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THE IMPACT OF INTERNATIONAL TREATIES ON LAND AND RESOURCE RIGHTS

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Table of Content

I. Introduction	1
II. Conceptualisation	2
A. Property rights	2
B. Real and Intellectual Property Rights	2
C. Ascribing value	3
D. Recognised property rights systems	4
E. Common property	4
F. Private property	5
III. International Treaties and Land & Resource Rights	6
IV. Wildlife Treaties	6
A. The African Convention on the Conservation of Nature and Natural Resources	7
B. The World Heritage Convention	7
C. Convention on International Trade of Endangered Species (CITES)	8
D. The Lusaka Agreement on Cooperative Enforcement Operations Directed at Illegal Trade in Wild Fauna and Flora (1994).	9
E. The Convention on Biological Diversity	9
F. The international convention to combat desertification	10
G. International Convention for the Protection of New Varieties of Plants	10
H. Agreement on Trade-Related Aspects of Intellectual Property Rights	11
V. Conclusion	12

I. Introduction

International agreements have implications for land and resource tenure at local, national and international levels. The issue of land and resource rights has to be addressed in the broader context of international treaties since these have impacts on land and resource rights. Multilateral environmental agreements concluded in the last two decades seek to establish a legal framework for environmental resources' management and also to create a favourable environment for sustainable and equitable development. Most of these agreements, to a greater or lesser degree, deal with or affect, the subject of land and resource rights vis-à-vis national and regional processes. They are particularly of central importance as regards resource rights, namely access, control and ownership of land and other resources.

The subject is of great importance, as it touches on secure and affordable access to and enjoyment of land and resource rights, a significant matter in the pursuit of such national, regional and even international goals such as poverty reduction and food security. Access to land and natural resources is important in ensuring that the citizenry contributes to and benefits from economic growth. Poverty reduction in Africa, for example, is largely predicated on land productivity in addition to access to basic services, markets, education and health care. Furthermore, secure rights to land and other resources underpin secure livelihoods and shelter by reducing vulnerability to shocks, guaranteeing a level of self-provisioning and supplementary incomes from basic food stuffs and enabling easier access to basic infrastructure, employment, markets and financial services. Moreover, insecure land and resource rights can result in societal unrest, which would greatly impinge on both long term and, short-term development policies.

Direct access to environmental resources by poor people is therefore critical in ensuring economic growth, which is environmentally sustainable. For this reason, the national land policies, as affected by international agreements underpin development. Further, globalisation as epitomised by the inter-connectedness of the international community and given effect through international agreements, also has impacts on land and resource rights. More specifically, economic liberalisation and subscription to international treaties without political liberalization intra-state affects the enjoyment of land and resource rights at national levels. Land and resource rights in the international legal framework can be broadly categorised as vesting in three different entities; the state, the individual and the community of states. International law, being state centric has as its locus of grant of property rights, the state. Consequently, in areas under national sovereignty, including all terrestrial ecosystems, states have full rights over their land resources. However, international agreements also provide for ownership, control and access to resources by private entities and individuals. In areas that are not subject to sovereign appropriation, common ownership regimes govern access to, control and ownership of land and other resources.

It is important to point out that in international treaty making, the equality of states is assumed. In instances where a particular state is unable to engage in the debates but proceeds to subscribe to the international regime for any number of reasons, the state will in essence be bound to abide by the treaty's rules. In many cases, African countries are unable to access international legal provisions even where these would benefit them, due to lack of capacity. This chapter sets out to inquire into the implications of international agreements on land and resources rights as regards access, control and ownership of the same. While these agreements represent consensus on issues, they can both enable as well as disenable enjoyment of land and resource rights at different levels. I explore the link between these instruments and national and regional processes paying particular attention to the Convention on Biological Diversity (CBD), the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA), the Convention to Combat Desertification (CCD), the International Union for the Protection of New Varieties of Plants (UPOV), and the Organisation of African Unity (OAU) African Model Law for the Protection of the Rights of Local Communities, Farmers and Breeders, and for the Regulation of Access to Biological Resources (African Model Law).

Other agreements that will be referred to include the African Convention, the Lusaka Agreement and the World Trade Agreement's Trade Related Aspects of Intellectual Property Rights (TRIPS). All these international treaties have implications for land and resource rights with some underscoring the importance of common schemes for ownership, control and access to resources and others emphasizing the role of states and private entities as the loci for property rights' grant.

The chapter examines the North-South dynamics of treaty making to provide the context for discussing specific agreements. It then concludes by pointing out that the wider economic contexts and engagements are critical to any exploration of the issue of land and resource rights and that it is important to identify those aspects of international treaties that enable the enjoyment of rights and utilize them, while at the same time minimizing the effect of the disabling provisions. In my view, the Pan-African Programme on Land and Resource Rights (PAPLRR) can contribute to enhancing the capacity of African countries to meaningfully engage and thus optimise the benefits of international agreements in the realization of land and resource rights for the poor.

II. Conceptualisation

A. Property rights

Property is a claim to a benefit or income stream while property rights constitute claims to a benefit stream protected through institutionalised regimes from interference from other potential users.¹ Property rights refer to rights, relationships, responsibilities and duties.² They constitute a social relationship defining the property holder with respect to something of value.³ There are different kinds of property rights for which different rationales are given.

The existence of property rights depends upon a limited supply of resources for which different users compete. In this situation, law reacts by assigning property rights to regulate access to resources that was previously unregulated.⁴ In the realm of land and resource rights, property rights can be broadly categorised into real and intellectual property rights.

B. Real and Intellectual Property Rights

Real property comprises tangible commodities capable of exclusive possession and clear delineation.⁵ Land and the accompanying rights that flow with it exemplify this kind of property. Ownership of land has historically constituted one of the main categories of property rights conveying an array of rights upon the owner.⁶ Land is important in resource tenure because it hosts diverse species and also encompasses a variety of ecosystems. In this regard land tenure arrangements are crucial to the interaction between natural resources and property rights holding.

Intellectual property on the other hand deals with informational services, "which are intangible and amorphous . . . not readily susceptible to either possession or delineation."⁷ While real property is relatively scarce and therefore expensive to protect and capture, the value of intellectual property is associated with creation of shortage of information by limiting the capacity of non-owners to capture it. This genus of rights also distinguishes between the treatment given to human creations as opposed to nature's creations.⁸

Intellectual property rights (IPRs) generally fall into four categories; namely, copyright, trademark, trade secrets and patents. While copyright protects the creative expression of ideas in tangible form, trademarks protect symbols, words and marks that are designed to distinguish services and goods in the market.⁹ For an inven-

tion to be patentable, it must satisfy the requirements of novelty, non-obviousness and utility.¹⁰ Patents can be granted for either products or processes.¹¹ Trade secrets also protect ideas but rely on private enforcement measures such as employment contracts. A notable characteristic of IPR protection generally is the public good aspect, which makes it amenable to use without one necessarily paying for it. While production of a work of intellect involves time, effort and money on the part of the creator of the work, the person who accesses it through copying spends much less time and resources but has the same information as the person buying the original. This makes copying of the work more attractive than buying the original.¹² Allocating property rights to the creator of a work balances the private interests of the creator, by ensuring that s/he still has an incentive to create, against those of the society at large in having the information available for its use.

Even though intellectual property does not diminish once it is shared, the role of IPRs is to ensure that information providers do not lose rights to the information by disclosing it, since such information can be used by an infinite number of persons simultaneously.¹³ Indeed one of the perceived philosophic underpinnings of IPRs is to ensure disclosure of the information, the assumption being that lack of such right would discourage information holders from sharing their information for fear of losing it. The fear of losing exclusive rights to the information once shared is real because another person can use the same idea without having recourse to the originator of the idea.

Another major distinguishing factor of intellectual property from real or material property is the time limitation of the rights also known as “sunset clause”.¹⁴ The effect of this clause is to limit the duration for which property rights can be held. The expiration of the duration entails a freeing of the rights from protection and consequently their unrestricted availability to the public.

Relevant IPRs in the field of natural resources are patents and plant breeders’ rights (PBRs). Traditionally, plants and animals were excluded from patentability and were governed by PBRs.¹⁵ The gradual move towards patenting of life forms in the United States first affected plants and has also been extended to animals.¹⁶

C. Ascribing value

Recognising property rights over land and natural resources involves a valuation thereof. This has proved to be quite a complicated and controversial task because of conflicting interests and value judgment systems. Natural resources, for instance, are in many cases both a public good from which it is difficult to exclude others and a private good whose consumption is subtractable.¹⁷ In the majority of cases, the ecosystem services that they provide are consumed directly and never get to the market place. This results in undervaluation of these services (which are in the public domain) and overstatement of private rights that are transacted in the market place.¹⁸

An anthropocentric and utilitarian view of natural resources tends to emphasise potential economic returns. In this view, raw materials only acquire significance when they reach the market place and can be assigned a monetary value. Thus the value of forest resources is broadly limited to the value of the timber that can be harvested and all other products whose market value is not known are disregarded. This overlooks other direct economic benefits that can be derived from the forest such as fuelwood, recreation or hunting and environmental services such as preventing the siltation of downstream areas.¹⁹

With regard to genetic resources and raw germplasm, despite the recognised potential utility, assignment of value presents insurmountable difficulties because of the very low probability of any given sample yielding commercial returns. It is also argued that the taking of germplasm is different from extraction of timber because only a small part of the whole is taken while the rest is left on the ground.²⁰ This reflects the incapacity of the market to ascribe value to products that may be useful to humankind but are not currently commercially exchanged.²¹

The dominance of the market precludes the search for non-market models of valuing such products.²² The fact that the market is unable to ascribe value to something does not mean that the thing is valueless. It may point to the needs for other kinds of valuation outside the purview of the market. There are also social concerns that are relevant in natural resource management and are not commodified.²³

Existing property rights regimes make it easier to ascribe value to genetic resources that have been transformed through biotechnology. This is not the case with land races.²⁴ While the latter are designated as primitive cultivars, the former are characterised as elite varieties. This characterisation reflects value judgments that translate into monetary gains to be derived therefrom. The skewed valuation scale does not indicate a continuum from the raw material to a transformed product. There is a marked dichotomy between the valueless raw germplasm and the commodified varieties that are processed in laboratories.²⁵

The value of natural resources is also lowered by the standardisation of systems of production, knowledge and institutions across the world. While such standardisation has its benefits, it tends to disregard the need to preserve diversity and take into account the contribution of local knowledge and institutions in this effort.

D. Recognised property rights systems

The way in which persons vested with property rights deal with those rights determines to a significant extent the efficacy of those rights in promoting resource management objectives. Since property rights provide an incentive to conserve and sustainably use resources, it is important to assign the rights to the persons interacting closely with the resources. Open access situations obtain where there are no property rights and the resources are accessed on a first-come, first-served basis.²⁶ There has been a tendency to view common property regimes as synonymous with open access regimes.²⁷

The major property rights regimes relevant in the realm of land and natural resources are individual/private property, communal property and government control.²⁸ For this purpose I divide the property rights systems broadly into two, namely common and individual property rights.

E. Common property

Common property resources are those resources not controlled by a single entity and access to which is limited to an identifiable community which has set rules on the way those resources are to be managed and can exclude others. There are separate entitlements to the commons for each user and no one user has the right to abuse or dispose of the property. Any dealing with the property has to take into account the entitlements of others and is subject to approval by the community. Users of common property share rights to the resource and are subject to rules and restrictions, embedded in cultural or religious customs, governing the use of those resources.

Common property resources provide a basis for non-monetary and non-market economic relations.²⁹ Common property users do not usually perceive themselves as owners of the resources. They consider themselves as being merely in possession of their habitat. In the words of Singh, “forest dwellers have traditionally not cognised their habitat as their property, common or private, since such a legal title did not exist in their world view.”

Bromley and Cernea posit that common property is akin to private property and only differs therefrom because of the number of persons who own and can exclude outsiders. They also argue that common property is like corporate property, the members of the group having a relationship different from that of corporate property holders. Further, all members of the group are assured of access even when they do not actively participate in the activities of the community.

In the context of natural resources, the existence of global problems has led to the development of new regimes for regulating access to them. One example of these is the concept of common heritage of mankind that was

first discussed within the purview of the Law of the Sea Convention.³⁰ A common heritage regime was developed in the context of deep seabed resources that do not fall under the jurisdiction of any state. Common heritage resources belong to all but can only be exploited in a way that benefits all, even those that do not partake in the exploitation. The benefits derived from the exploitation should also be redistributed so as to give those countries that usually do not have the technological or financial capacity to undertake activities of their own to benefit from the benefits derived from these resources by other states. This implies that all potential users must receive a portion of any benefits and share the duties.³¹

State Ownership.

State ownership constitutes another major form of property holding.³² This refers to situations where the state has ownership and control over a resource. The state may directly control and utilise the resource through one of its administrative arms or it could grant user rights to communities and individuals.³³ States are in a peculiar position as grantors and guarantors of property rights, both at the local and international level, as well as holders in their own right. They are, for instance granted by international law permanent sovereignty over their natural resources.³⁴ At the international level, a distinction exists between areas subject to ab initio appropriation on a first-come, first-served basis and common areas whose access is regulated and restricted by international law.³⁵

States today still represent the most important property rights holders. In postcolonial societies, for instance the destabilisation occasioned by colonial rule contributed to the breakdown of social, political and economic communal structures. States moved in to replace the centres of power in all areas, including property holding. In this process, they took over most of the properties previously held by communities.³⁶ States thus have come to monopolise common property resources. This does not imply that such “privatisation” makes resources commonly available to many people. In most cases, it is used as an avenue for channelling common property resources to individuals or companies for economic or political reasons.³⁷

Communities

The increasing trend of subsuming the discussion of common property rights within open access has led to community rights being ignored. As noted above, there is a marked difference between common property and open access.

In the context of natural resource management, the traditional knowledge of communities in the preservation and enhancement of diversity has not been taken into consideration. This is due to the fact that raw genetic resources are not given a high commercial value because no IPRs can be ascribed at that stage.

F. Private property

Private property rights denote “a bundle of entitlements defining the owner’s rights, privileges and limitations for use of a resource.”³⁸ Other attributes of property rights are exclusivity, universality, transferability and enforceability.³⁹ The recognition and enforcement of these rights depend on the machinery put in place by the State.

The holders of these rights are either corporations or individuals who can exclude others from the benefits of their property and regulate its use in so far as they comply with the laws of the State granting the rights.

Changes in property rights are generally towards individualisation and away from communal property rights. Patents in life forms and biotechnology patents are symptomatic of this general trend.

The role of corporations is significant and Transnational Corporations (TNCs) originating mainly in developed countries have made their mark in property ownership, especially in the area of intellectual property. This trend has been facilitated by the globalisation of international trade. In biotechnology, the entry of TNCs to the fray has brought with it a culture of commodification. The biotechnology sector seeks to make seeds merely a raw material by replacing their regenerative biological processes. Through IPRs, the freedom of farmers to reproduce seeds is being circumscribed.⁴⁰

Tragedy of the Commons versus Tragedy of the Enclosure

One of the most widely accepted ideas in the area of resource use is that of the tragedy of the commons which postulates that when property rights are not assigned in situations of open access, there is an incentive to over-exploit renewable resources.⁴¹ The flip side of this argument is that when property rights are assigned in these situations, the market will act to properly balance competing uses and force the participants to use such property in the most efficient way. Guided by the erroneous notion that common property is synonymous with property held in open access, the theory of the tragedy of the commons has been used to justify the grant of private property rights to resources held in common.

However, over-exploitation can also occur when common property resources are privatised. This is the so-called “tragedy of the enclosure”.⁴² The transfer of authority over common resources from the realm of communal rules to the individual creates conditions for over-exploitation due to the sweeping aside of traditional structures that regulate use. If the mechanisms put in place for policing the use of this individualised property are not fully accepted as binding by the people upon whom they are to operate or if they are not as far-reaching as the norms, which they seek to replace, the result is a “tragedy of the enclosure”. The existence of a tragedy of the enclosure may not necessarily mean that there is anything wrong with the property rights themselves, it raises the question of whether the property rights are framed at the right level.⁴³

III. International Treaties and Land & Resource Rights

The international legal framework alternates between two extreme positions, namely common heritage broadly defined and private rights narrowly defined. There have been a number of international agreements on these issues. There are those that emphasise common heritage principles, such as the ITPGRFA and others, such as the International Union for the Protection of New Varieties of Plants (UPOV),⁴⁴ and the Agreement on the Trade Related aspects of Intellectual Property Rights (TRIPS),⁴⁵ that provide for private/individual rights. In between these two groups, are agreements such as the Convention on Biological Diversity, which provides for state, community and individual/private property rights.

IV. Wildlife Treaties

The African Convention,⁴⁶ the Lusaka Agreement⁴⁷, the World Heritage Convention⁴⁸ and CITES⁴⁹ all have implications for land and resource rights. The locus of grant of property rights here is the state and access to areas that host wildlife and wildlife resources is severely curtailed.

A. The African Convention on the Conservation of Nature and Natural Resources

This is a regional instrument, which was meant to help in harnessing the natural and human resources of the continent for the total advancement of Africans in all spheres of human endeavour. The instrument reiterated that the utilization of the natural resources must aim at satisfying the needs of man according to the carrying capacity of the environment. In an endeavour to achieve these objectives, the Convention creates 'conservation areas' which, in accordance with the Convention, means any protected natural resource area, whether it be a strict natural reserve, a national park or a special reserve. These are, by definition, areas under state control, and access to them is therefore controlled by the state. Their boundaries may neither be altered nor any portion alienated except by the competent legislative authority. They are, by implication and legislation therefore owned by the state, with the aim of conservation and protection of soil, water, flora and faunal resources. Under the Convention, state parties assume legislative obligations to adopt adequate legislation aimed at the protection of these resources. Such legislation would inevitably be based on the national processes of each of the party states, and the Convention can therefore be seen as instrumental in shaping the state policies of the parties as regards enhancing the conservation of nature and natural resources.

It cannot, however, escape notice that in pursuing such policies, access to the same resources by local communities is restricted, for instance, through the creation of conservation areas, which are not open for access by these communities. In some cases, such communities have had to lose what they had always regarded as ancestral or communal land from which they had always eked out a livelihood. In response, such communities get hostile to the whole idea of the creation of 'conservation areas', if the creation of the same means limitation of access and control of land and other natural resources on it, and in extreme cases, the denial of previously real or imagined rights over land. Article XI of the Convention however tries to remedy this problem by providing that the contracting states shall take all necessary legislative measures to reconcile customary rights with the provisions of the Convention.

B. The World Heritage Convention

This Convention affirms respect for the principle of sovereignty of the states on whose territory the cultural and natural heritage is situated. Without prejudice to property rights provided by national legislation, the states parties to the Convention recognize that such heritage constitutes a world heritage for whose protection it is the duty of the international community as a whole to cooperate. It further requires states parties to set up a framework for national protection of cultural and natural heritage. This convention, unlike most of the other international agreements, unequivocally recognizes the sovereignty of the states on whose territory such resources are situated, and expressly confirms that it does not in any way whatsoever prejudice any property rights provided by national legislation. While promoting the protection of the world cultural and natural heritage, the Convention also ensures that its implementation does not involve national programmes/policies, which encroach on natural resource rights as conferred by national legislation.

Though this Convention does not deal specifically with wildlife, it has potential to protect unique wildlife habitats. It was adopted within the general conference of the United Nations Educational, Scientific Cultural Organisation (UNESCO) in 1972 and constituted the first international environmental agreement recognising the overriding interest of the global community in the management of domestic resources.⁵⁰ It is noteworthy that state sovereignty is not infringed upon at all because the procedure, though internationally devised, is voluntary.⁵¹ The incentives are the international recognition gained from enlisting the sites on the World list and the financial assistance accorded to members. This approach has been extremely successful in enlisting state support for conservation measures of sites of recognised international importance. It can however impinge on the rights of people to land and resources where designated sites enclose areas that are vital for the community and thus curtails the community's access to the resources.

C. Convention on International Trade of Endangered Species (CITES)

CITES was signed in March 1972 and entered into force in 1975. It provides the primary international control structure for trade in wildlife products. It focuses on the identification of endangered species and their withdrawal from the world market through a listing process. CITES appendices list the species that are threatened with extinction currently and those for which there is some indication that they face the threat of extinction in the future. The Conference of Parties determines what species should be listed.

Any species listed in appendix I may not be shipped without the issuance of an export permit by the exporting state, which permit may only be issued upon certification by the exporting state that such export will not be detrimental to the survival of the species. The importing state on its part has to certify that the import will not be used for commercial purposes. Further, a “re-export certificate” certifying that the specimen was imported into the re-exporting country in accordance with the provisions of CITES is required for all appendix I species. An appendix I listing thus acts as an effective ban on trade of a species because even if the exporting state wishes to continue trading in the listed species, the importing state is under an obligation to bar all other than scientific imports.⁵² An Appendix II listing on the other hand allows for trade in the listed species at the discretion of the exporting state. The importing state has an obligation to ensure that the exporting certificate has been issued. Appendix III of CITES provides the least amount of protection and it includes species that are subject to regulation under the jurisdiction of any member state for the purposes of preventing or restricting exploitation. The provision for an appendix III listing is to assist countries with domestic regulations to enforce those regulations internationally. Restrictions on trade there under are limited to specimens from the state that has listed the species.

The permit system under CITES provides the mechanisms for trade regulation. Member states are required to provide annual reports to CITES secretariat on the amounts of trade being carried out in the listed species. The secretariat acts as the intermediary between the exporting and importing states and confirms the authenticity of the trade documents. The management and scientific authorities set up at the national level by member states limit the numbers of permits issued and thus effectively establish quotas for the species concerned. The permits also facilitate the monitoring of international trade in wildlife.

One of the major weaknesses of CITES is its provision for exceptions being made for countries that take a reservation with respect to particular species provided that such member notifies other countries of the intention not to comply with trade restriction on the species. The insistence on reservations exemplifies the parties’ increasing disenchantment with CITES’ protective rather than management approach to wildlife conservation. As early as 1979, developing countries argued that wildlife conservation should not be at the expense of national economic development and that there ought to be economic benefits emanating from controlled species if the protection of their habitat from human encroachment was to be justified.⁵³ Conference Resolution 3.15 of the conference of parties meeting held in New Delhi in 1981 actually implied that a species listed in Appendix I species could be removed from the list for purposes of sustainable resource management within the country in which the species resides.⁵⁴ While the inability of a country taking reservations to trade with other members of the Convention may water down the value of such a reservation, trade with non-members of the Convention who are not bound by its obligations may significantly hamper the protection of a species.⁵⁵

CITES has, for instance, remained at the centre of the divergence between Eastern and Southern African countries with respect to the African elephant. The latter support wildlife management strategies and have put in place community-based programmes encouraging such management while the former support preservationist strategies.⁵⁶ Most Southern African countries have communal wildlife management projects whereby local communities participate in management activities and derive benefits therefrom. Eastern African countries in contradistinction maintain state control of wildlife management activities with minimal community involvement and consequently, local communities are opposed to wildlife presence on their land. All in all, the Convention remains state-centred as opposed to people-centred which could adversely affect its effectiveness if the needs of people to access land and resources are not taken care of by the states.

D. The Lusaka Agreement on Cooperative Enforcement Operations Directed at Illegal Trade in Wild Fauna and Flora (1994).

This agreement aims to reduce and ultimately eliminate illegal trade in wild fauna and flora. It arose from the realization among African states, that there exists a wide scope for illegal trade in fauna and flora, and that this situation has given rise to large-scale poaching and depletion of the continent's biodiversity. It promotes enforcement measures applicable under both CITES and CBD and is in fact a regional instrument for the implementation of the provisions of CITES. The basic obligations that state parties assume is to individually and/or jointly investigate and prosecute cases of illegal trade in wild fauna and flora (Article 4), in so doing, most states parties have adopted policies and legislations which are meant to protect flora and fauna, but which have the practical effect of severely restricting the access, control and in some cases ownership of environmental resources like forests and water, even to the indigenous communities. Contrary to the desired effect, such restriction sometimes causes tension between institutional mechanisms that implement the said policies and legislation and the local indigenous communities. The Wildlife Act in Kenya is, for instance a case in point in which, in implementing it, some local communities (for instance the Maasai) feel that they are wrongfully being denied access and control of natural resources in favour of wild animals.

Such tension works only to cause conflicts, more so when such national policies are not 'home grown', but are rather put in place by a state in a berated attempt to conform to an international treaty obligation. This is more so where, without any intervention, there is perfect co-existence of the local communities and other natural resources/wildlife.

E. The Convention on Biological Diversity

This Convention represents, as pointed out above, the middle ground in the debate on property rights and biodiversity conservation. The main concerns of the Convention are the conservation of biodiversity, the development of biotechnology, access to both biodiversity and biotechnology and international equity. The negotiators faced indomitable challenges trying to balance the interests of the key players in the issues sought to be resolved.⁵⁷ The discussions leading to the conclusion of the Convention were characterised by major ideological differences between the developing countries and the developed countries over the question of intellectual property rights almost threatening the outcome of the negotiations.⁵⁸

While developed countries pushed for the consideration of biodiversity as common heritage of mankind that should be exploited and conserved for the benefit of all mankind, they were unwilling to concede to sharing its benefits. Developing countries demanded that biotechnology innovations arising out of biodiversity resources extracted from their territories be availed to them free of charge. Some developed countries attempted to have intellectual property rights to biotechnology innovations dealt with exclusively in the context of the General Agreement on Tariffs and Trade (GATT) negotiations because the purpose of the Convention should be primarily to conserve biodiversity.⁵⁹

The resulting Convention is riddled with contradictions as it tries to accommodate the differences between the two sides. It affirms the rights of states to natural resources within their jurisdictions and effectively debunks the common heritage concept, introducing the notion of common concern. Common concern implies recognition of the global importance of biological diversity but does not diminish the ambit of the principle of permanent sovereignty over natural resources.⁶⁰ It seeks to facilitate and promote global cooperation for the conservation of biodiversity without forcing any given state to participate in this process.⁶¹ The central idea is that the benefits of access to the resource must be shared equitably. Like in human rights, reference to common concern is an acknowledgment that management of a state's own environment and resources is a matter in respect of which all states have standing.⁶²

The Biodiversity Convention recognises different potentially conflicting rights over resources. It recognises, for instance the need to ensure equitable allocation of ownership rights and IPRs to biotechnology. The provisions on technology transfer may thus conflict with existing IPRs. The Convention is silent on which rights should prevail in the event of a conflict.⁶³ Like other international agreements, the Convention does not specifically address the rights of communities apart from a cursory mention of indigenous and local communities in one article.⁶⁴

F. The international convention to combat desertification

In countries experiencing serious drought and/or desertification, particularly in Africa, this international agreement may have implications on land and resource rights. The Convention recognizes that national governments play a critical role in combating desertification and mitigating the effects of drought. The central role of local implementation of action programmes in this respect, and hence the impact of national processes on such programmes is also noted. The Convention calls for improvement of the effectiveness and coordination of international cooperation to facilitate the implementation of national plans and priorities. Under article 4(2) of the Convention, parties undertake to promote cooperation among affected parties in the fields of environmental protection and the conservation of land and water resources, as they relate to desertification and drought. Further, they undertake to strengthen sub-regional, regional and international cooperation in this regard.

The Convention requires that parties prepare national action programmes to achieve the objective of the Convention, and requires that such programmes be closely inter-linked with other efforts to formulate national policies for sustainable development (Article 9(1)). Such programmes would include the re-settlement of communities where activities which threaten to cause desertification, are carried out and regulation of access and control of other natural resources, especially water and forests. This has a direct impact on land and other natural resource rights as it involves a re-definition of these rights through the national processes of legislation and implementation of other national policies aimed at the fulfilment of the obligations assumed under the Convention. It is augmented by the provision of Article 10(2), which provides that the national action programmes shall specify the respective roles of government, local communities and land users and the resources available and needed. In essence, the article recognizes that the programmes contemplated have a direct relevance to the local communities whose access, control and ownership of land and other resources may be adversely affected.

Under the Convention, national action programmes may include, inter alia, the establishment of alternative livelihood projects that could provide incomes in drought prone areas, and the development of sustainable irrigation programmes for both crops and livestock. Such projects involve the change and re-organization of land use. They may involve the change of land tenure, being national programmes. It is for this reason that local communities must be actively involved in the designing of such projects, lest they view them as disruptive of their rights to land and other natural resources.

G. International Convention for the Protection of New Varieties of Plants

The UPOV Convention seeks to protect new varieties of plants, both in the interest of agricultural development and of plant breeders. Member States undertake to create a system for granting PBRs within their domestic laws. The rights granted in each Member State are effective only within that territory, and not internationally. The 1978 and 1991 revisions set out minimum scope of protection that states must grant. The 1978 revision expanded the number of criteria that a plant variety must meet in order to qualify for PBRs. These include an element of distinctness, homogeneity, stability, commercial novelty and the submission of an acceptable denomination.

The 1991 revision provides that parties are free to protect plant varieties by PBRs or other types of IPRs such as patents. States may also grant simultaneous protection to the same plant variety by more than one type of IPRs.⁶⁵ Further, it extends breeders' rights to all production and reproduction of their varieties, and to species as well as general and specific plant varieties. The remaining exceptions to commodification include acts done privately and for non-commercial purposes, experiments, and breeding and exploitation of other varieties. The effect of the 1991 revision is to bring the UPOV Convention in line with the trend towards patenting of plant varieties. The breeders are now granted exclusive rights to harvested materials and the distinction between discovery and development of varieties has been eliminated.⁶⁶

It is important to note that the latest revisions emphasise the increasing importance of patents in a world that sees PBRs as unnecessarily restrictive even after redefining the concepts of farmers' rights and breeders' rights. This regime's membership was mainly drawn from the pool of countries, which are at the forefront of biotechnology developments. It now includes some developing countries including Kenya and South Africa.

H. Agreement on Trade-Related Aspects of Intellectual Property Rights

Other developments occurred in the context of the Uruguay round of negotiations in the General Agreement on Tariffs and Trade (GATT).⁶⁷ GATT was originally conceived of as a mechanism to promote free trade. Its mandate has widened as international trade has grown to eventually include services and IPRs. The new World Trade Organisation now appears to be the chief multilateral institution addressing global uniformity of intellectual property standards and seems to be taking over part of the role played by the World Intellectual Property Organisation, whose mandate is to harmonise international IPR standards.

The United States led the initiative by developed countries to introduce more stringent IPR rules in trade because of complaints by American firms about counterfeiting and piracy, which necessitated the protection of domestic biotechnology and other industries. The TRIPS Agreement was initially meant to deal with trade distortions but later its scope was expanded to cover IPRs. Its main objective is to protect and enforce intellectual property rights and ensure that they contribute to the promotion of technological information, transfer and dissemination of technology. The Agreement only takes into account resource tenure in so far as they relate to patents.

Patents are dealt with in Section 5 of the Agreement, Article 27 of which addresses the question of patentable subject matter. The latter article allows Member States to exclude from patentability plants, animals, medical processes for the treatment of humans or animals. They may also restrict the commercial exploitation of patentable innovations to protect public order or morality, including averting serious harm to the environment. Governments still retain the right to restrict research, development or use of technology for protecting the environment.

On another level, the CBD is seen as a possible solution to the difficulties in property rights to innovations derived from natural resources. However, the issues regarding knowledge, innovations and practices of indigenous and local communities as captured under Article 8(j) are problematic and can limit the access, control and ownership of natural resources to these communities. The protection of such knowledge, innovations and practices is problematic within the recognized IPR regimes. Firstly because the rights involved are collective and intergenerational in character and secondly because such rights may not satisfy the criteria for patentability as novelty, inventiveness and capability of industrial application which are required for IPR protection under current regimes.

Such rights are mainly preserved through oral traditions, and this means that resource rights and land rights drawing from them will not be readily protected under the schemes of modern property regimes. As a result, underdeveloped countries run the risk of losing the ownership of these genetic and other natural resources to the industrialized countries, which are in a position to industrially tap these resources and protect them as their own.

V. Conclusion

This chapter highlights the plethora of international treaties affecting the promulgation, enforcement and enjoyment of land and resource rights. It is therefore critical in any exploration of land and resource rights to bear in mind the broader context of globalisation and international treaties. Most of the international agreements that affect land and resource rights tend to weaken the international law principle of state sovereignty over natural resources of the states in which such resources are situated. Moreover, the conventions do not ensure that in their implementation, the national programmes to be adopted do not encroach the land and other resource rights of the local communities. The consequence is that there develops a lack of goodwill between the local communities and overseers of the national policies/programmes in place as a framework for the implementation of the provisions of the agreements. It should also be noted that where people have weak, temporary or unclear rights to land or other natural resources, they lack the incentive to invest or use such resources in a meaningfully productive way.

International agreements should, in accord with the above observation, take into account the land and other resource rights of local communities if such resources are to be used sustainably. While recognizing the need for the implementation frameworks of such agreements in achieving their objectives, the need for a compensated restriction of access, control and ownership of resources should be ensured in any national programme or process meant to be in accord with such international agreements' participatory approaches to land and resource use planning, as adopted through national processes in an endeavour to line up to the international obligations as assumed under international agreements should assist in matching land allocation and management to social needs, and in addressing potential conflicts amongst land users.

The rights of land users, while taking steps to ensure that land and other environmental resources are well protected, should be recognized. The general ownership of land and other resources should not prejudice the interests of local communities, as this would be counterproductive since such communities would generally be averse of the objectives for which such restriction is imposed.

Endnotes

- ¹ Daniel W. Bromley, *The Commons, Property, and Common-Property Regimes*, in MAKING THE COMMONS WORK : THEORY, PRACTICE AND POLICY 3 (Daniel W. Bromley et. al., eds., 1992).
- ² See FAO, COMMON FOREST RESOURCE MANAGEMENT - ANNOTATED BIBLIOGRAPHY OF ASIA, AFRICA AND LATIN AMERICA (Donald A. Messerschmidt et al eds, 1993).
- ³ Bromley, *supra* note 1.
- ⁴ Charles Biblowit, *International Law and the Allocation of Property Rights in Common Resources*, 4 N.Y. INT'L L. REV. 77 (1991).
- ⁵ It is also referred to as immovable property. See, e.g., Timothy Swanson, *The Appropriation of Evolution's Values: An Institutional Analysis of Intellectual Property Regimes and Biodiversity Conservation*, in INTELLECTUAL PROPERTY RIGHTS AND BIODIVERSITY CONSERVATION - AN INTERDISCIPLINARY ANALYSIS OF THE VALUES OF MEDICINAL PLANTS 141 (Timothy Swanson ed., 1995).
- ⁶ It confers the right to extract minerals from the land, to use and abuse and dispose of it as the property holder wills. See ROBERT E. MEGARRY, THE LAW OF REAL PROPERTY (5th ed. 1984).
- ⁷ Swanson, *supra* note 5 at 163.
- ⁸ Ian Walden, *Preserving Biodiversity: The Role of Property Rights*, in INTELLECTUAL PROPERTY RIGHTS AND BIODIVERSITY CONSERVATION - AN INTERDISCIPLINARY ANALYSIS OF THE VALUES OF MEDICINAL PLANTS 176 (Timothy Swanson ed., 1995).
- ⁹ Tom G. Palmer, *Intellectual Property : A Non-Posnerian Law and Economics Approach*, 12 HAMLINE L. REV. 261 (1989).
- ¹⁰ PAUL GOLDSTEIN, COPYRIGHT, PATENT, TRADEMARK AND RELATED STATE DOCTRINES (3rd ed. 1992).
- ¹¹ Doc WIP/ACAD/E/93/22. Process patents are given less economic value because of the difficulty to monitor them.
- ¹² William M. Landes & Richard A. Posner, *An Economic Analysis of Copyright*, 18 J OF LEGAL STUD. 325 (1989).
- ¹³ Karen W. Baer, *A Theory of Intellectual Property and the Biodiversity Treaty*, 21 SYRACUSE J. INT'L L. & COM. 259 (1995).
- ¹⁴ *Id.*
- ¹⁵ See, e.g., Rebecca S. Eisenberg, *Proprietary Rights and the Norms of Science in Biotechnology Research*, 97 YALE L.J. 177 (1987).
- ¹⁶ See *Diamond v. Chakrabarty*, 447 U.S. 303 (1980) and Walden, *supra* note 8 at 184.
- ¹⁷ See Clarke Gibson, Address at the East African Regional Symposium on Common Property Resource Management (28 Mar. 1996) (on file with the authors).
- ¹⁸ See WRI/IUCN/UNEP, GLOBAL BIODIVERSITY STRATEGY (1992).
- ¹⁹ See, e.g., Principle 2.b of the Non-Legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of all Types of Forests (*Report of the United Nations Conference on Environment and Development*, United Nations, Rio de Janeiro, 3-14 Jun. 1992, UN Doc. A/CONF.151/26/Rev.1 (Vol. 1), Annex

- III) [hereinafter 1992 Forest Statement]. *See also* EDITH BROWN WEISS, IN FAIRNESS TO FUTURE GENERATIONS: INTERNATIONAL LAW, COMMON PATRIMONY AND INTERGENERATIONAL EQUITY (1989).
- ²⁰ *See, e.g.*, Jack R. Kloppenburg, Jr. & Daniel Lee Kleinman, *Seeds of Controversy: National Property Versus Common Heritage*, in SEEDS AND SOVEREIGNTY - THE USE AND CONTROL OF PLANT GENETIC RESOURCES 173 (Jack R. Kloppenburg, J ed., 1988).
- ²¹ *See* MARGARET JANE RADIN, CONTESTED COMMODITIES (1996).
- ²² *Id.*
- ²³ *Lujan v. Defender of Wildlife*, 112 S. Ct. 2130 (1992). *See also* Lawrence H. Goulder & Donald Kennedy, *Valuing Nature*, in EARTH SYSTEMS (G. Ernst ed., forth-coming 1996).
- ²⁴ Land races are defined as actively cultivated crop varieties that have been developed in traditional agricultural systems through both natural and human selection. *See, e.g.*, Steven C. Witt, *Biotechnology and Genetic Diversity*, in BIODIVERSITY 23 (E. O. Wilson ed., 1988).
- ²⁵ *See* VANDANA SHIVA, MONOCULTURES OF THE MIND : PERSPECTIVES ON BIODIVERSITY AND BIOTECHNOLOGY (1993). *See also* John H. Barton & Eric Christensen, *Diversity Compensation Systems: Ways to Compensate Developing Nations for Providing Genetic Materials*, in SEEDS AND SOVEREIGNTY - THE USE AND CONTROL OF PLANT GENETIC RESOURCES 338 (Jack R. Kloppenburg, Jr. ed., 1988).
- ²⁶ JOHN GOWDY, COEVOLUTIONARY ECONOMICS - THE ECONOMY, SOCIETY AND THE ENVIRONMENT (1994).
- ²⁷ *See* DANIEL W. BROMLEY & MICHAEL M. CERNEA, THE MANAGEMENT OF COMMON PROPERTY NATURAL RESOURCES - SOME CONCEPTUAL AND OPERATIONAL FALLACIES (1989).
- ²⁸ The importance of common property management systems should not be underestimated. It was, for instance estimated that in India 64% of all land is in private hands whereas 36% comprises of common land. *See* Tony Beck, *Common Property Resource Access by Poor and Class Conflict in West Bengal*, XXIX/4 ECON. & POL. WKLY. 187 (22 Jan. 1994). In Uganda, about 70% of total arable land was held under customary tenure in 1971. *See* Benjamin J. Richardson, *Environmental Management in Uganda: The Importance of Property Law and Local Government in Wetlands Conservation*, 37 J. AFR. L. 109 (1993).
- ²⁹ CHHATRAPATI SINGH, COMMON PROPERTY AND COMMON POVERTY - INDIA'S FORESTS, FOREST DWELLERS AND THE LAW (1986).
- ³⁰ G.A. Res. 2749 (XXV), *Declaration of Principles Governing the Sea-Bed and the Ocean floor, and the Subsoil Thereof, Beyond the Limits of National Jurisdiction*, 17 Dec. 1970, Resolutions Adopted by the General Assembly During its 25th Session, 15 Sept. - 17 Dec. 1970, GAOR 25th Sess., Supp.28 (A/8028) and Article 136 of the United Nations Convention on the Law of the Sea, Montego Bay, 10 Dec. 1982, *reprinted in* 21 I.L.M. 1261 (1982) [hereinafter Law of the Sea Convention]
- ³¹ Part XI of the Law of the Sea Convention, *supra* note 30 and United Nations: Agreement Relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea of 10 December 1982 - Done at New York, July 28, 1994, *reprinted in* 33 I.L.M. 1309 (1994). *See also* Alan E. Boyle, *International Law and the Protection of the Global Atmosphere: Concepts, Categories and Principles*, in INTERNATIONAL LAW AND GLOBAL CLIMATE CHANGE 7 (Robin Churchill & David Freestone eds., 1991).
- ³² *See, e.g.*, PHILIP ALLOTT, EUNOMIA - NEW ORDER FOR A NEW WORLD (1990) noting that sovereignty entails the idea of exclusion of anyone not authorized by the property owner from enjoyment of thing owned.
- ³³ *See* BROMLEY & CERNEA, *supra* note 27.

- ³⁴ See, e.g., G.A. Res. 1803 (XVII), *Permanent Sovereignty over Natural Resources*, 14 Dec. 1962, reprinted in 2 I.L.M. 223 (1963) and PHILIPPE SANDS, *PRINCIPLES OF INTERNATIONAL ENVIRONMENTAL LAW I - FRAMEWORKS, STANDARDS AND IMPLEMENTATION* (1995).
- ³⁵ See, e.g., Edith Brown Weiss, *Environmental Equity: The Imperative for the Twenty-First Century*, in *SUSTAINABLE DEVELOPMENT AND INTERNATIONAL LAW* 17 (Winfried Lang ed., 1995).
- ³⁶ See, e.g., Michael Ochieng Odhiambo, *Liberalisation, Law and the Management of Common Property Resources in Kenya: The Case of Public Land and Forests* (26 Mar. 1996) (mimeographed paper presented at the East African Regional Symposium on Common Property Resource Management, Kampala, 26-28 Mar. 1996, on file with the authors).
- ³⁷ See SINGH, *supra* note 29.
- ³⁸ TOM TIETENBERG, *ENVIRONMENTAL AND NATURAL RESOURCE ECONOMICS* (3rd ed. 1992).
- ³⁹ Property rights have also been referred to as monopoly rights. See Swanson, *supra* note 5 at 164.
- ⁴⁰ Vandana Shiva, *The Seed and the Earth - Biotechnology and the Colonisation of Regeneration*, in *CLOSE TO HOME - WOMEN RECONNECT ECOLOGY, HEALTH AND DEVELOPMENT* 128 (Vandana Shiva ed., 1994)
- ⁴¹ See *MANAGING THE COMMONS* (Garrett Hardin & John Baden eds., 1977).
- ⁴² See, e.g., Joan Martinez-Alier, *Ecology of the Poor: A Neglected Dimension of Latin American History*, 23 J. *LATIN AMERICAN STUDIES*, 621 (1991).
- ⁴³ In situations where the best level at which to frame the property rights is the community, framing them at the level of the individual is likely to result in a tragedy of the enclosure.
- ⁴⁴ International Convention for the Protection of New Varieties of Plants - Done at Paris 2 Dec. 1961, 815 U.N.T.S. 89 [hereinafter UPOV Convention].
- ⁴⁵ Agreement on Trade-Related Aspects of Intellectual Property Rights, in *General Agreement on Tariffs and Trade: Multilateral Trade Negotiations Final Act Embodying the Results of the Uruguay Round of Trade Negotiations, Annex 1C - Done at Marrakesh, April 15, 1994*, reprinted in 33 I.L.M. 1125 (1994) [hereinafter TRIPS Agreement].
- ⁴⁶ African Convention on the Conservation of Nature and Natural Resource - Adopted at Algiers, 15 Sept. 1968, 1976 UNTS 4 [hereinafter the African Convention].
- ⁴⁷ Agreement on Co-operative Enforcement Operations Directed at Illegal Trade in Wild Fauna and Flora, Lusaka, 8 Sept. 1999.
- ⁴⁸ UNESCO Convention for the Protection of the World Cultural and Natural Heritage - Adopted on 16 Nov. 1972, reprinted in 11 I.L.M. 1358 (1972).
- ⁴⁹ Convention on International Trade in Endangered Species of Wild Fauna and Flora reprinted in 12 *ILM* 1085 (1973)
- ⁵⁰ See Timothy M. Swanson, *The Role of Wildlife Utilization and other Policies for Diversity Conservation*, in *ECONOMICS FOR THE WILDS* 65 (T. M. Swanson & E. M. Barbier, eds., 1992).
- ⁵¹ See Article 3 of the World Heritage Convention.
- ⁵² See Timothy M. Swanson, *The Role of Wildlife Utilization and other Policies for Diversity Conservation*, in *ECONOMICS FOR THE WILDS* 65 (T. M. Swanson & E. M. Barbier, eds., 1992). See also, Michael J. Glennon, *Has International Law Failed the African Elephant?* 84 *AM. J. INTL. L.* 1, 11 (1990).

