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Draft for Discussion. Not to Be Quoted.

The Convention on Biological Diversity, Intellectual Property Rights and the Interests of the South

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1. Introduction

A workshop on intellectual property rights and farming communities was held in Uppsala in June 15-20, 1993. During the discussions, it became clear that the implication of the Convention on Biological Diversity on the IPR of farming communities and indigenous peoples have not been analysed and that this is essential. I was asked to develop a draft of this and circulate it among the participants of that workshop for comments. The following is an attempt to do that.

2. Negotiations among Unequals

I attended the last intergovernmental negotiation session of the Convention on Biological Diversity, which took place in Nairobi from May 11 to May 22, 1992. I was a delegate from Ethiopia. When I started to participate in the negotiations, most of the articles had been finalized. But there were still some contentious issues outstanding. This gave me a taste of what the negotiations were like. It was immediately apparent that there were two camps: that of the delegates from the North, and that of the delegates from the south.

The delegates of the South felt their poverty in the negotiating rooms and in the bargaining that took place in the corridors. They were often too few to be effective. They had to deal with multitudes of disciplines for most of which they had had no educational background. The delegates from the North came mostly in large multi-disciplinary teams. They also came equipped with comprehensive data bases while those from the South had to rely only on their own knowledge and intuition. The delegations from the South were, in the eyes of the Secretariats, light-weight, and rules of procedure and bureaucracy could be applied on them strictly. But delegates of the North controlled the finances of the Secretariats and the bureaucracy bent over backwards to accommodate them.

Given this setting the negotiations were between Goliaths and Davids. The sling of the Davids was in their number. On issues in which they united under the umbrella of Group of 77 (G-77), therefore, they negotiated effectively. But the G-77 is a loose organization and on most issues, therefore, a common position had not been defined among its members and the South remained divided and at a great disadvantage.

But the South also had well informed and highly organized allies in the Scandinavian countries, especially Sweden, who obviously understand fully the need for a world fair enough to be secure.

It is thus not surprising that the South lost more than the North in the give-and-take game of negotiating. The aspirations of the South were allowed expression in the Preamble, (paragraphs 4, 8, 11, 12, 15, 16, 17, 19) but most of these did not find their way into the articles. Of these, paragraph 4, which stipulates that states have sovereign rights over their biodiversity, has been accommodated in article 3. Most of the others have also, at least nominally, been accommodated in articles (paragraphs 8 & 11 in Article 9; paragraphs 15, 16, 17, 19 in Article 20). However, these provisions have been rendered meaningless by Article 39 which, at the naked coersion of the North, has stipulated that, for the time being, the Financial mechanism described in Articles 21 will be the Global Environmental Facility (GEF), which, though nominally under UNDP, UNEP and the World Bank, is directed from the World Bank and headed by a World Bank employee and thus remains in one of the institutions known to be most difficult for the South. Its decision making has thus, contrary to the spirit of Article 21, remained totally outside of the influence of the parties to the Convention which are in the South. The North looks to be set on insisting on GEF continuing to be the funding mechanism, and GEF seems to be set to continue receiving its order from the World Bank, thwarting all the aspirations of the South for a communally controlled fund.

One idea expressed in the Preamble, paragraph 12, has been partially covered by Article 8j, which dilutes the "desirability of sharing equitably benefits arising from the use of traditional knowledge, ..." to "encourage the equitable sharing of the benefits ...".

The Northern countries are obviously using biotechnology, consciously or unconsciously, as their newest and most promising addition to the arsenal of arms used to force the South into submission and to keep resources, including biological diversity, flowing unhindered into the North. They thus insisted, as they have been doing in the negotiations on the Uruguay round of the General Agreement on Tariffs and Trade (GATT), on respect for their intellectual property rights legislations and forced the inclusion of Article 16.2. That they intended this to be a new and effective

tap for the flow of resources to the North is seen from the fact that they blocked the inclusion of even a mildly worded balancing provision on farmers' rights. The only concession they made was to allow a statement to be made in Resolution 3, sponsored by the Scandinavian and some Southern countries and adopted during the final act of the Convention to the effect that the issue of "farmers' rights" should be resolved.

Since the outflow of resources from South to North is obvious, the Northern countries could no longer manage to completely refuse to accept that the South thus impoverished could not be expected to be an effective guardian of the biological diversity needed by the biotechnology industry of the North unaided. They thus accepted statements to the fact in the Preamble (paragraphs 15 and 16), and provisions stating the need for financial, technical and other forms of support to the South by the North (Articles 8.m, 12.a, 12.b, 12.c, 15.6, 16, 18.2, 18.3, 18.4, 19.1, 19.2, 20, 21) but made the enforcement of these articles dependent on their mere good will by refusing to accept any system of levying resources from among them, and by blocking the creation of a funding mechanism that would work under the control of Conference of the Parties. In fact, they cynically pushed the responsibility of funding to the institution seen as the arch bulley, the World Bank.

This cynicism was displayed on the issue of germplasm existing in ex-situ storage outside of its "country of origin" as defined by the Convention (Article 2, paragraph 4). These collections were made by the Northern countries mostly from the South, and mostly for safe-keeping. So long as the germplasm had no monetary value, as had been the case throughout human history, this was seen as a good deed by those who could for the benefit of the whole of humanity. But following the emergence of breeders' rights and patenting, these ex-situ collections acquired monetary value. Also following the recognition of the sovereign rights of states over their genetic resources by the Convention (Article 3), the issue of who owns these previous collections surfaced. If these collections are declared as belonging to the "country of origin", then the Northern countries would be obliged to respect the rights of the countries of origin to the stipulations made on reciprocating for the right to use germplasm by allowing participation in research on that germplasm (Article 15.6 and 19.1), by allowing access to the technologies that use the germplasm, including patented technologies (Article 16.3), together with those in the private sector (Article 16.4) and by allowing "access on a fair and equitable basis... to the results and benefits... based upon genetic resources provided... " (Article 19.2).

It should be pointed out again that the Scandinavian countries did side with the South and it is thanks to them that a small opening now exists to raise the issue again through Resolution 3.4(a).

Even though the main divide among the negotiators was the North-South line, there was one major issue on which the North was substantially divided. This was the issue of the need for a protocol on biosafety. At the end of the negotiations, the United States of America stood alone by insisting that a protocol on biosafety was unnecessary. Their argument was that there already exist enough safeguards functioning on a voluntary basis. The South wanted a protocol because it was afraid that it would end up being an experimental ground for the North's transgenic organisms. Ironically, the spirit of the fear has since been captured by the book and the film, "Jurassic Park". For once, the EEC sided with the South.

When it is realized that the United States of America has very strict rules governing biosafety, a cynical interpretation is that it wanted to remain safe but play with danger in the Arena of the South. If so, this would be myopic and unworthy of the scientific and technological leader of the world. If not, there seems to be no really satisfactory explanation for fighting against a protocol so adamantly. For, if the argument had really been that existing instruments will suffice to ensure biosafety, there is no reason to fight so adamantly if the rest of the world wanted a firmer set of instruments. The intransigence of the United States of America was continued in the post-Rio era when it fought to fight equally adamantly against the idea of a protocol in the task force established by UNEP to look at the issue. - Together with Veit Koester of Denmark, I co-chaired the task force -.

3. International Property Rights and the South

The article in the Convention that protects intellectual property rights (Article 16.2) does not specifically apply to the North by specially excluding the South. Nevertheless, it is clear that it will primarily benefit the North. This is because the values and norms of the North are such that they enable legal individuals to benefit from an IPR regime, but those of the South do not, on the whole, do so. In order to deal with the problems paused by intellectual property rights, therefore, we need to examine the South in relation to the North. A detailed examination of the North is considered unnecessary since, as the dominant society in the world, it is relatively well understood. In any event, also because it is the dominant society and sure of itself, it would look a more difficult task to try and change its workings in order to ensure fairness to other cultures in its application of intellectual property rights. It would seem easier to suggest to the South how it could cope with the impact of the application of intellectual property rights by the North.

3.1 The Bases for Achievement and Reward in the South

In the South, as was the case in the North prior to the Industrial Revolution and the emergence of capitalism, innovations resulted as the sum of the discoveries and inventions of the members of communities. The motive force for innovations was probably personal gain, but it was not conceivable to extract royalties from any person who used somebody else's invention or discovery. As a result, the inventor or the discover never tried to personalize her/his achievement. Improvements to that achievement occurred as contributions from all the users of the discovery or invention.

This gave rise to folk science and folk technology, which were there for any one to use.

This communal approach to discoveries and inventions was strengthened by the social values which saw communal action as essential for survival.

The rise of capitalism in Western Europe changed all this wherever that capitalism has penetrated. Achievements and rewards became individual, and the constant search for collective good was replaced by the constant search for individual benefits under the unfeeling protection of the impersonal state. It is the disappearance of the collective that gave rise to the intellectual property regimes that we now know in the North.

3.2 What is the Southern Collective?

The dominant international culture now is this individual oriented one of the North. It is not a question of coming form the North or the South, but one of which values one has. On the whole, though, just as the majority of those in the North function as individuals alone and their state, and the majority of those in the South function as components of a community, the individuals of the North, even when professing communal allegiances behave as lone individuals, and those of the South, even when professing capitalist individualism are largely communal.

Nevertheless, the modern components of society in the South satisfy their individualistic needs through the personalized grabbing for gain that characterizes the Northerners while leaning on their communal society for their communal needs. That is why they usually use communal channels to acquire personal wealth at the expense of the other members of the community. When seen through this light, corruption becomes understandable and insidious.

It is these individuals from the South, who abuse their communities, that become the agents of the fully individualized members of the impersonal states of the North in the outflow of the resources of the South to its detriment and to the prosperity of the North.

If we are to understand fully the exploitation of the South, therefore, we need to look at the components of its society and at their internal and external linkages.

3.3 Local Community and Indigenous People

The components of the society of the South mentioned in the context of intellectual property rights are indigenous people and local communities (Preamble, paragraph 12 and Article 8(j)). The term "local populations" has also been used, though only in connection with supporting them "to develop and implement remedial action in degraded areas" only (Article 10(e)). This term is obviously meant to include both indigenous people and local communities. But since "indigenous people" are also "local communities" in their own areas, "local populations" and "local communities" are, for the purposes of this Convention, comparable. Neither term has been rigorously defined in the Convention. However, it is also obvious that the term "local community" implies that norms and institutions of long standing make a unit out of the people involved, while the term "local populations" is neutral of social organization. Since in the context of intellectual property rights in the South our focus is on group achievement and group reward, the term of relevance is "local community".

There may be difficulties in defining a given community and in delimiting it from other communities. Conceptually, however, if a group of people have a long standing social organization that binds them together, and if they are in a defined area, they constitute a "local community". This definition is not likely to give us problems.

The use of the term "indigenous people", however, has been involved in much controversial discussion. To this effect, Durning (1992, p.8) states, "The extreme variation in their [indigenous peoples'] ways of life and current circumstances defy ready definition. Indeed, states manipulate definitions to suit their political needs variously labelling indigenous peoples 'small nationalities', 'remote area dwellers', 'mountain peasants', 'backward tribes', 'primitive populations', and so on." Most definitions involve the concept of a people conquered by another people from outside its area and kept in subjugation losing not only its power and resources, but usually also its culture, religion, language and finally its identify (Axt et al., 1993, pp. 22-26).

It might be helpful in clearing the confusion to look at the various dimensions of being a people at times occupying and at other times being occupied.

Two given people might exchange roles one occupying and the other being occupied. This reversibility may be frequent or infrequent. The extreme is of course, that occupation is not reversible, that one people has occupied another and a status quo has been established.

The occupation of a people by another could be recent, with all memories vivid, or past and virtually forgotten.

The occupier and the occupied could be ethnically related, or they could be different.

The occupier and the occupied could be from geographically neighbouring areas, or from distant areas. The extremes are adjacent and different and distant continents.

The occupier and occupied could have similar or different cultures.

Let us arrange these dimensions of occupation in a two-way table as follows, with one column specifying the status of the dimension when it is least significant, and the other when it is most significant.

TABLE 1

DIMENSION OF OCCUPATION	SIGNIFICANCE	
	LEAST	HIGHEST
Frequency of reversal	Often (>3)	Never (zero)
Time of Occupation	Distant past (1000 or 300)	Recent
Geographical origin	Adjacent (next area)	Far apart
Ethnicity	Similar (differences not noticed at encounter)	Different
Culture	Similar (intermarriage rate >10%)	Different
Miscegenation	Free	Prohibited

If we look at the situation of an occupied and occupying people of one extreme, that of both people having similar cultures and similar ethnic origins who live in adjacent areas among whom the history of occupation is both old and frequently reversed, we end up with one people with perhaps differences in dialects and

some cultural traits of local idiosyncrasy. The other extreme is one of two people with very different cultures and ethnic origins, with the occupier coming form a distant continent, with the occupation having occurred recently, and the reversibility of roles as occupier and occupied looking impossible.

It seems that nobody argues about the two extremes. For examples, the English are proud to call themselves Anglosaxon, the record of rivalry of the Angles and the Saxons, who miscegenated freely, who were both Germanic, and who came to England from Germany, in the distant past, figuring in no way other than as a historical curiosity; and the whole world is agreed in calling the Maori of New Zealand "indigenous people" because they intermarry litter with, and their culture is very different from, that of, their occupying Europeans who are ethnically very different and who came from the far off continent of Europe only a few hundred years ago and who look so completely invincible that it is doubtful if it has ever looked remotely possible for anyone that someday, the Maori will colonize England.

Arguments arise when we deal with intermediate cases. To investigate if we could identify a cut-off point in the continuum between the two extremes, we could arrange the possible events in a logical order along the axis defined by the two extremes. Let us represent each of the dimensions of occupation (1st column of Table 1) by the first letter of the first word (R,F,T,G,E,C). Let us then qualify each dimension by the level of its significance (columns 2 and 3, Table 1). These dimensions are quantitative, and we will have to be subjective as to which quantity affords us a cut-off level. Let us subjectively accept that 3 reversals (a total of 4 occupations, 2 by each side), 300 years of unrecorded or 1000 years of recorded history, being geographically separated by one neighbouring area (country) or by an adjacent barrier, showing an obvious ethnic distinctiveness at encounter, having cultural difference which even when miscegenation is not prohibited, reduced intermarriage to 10% or less among sympatric individuals of the different cultures, and the existence of legal or religious prohibition of intermarriages as cut off points.

If intermarriage is prohibited, - by religion, as legal prohibition no longer exists - all other dimensions of occupation become secondary and the two people continue with their separate identities. Provided the occupied people is allowed to stay in its original area, therefore, it remains an "indigenous people". The oppression of the low castes in India (Ghurye, 1979, pp. 162-181) and other parts of the world arises from this fact.

The effect of a cultural difference that drastically reduces intermarriages (say, to less than 10%) has a similar though less harsh effect as prohibiting intermarriages. The distinctive black minority in the USA suffers from this kind of rejection. This minority is itself an immigrant and thus not an indigenous people.

But the Inuits of Alaska are for this reason, an "indigenous people".

On the other extreme, when reversal of occupation can happen, it is because the peoples in question are approximately equivalent in potential strength. They are, therefore, roughly comparable in population size and mutually culturally acceptable, otherwise once one people occupies the other, it will impose its culture upon it. If occupation has reversed a few times (say 3), the time is also long enough to enable a mutual acceptance of one another on both peoples. A use of the term "indigenous people" would thus be inappropriate.

The uncertain situations are, therefore, those involving time of occupation, geographical origins and ethnicity when intermarriages are allowed. Let us explore the interactions among these as follows:

$$T_L\ G_L\ E_L \longrightarrow T_H\ G_L\ E_L \longrightarrow T_H\ G_H\ E_L \longrightarrow T_H\ G_H\ E_H$$

$$T_L\ G_H\ E_L \qquad T_H\ G_L\ E_H$$

$$T_L\ G_L\ E_H \qquad T_L\ G_H\ E_H$$

In the relationships represented above, it is obvious that $T_L\ G_L\ E_L$ would indicate that the concept of the existence of two peoples, one occupier and the other occupied, is not tenable; only groupings of the same people can be indicated. The issue of "indigenous people" does not, therefore, arise.

The situation represented by $T_H\ G_H\ E_H$, however, clearly shows the presence of an occupier and an indigenous people.

Of the situations represented in Column 2, $T_L\ G_H\ E_L$ is an unlikely combination because the probability of related ethnic groups living in distant areas, and one of them going to conquer the other, is very low. Of the remaining 2 combinations, $T_L\ G_L\ E_H$ is also unlikely as, given time and geographic proximity in the absence of barriers to intermarriage, miscegenation takes place and ethnic difference fade. The third possibility ($T_H\ G_L\ E_L$) happens very frequently, and manifests itself very often in civil wars. Even though in the context of justice and conflict resolution this combination describes a very important situation with intractable problems (eg. Eritrea and Ethiopia), it is a trivial case in the context of the intellectual property issues that will arise as the peoples involved are of a comparable socio-economic and technological condition.

In the third column, the first combination ($T_H\ G_H\ E_L$) is unlikely for the same reasons that the second combination in the 2nd column ($T_L\ G_H\ E_L$) is unlikely. The other two combinations in

the 3rd column would create a clear case of an occupier and an "indigenous people". However, $T_L\ G_H\ E_H$ is unlikely as, given time and no barrier to intermarriages, ethnic distinctions would disappear. The meaningful combinations could, therefore, be written as follows:

$$T_L\ G_L\ E_L \longrightarrow T_H\ G_L\ E_L \longrightarrow T_H\ G_L\ E_H \longrightarrow T_H\ G_H\ E_H$$

Combining the above cases, we can define an indigenous people as one which is living in its original area subjugated to another people which came from another area, distinct from the occupier because intermarriages between the occupier and the occupied are either prohibited by law or religion, or are kept very low because of a big cultural difference between them, or because there has not been a long enough time for miscegenation to remove the differences inspite of other conditions not discouraging intermarriages. The two peoples are ethnically distinct, whether they normally occupy adjacent areas or distant lands.

When ethnically related peoples who normally live geographically near each other are involved as occupiers and occupied, the problem can become intense, but only over a short time span; the occupied people could then not be called indigenous.

In the context of intellectual property rights, these is no doubt that indigenous peoples are at a great disadvantage because legal decisions are made by the occupiers. How about others?

3.4 Peasants, Pastoralists and Hunter Gatherers

As already pointed out (3.2), societies in the South are led by elites who resort to privatizing the communal goods of their societies and develop their personalized values a la North. For these reasons, they find it easy to pursue their personal gains at the expense of their societies, usually by facilitating the flow of resources from the South Northwards for a share of those resources. Mobutu is perhaps the most notorious of our time in this context.

As a result, the peasants, pastoralists and hunter gatherers who are the base of the power of the privatizing elite lose, even through naked legislation passed by the elite. They are almost as helpless in the face of exploitation as indigenous peoples are. In one sense, therefore, the indigenous peoples (mostly in the New World) and the peasants, pastoralists, and hunter gatherers of independent countries (mostly in the Old World, but peasants also in the New World), suffer from the same exploitation in the hands of direct occupiers or remote control occupiers. In the context of intellectual property rights, therefore, they require new strategies that bypass their occupiers. That is why the terms "local communities" (Preamble, paragraph 12, Article 8(j)) and

"local populations (Article 10(d), which include peasants, pastoralists, hunter gatherers and indigenous peoples, are useful. Since it may help in the development of appropriate strategies in the defence of the rights of these local communities, it would be useful to keep the distinctions also in mind.

4. Intellectual Property Rights and Local Populations

The delineation and choice of strategy for enforcement of the intellectual property rights of local populations is obviously closely linked to the structure of the society in question, and to the access the given society has to power.

It would, therefore help if local populations were categorized in this context.

4.1 Categories of Local Populations

The most vulnerable of the local populations of the South are indigenous peoples, followed by hunter gatherers, followed by pastoralists, followed by peasants, and, lastly followed by the entrepreneurs and the intellectuals.

4.1.1 Indigenous peoples

Indigenous peoples are internally well organized into effective communities. Contact with the outside world is forced on them by the outside world itself, and, as a rule, this contact is detrimental to them both as communities and as individuals. In the extreme case of the indigenous peoples of the Amazon, contact usually means death from new diseases. In the case of indigenous communities, therefore, it would seem that since survival must precede all else, minimization of external contacts would weigh heavily in the considerations of the respect of rights. On the other hand, it looks certain that such a minimization, if at all achievable, cannot but be temporary. Since all living cultures are dynamic, undergoing self modification to maximize survival in the face of changing circumstances, it is, therefore, essential that social adaptations take place which ensure the well-being of the community, and hence also of the individual, while coping with the inevitable interaction with the external world and using this interaction to the advantage of the community.

In this context, it is perhaps useful to note that not all indigenous peoples have the same vulnerability to contacts with their occupiers. On one extreme are the indigenous people of the Amazon for whom this contact usually literally spells death. On

the other extreme are castes who, though down trodden, have carved out for themselves invaluable positions in the survival of the occupying society and the society thus tolerates or even protects them. Among the Gurage of Ethiopia, for example, the society consists of the farming majority, who are the occupiers, and the Fuga, a low caste group of artisan who serve the majority and are despised by them, but, nevertheless, are protected by them as they are the key ritualists in various traditional initiation ceremonies of the oppressing majority (Shack 1969, p. 9). The indigenous peoples of the New World tend to be of the former, and those of the Old World of the latter type. However, communities that are being destroyed by contact with neighbouring dominant communities, even if not through new diseases, are common in the Old World as well.

4.1.2 Hunter gatherers

The hunter gatherers of the New World are indigenous people as already defined. But some hunter gatherers of the Old World do not fit in that definition. They often have neighbours who are related to them ethnically, linguistically and even in some important components of world view and rituals. This link pre-disposes them to being willing to modify their individual and community life to cope with inevitable new contacts and to use them to advantage. The need of self isolation as an urgent step suggested for indigenous peoples does not, therefore, exist and the threat of extinction is not immediate.

4.1.3 Pastoralists

Pastoralists share most of the characteristics of the peasants of the Old World (see 4.1.4).

Pastoralists are not in any immediate danger as societies or as individuals. However, in the presence of peasants or urban entrepreneurs or even government projects (e.g. irrigation schemes, hydropower generation facilities, national parks, etc.), they are the ones to lose in the competition. Given the opportunity to change and become more effective in dealing with the usual modernization drive, they are usually willing. The question that arises in the context of intellectual property protection, therefore, is one of how to empower them rather than one of a fear of destroying them.

4.1.4 Peasants

The peasants and pastoralists of the Old World are indigenous in the sense that they did not come recently as part of an alien occupying people. If we go far enough back in history (this need to be further than 100-500 years), we will, in fact, usually find

that they came as conquerors. But miscegenation has usually taken place with the original population except possibly for pockets that have remained as servile castes(see 4.1.1). Even if they are locally dominant, they are targets of exploitation by the national elites and entrepreneurs.

In the face of competition with pastoralists, the peasants have the upper hand.

The entrepreneurs and elites of most of the Southern countries come from the peasantry, or from its upper class, the aristocracy, or from both. In cases where countries are primarily pastoralist (e.g. Saudi Arabia, Somalia) the entrepreneurs and elites come from among the pastoralists or from the pastoralist upper class, the aristocracy, or from both.

Peasants, even more than pastoralists, are in no immediate danger as individuals. Since they are, by definition, an oppressed community, traditionally oppressed by the aristocracy and now by the elites and entrepreneurs, they want change provided this change is seen as advantageous. The precautions needed to protect communities and individuals from destruction that is obvious when dealing with indigenous people is thus not necessary when dealing with peasants or pastoralists.

The situation with the New World Peasants (mostly in Latin America) is complex. These peasants consist of immigrants from Europe and Africa, who were brought in by the occupying Europeans. These are the lower strata of the occupying people. They suffer from exploitation by the entrepreneurs and elites of the country in question, but they neither cause worry in the context of possible disruptions through external contacts, nor are they important in the context of biodiversity except in the situation in which the indigenous farmers have been eliminated bequeathing their biodiversity and knowledge about it to these new peasants.

The indigenous farmers in much of Latin America have now become peasants. As attached to the land which has been occupied, they were vulnerable to the impact of the occupying Europeans. They have, therefore, created a new synthesis of local and European cultures and their communities are no longer vulnerable to disruption from contacts with the outside world. In terms of exploitation, however, they are the most seriously affected in their respective countries.

4.2 Biodiversity and Local Populations

Plants, animals and other organisms become economically useful to humans when their uses are known. Local populations are the source of virtually all our knowledge about the uses of the plants and animals, and even of the micro-organisms in their localities.

All local populations should, therefore, have the rights over the knowledge about the plants and animals that grow in their areas if anybody at all is to have those rights.

In addition to having knowledge on local wild plants and animals, pastoralists and peasants have, through selection and experimentation, created the biodiversity of crops and domestic animals. These great innovators should, therefore, have the rights to the germplasm of their own domesticated plants and animals if anybody at all is to have rights over them.

4.3 Intellectual Property Rights, Local Populations, and the Convention on Biological Diversity

Many countries in the South have indigenous peoples, hunter gatherers even if these are not categorized as "indigenous peoples", and pastoralists. Virtually all of them have peasants.

Most of the biodiversity in the world is in the South. Since the Convention on Biological Diversity recognizes sovereign rights of countries over their biodiversity (Preamble, paragraph 4 and Article 3), and since, within these countries it is the local communities who create and know and look after the biological diversity, ultimately it is their rights that are being recognized by the Convention.

But, as already pointed out, the world economic system exploits these local populations. Systems should, therefore, be devised to protect them from exploitation, not only in the context of the North-South divide, but also in the context of national class relationships.

The Convention, in fact, specifically recognizes indigenous and local communities (Preamble, paragraph 12 and Article 8(j)), as sources of knowledge and practices of relevance to the conservation of biodiversity, and as "embodying traditional lifestyles on biological resources". In article 8(j), it stipulates the promotion of the wider application of the "knowledge, innovations and practices of indigenous and local communities... for the conservation and sustainable use of biological diversity... with the approval and involvement of the holders of such knowledge, innovations and practices...". It even goes so far as to stipulate that "the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices" be encouraged.

If the term "encourage" had been changed, as insisted upon by the Peruvian delegation (UNEP, 1992, p.19), into "effect" or an equivalent therefore, the Convention would have become a solid base from which to fight for the rights of local populations. Even without that, however, the Convention does make enough stipulation

to make it possible for an empowered local population in a world where states are equal in the eyes of the law to extract economic benefits from the use of its knowledge and biological diversity.

What is stipulated in 8(j) would enable local and indigenous communities to sue and claim damages from any one who uses their knowledge, innovations (including, therefore, their crop and domestic plant germplasm) and practices without their approval and involvement. The process of approval would enable bargaining, and the process of involvement would bring about gains in income or training and thus help in the process of strengthening the community to enable it to cope with the contacts with the outside world.

The provision in Article 10(c), which stipulates that "Each Contracting Party shall... protect and encourage customary use of biological resources in accordance with traditional cultural practices that are compatible with conservation or sustainable use requirements" could be used to pressurize governments into taking their indigenous and local communities seriously. Article 10(d), which states, "Each Contracting Party shall... support local populations to develop and implement remedial action in degraded areas where biological diversity has been reduced," could be used to pressurize governments into supporting the rehabilitation of the environments of local communities.

One of the reasons for the lack of recognition of the value of the knowledge and innovations of local and indigenous communities, and hence also of the lack of recognition of their intellectual property rights, at least internally in the countries of the South, is the low esteem, or even denial of the existence of, useful traditional knowledge, technologies and innovations. Article 17.2 stipulates that Contracting Parties shall facilitate the exchange of information, including "results of technical, scientific and socio-economic research..." and "indigenous and traditional knowledge". If indigenous and traditional knowledge is formally exchanged between states through a system which includes the results of formal scientific research, then its esteem would go up. This would help in the fight for enforcing the stipulations in articles 8(j), 10(c) and 10(d).

On the other hand, the combination of Articles 17.2 and 17.1 place indigenous and traditional knowledge as "publicly available", and thus, therefore, not protected by intellectual property rights legislation.

This should, however, not be an insurmountable barrier to securing benefits for local and indigenous communities because, following the stipulation of Article 8(j), the exchange can be made conditional upon the specific approval and hence also of negotiated conditions, of the communities. Besides, should Southern countries develop legislation for protecting the intellectual

property rights of communities, Article 17 would then concern only that portion of the information on indigenous and traditional knowledge, technologies and other innovations not covered by the protection.

The use that can be made of the provision in the Convention that concern local populations for maximizing their benefits will depend on the nature of these populations. It would be worthwhile to present some tentative ideas on the issue.

4.3.1 Indigenous peoples

As already pointed out, the risk of social disruption should be of important considerations in advocating for indigenous peoples.

Much of this advocacy will focus on national and local governments to observe the spirit of Articles 10(c), and 10(d) and thus support rather than undermine their indigenous populations. Popularizing the stipulations in these articles, and especially that in Article 17.2, could help raise the status of indigenous peoples nationally.

In the long run, indigenous peoples will have to develop the organizational strength and the awareness to be able to cope with the forces working against them, primarily from within their respective countries, but also from the North. For this, income generation is essential. But the income has to accrue to the community, not to individuals for, otherwise, the social fabric would break down instead of strengthening. For this reason, the enforcement of Article 8(j) would have to be preceded by the transformation of the community to a legal personality. The specifics of how this could be done will probably remain community specific.

4.3.2 Hunter gatherers

The case of hunter gatherers of the New World is covered under "indigenous peoples (see 4.3.1). The hunter gatherers of the Old World would also have to be advocated for in the same way as for the indigenous peoples except for the fact that the fear of social disruption is greatly reduced.

4.3.3 Pastoralists and Peasants

Pastoralists and Peasants cause no concern about social disruptions arising from the monetization of the value of their knowledge, innovations and technologies. Their societies are, however, already riddled with inequity. If possibly, therefore, it

would be desirable to choose a system of legal personification which will not enhance this inequity.

The poorer elements and servile castes should be decisively represented in the mechanism that ensures the community legal personality.

With these provisos, the comments made in 4.3.1 on enforcing the intellectual property rights of communities according to the provisions of the Convention apply to pastoralists and peasants as well.

In addition, pastoralists and peasants are innovators of germplasm with far greater achievements than modern scientists (Fowler and Mooney, 1990, p. 24). The stipulations of Articles 16.1 and 16.2 could be the basis for developing community level patenting, using the legal personification mechanism already suggested or another one as indicated by local conditions.

The North would have no choice but to recognize such a legislation on patenting both because it is the one that has consistently pushed for patenting, and because, apparently in international law, patenting legislation is a purely national affair. If the new proposals for harmonizing legislation on intellectual property rights now being championed by the North in the GATT talks do get accepted, it would make the production of a legislation on patenting even easier, but it may make the inclusion nationally of community patenting more difficult.

How difficult this will be will depend on how, without requiring a sequencing of the genes involved, descriptions of useful traits can be made in crop landraces and domestic animal breeds. This will require a separate study, and the study will be handled separately.

The Convention has provisions which would support the development of a system of community patenting.

Article 11 stipulates that each Contracting Party shall adopt incentives for the conservation and sustainable use of biological diversity. If community patenting were introduced, communities could be convinced to perpetuate their land races and animal breeds. Article 10(b), which states that "Each Contracting Party shall... adopt measures relating to the use of biological resources to avoid or minimize adverse impacts on biological diversity;" would also become a basis for deciding to adopt community patenting. Article 10(c), which stipulates the protection and encouragement of customary use of biological resources compatible with conservation could be used to strengthen this argument.

The Convention could also be modified, or it could have protocols added to it if the spirit of the statement in paragraph

12 of the Preamble were to be seen as just and if there arose a majority desire among the Parties to the Convention to rectify the shortcoming of Article 8(j).

The Parties could develop a protocol on patenting according to Article 23.4(c), or amend the Convention according to Article 23.4(d). The ideas for these changes could come from the Subsidiary Body on Scientific, Technical and Technological Advice, established by Article 25.1 and functioning according to Article 25.2(a) - (e) and 23(b).

The very germplasm taken from the pastoralists and peasants could be used through genetic engineering, to substitute their exports to the North by enabling its production in factories using genetically engineered microorganisms, or in farms using transgenic organisms.

Articles 14.1(c) and 14.1(d) could be used to pressurize the North to warn Southern countries that such developments are likely to happen, and article 14.1(e) and all the articles already mentioned which concern financial and technological assistance to the South could be used to fund product diversification among the peasants and pastoralists of the South likely to be affected.

4.3.4 National entrepreneurs and intellectuals

At the level of the modern sector, countries of the South would fare better if they had no intellectual property rights legislation. This is because they need to import much technology and literature, but can export little.

Considering the mighty hand of the North and its stated intention to subjugate the whole world through GATT into accepting a "harmonized" intellectual property legislation, however, advising the South to stay away from intellectual property legislation is unlikely to have any impact. Perhaps the most useful advice would be to suggest to Southern governments that, if they can no longer delay intellectual property rights legislation, they should make their legislation as minimal as the GATT provisions would allow.

To this end, advocacy group studies on each intellectual property right sector, and suggested minimal legislation could help.

4.4 Intellectual Property Rights and Governments

As already indicated (3.2), Southern governments are usually run by people whose values have deviated from those of local populations and who take advantage of traditional values and institutions to pursue personal gains. They thus often end up

being mere conduits for the outflow of resources from local populations to the North.

Given this sad situation, it is not realistic to expect Government of the South to look after the intellectual property interests of their indigenous peoples, hunter gatherers, pastoralists and peasants. They could be expected to look after the interests of the national entrepreneurs and intelligence more effectively because their values are roughly the same, and, in any case, they will have personal stakes in the national enterprises, usually being owners or co-owners.

Any legislation aimed at protecting the intellectual property rights of local peoples should, therefore, contain major elements of empowerment of indigenous peoples, hunter gatherers, pastoralists and peasants. This empowerment should include the creation of institutions to help these local peoples describe, document and follow up the fate of their biological resources, monitor internationally the use made of those biological resources, take appropriate action to ensure that the interests safeguarded by law are indeed internationally respected, and carry out scientific research on biological resources and their utilization in order both to keep abreast with changes in the world scene, and to strengthen the base for the putting into effect of the community intellectual property rights.

But most importantly the empowerment should include control of these institutions by the local communities, with government having a monitoring role only.

Recognition of property rights legislation by a Southern country should be made conditional on the inclusion into the legislation of the above requirements.

4.5 Intellectual Property Rights and the International Community

Most governments in the South can be expected to want the intellectual property rights of their local populations respected if only because they will see it as a possible source of income, especially of foreign currency.

However, for the reasons already stated, they can also be expected not to be effective about ensuring that the benefits accruing from those rights do in fact go to the owners of those rights, the local populations.

The United Nations system should, therefore, create a body to monitor the respect of the intellectual property rights of local populations and alert the world community to abuses and confront governments with the facts about those abuses.

The United Nations system is sensitive to political pressures from governments. It may, therefore, often not find it easy to condemn governments. It may often not even be easy to collect the relevant information, especially from non-governmental sources. Non governmental organizations, both in the North and the South would fill in this information gap. They, and especially those of the North, could also play a very useful advocacy role for local populations of the South by raising the awareness of the Northern public, by pressurising governments, especially those of the North, and by prodding the United National System into action.

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