Traditional agricultural landscapes as protected areas in international law and policy

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Abstract

The protected area approach to conservation of habitats and species emphasises a natural world shaped without human influence. Despite the debates relating to community conservation, stakeholder involvement in conservation and equitable benefit sharing, progressive approaches to community conservation tend to permit traditional agricultural practises, that support biodiversity preservation, to operate only in land outside core conservation areas. Nevertheless, there are many ingenious agricultural systems that have shaped novel, resilient landscapes for centuries and in so doing have also sustained high levels of biodiversity. The traditional practices deployed also constitute a wealth of unique cultural heritage. These systems are of such importance that they merit primary support in protected areas and should not be relegated to operate only in formal and informal buffer zones. Further, some of these systems may be internationally important and capable of fulfilling aspects of key global policy mandates established at the Earth and World Summits held respectively in Rio de Janeiro and Johannesburg.

This analysis examines the extent to which the current international regulatory and policy matrix dealing with protected areas supports the continuance of traditional agricultural landscapes which are herein described as landscapes in which primarily, traditional sustainable agricultural practices are currently carried out and where biological diversity (which includes agrobiodiversity) is conserved thereby.

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1. Introduction

The early history of area-based biodiversity preservation demonstrated an emphasis of appropriation and assumption of control. The forced removal of humans from protected areas in order to secure a concept of wilderness and to permit endangered species to live within natural ecosystems is well documented not only within descriptions of the human rights implications, but also in contemporary conceptual analyses of conservation strategies (Gomez-Pompa and Kaus, 1992). The establishment of one of the forerunners of the protected area concept, Yellowstone National Park in the USA, involved the exclusion of the Crow and Blackfoot and in part removal of the Tukarika Shoshone in order to meet the strict criteria of the existing concept of wilderness area (Stevens, 1997). The resulting idealised concept of an area excluding all but limited human visitors has persisted to the present day. In Africa the Serengeti National Park in Tanzania followed a similar pattern when, in 1959, the indigenous Maasai and their cattle were forced to leave the protected area (Homewood and Rogers, 1991). In Asia, a comparable approach has been taken in some protected areas. Nepal, for example, removed and relocated the entirety of the indigenous peoples from the Rara National Park in 1976 (Stevens, 1997).

Policies of gazetting land and the subsequent removal of human communities persist and international conservation programmes still primarily favour limited human involvement in protected areas (perhaps for research, monitoring and tourism within strictly controlled parameters). Even programmes designed to acknowledge the human
relationship with the environment tend to secure a central zone within protected domains in which human activities are excluded and other concessions to human requirements are often restricted to protected area margins (Parker and Amin, 1983).

There are always exceptions to the rule but in this context these are few in number. A prime example of a different approach is the renowned Ngorongoro crater protected area which was formally established by the Tanzanian Ngorongoro Conservation Area Ordinance in 1959. From the outset it was designed to conserve the natural and archaeological resources of the area and to protect the interests of Maasai living there (Chausi, 1996).

Although humans are rarely permitted to carry out unmodified versions of their traditional lifestyles in protected areas there has been a debate for some time concerning human participation within them, stakeholder involvement and the equitable sharing of benefits derived from exploiting ancestral lands and traditional knowledge (Pimbert and Pretty, 1995). In many instances the natural resources within a protected area may have previously met most of a traditional community’s subsistence needs (Fabricus and Koch, 2004). However, realisation of this fact has not necessarily resulted in regulatory support for areas where humans may continue to live within their uninhibited, traditional lifestyles. Instead, in some instances, local communities have begun to participate in management and other aspects of protected area operation but this tends to be within the imposed paradigm and subject to the overriding priority to protect non-human natural resources.

This failure to fully embrace and support traditional lifestyles may be explained, in part, by the expansion of all societies beyond the traditional carrying capacity of some ancestral lands. In other cases, the territories of ancestral lands available for traditional communities are so eroded by many pressures that traditional ways of life are no longer viable.

Nevertheless, where territories that are capable of supporting traditional lifestyles still persist, the emphasis on the exclusion of humans living traditional lifestyles within protected areas may be seriously misguided in some instances. Humans contribute significantly to the shaping of ecosystems to the extent that very few examples of wilderness within the biosphere are free of our influence. Indeed there is evidence that some of the world’s wild ecosystems are the result of intelligent cooperation between humans and the biosphere. Posey (1998), by example, argued that areas within apparently pristine tropical rainforest in his Brazilian rainforest research areas were in part created by the practices of indigenous peoples intent on securing guaranteed access to their extensive portfolio of medicinal and other useful plants. Posey (1998) specifically indicated that many biodiverse areas within the Amazon basin contain gardens indivisible from the forest wilderness to the untrained eye. These gardens contain specific concentrations of key plants used and carefully maintained, in accordance with ancient and still developing knowledge, by the local native peoples (Posey, 1998).

In some cases the impact on land, diversity and species differentiation by humans has been so dramatic that biodiversity management plans have had to mimic agricultural practices that once had a purpose but are now confined to historical archives Harrop (2005a).

This strategy is common in countries that no longer have obvious communities living within traditional lifestyles such as the United Kingdom: a land with a surfeit of ecosystems affected and created by human activities. One such activity, known as coppicing, involves the rotational cutting of trees to a base root carried out originally in order to supply natural materials for a variety of human uses. The wood grows from the base and when it reaches a certain height is repeatedly and thus sustainably cut again. Coppicing in its traditional form was not carried out to preserve rare species but was an element of a portfolio of agricultural practices carried out to provide resources to support the essential needs of human communities (Maylam, 2002). In protected areas in the South of England the traditional practice is mimicked in contemporary conservation management plans to secure the persistence of rare species that depend upon the human-induced habitat. Although this method is based on a tradition, in this form it adds to the cost of conservation collected either through public taxation or through other public fund sources.

To mimic traditional practices and to construct legal frameworks to support them involves the imposition of artificial and costly regimes. Pragmatically, where traditional practices still flourish it makes much more financial, political and regulatory sense to encourage their continuance. Conservation can then operate without a negative impact on the public purse. Coppicing in the UK is no longer an extant traditional practice but there any many traditional systems operating around the world (Altieri, 2004) which are very much alive and not only support resilient ecosystems and the concomitant biodiversity without imposing public costs (Toledo et al., 2003) but also have the potential to provide solutions to food security and water shortage problems addition to improving soil health, reducing pesticide use and assisting to provide benefits to the rural poor (Pretty et al., 2003). In many cases, as a result of unclear land tenure or as a result of other land-use pressures (Altieri, 2004), these traditional practices are not supported by regulatory regimes and when they operate near or in protected areas they may subsist on the edge of toleration by the authorities or be positively discriminated against (Martin et al., 2006).Objective of this analysis is to ascertain the extent to which international law and policy support and prioritise the protection of the systems and the land areas comprised in traditional agricultural landscapes. In particular instruments dealing with protected area management are emphasised herein.
2. Globally Important Agricultural Heritage Systems

The importance of the systems within traditional agricultural landscapes has recently been emphasised at the international, institutional level by the United Nations Food and Agriculture Organisation through the Globally Important Agricultural Heritage Systems (GIAHS) project. This is currently examining the manner in which agriculturally generated biological diversity may be protected. The definition of GIAHS currently used within this evolving project is as follows:

Remarkable Land Use Systems and landscapes which are rich in biological diversity evolving from the ingenious and dynamic adaptation of a community/population to its environment and the needs and aspirations for sustainable development (FAO).

Perhaps as a result of ensuring that GIAHS comply with the contemporary institutional mandate of sustainable development, the definition does not make it clear whose needs and aspirations are being referred to: those of the community/population served by the GIAHS site or the global community as a whole. If the latter is intended it may be that no GIAHS sites would qualify in that they would have initially developed to satisfy local or at best a region’s needs. Nevertheless, putting these concerns aside, the intentions very much reflect many aspects of the current community conservation debates concerned with increasing stakeholder participation and securing equitable benefit sharing. Consequently current aims include the strengthening of the capacity of farmers and farming communities to conserve and sustainably operate GIAHS examples and derive enhanced benefits from their efforts. It is also intended that the project will provide a foundation for a global approach to in situ conservation of agricultural biodiversity and for the sharing of traditional technology relating to these agricultural practices and systems.

The project raises interesting questions in the current context of international regulation and policy relating to protected areas. Whereas the emphasis to date has been on conserving biological diversity and habitats in core areas by excluding human communities and their obvious influence, this project emphasises the protection of human practices which contribute to the creation and maintenance of agricultural diversity as a subset of biological diversity along with the landscapes that have resulted from the long relationship between humans and the natural world. The project also seeks to conserve the human cultural heritage that forms the foundations for the traditional practices that support the GIAHS examples.

The variety of sites currently being considered by the GIAHS project for its pilot study is impressive and ranges across the continents of the world (see Footnote 1).

Examples of these and other possible GIAHS sites include: Maasai pastoralism and rangeland management in Kenya, the traditional Marka systems of rice cultivation in the Sahel region of Africa, Quechua and Aymara agricultural systems in the southern Peruvian Andes, raised field agriculture (Chinampas) in the valley of Mexico, home gardens in Mexico and Belize, Pacific Island Taro-based home gardens on Vanuatu, traditional paddy rice systems and fish-farming in China and elsewhere in Southeast Asia, reindeer herding in Siberia, the Dehasa system of Southern Spain and Portugal, and traditional shifting agro-forestry practices in all tropical forest regions throughout the world (GIAHS website (see Footnote 1) archives and Altieri, 2004).

The sites currently selected by the GIAHS project comprise a useful illustrative subset of the landscapes examined herein but this analysis goes further to ascertain the extent to which current international regulations and policy support the concept of protected areas for all traditional agricultural landscapes.

3. The international regulations and policy

The protection of the sites contemplated herein requires a number of emphases within international law and policy. Without these emphases, expressed in unequivocal language, the lack of support for traditional agricultural landscapes may mean that the priorities of other global initiatives will cause these landscapes to disappear or be relegated to frozen examples of history. The area of focus in this analysis, within the wider scope of international law and policy, is restricted to the regulation of protected area management. Other areas that are relevant to the wider issue of traditional agricultural practices include intellectual property rights and traditional ecological knowledge (Harrop, 2004); the human rights and land rights of indigenous and rural communities (Harrop, 2003, 2005b); the relationship between the World Trade Organisation’s portfolio of agreements and eco-labelling, global markets and food sovereignty (Harrop, 2005b).

The legislation and policy in the field of conservation is extensive. Early instruments exclusively focused on species conservation. With a few exceptions, where they dealt with protected areas, they emphasised tracts of land distinctly defined where only non-human species would live. More recently, the instruments have reflected a more holistic approach to conservation linking human communities and human issues to species conservation and protected area management. However, most instruments do not contemplate, as a priority, the protection of human operations in the central zone of a protected area.

Conservation instruments deal with a wide range of habitats and thus encompass a diverse group of traditional agricultural landscapes. The systems deployed may involve the exploitation of natural resources on open land, in wetlands, in montane areas, in forests, in the open sea, in the
inter-tidal zones and in most of the areas in which humans are capable of surviving. Therefore, the general references herein to conservation of habitats and protected areas should be construed to include the entirety of the range of possible sites for traditional agricultural landscapes.

From the outset it must be emphasised that, whereas biodiversity and traditional agricultural heritage may often be found together and may be protected and supported within legislation designed to protect biodiversity, there are many instances where they are mutually exclusive and the dynamics that drive them may be in conflict. An example of this is the regulatory dynamic to preserve pristine, primary habitat rather than linked, secondary but often equally diverse habitat that may be a product of direct human intervention through traditional agricultural practices.

3.1. International policy deriving from the Earth Summit and the World Summit Agenda 21

Agenda 21 is an extensive document dealing comprehensively with the issues of environmental protection and development as seen in 1992. It also deals in detail with human issues and advocates that traditional human practices, to the extent that they are sustainable with a positive impact on the natural world, be promoted and protected. It is an authoritative document but should also be read in the light of the decisions of the more recent Johannesburg Summit. There are many parts of the text that could be construed to directly support the protection of traditional agricultural landscapes. However, all of the principles enunciated would need to be strengthened through hard international regulation to secure precise support and protection. Some specific Agenda 21 chapters are particularly relevant but do not always provide positive support. The following is a summary of relevant provisions:

- **Chapter 11: Combating deforestation.** In this chapter governments are required to act to increase forest cover, working, *inter alia*, with indigenous people, to establish and expand protected areas which, in addition to ecological aspects, should also preserve spiritual values and support sustainable utilisation of the traditional forest habitats of indigenous people, forest dwellers and local communities. This general topic is controversial even for conservationists at the national level and key issues such as the role of people, and the nature of their land tenure are not clarified in detail in legislative instruments in order to put these principles into effective practice. However, the stipulations provide a direct mandate to support forest-based traditional agricultural landscapes which, to date, may have been overlooked in many areas where the prime focus is on preserving primary forest and excluding the presence of humans.
- **Chapter 14: Promoting sustainable agriculture and rural development.** This chapter urges, *inter alia*, more community control over agriculture and changes in global market mechanisms that affect agricultural practices. However, this chapter is surprisingly unsupportive of the concept of traditional agricultural landscapes in that it does not make any direct references to the preservation of the underlying systems.
- **Chapter 15: Conservation of biological diversity.** Articles 15.4(g) and 15.5(e) reiterate the tenets of Article 8(j) of the Convention on Biological Diversity, the most relevant stipulation within hard law, which is analysed later.
- **Chapter 16: Environmentally sound management of biotechnology.** Article 16.39(a)vi urges the recognition and fostering of traditional methods and knowledge and equitable benefit sharing from biotechnological developments. Again there are provisions in this chapter which mirror Article 8(j) of the CBD.
- **Chapter 32: Strengthening the role of farmers.** Article 32.2 acknowledges indigenous and other rural families as stewards of natural resources and this is a precise restatement of an aspect of the principles in Article 8(j) of the CBD that directly supports the preservation of traditional agricultural landscapes.

3.1.1. The Forest Principles

Ethno-biological knowledge and practices are often diverse in tropical forests and they share this level of diversity geographically with biological, cultural and linguistic diversity. Traditional agricultural systems, such as forms of shifting cultivation methods and forest gardens, are found in most tropical forest zones. Such methods, in some instances are carried out with great expertise and knowledge and lead to effective sustainable agricultural systems with demonstrably high levels of biological diversity in the secondary forest that results (Toledo et al., 2003; Posey, 1998). Often a community carrying out traditional agricultural practices will also depend upon primary forest, not subject to shifting agriculture or other methods, for other needs such as water deriving from forest catchment areas, medicinal plants, hunted meat and so on. Consequently the systems deployed not only include agricultural practices but also subtle knowledge of hunting and trapping methods in addition to other ethno-biological knowledge. Regulation of forest activities is thus a key area for examination.

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3 The international instruments that are examined herein consist in part of soft and hard law. In international law “hard” law includes conventions and treaties which contain state obligations and “soft” law includes important agreements between states which are not strictly international law but nevertheless have a key impact on legislative developments (see Hillenberg, 1999).

4 UN General Assembly Report of the Conference of Environment and Development (Rio), Annex III, non-legally binding authoritative statement of principles for a global consensus on the management, conservation and sustainable development of all types of forest.
The Forest Principles comprise a specific body of soft law dealing with many of the peripheral areas that require hard law intervention to support traditional agricultural landscapes. Thus, the principles urge support for indigenous peoples living in forests, the provision of an economic stake in forest use, appropriate land tenure arrangements and equitable benefit sharing in relation to traditional knowledge.

3.1.2. The Johannesburg Declaration on Sustainable Development

The JDSD is an extremely wide-ranging statement of international policy and it links the human condition with the quality of the biosphere. With this emphasis it is extremely relevant to this examination of international regulatory support for traditional agricultural landscapes. Paragraph 40 concentrates on agricultural and food security issues and many of the stipulations therein could be construed to support traditional agricultural systems particularly because the technology within them can contribute to the development of wider food security (Pretty et al., 2003). Paragraph 40(r) is directly relevant in that it requires members to:

Promote the conservation, sustainable use and management of traditional and indigenous agricultural systems and to strengthen indigenous models of agricultural production.

Paragraph 45(h) also directly supports indigenous and community-based forest management systems to ensure their full and effective participation in sustainable forest management. This provides further international support for crucial areas of forest management that are often at odds with ecocentric approaches to conservation (MacKay and Caruso, 2004; Barber, 2000) and the intensification of agriculture in areas historically restricted to traditional methods.

The declaration also refers to the importance of non-conventional water resources and conservation technologies which are prevalent within traditional agricultural landscapes and which can enable not only agricultural diversity to flourish in arid zones but also, through the ancient nature of some of the water conservation practices, facilitate the existence of havens for unique biodiversity (paragraph 26(e)).

3.1.3. United Nations Millennium Declaration

The important set of policy aspirations within the Millennium Declaration and the Millennium Development Goals may be interpreted to support traditional agricultural landscapes by implication. The inter-relationship between all of the goals and the need to ensure environmental sustainability is clear (Kakabadse-Navarro et al., 2005). Apart from the general propensity of traditional agricultural systems to provide sustainable mechanisms to alleviate hunger, provide access to water and so on the most obvious area of synergy is linked to Millennium Development Goal 7: to ensure environmental sustainability. Specific tasks therein relate to targets for levels of forest cover and expanse of biodiversity which would be directly supported by the

secured persistence of traditional agricultural systems (although such systems are not referred to in the text).

There are references in the reports of task forces relating to the Millennium Development Goals, to the need to support sustainable agriculture techniques that preserve, protect and restore natural habitats, and arid zones (Melnick et al., 2005). These goals could be met by deploying the traditional knowledge that forms the basis of traditional agricultural landscapes although specific references in the MDG texts would be required to encourage policy-based action.

3.1.4. General

This brief examination of the relevant international policy demonstrates that there is some support for the protection of traditional agricultural landscapes. However, many of the expressions of support are implied rather than expressly defined or at too rarified a level to have an impact within a timescale that would be viable to save many of the rapidly disappearing traditional agricultural systems. The next tier of examination looks, therefore, at the extent to which these expressions of policy are adequately put into practice through specific provisions in international law.

3.2. Conventions and instruments dealing with conservation of natural resources/land practices and protected areas

3.2.1. The Convention on Biological Diversity

With its holistic approach to the preservation of entire ecosystems and its approach to generating respect for the role of traditional practices of rural communities, the CBD’s provisions support the protection of traditional agricultural systems and aspects of traditional agricultural landscapes in a number of respects. However, it must be emphasised from the outset that the CBD’s central concern is the preservation of biodiversity not agricultural bio-diversity or agricultural heritage.

Articles 8(j) and 10(c) are of particular importance and together they could be interpreted to directly support the persistence of traditional agricultural landscapes. The two provisions need to be examined in detail:

Article 8(j), accompanied by the chapeau to the Article, states as follows:

Each Contracting Party shall, as far as possible and as appropriate:

(j) Subject to its national legislation, respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices;
10(c) again accompanied by the relevant chapeau states that:
Each Contracting Party shall, as far as possible and as appropriate:
(c) Protect and encourage customary use of biological resources in accordance with traditional cultural practices that are compatible with conservation or sustainable use requirements

Both articles clearly support aspects of traditional agriculture. However, there are systems which could conceivably fall outside the remit of 8(j) and to an extent 10(c). Thus a traditional agricultural landscape may have evolved from, but no longer exclusively embody, a traditional lifestyle within the scope of 8(j). Further, there is a difference in emphasis and objectives. Article 8(j) is in the section of the CBD dealing with in situ conservation of habitats and species and the strategic conservation of specifically protected areas. The traditional agricultural landscape concept encompasses this objective but is somewhat broader in its focus on natural, cultural and agricultural diversity. This difference in emphasis results, for the most part, in these traditional systems forming a subset of the practices contemplated by Article 8(j).

However, it is conceivable that a traditional agricultural landscape example could also be in conflict with the requirements of Article 8(j) through its emphasis on the maintenance of agricultural diversity. An example of such an anthropocentric versus eco-centric conflict is best illustrated by reference to the traditional shifting cultivation methods within or adjacent to primary rainforest. Whereas the primary rainforest may consist of high natural diversity, the fallows left by shifting cultivation in the form of temporary secondary forest will possess a high level of agricultural diversity (Toledo et al., 2003). From the perspective of the agriculturalist the secondary forest might be a priority target for preservation whereas the primary forest would be the target for the conservationist.

The convention is, in part, a framework convention requiring further, subsidiary international legislation to precisely implement its objectives. These clauses must be read in this perspective. There is, however, a working party under the auspices of the CBD, which is currently examining the more detailed implementation of the provisions of 8(j), and a number of previous discussions have taken place at conferences of the parties. In addition the CBD secretariat has produced a profusion of policy papers concerning the implementation of the article. The appearance of international legislation dealing with human traditional practices in the context of biodiversity conservation stresses the key role that indigenous and rural communities must have in participating in the implementation of strategies for conservation and reflects a new, enlightened international regulatory approach.

There are some aspects of the text of Article 8(j) which must be examined in more detail.

3.2.2. National legislation

The protection of traditional agricultural landscapes, in some instances, may face considerable obstacles in national law particularly from the manner in which land rights of rural communities and particularly native title are governed. Whereas it would be expected that parties would implement an international commitment in their national legislation and thus alter their national regime, Article 8(j) is expressed to be subject to national legislation and suggests that the reverse applies in this context. Bearing in mind the framework nature of the clause and the imprecise drafting approach the words seem hardly necessary. This idiosyncratic approach may be inevitable, however, having regard to the depth of political feeling concerning this general issue. This part of the article attempts to honour the sovereignty of states and at the same time secure the well being of peoples (and indeed habitats and species) behind the veil of sovereignty. It may be that, by the use of these words, the CBD attempts to avoid confronting the difficult question concerning claims for restitution of indigenous and other traditional territories. In consequence the clause cannot be a mandate alone for returning deposed peoples to protected areas or giving back to them the rights they enjoyed before conquest or colonisation in the interests of preserving traditional agricultural practices. However, the clause would be meaningless if it dictated that national law (whether presently or prospectively promulgated) simply overrides the requirements in the article especially in the case where national law is diametrically opposed to the article’s key principles (Glowka et al., 1994). A better interpretation is that the principles of the article must be implemented in a manner that conforms to national law principles. One advocate of indigenous peoples’ rights states the position as follows:

Contracting Parties cannot remain inactive, but must make all efforts to do justice to the objectives of article 8(j) (Gundling, 2000).
3.2.3. Respecting, preserving and maintaining knowledge, practices, etc.

These words as a whole imply an endeavour to secure the persistence of more than just an archival remnant of the knowledge, innovations and practices referred to in Article 8(j). Each component of the phrase has a role to play in supporting this general intention.

First, preservation and maintenance, taken together, appear to require the immediate protection of the relevant practices in a dynamic form and in their original sites rather than preserved specimens displayed in tourist parks. The context of the article in the in situ conservation section of the CBD reinforces this contention. Further, Article 8(j) must also be read in conjunction with Article 10(c), already quoted, which is contained in the convention’s section dealing with sustainable use of components of biological diversity. Thus the reference to preservation and maintenance suggests a continuation of the evolution and development of such knowledge and practices in a living, dynamic manner to the extent that they are relevant to contemporary conservation plans that deploy sustainable use strategies. Subject to all other comments made within the context of Article 9(j) examples of traditional agricultural landscapes would in part fulfil the intent of this article.

The word respect lends support to lobbyists but is obscure from a legal perspective and does not provide precise guidance. The word might connote, inter alia, the perpetuation of indigenous culture by actively teaching it in national curricula and by deploying the knowledge holders as teachers, conservation policy makers and so on. Evidence to support this interpretation is reflected in statements by CBD policy makers where respect is believed to mean that... relevant traditional knowledge should be accorded a status in national life comparable to that shown to scientific knowledge.11

However, it is difficult, if not contrived, to transmute these connotations derived from one word into absolute legal commitments. The word respect must therefore be seen as a basis for the negotiation of a more precise legal mechanism to protect traditional practices.

Reflecting on the joint construction of these articles, the Executive Secretary of the CBD has taken the potential impact much further into sovereign territory:

Taken together, these provisions therefore require Parties to recognize that biological diversity is maintained, and very often enhanced, by the knowledge, innovations and practices of indigenous and local communities and that the preservation and maintenance of biological diversity goes hand in hand with the preservation and maintenance of cultural diversity. In order that indigenous and local communities may continue to maintain and develop their knowledge, innovations and practices (in other words, are able to ensure their cultural survival), they need secure access to the basis of such biological diversity and its components in their traditional lands.12

...The need for Governments to recognize and guarantee rights to land for indigenous and traditional communities is thus a prerequisite both for the preservation and maintenance of the knowledge, innovations and practices referred to in Article 8(j), and for the protection of customary use of biological resources referred to in Article 10(c).13

The reinstatement of traditional land rights is a controversial issue in relation to the purpose and extent of this article and it remains to be seen whether signatories to the CBD will be willing to implement it to this extent. However desirable it may be, these articles certainly do not dictate that land rights should be granted as part of the process of protecting traditional practices. However, these commentaries and interpretations by policy makers clearly support the case for the preservation of traditional agricultural landscapes.

3.2.4. Communities embodying traditional lifestyles relevant for conservation

By emphasising the nature of the knowledge and practices of both indigenous and, more generally, rural communities the approach of the CBD firmly focuses on conservation rather than entangling the article in the fine details of the definition of indigenous peoples. This wide approach assists to support the preservation of traditional agricultural landscapes and the type of communities that may be involved with them. First, not all rural communities exercising traditional agricultural practices will be indigenous. Second, since the ethnicity of a community that carries out these practices may be fluid, more practices will fall within the prescriptions of international law if the definition of such communities remains unfettered by restrictive definitions of indigenous.

However, an extensive collection of international law and policy14 is concerned with the manner in which nations deal with indigenous people whereas those who are not within this category, but nevertheless carry out traditional agricultural practices, cannot claim the benefits extended by these instruments. These provisions deal with tenure, rights to participate in land management and many other issues that are key to the survival of traditional communities. The CBD carefully avoids entangling its conservation provisions with the complex and controversial tenure and indigenous rights issues. There are numerous examples of

10 UNEP/CBD/COP/3/19 knowledge. Innovations and practices of indigenous and local communities: implementation of article 8(j) (note by the Executive Secretary), para 65.
11 UNEP/CBD/TKBD/1/2 traditional knowledge and biological diversity (note by the Executive Secretary), para 83.
12 UNEP/CBD/COP/3/19, para 60.
13 UNEP/CBD/COP/3/19, para 61.
14 See respectively the International Labour Organisation (ILO) Convention 169 and the UN Draft Declaration on the Rights of Indigenous Peoples.
difficulties that are generated by this aspect of international law at the present time. Some countries with considerable populations of indigenous people and conflicting land rights claims by those people and others who wish to exploit forest timber, oil, mineral and gas resources have simply avoided ratifying the key instrument that seeks to protect indigenous rights: the International Labour Convention 169 (Martin et al., 2006).

3.2.5. Benefit sharing

Although this analysis is primarily examining the extent of legislative support for traditional agricultural landscape protected areas, incidental aspects such as benefit sharing and capacity building cannot be ignored. Article 8(j) includes provision for these aspects in that the parties are required to encourage the equitable sharing of benefits deriving from the application of the practices and knowledge described within the article. This word does not establish a strong obligation from the legal perspective and may well result in the choices being left to market forces. Effective preservation of traditional agricultural practices requires a process of capacity building and equitable sharing of benefits deriving from the practices. A voluntary initiative to amplify the principles in the CBD dealing with this aspect is contained in the Bonn guidelines on access to genetic resources and fair and equitable sharing of the benefits arising out of their utilisation.\textsuperscript{15} This document details the involvement of stakeholders particularly in the context of intellectual property rights in traditional ecological knowledge and develops the meaning of the term prior informed consent. The guidelines are thus relevant incidentally to the current enquiry in that they deal with the protection of rights in the more sophisticated aspects of traditional agricultural practices and, to an extent in unique seed stock, other unique breeds, land races and other novel forms of natural resources deployed within the traditional practices.

3.2.6. Protected areas in the CBD

Article 8 of the CBD specifically deals with in situ conservation and emphasises the establishment of protected areas as the main vehicle to achieve this. However the convention acknowledges the need to conserve biological diversity whether within or outside protected areas (see Article 8(c) CBD) and, consequently, Article 8(j)’s support for traditional agricultural landscapes is not limited to systems operating in designated areas. In practice many traditional agricultural systems operate within buffer zones adjacent to core protected areas in which human agriculture use is prohibited. Article 8(e) of the CBD assists this through the promotion of environmentally sound and sustainable development in areas adjacent to protected areas with a view to furthering protection of these areas.

However, traditional agricultural landscapes cannot be universally restricted to secondary buffer zones. To do so would compromise the integrity of these agricultural systems. In some cases the protection of these landscapes and the operations therein should be perceived as paramount and the active interface of humans and the relevant ecosystems should take place within the core protected zone itself.

3.2.7. Buffer zones in the CBD

Buffer zones adjacent to protected areas are protected where appropriate regulatory regimes have been created to secure their nature as buffers to the central protected zone. Article 2 of the CBD defines them as:

\[ \ldots \text{geographically defined area[s] which [are] designated or regulated and managed to achieve specific conservation objectives} \]

Clearly in specific zoned systems, such as within the man and biosphere (MAB) programme, all zones within a biosphere reserve are protected albeit to different degrees. However, many key zones in biodiversity hot spots where potential traditional agricultural landscapes may be found do not receive protection because they are not designated or regulated as protected areas and because there may be disagreement about whether their objectives are conservation objectives. This state of affairs may be present in systems where agricultural communities live close to protected areas and conflicts between them and the interests of preserved species may arise (such as Maasai pastoralist communities conflicting with elephant conservation priorities in Kenya (Walpole et al., 2003)). However, this phenomenon is particularly evident in some tropical rainforest areas where samples of primary forest are designated as protected areas. The ancient traditional use zones on the borders of these protected areas, where sophisticated shifting agriculture in bio-diverse secondary forest prevails, often receive no protection and even attempts to claim land rights by the traditional communities may be frustrated by other stronger competing interests such as the desire to harvest forest timber, exploit mineral, oil and gas resources or commence new tourism opportunities. Without some degree of protected area designation the traditional systems operate precariously and may contravene narrowly focused laws designed to protect primary forest protected areas that operate without an appreciation of traditional use of the forest and its positive consequence for biodiversity or without the emphasis on the preservation of agricultural-diversity (Martin et al., 2006). In consequence, regardless of whether traditional agricultural landscapes are in buffer zones or core zones within protected areas, or outside all protected zones, they will have little chance of survival without specific international regulatory support.

3.2.8. IUCN

The perspective of the IUCN is mentioned within the context of legislation because its members include states
and governmental institutions and it has a key role in advising international institutions and the conferences of the parties of conservation conventions on conservation policy. Thus its policies and publications (such as the Red List) influence international and national conservation legislation but, of course, have no legal status in themselves. The IUCN has promulgated detailed guidelines setting out an approach to classification of protected areas. A key aspect of the classification system emphasises the link between human use of resources and biodiversity within a protected area. The system descends in categories from a strict protection of natural processes (that is to say areas not materially altered by human activity) to areas where societies live in harmony with the environment in a manner undisturbed by modern technology and on to areas sustainably used but which support nature conservation. Category V usefully describes a concept similar to that of the traditional agricultural landscape:

Protected Landscape/Seascape: protected area managed mainly for landscape/seascape conservation or recreation – area of land, with coast or sea as appropriate, where the interaction of people and nature over time has produced an area of distinct character with significant aesthetic, ecological and/or cultural value, and often with high biological diversity. Safeguarding the integrity of this traditional interaction is vital to the protection, maintenance and evolution of such an area.

3.2.9. Biosphere reserves

Despite its designation as the statutory framework of the world network of biosphere reserves, UNESCO’s man and biosphere programme comprises a system of soft law whereby a network of biosphere reserves has been created throughout the world. These include zoned protected areas that specifically take into account the integration of the social, economic and the natural as they move from the central core zone through other zones to the periphery of the total protected area. The approach clearly encompasses support for the traditional agricultural landscape concept and, as MAB’s own website states:

People in many parts of the world have devised, over a long period of time, ingenious land-use practices which do not deplete the natural resources and which can provide valuable knowledge for modern production systems. Biosphere reserves are areas where such peoples can maintain their traditions, as well as improving their economic well-being through the use of culturally and environmentally appropriate technologies. Further, the current strategy for MAB reserves explicitly supports the traditional agricultural landscape concept in its attempt to reflect more fully the human dimensions of biosphere reserves.

Despite being soft law, the regime expressly requires some legal protection and national law has been generated as a result of application of the programme in a number of areas of the world.

Whereas the support for the concept is clear within the MAB programme, this initiative does not emphasise the importance of placing the human interaction within the environment in the core zone of protected areas and this is, in most cases, an aspect restricted to secondary buffer zones.

3.2.10. RAMSAR

Many traditional agricultural landscapes are in or adjacent to wetlands and this area of regulation therefore merits specific examination. The Convention on Wetlands of International Importance 1971 (RAMSAR) does not specifically mention human land practices in its text, but in the first clause in its preamble the interdependence of man and his environment is emphasised. The prevailing principle applied in RAMSAR to conservation of wetlands is wise use, which is interpreted as being synonymous with sustainable use. Therefore, the human element in conservation is pervasive in the text.

Beyond the main text, RAMSAR has established directly relevant principles entitled Guidelines for establishing and strengthening local communities’ and indigenous people’s participation in the management of wetlands. They focus on participatory management in wetlands, which would be a key factor for a community operating an effective traditional agricultural landscape in or adjacent to a RAMSAR protected area or in other wetlands. These principles

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18. IUCN Protected Areas Management Categories: National Park (2).
17. IUCN Protected Areas Management Categories: National Park (2): Anthropological Reserve/Natural Biotic Area (7).
16. IUCN Protected Areas Management Categories: National Park (2): Multiple Use Management Area/Managed Resource Area (8).
22. In Mexico, by example, Biosphere Reserves are protected by the Ley General del equilibrio Ecológico y la Protección al Ambiente Titulo segundo, Capitulo 1, Seccion 1, Articulo 48 (DOF 1988, 1996). Although the definition in Mexican law has resulted in some sites, not yet recognised by the MAB programme, being included within the national law’s definition and others which are recognised internationally being excluded (see: http://www.oceanoasis.org/conservation/status.html).
24. As defined by Ramsar COP3 (1987), wise use of wetlands is their sustainable utilisation for the benefit of mankind in a way compatible with the maintenance of the natural properties of the ecosystem.
25. Adopted as an annex to Resolution VII.8 at the 7th Meeting of the Conference of the RAMSAR Parties, San Jose, Costa Rica, 10–18 May 1999. These guidelines derive from Recommendation 6.3 of RAMSAR COP 6 (1996) which called upon the parties to make specific efforts to encourage active and informed participation of local and indigenous people at Ramsar listed sites and other wetlands and their catchments, and their direct involvement, through appropriate mechanisms, in wetland management.
support the persistence of traditional agricultural practices related to wetland management but they do not create binding obligations on RAMSAR members. Further, they are restricted to general statements and do not deal with the complexity of legislating for the different approaches to managing traditional agricultural landscapes.

In a further document, which is again non-binding, entitled Guiding principles for taking into account the cultural values of wetlands for the effective management of sites specific reference is made to the maintenance of traditional sustainable practices used in and around wetlands.

3.2.11. UNESCO’s World Heritage Convention

With its approach to preserving cultural and natural heritage and with its particular emphasis on outstanding universal value the World Heritage Convention (WHC) has a unique and precise focus. Although the definitions in Articles 1 and 2 of the text of the convention do not expressly lend support to the type of landscape envisaged within the traditional agricultural landscape concept they are fluid enough to permit development in this area. Thus the Convention’s Operating Guidelines were amended in 1992 to permit the inclusion of World Heritage Cultural Landscapes on the World Heritage List and increasingly the nominations for this category include agricultural sites. It is also interesting to note that some of the expert meetings held within the auspices of the WHC have dealt specifically with traditional agricultural landscapes (Rössler, 2005). A limiting factor that restricts the sites that can be listed is the requirement that sites have outstanding universal value. Nevertheless, the WHC provides a useful vehicle for preserving some sites where traditional agricultural practices are carried out.

3.2.12. Other conventions

A number of other international instruments deal with protected areas but without detailing practices in buffer zones or expanding on human use of land in or adjacent to protected areas. These are not dealt with because of their marginal relevance to the central issue. Other conventions add incidental support to the protection of traditional agricultural landscapes. By example the Convention to Combat Desertification in those countries experiencing drought and/or desertification, particularly in Africa (CCD) supports diverse agricultural practices and specifically traditional practices as vehicles to combat drought and to facilitate agriculture in arid zones.

Finally in this context, although the international Treaty on Plant Genetic Resources for Food and Agriculture is primarily relevant to intellectual property issues, it also deals with some aspects of in situ conservation of plant genetic resources for food and agriculture and in so doing supports traditional agricultural practices as a means to promote agrobiodiversity.

4. Conclusion

Much research has been carried out to demonstrate the value of traditional agricultural systems but the international regulatory regime does not provide a coherent framework of protection. The concept of traditional agricultural landscape is supported in principle at the international policy level and by a number of soft law instruments that all require further, detailed regulation to secure a legislative impact. The record of more detailed implementation is not, however, impressive. Agenda 21, with its grand array of principles, has been in place since 1992 but there is little evidence, in the current context, of detailed legislative developments. The CBD is notably oriented to preserving traditional practices that contribute to the preservation of biodiversity and is generally worded. Thus a party to the CBD desiring to protect traditional agricultural landscapes and the practices carried out therein could base a national law solely on the powers derived from a full implementation of the CBD provided that the appropriate detail was incorporated in the national law in the manner discussed in the preceding analysis of Article 8(j). However, politically, this would be a great deal to expect without precise elucidation of the requirements in an international instrument. The CBD only provides a framework and comprehensive provisions designed to facilitate the protection of agricultural biodiversity in a subsidiary or new international instrument would provide a far more effective lever to facilitate protection.

MAB, RAMSAR and WHC each have their own, unique approach to protected area management and preservation. All of these regimes lend some support the concept of the traditional agricultural landscape and there are a number of examples included within their respective designations.

If these protected area regimes and the provisions of the CBD are to be the only legal basis to protect traditional agricultural landscapes there are some qualifications. First,
the inclusion of a traditional agricultural landscape in a protected area regime may in some cases compromise the perceived purposes of its protection. Many of the objectives of protected area regimes relate solely to the conservation of naturally occurring resources in a manner that excludes the human element within ecosystems. Although the objectives of traditional agricultural landscapes include the preservation of biodiversity they also seek to preserve agrobiodiversity and traditional heritage and thus have their own unique focus and volition. By mixing two differing concepts there may be conflicts which will, in turn, result in the volition to protect agricultural biodiversity (with its non-legal authority) being required to compromise as the weaker party to the clear parameter of biodiversity protection. Second, the CBD and all other instruments fail to address the key issues of land tenure which would need to be faced in an uncompromising manner in order to secure lasting examples of traditional agricultural landscapes. Third, the CBD is drafted in the nature of a framework convention and in the absence of detailed subsidiary instruments it does not provide the precision required to support a consistent approach to agrobiodiversity protection. Fourth, in the case of the MAB programme, this is essentially a system of soft law and there is no obligation for state implementation. Fifth, in the case of the WHC, the need to fulfil the requirement of outstanding universal value within the listing criteria will preclude many examples of traditional agricultural landscapes.

The point relating to the lower priority given to agricultural biodiversity is perhaps the most pertinent since it provides the greatest obstacle to preserving traditional agricultural systems. A manifestation of the secondary nature of agricultural diversity is seen in the instruments that deal with the zoning of protected areas where usually this aspect is relegated to official secondary buffer zones or unofficial, legally precarious non-designated buffer zones. However, traditional agricultural landscapes need to be recognised in their own right whether they are secondary, buffer or core zones. Indeed, these traditional use zones will themselves need to be buffered from peripheral non-traditional agricultural activities, the impacts of tourism and so on.

In order to establish support for these systems in existing instruments there has to be some contrived inclusion of both agricultural heritage and agricultural bio-diversity within the existing international regulatory objective requiring the preservation of biodiversity. Therefore, there is a need, in new instruments or policy documents directly supporting traditional agricultural landscapes, to define this aspect as the prime goal of this area of conservation policy to avoid tenuous interpretations of existing law. Without clarity in this respect the political incentives for change are unlikely to materialise.

References


Barber, C.V., 2000. Trial by Fires: Forest Fires and Forestry Policy in Indonesia’s era of Crisis and Reform. World Resources Institute, Washington, DC.


Gundling, L., 2000. Implementing Article 8(j) and other provisions of the Convention on Biological Diversity to strengthen the legal positions of indigenous and local communities. COICA (Co-coordinating body of Indigenous Organisations of the Amazon Basin), Quito, Ecuador.


opment. National Zoological Park Smithsonian Institution, Kendall/Hunt Iowa.


