law on Folklore was adopted; in 1992 the Convention on Biological Diversity specifically addressed the issue (article 8(j)). In 2000, an Intergovernmental Committee on Intellectual Property and Genetic Resources, Indigenous Knowledge and Folklore was established under the auspices of WIPO.

Misappropriation of IK

A large number of patents has been granted on genetic resources and knowledge obtained from developing countries, without the consent of the possessors of the resources and knowledge. There has been extensive documentation of IPR being sought over resources “as they are”, without further improvement (e.g., US patent No. 5,304,718 on quinoa granted to researchers of the Colorado State University; US Plant patent No. 5,751 on ayahuasca, a sacred and medicinal plant of the Amazon) and on products based on plant materials and knowledge developed and used by

local/indigenous communities, such as the cases of the neem tree, kava, barbasco, endod and turmeric, among others.

Many of these patents have been revoked by the competent national authorities. Thus, the Council of Scientific and Industrial Research (CSIR) from India asked for a reexamination of the US patent No. 5,401,5041 granted for the wound healing properties of turmeric. The US Patent and Trademark Office (USPTO) revoked this patent after ascertaining that there was no novelty; the innovation having been used in India for centuries. In early 2000 the patent granted to W.R. Grace Company and US Department of Agriculture on neem (EPO patent No. 436257) was also revoked by the European Patent Office on the grounds of its use having been known in India. The most important use of the neem tree is that of biopesticide. In this respect, neem has more than 60 valuable compounds, which also includes the widely used azadirachtin A (aza A). According to Grace, azadirachtin was being destroyed during traditional processing. This is highly inaccurate. The extracts were indeed subject to degradation but this did not amount to any wastage since farmers put such extracts to use as and when required. The problem of stabilisation arose only when it needed to be commercially packaged for a long time. The 1992 patent application was put forward by Grace on the principle that the process supposedly invented by them paved the way for additional extraction in the form of water soluble neem extract and hence is an add-on rather than a substitute to the current neem industry in India. In short, the processes are supposedly novel and an advance on the Indian techniques. However, this novelty exists mainly due to ignorance of the West. A reexamination request for the patent on Basmati rice lines and grains (US Patent No. 5,663,484) granted by the USPTO was also made by the CSIR and Rice Tec the patent applicant choose to withdraw 15 out of its 20 claims.

IK - Existing IPR

Copyright

Copyright can be used to protect the artistic manifestations of the holders of traditional knowledge, especially artists who belong to indigenous and native communities, against unauthorized reproduction and exploitation of those manifestations. Copyrights probably can not be applied to IK related to bioresources.

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Plant varieties

New plant varieties may be protected with plant breeders' rights (see section on Indian Plant Variety Protection and Farmers' Rights Act).

Industrial designs

The design and shape of utilitarian craft products such as furniture, receptacles, garments and articles of ceramics, leather, wood and other materials may qualify for protection as industrial designs.

Trademarks

Trademarks lend themselves to protecting indigenous products even agricultural and biological products.All goods manufactures and services offered by manufacturers, craftsmen, professionals and traders in native and indigenous communities, or by the bodies that represent them or in which they are grouped (cooperatives, guilds, etc.), may be differentiated from each other with trademarks and service marks. The trademark is an essential element in the commercial promotion of goods and services both within the country and abroad.

Geographical indications and appellations of origin

Geographical indications, especially appellations of origin, may be used to protect products of a special region like basmati rice, Darjeeling Tea, alphonso mangoes, Kolhapuri slippers in the case of India. Other members would be interested products of interest to them like Bulgarian yoghurt, Chech Pilsen beer, many agricultural products of the European Union, Hungarian Szatmar plums and so on.

The core problem of IK protection

International conventions and treaties dealing with IK are characterised by the fact that they are not binding. Every clause that deals with benefit sharing is contested and refused. ILO Convention No. 169 which says a lot about legal standards for indigenous rights fails to protect the IPR of indigenous people. Whereas the UN Declaration on the rights of IP recognises the rights and aspirations of the IP, it will be a non- binding document, which can not be legally enforced. In the International Treaty on Plant Genetic Resources, developed nations have successfully blocked an international recognition of Farmers Rights. They also contest any notion of paying for the use of traditional germplasm in a benefit sharing arrangement. The CBD which has attempted to push through the interests of IP, has been thwarted by the American refusal to ratify it and accept its conditions.

National level action

Action is needed at the national level, in policy and legislation, to protect indigenous knowledge. Some features that should be included in national legislation are included below.

- Disclosure of origin of materials or knowledge used. For example, the use of a farmer variety in breeding a new variety; use of a medicinal or aromatic plant to make products or extracting vegetable dyes from certain minerals and plants.

- Evidence of Prior Informed Consent (in standard format) before using the bioresource.

- Evidence (in standard format) of the nature (monetary, non- monetary) mode and method of sharing benefits derived from using IK.

- Applications for use of IK should be published in all major newspapers, specially the vernacular press.

- Proof of IK will be entertained in both written and oral form and in the form of community knowledge conveyed by third parties.

- The onus of proving compliance (burden of proof) should be reversed. In the case of a dispute, the user agency will be required to prove that all conditions of disclosure and benefit sharing have been met.

- The penalty for infringement should be severe enough to be an effective deterrent.

- Access to bioresources should be linked to the provisions of Article 16 of the CBD relating to transfer of technology. The Material Transfer Agreement needed for access to bioresources should be linked to an agreement to transfer technologies in various categories related to biodiversity, including biotechnology.

Review of legal and other initiative for protecting IK

Protection by the Constitution of India

In India, special rights of Adivasis include the Scheduled Areas, according to which tribal land can not be sold to non-tribals and only tribals can be agents of development. The Affirmative Action policy, guaranteed constitutionally, ensures reservations in education, employment and political representation by reserving political constituencies. A third protection is by Special Provisions (as in the case of Nagaland) where tribal dominated states have been given constitutionally guaranteed rights, (Article 371). Apart from land ownership, these rights include rights over all natural resources including forests. Although not brutalized like their New World counterparts, tribal societies in India and Asia have been often exploited. The rights that were given to them by post-colonial, independent governments are being eroded by domestic industry as also the forces of globalisation.

Protection for IK in National Legislation

India has had a proactive approach to drafting national legislation pertaining to bioresources and indigenous knowledge.

i) The Act on Geographical Indication to protect traditional Indian products like Basmati rice and Darjeeling tea. The process of compiling the list of products for which India will seek Geographically Indicated rights is still on.

ii) The Plant Variety Protection and farmers Rights Act, 2001. This is the sui generis legislation drafted to fulfil the conditions of the TRIPs/WTO. India has decided to include Farmers Rights in its legislation apart from the mandatory Breeders Rights that the TRIPS demands. The Farmers Rights include the right to save seed for them and the right to sell seed, even of the protected

variety, but without branding. To protect the knowledge of farmers and enable a share of benefits to be derived from new varieties, there are provisions for a National gene Fund into which breeders will have to pay revenues for using farmer varieties. The legislation requires full disclosure of source and origin of varieties and complete passport data from breeders .Penalty for non-disclosure is a heavy fine and /or a jail term.

iii) The National Biodiversity draft Bill. In accordance with the CBD, this draft Bill establishes sovereignity and recognises the rights of communities. There is a National Biodiversity Authority (NBA), as also State and Panchayat level Biodiversity Authorities in which the creators and holders of knowledge are members, so that they are fully involved in policy formulation. The draft Act controls use of biological resources specifically, making the distinction between traditional healers and companies. Information and data from research can not be transferred without the approval of the NBA. The NBA will screen any applications for intellectual property rights claims and monitor conservation.

iv) The Patent Amendment Act, 1999. The Patent First Amendment Act has provided exclusion for drugs based on ISM, keeping them out of the purview of the patent system.

Conservation of biodiversity by tribal communities

Tribal populations have created and maintained the Sacred Groves in forest areas. These are found all over India in the tribal zones. Mostly, they represent the only surviving examples of climax vegetation. Such virgin forests are usually located at the origins of forest water springs and in the catchment areas of river basins A Sacred Grove is usually dedicated to a deity or a 'mother goddess' who is supposed to protect and preside over the Grove. It is believed that such Sacred Groves date back to several thousand years. The degree of sanctity of these sacred forests varies. In some forests even the dry foliage and fallen fruits can not touched. In others, the deadwood may be picked up, but never the live trees or their branches. The animals and the birds are not disturbed. The Garo and Khasi tribes of North-Eastern India completely prohibit any human interference in their sacred groves. The Gonds of Central India prohibit the cutting of a tree but allow fallen branches to be used.

The sacred groves of ancient times have become, in many cases, the 'Biosphere Reserves' of today and are found in several parts of India. The States with large tribal populations have the highest number of biosphere reserves in the form of Wild Life Sanctuaries and National Parks.

In some parts of the country, especially where soils were poor and agriculture was not enough to sustain the communities, hunting of animals and gathering of wild species of edible plants was critical for survival. Here, again, traditional communities

developed strategies to ensure that critical species were not over hunted or over collected.

A typical strategy was like the one reported from little Andaman Island in the Andaman and Nicobar group. Here, the Onges, who love to hunt wild pigs (Sus scrofa andamanensis) had developed an indigenous way of ensuring that the pig did not get over hunted in any particular location. Every time an Onge killed a pig, he half broke a branch of the largest tree in the area. This branch then hung half broken from the tree and was a signal to all other Onges that a pig had been killed there recently. No one else would then hunt a pig in that locality, but move to some other locality. After a sufficient period of time has passed, the branch would totally dry up and fall off, once again opening the area for hunting.

The Cholanaickan tribals of Kerala had elaborate social procedures to conserve and share natural resources. They have elaborate rituals to demarcate the ranges from which individual families can collect various resources. From the common lands, resources can be extracted by according to strict rules, which give the right to a particular honeycomb or tree to the first person who spots it and reserves it.

The person or the party who has first sighted the beehive and have accordingly marked the tree has alone the right to collect honey at that time and also in subsequent years from the same tree. This rule is customarily never transgressed.

The Cholanaickan have well-defined principles that allow the members to gather and extract minor forest produce within their respective region. There is no restriction on gathering edible tubers, roots, fruits and leaves for self-consumption. One is free to move in the entire forests region and to collect tubers, roots, fruits etc. as and when required. But people usually gather edibles only in their own area. However, there are rigid norms regarding the collection of minor forest produce. Trespassing the territory of another Cholanaickan to collect minor forest produce is considered an offence.

Integration of the Indigenous Knowledge into formal healthcare system

The Indian Systems of Medicine (ISM) have a place in the official Indian health care system. Doctors trained in Ayurveda, Siddha and Unani are part of the formal system. The government of India has recently created a Department of Indian Systems of Medicine (ISM) in the Ministry of Health to oversee policy and research in this area. India has over the years set up National Institutes of Homeopathy and Ayurveda. Similar institutions exist for Unani and Siddha traditions of medicine based on indigenous knowledge. There are colleges teaching ISM and training doctors all over the country. The ISM tradition is stronger in south India where it is preferred option for many people.

Documentation of indigenous knowledge

There is substantial work going on in India, supported by the government and being executed by NGOs, to document indigenous knowledge.

Preparation of village-wise Community Biodiversity Registers (CBRS) for documenting all knowledge, innovations and practices has been undertaken in a few States. The State Plan for Kerala has also actively promoted documentation of local knowledge regarding biodiversity in people's biodiversity registers. One pilot project on this has been completed in Ernakulam District. The Tropical Botanic Garden and Research Institute (TBGRI) and the Kerala Forest Research Institute have initiated two other projects at a single Panchayat level.

In the state of Karnataka, there is an NGO initiative to formulate Peoples' Biodiversity Registers (PBRs). Some experts who were part of the State Planning Board recommended the Karnataka Biodiversity Conservation Order in 1996. This order envisaged biodiversity boards at the state and sub-state levels, with a wide range of stakeholders being members of the board, and envisaged PBRs as part of the responsibilities of the boards. One of the organised and widespread attempts of NG0s has been towards initiating and completing biodiversity registers. Many other organisations have since taken up the initiative, and at present about 5 villages each in Karnataka, Andhra Pradesh and the rest of India are involved in developing Peoples Biodiversity Registers

Non-governmental documentation initiatives include:

(a) The work being done by the Centre for Ecological Sciences, Indian Institute of Science, and the FRLHT (Foundation for the Revitalisation of Local Health Traditions, Bangalore) to prepare Community Biodiversity Registers.

(b) Gene Campaign has undertaken work on documentation of indigenous knowledge among three tribal populations: the Mundas and Oraons in South Bihar (in the Chotanagpur region); the Bhils of Madhya Pradesh; and the Tharus of the Terai region. Medicinal plants and knowledge of its use for human and veterinary care was documented with the help of educated tribal youth. Elders in the village, medical practitioners and traditional healers were consulted in the collection and understanding of the information.

The documented knowledge has been made into manuals for the tribal people who now use it as a practical healing guide. During the data collection exercise Gene Campaign also conducted a public education program, telling the community about the new national and international developments and the growing biopiracy which steals their knowledge and their materials. Gene Campaign has made them aware of their rights so that the people are now fully aware that this knowledge belongs to them and can not be used without their permission, even by the government of India.

Gene Campaign has also been working to conserve traditional knowledge by its field projects which include :

1. Collection of local medicinal flora and establishing a herbal garden in Jharkhand and Madhya Pradesh
2. Developing a Genetic Diversity Centre in Kishanpuri, M.P.
3. Collection of landraces and traditional varieties of rice, millets and pulses and setting-up of medium term gene banks in UP and Bihar.
4. Survey and mapping of wild relatives of important crop plants in the Upper Western Ghats.
5. Study on Agrobiodiversity and farmer perceptions about genetic diversity in the states of Uttar Pradesh and Bihar.
6. Inventorisation of genetic diversity in Indian trees and their known characteristics

(c) Sristi, the Society for Research and Initiatives for Sustainable Technologies and Institutions based in Ahmedabad has been involved in documenting innovation relating to farming, developed by individuals at the village level. The HoneyBee Network, as the initiative is called, documents not elements of biodiversity per se, but their uses and in particular innovation surrounding these elements.

(d) The Beej Bachao Aandolan in collaboration with the villagers of Jardhar of the Terhi Garhwal district of Uttar Pradesh, initiated an exercise in 1995 to document the various bio-resources used by the community and conservation practices. The members of the Beej Bachao Aaandolan - a network of local farmers have been involved for a number of years now in reviving and spreading indigenous crop diversity.

(e) the Biodiversity Conservation Prioritization program (BCPP), supported by the Biodiversity Support Program of the US, studied 56 sites across seven states, to develop a conservation strategy for areas rich in biodiversity across all major ecosystems..

Setting up an Indigenous Knowledge Database

Instances of biopiracy from India and other parts of the world have been snowballing in recent years. To prevent such instances in future, India has developed digital databases of prior art related to medicinal plants, which are already in the public domain. It is proposed to make this digital database available to Patent Offices all over the world so that they can examine and search for prevalent use/prior art of the particular medicinal plant. This should hopefully prevent granting of wrong patents like those on turmeric and Neem derived products. The TKDL project would save huge costs involved in fighting legal battles against patent. The cost incurred in contesting one patent at international level over a 3-5 year period may add up to (in travel and stay alone) $ 0.20-0.25 million. Conservative estimates indicate that about 2,500 wrong patents have already granted and for fighting these patents it would cost Rs 2500 crore. The addition of 500 new “wrongful” patents every year would cost an additional Rs 500 crore every year. A joint project of NISCOM and the Central Department of Indian System of Medicine and Homeopathy, TKDL is based on an

innovative software which facilitates classification of traditional knowledge, making it compatible with international patent classification. An interdisciplinary team of 30 ayurvedic experts, five patent examiners and five IT experts have already transcribed about 8,000 formulations of the 35,000 *slokas* pertaining to Ayurveda. The knowledge will be made available simultaneously in English, Spanish, German, French, Japanese and Hindi. With each *sloka* yielding four pages of transcription, about 1,40,000 pages would be available in each language. Total 35 languages are targeted including all major Indian and foreign languages. Plants that are not in the public domain and knowledge of whose uses is to be protected are not put into the database.

In India, a National Innovation Foundation has been set up. This foundation, with an initial corpus of Rs.20 crore, is intended to build a national register of innovations, mobilize intellectual property protection, set up incubators for converting innovations into viable business opportunities and help in dissemination across the country. It has established four incubation centres known as Grassroot Innovation Augmentation Network, across the country to incubate innovation into enterprises, protect their intellectual property rights, and mobilize venture capital for them.

Elements of a sui generis system for protection of IK

Designing a sui generis regime for IK

There is a lot of debate on the systems of protection that can be adopted to provide legal protection to the intellectual property of indigenous people and communities. Most of these discussions have tried to adapt the existing forms of IPRs like patents, trade secrets, copyrights etc. to the field of IK and bioresources. This is not likely to work because of the inherent mismatch between the protection that was created for finite, inanimate objects coming out of industrial activity and the flowing, mutable and variable properties of biological materials.

How can a patent, with its life of 20 years be applied to an intellectual property that has existed for a few hundred if not a few thousand years! Case law in India has shown that Copyrights are not adequate to protect IK. Rulings have said that the idea is not important, just the mode of expression of the idea. The court has ruled to say that even if the defendant in a suit has used a common stock of knowledge, no action can be brought.

An approach that has been strongly advocated by some academics and many NGOs is the development of a *sui generis* regime, that is, a legal regime “of its own kind” which is specifically adapted to the nature and characteristics of IK. Though this approach has received considerable attention in the literature, little progress has been made in terms of actually implementing this kind of protection. The establishment of a **sui generis** regime poses, in fact, many complex conceptual and practical issues. Those are :

- Definition of the subject matter of protection
- Requirements for protection
- Extent of rights to be conferred (rights to exclude, to obtain a remuneration, to avoid misappropriation)
- Title-holders (individuals/communities)
- Modes of acquisition, including registration
- Duration
- Enforcement measures
- Different *sui generis* options may be considered:

Examples of existing forms of *sui generis* Protection

India

India has passed the Plant Variety Protection and Farmers' Rights Act in 2001 with a strong, proactive Farmers Right, provisions for registration of farmers' varieties, benefit sharing through a National Gene Fund and the requirement for prior informed consent for use in breeding.

Other kinds of farmers' rights offered by the Indian Act

i. The explicit and detailed disclosure requirements in the **passport data**, which has to be submitted at the time of applying for a breeders certificate. Passport data refers to the data about the parentage of the new variety. In this case it includes details like name and location of any farmers varieties used. If any concealment is detected in the passport data, the breeders certificate stands to be cancelled.
ii. There is a clause **prohibiting breeders from using sterile seed technologies**. Breeders will have to submit an affidavit that their variety does not contain a Gene Use Restriction Technology (GURT) or terminator technology.
iii. If farmers wish to examine documents and papers or receive copies of rules and decisions made by the various authorities, they will be **exempt from paying any fees**.
iv. Protection against **innocent infringement** .
v. In providing a **liability clause** in the section on Farmers' Rights, the farmer in principle is protected against the supply of spurious and/or bad quality seed.

Thailand

Thailand has developed a comprehensive *sui generis* regime for traditional medicines. The "Thai Traditional Thai Medicinal Intelligence Act" distinguishes different categories of " traditional Formulation":

"National Formulae" are formulations given to the Nation which are crucial for human health.

The Act stipulates that the ministry of Public health has authority to announce a certain formula of traditional Thai medicine as a "national formula". In this case, the traditional formula must be of significant benefit or have special medical value. After the announcement, the rights of such a formula belong to the state.

The commercial use of a national formula for the production of drugs or for research and development, is subject to permission from the government (criminal sanctions are provided for under the Act for infringement).

"*Private Formulae*" can be freely used by the owner. Third parties must obtain permission from the owner to use the formula. The request for the registration of a "private formula" can be submitted by an inventor or developer of the formula; or an inheritor of the inventor or developer of such a formula.

The Act grants exclusive rights by allowing the owner of the registered personal formula to use the formula for research and to sell and distribute any product developed or manufactured by using the formula. However, there are certain limitations to the exclusive rights. The rights over a registered personal formula subsist throughout the life of the owner and shall subsist for a further period of fifty years from the date the applicant dies. One of the main objectives of the *sui generis* protection is that the exclusive monopoly granted by the State should enable the owners of traditional knowledge to be adequately compensated for their contribution.

"*General formulae*", finally, are well known traditional formula that remain free to use by anybody.

One important feature of the referred law is that all three types of formula can continue to be used free domestically by traditional healers or Thai communities in a limited quantity. The law also provides for measures aimed at the conservation and sustainable utilization of the medicinal plants, especially those at high risk of extinction. In addition, the Institute of Thai Traditional Medicine was formally established (after having been in operation for seven years), and a "Thai Traditional Knowledge Developing Fund" was created

***Sui generis* models offered by civil society and other groups**

Convention of Farmers and Breeders(CoFaB)

Gene Campaign along with CEAD, has drafted an alternative treaty to UPOV to provide a forum for developing countries to implement their Farmers' and Breeders' Rights. This treaty called the Convention of Farmers and Breeders', CoFaB for short.CoFaB has an agenda that is appropriate for developing countries.
Unlike the provisions of the UPOV, the CoFaB treaty seeks to fulfill the following goals:

- Provide reliable, good quality seeds to the small and large farmer
- Maintain genetic diversity in the field
- Provide for breeders of new varieties to have protection for their varieties in the market, without prejudice to public interest
- Acknowledge the enormous contribution of farmers to the identification, maintenance and refinement of germplasm
- Acknowledge the role of farmers as creators of landraces and traditional varieties which form the foundation of agriculture and modern plant breeding
- Emphasize that the countries of the tropics are germplasm owning countries and the primary source of agricultural varieties
- Develop a system wherein farmers and breeders have recognition and rights accruing from their respective contribution to the creation of new varieties.

The salient features of CoFaB are as follows:

1. Farmers' rights--- Each contracting state will recognise the rights of farmers by arranging for the collection of a Farmers' Rights fee from the breeders of new varieties. The Farmers' Rights fee will be levied for the privilege of using land races or traditional varieties either directly or through the use of other varieties that have used land races and traditional varieties, in their breeding program.

2. Breeders' rights---Each member state will recognise the right of the breeder of a new variety by the grant of a special title called the Plant Breeder's Right.
   The Plant Breeders' Right granted to the breeder of a new plant variety is that prior authorisation shall be require for the production, for purposes of commercial and branded marketing of the reproductive or vegetative propagating material, as such, of the new variety, and for the offering for sale or marketing of such material.

<u>The OAU model</u>

The Organisation of African Unity has drafted an " African Model Legislation for the Protection of the Rights of Local Communities, farmers and Breeders, and for the Regulation of Access to Biological Resouces". It determines that any written contract shall be entered into by the state and the collector, but with the full participation and approval of the concerned local community or communities. It further suggests an institutional arrangement for developing a system of registration of items protected by community intellectual rights and farmers'rights according to their customary practices and law. Other provisions pertain to the development of a national information system to compile and document information on local knowledge and innovation practices of the communities and guidelines for collectors of resources.

Community rights recognize that the customary practices of local communities derive from a priori duties and responsibilities to past and future generations of both human and other species. This reflects a fundamental relationship with all life, and is imbued with an innate demand for respect. Despite this worldview not being commonly

understood by the dominant western world, the purpose of these rights is to recognize and protect the multi-cultural nature of the human species.

Community rights and responsibilities that govern the use, management and development of biodiversity, as well as the traditional knowledge, innovations and practices relating to them, existed long before private rights over biodiversity emerged, and concepts of individual ownership and property arose community rights are thus regarded as natural, inalienable, pre-existing or primary rights. The OAU´s Model Law recognizes this a priori character of rights in its Preamble.

The rights of local communities over their biodiversity leads to the formalization of their existing communal control over biodiversity. This system of rights, which enhances the conservation and sustainable use of biological diversity and promotes the use and further development of knowledge and technologies, is absolutely essential for the identity of local communities and for the continuation of their irreplaceable role in the conservation and sustainable use of this biodiversity.

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