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Lehrbuch der Landschaftsökologie

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Spektrum

Uta Steinhardt / Oswald Blumenstein / Heiner Barsch

Lehrbuch der Landschaftsökologie

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2. Landschaft als Gegenstand wissenschaftlicher Erkenntnis

2.1 Der Begriff „Landschaft"

Was ist [die/eine] Landschaft? Diese Frage sollte erwartungsgemäß in einem „Lehrbuch der Landschaftsökologie" zu Beginn geklärt werden. Um es jedoch vorwegzunehmen: Wir werden eine eindeutige Definition dieses Begriffes nicht geben können.

Landschaft ist ein Begriff, den jeder kennt – oder zumindest zu kennen glaubt. Kaum ein anderer Begriff jedoch wird in den Wissenschaften und im allgemeinen Sprachgebrauch mit so unterschiedlichen Sinngehalten verwendet wie dieser. Der Gartenarchitekt Peter Joseph Lenné verband mit Landschaft etwas völlig anderes als der Ökologe Ernst Haeckel, ein Großstadtbewohner hat zu Landschaft andere Assoziationen als ein Sami in Lappland. Landschaft sollte jedoch jene (räumliche) Basis sein, auf der sich verschiedene Wissenschaften aber auch Wissenschaft und Politik verständigen, zu der alle Befunde haben und an deren Veränderung sie alle (mehr oder weniger zielgerichtet und bewusst) mitwirken – allein es fehlt an der begrifflichen Konsistenz.

Außerhalb der Wissenschaft wird der Begriff *Landschaft* für ein ganzheitliches und ästhetisch-harmonisches Bild von der durch den Menschen gestalteten Natur verwendet.

Weil aber Landschaft ein so wichtiger Begriff ist, wollen wir versuchen, uns der Vielschichtigkeit dieses Begriffes zu nähern, um uns dann auf ein Verständnis zu einigen, das dem hier verfolgten Zweck dienlich ist.

Bevor Landschaft zu Beginn des 19. Jahrhunderts in die Wissenschaft Einzug hielt, verband man damit ein Bild der durch menschliche Nutzung und Gestaltung geprägten Natur (Haber 1998). In diesem Zusammenhang wurde Landschaft ganzheitlich und vorwiegend ästhetisch-harmonisch aufgefasst. Dieses Landschaftsverständnis herrscht auch bis heute außerhalb der Wissenschaft vor. Fragt man beispielsweise heute ein siebenjähriges Kind nach seinem Verständnis von Landschaft, so bekommt man als Antwort: „... viel Wiese, ein paar Bäume, Wald, Pflanzen und Tiere, Acker, keine (!) Städte, ein Fluss und ein See", was den erwähnten wahrnehmungsbedingten ästhetischen Aspekt unterstreicht (Volk und Steinhardt 2002). Verwissenschaftlicht – nicht jedoch definiert - wurde der Begriff durch Alexander von Humboldt (1769-1859), der Landschaft nicht als zufällige Komposition betrachtete, sondern versuchte, Landschaft in ihre Bestandteile aufzugliedern und die gesetzmäßigen Zusammenhänge zwischen den Teilgliedern zu analysieren. Humboldt behielt jedoch dabei diese **ganzheitlich-ästhetische Sicht** bei – wie

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seinen beeindruckenden Reiseberichten zu entnehmen ist. Darauf geht die im 19. Jahrhundert entwickelte ästhetische Geographie zurück, die weitgehend mit „Landschaftskunde" identisch ist. Humboldt hat die Geographie in die Sphäre einer ästhetischen Wissenschaft gehoben (Hard 1970), denn die von ihm verwendeten Begriffe wie Physiognomik, Landschaft, (Total-)Charakter, Erdgegend hatten um die Wende vom 18. zum 19. Jahrhundert einen ästhetischen Sinn. Zu dieser Zeit stimmte der wissenschaftliche Landschaftsbegriff noch mit dem Landschaftsbegriff der Malerei und der zeitgenössischen Kunsttheorie überein (Haber 1996).
In der darauffolgenden geographisch-ökologischen Forschung wurde der ästhetische Landschaftsbegriff zunehmend durch einen kausalanalytisch-genetischen verdrängt. So sah Carl Ritter (1779-1859) einer der großen Geographen des 19. Jahrhunderts als Gegenstand der „eigentlichen" Geographie Naturgebiete und natürlich Länder; Landschaft im physiognomisch-emotionalen Sinn, in Vielseitigkeit und Einheit der organisierten Erdoberfläche in ihrem überschaubaren Zusammenhang. Friedrich Ratzel (1844-1904), einer der bedeutendsten Geographen vor rund einhundert Jahren, der den ästhetischen Aspekt noch sehr stark pflegte, schrieb:

> „Um die Dinge in ihrer natürlichen Ordnung, Abhängigkeit und Beziehung darzustellen, genügt nicht mehr das Beobachten der Einzelheiten allein. Es wäre ein großer Irrtum zu glauben, eine solche Naturschilderung sei ein Mosaik, das man einfach aus den Steinchen der Einzelbeobachtungen zusammensetzt. Gerade in dieser Schilderung kommt es auf Dinge an, die über den Einzelheiten schweben, und auf Dinge, die unter den Einzelheiten liegen. Dazu gehört ein Blick für das Ganze und die Zusammenhänge." (Ratzel 1904, S. 8)

Hierin manifestiert sich ein Grundgedanke, der sich auch bei vielen nachfolgenden Landschaftsökologen wiederfindet: Das Ganze (die **Landschaft**) ist mehr als nur die Summe der Teile. Diesem Gedanken folgte auch der Geograph Carl Troll (1899 – 1975), der 1939 den Begriff **Landschaftsökologie** prägte; er sah Landschaft als eine mosaikartige Zusammenfügung (Komplex) von belebten Ökotopen („Landschaftszellen") zu einem einheitlich wirkenden Gebilde. Mit dieser Auffassung wird aber weder der ästhetische Gehalt noch der kulturelle Wert einer Landschaft berücksichtigt. Gerade dies aber ist es, was Landschaft für die meisten Mit-

teleuropäer ausmacht: ein Bild, eine Szenerie, mit der man sich „heimatlich“ identifizieren möchte, nach der man in seinen Ausflugszielen sucht. Sie sollte abwechslungsreich, aber überschaubar, dazu gepflegt und erschlossen sein (Haber 1996).

> „Unter einer geographischen Landschaft ... verstehen wir einen Teil der Erdoberfläche, der nach seinem äußeren Bild und dem Zusammenwirken seiner Erscheinungen sowie den inneren und äußeren Lagebeziehungen eine Raumeinheit von bestimmtem Charakter bildet und ... in Landschaften von anderem Charakter übergeht.“ (Troll 1950, S. 167)

Neben Carl Troll stellt Hartmut Leser (1985, 1999) auch Josef Schmithüsen (1909 – 1984) und Ernst Neef (1908-1984) in die Reihe der Gründerväter der Landschaftsökologie. Sowohl Schmithüsens als auch Neefs Auffassung sind dem **kausalanalytisch-genetischen** Landschaftsverständnis verpflichtet:

> „Eine Landschaft ist die Gestalt eines nach seinem Totalcharakter als Einheit begreifbarer Teil der Geosphäre von geographisch relevanter Größenordnung.“ (Schmithüsen 1963, S. 9)

> „Unter Landschaft verstehen wir einen durch einheitliche Struktur und gleiches Wirkungsgefüge geprägten konkreten Teil der Erdoberfläche.“ (Neef 1967, S. 36)

Dieser geographische Landschaftsbegriff ist jedoch nicht unumstritten, wie eine ebenso scharfsinnige wie aggressive Examination von Hard (1971) zeigt: „Es ist nicht zu übersehen, dass diese „Definition“ auch durch ein Trottoir, einen Maulwurfshügel und eine Schnapsflasche erfüllt wird.“ Seine Kritik am Landschaftsbegriff der Geographie erstreckt sich bis zu Lesers (1976) „definitionsreicher Anfüllung“ (Haber 1996) des Begriffs:

> „Das Landschaftsökosystem ist ein in der Realität hochkomplexes Wirkungsgefüge von physiogenen, biotischen und anthropogenen Faktoren, die mit direkten und indirekten Beziehungen untereinander einen übergeordneten Funktionszusammenhang bilden, dessen räumlicher Repräsentant die „Landschaft“ ist.“ (Leser 1976, 1991, 1997, S. 187)

„Und wenn manche dann später und teilweise bis heute z.B. sagen, das Landschaftssystem sei ein Wirkungsgefüge von integrierten Teilkomplexen, die durch mannigfaltige Relationen miteinander zum Standortregelkreis gekoppelt seien (oder so ähnlich), dann handelt es sich nicht um neue Informationen, sondern bloß um sprachliche Transformationen sprachbürtiger Gemeinplätze, garniert mit systemtheoretischem Wortgeklingel." (Hard 1983).

Hard ist es auch, der vor einer Vermischung von Sach- und Sprachfrage warnt, wenn bei der Beantwortung der Frage, was eine Landschaft (eigentlich) sei, versucht wird, das Wesen eines Dings aus seinem Namen zu erschließen. Die von ihm als „Etymologie der Denkform" (Hard 1970) kritisierte sprachgeschichtliche Deutung des Wortes Landschaft führt aber dennoch zu einige Facetten, die zur Klärung des Begriffsverständnisses beitragen (u.a. Müller 1977, Haber 1996, Steinhardt 2001). Danach geht Landschaft als Begriff für ein geographisch zusammenhängendes Gebiet mit spezifischem Charakter und bestimmten Eigenschaften zurück auf das Althochdeutsche *lantscaf* (8. Jahrhundert) bzw. *lantscaft* (10. Jahrhundert), womit man die Vorstellung von einem Landesteil oder einer Gegend verband – etwa identisch mit dem Lateinischen *regio*. In geringer Abwandlung ist *lantschaft* für den Zeitraum 1050 bis 1350 auch im Mittelhochdeutschen nachgewiesen. Dabei setzt man den ersten Teil des Wortes *lant* oder *Land-* zur o.a. *regio* in Beziehung und führt den zweiten Teil auf den althochdeutschen Wortstamm *skapjan* (= schaffen, wirken, gestalten) zurück. Viele Begriffe, der deutschen Sprache, die auf –schaft enden, drücken i.d.R. etwas Zusammengehörendes oder –fassendes aus (z.B. Mannschaft, Kameradschaft). Aus *skapjan* ist in der weiteren Entwicklung der germanischen Sprachen dann *schaffen* und *schaben* im Deutschen und *shape* im Englischen geworden. „Durch Schaffen gestaltetes Land" erscheint Haber (1996) als eine sinnfällige Deutung von *Landschaft,* die auch eine Brücke schlägt zwischen den Inhalten von *Landschaft* in der deutschen und *landscape* in der englischen Sprache. Es muss jedoch explizit darauf verwiesen werden, dass *landscape* die vom Architekten und Landschaftsgärtner geschaffene bzw. gestaltete Landschaft meint, hier also eher der ästhetische Aspekt des Begriffes überwiegt.

Zweifelsfrei geht auch der Landschaftsbegriff einiger slawischen Sprachen auf das Germanische zurück. So kommt das Russische *ландшафт* (1707) oder das Polnische *lan(d)szaft* nachweislich aus dem Niederdeutschen. Bemerkenswert ist

jedoch, dass heute im Russischen zwischen *ландшафт* und *пейзаж* als Begriffe für *Landschaft* unterschieden wird; die letztgenannte Vokabel verwendet man im Zusammenhang mit Landschaftsbild und Malerei – also für den ästhetischen Landschaftsaspekt, die erstgenannte für den kausalanalytisch-genetischen. Dabei geht *пейзаж* auf das Lateinische *pagus* (Dorf, Gau) zurück, das sich im Italienischen *paese* (Dorf, Land) ebenso wiederfindet wie in *paessagio* (Landschaft) analog zum Französischen *pays* (Dorf, Land) und *paysage* (Landschaft). Der griechische Landschaftsbegriff *χωρα* steht als Begriff für das Land, das die *polis* (Stadt) umgibt und verweist somit auf den Gegensatz von Stadt und Land.

Der Vollständigkeit halber sei erwähnt, dass man im Japanischen eine große Vielzahl von Vokabeln für *Landschaft* kennt: *keikann (*Anblick, Ansicht, Szenerie), *keishou* (Schönheit einer Landschaft), *keishouchi* (malerische Landschaft) oder *keishounoji* (pittoresker Ort) seien nur als Beweis dafür angeführt, dass hier eindeutig der ästhetische Aspekt des Wortes im Vordergrund steht.

Ohne Zweifel ist das deutschsprachige Wort *Landschaft* ein Begriff der europäischen, möglicherweise gar nur der germano-europäischen Kultur der Neuzeit und somit anderen Kulturen nur schwer vermittelbar. Nach der Bedeutung des Wortes in der deutschen Sprache, nach der Landschaft etwas (vom Menschen) Geschaffenes ist, erübrigt sich eigentlich eine Trennung zwischen den Begriffen Natur- und Kulturlandschaft. Haber (1996) geht in seiner Deutung des Begriffes sogar soweit, dass das „schaffende Gestalten“ oder „gestaltende Schaffen“ nicht nur vom Menschen ausgeübt zu sein braucht, sondern auch von Aktivitäten oder Kräften der belebten oder unbelebten Natur – die dann „Naturlandschaft“ hervorbringen. Hier fügt sich beispielsweise die mit der „Megaherbivorentheorie“ verbundene Vorstellung ein, dass Mitteleuropa seit dem Atlantikum u.U. nicht immer ein geschlossenes Waldland gewesen ist, sondern nicht unbeachtliche Teile dieser Landschaft durch inzwischen ausgestorbene bzw. ausgerottete pflanzenfressende Großsäuger wie Waldelefant, Nashorn, Wildpferd, Riesenhirsch, Wisent, Auerochse u.v.a.m. zumindest in Teilen als Offenland erhalten wurden.

So wird also durch die kreative Tätigkeit (des Menschen) aus *Land* erst *Landschaft*. Dieser Idee ist letzten Endes auch die Landschaftsdefinition nach Haase et al. (1991) verpflichtet (Abb. 2.1-1), die einen von der Naturausstattung vorgezeichneten und durch anthropogene Eingriffe überprägten Teil der Erdhülle als *Landschaft* bezeichnet:

„Der Begriff *Landschaft* bezeichnet Inhalt und Wesen eines von der Naturausstattung vorgezeichneten und durch die Gesellschaft beeinflussten und gestalteten Raumes als Ausschnitt aus der Erdhülle." (Haase et al. 1991, S. 22)

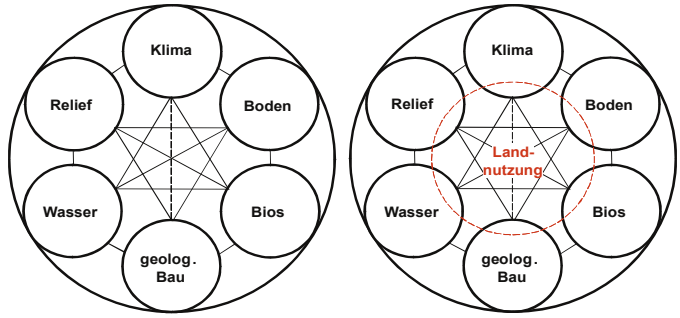


Abb. 2.1-1 Diese Modellvorstellung von Naturraum (links) und Landschaft (rechts) widerspiegelt den Landschaftsbegriff im Sinne von Haase et al. (1991): Die natürlichen Wechselwirkungen zwischen den abiototischen und biotischen Landschaftskompartimenten werden durch direkte Eingriffe oder indirekte Effekte menschlicher Tätigkeit überprägt.

I.S. Zonneveld (1995) misst Landschaft drei verschiedene Bedeutungen bei und unterscheidet zwischen der Wahrnehmungslandschaft (Landschaftsbild oder „*scenery*"), Landschaft als Mosaik oder Gefüge (*pattern*) und Landschaft als (Öko-) System im Sinne eines „pragmatischen Holismus". Er betrachtet dabei „Land" als Synonym für den letztgenannten Landschaftsbegriff im Sinne eines vollständigen Systems und grenzt diesen unverwechselbar von „*scenery*" ab. Konsequent schlägt er auch vor, die zuständige Wissenschaft „Landökologie" oder „Landwissenschaft" zu nennen und betitelt sein Buch *Land Ecology*.

Angesichts der bisher geschilderten Bemühungen um eine wissenschaftliche Definition und Inhaltsbestimmung wird also Landschaft als wissenschaftlicher Begriff fragwürdig. An ihn sind bestimmte Wertvorstellungen geknüpft; er bleibt in jedem Fall unpräzise und ist durch spezifische Denk- und Vorstellungstraditionen behaftet und dadurch zugleich auch eingeengt. Im nichtwissenschaftlichen Verständnis verbindet man Landschaft mit Begriffen wie „angenehm", „schön" und „harmonisch" und assoziiert damit stets auch etwas Ganzheitliches. Angesichts der wissenschaftlichen Unverträglichkeit dieses Begriffes liegt die Frage nahe, ob sich die Landschaftsökologen möglicherweise von Landschaft tren-

nen sollten. Troll, der den Begriff „Landschaftsökologie“ 1939 einführte, erkannte die Gefahr möglicher Missverständnisse und schrieb 1970: „Um die internationale Verständigung zu erleichtern, habe ich neuerdings das Wort *Geoökologie (geoecology)* vorgeschlagen . Nach seinem Verständnis sind Landschaftsökologie, Biogeocoenologie und Geoökologie synonym zu gebrauchende Begriffe.

Hard wiederum stellt die Existenz der Landschaftsökologie als Wissenschaftsdisziplin gänzlich infrage: „Es gibt keine Landschaftsökologie im Sinne einer Ökologie der ganzen Landschaft, aber natürlich gibt es viele Ökologen, die sich irgendwie mit landschaftlichen Phänomenen beschäftigen, und einige wenige von ihnen nennen sich dann, die beschriebene Suggestionskraft der Landschaftsvokabel nutzend, „Landschaftsökologen“.“ (Hard 1983). Dem kann man entgegnen, dass es die Ökologie der ganzen Landschaft noch nicht gibt, aber die heutige Landschaftsökologie genau diesen Weg beschreitet.

Während im deutschsprachigen bzw. europäischen Raum heftig um Begriffe debattiert wurde, nahm die Landschaftsökologie als *Landscape Ecology* im angelsächsischen Sprachraum insbesondere in den USA eine rasche und unerwartete Entwicklung, bei der man zwar auf europäische Vorbilder und Traditionen Bezug nahm – dies jedoch ohne nicht enden wollende Diskussionen und Infragestellung von Begriffen sondern in einer praktischen Anwendung. Forman und Godron (1986) fassen Landschaft sehr nüchtern auf als ein heterogenes Landgebiet, zusammengefügt aus einer Gruppe (*cluster*) von in Wechselwirkungen stehenden Ökosystemen, die sich in ähnlicher Form überall im Gebiet wiederholt. Sie sehen in der Anordnung der *cluster* typische wiederkehrende Muster (*pattern*), die in eine Hintergrund-„Matrix“ eingebettet sind. Die wesentlichen Muster-Elemente sind „Flecken“ (*patches*) und „Korridore“ (*corridors*), die zu „Netzwerken“ verbunden sein können:

> „We can now define landscape as a heterogeneous land area composed of a cluster of interacting ecosystems that is repeated in similar form throughout.” Forman und Godron 1986, S. 11)

Die nordamerikanische Landschaftsökologie konzentriert sich auf die Untersuchung der Struktur räumlicher Muster und deren Wirkung auf ökologische Systeme (Wiens 1995, Turner und Gardener 1991, Turner et al. 2001).

Naveh und Lieberman führen 1984 den Begriff des „Total Human Ecosystem“ ein und versuchen dabei, die Kluft zwischen der nach Trepl (1996) unvereinbaren ästhetischen Landschaftskunde (mit dem holistisch-kulturellen Gemäldeaspekt) und den kausalanalytischen Untersuchungen der Landschaftskompartimente in ihrem Zusammenwirken zu überwinden, indem sie das menschliche Handeln stark betonen und den Einfluss des Menschen sowie der Einbindung seiner selbst in das System auch sogenannte *soft values* für die Aufrechterhaltung von „*health and integrity of landscapes*“ berücksichtigen.

> „The Total Human Ecosystem is the complex sum of all landscapes, interacting and integrating with human beings. Whereas the geosphere, the biosphere and noosphere can be understood as subsystems of the landscape, the Total Human Ecosystem is the conceptual suprasystem.“ (Naveh und Lieberman 1944, S. 26)

In der damit verbundenen Weiterentwicklung des klassischen Landschaftsbegriffs der Geographie wird Landschaft zu einem wahrnehmungsabhängigen Konstrukt (Abb. 2.1-2).

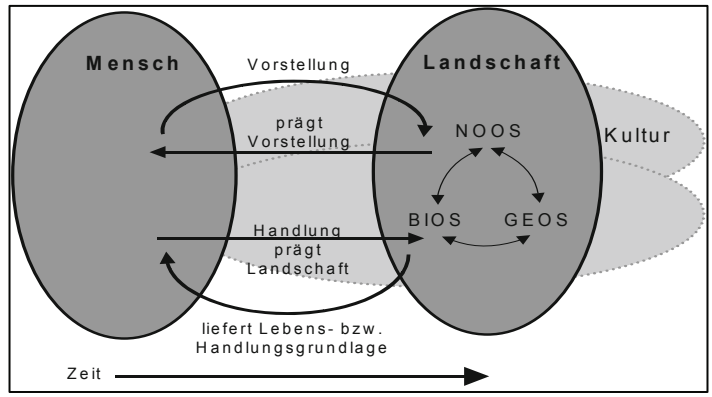


Abb. 2.1-2 Das Mensch-Landschaft-Modell (nach Tress und Tress 2001) basiert auf dem Total Human Ecosystem Konzept von Naveh und Lieberman, nach dem Landschaft als Berührungspunkt von Natur (Bios, Geos) und Kultur (Noos, grch. [Geist]) aufzufassen ist. Der Mensch prägt dabei durch sein Handeln die Landschaft; diese wiederum prägt die Vorstellungswelt des Menschen und damit auch sein Handeln

Die Beschäftigung mit Landschaft kann daher nicht die Zuständigkeit einer fachlichen Disziplin sein, sondern ist eine human- und kulturwissenschaftliche Aufgabe. Landschaftsökologie kann dazu beitragen, indem sie sich in Richtung

Humanökologie ausweitet, aber zugleich die naturwissenschaftlich-ökonomische Basis einer Landschaft liefert. Denn ob das Bild der *Landschaft* im traditionellen Sinn überhaupt weiter existieren wird, ist von der Entwicklung zukünftiger Landnutzung und des Umgangs mit Land abhängig.
Auch wenn mit dem *Total Human Ecosystem* ein konzeptionelles Suprasystem als gedankliches Konstrukt entwickelt wurde, ist dies dennoch wenig hilfreich beim praktischen Umgang mit Landschaft. Bis heute ist es unmöglich, den kausalanalytischen und den ästhetischen Aspekt bei der praktischen Analyse von Landschaft zu vereinen. Da sich dennoch die Notwendigkeit eines vernünftigen Umgangs mit Landschaft ergibt, fühlt sich dieses Buch vordergründig dem kausalanalytischen Aspekt der Landschaft verpflichtet und berührt den ästhetischen Aspekt nur randlich. Demnach soll Landschaft hier im Sinne von Haase et al. (1991) verstanden werden als ein von der Naturausstattung vorgezeichneten und durch anthropogene Eingriffe überprägten Teil der Erdhülle (Abb. 2.1-3).

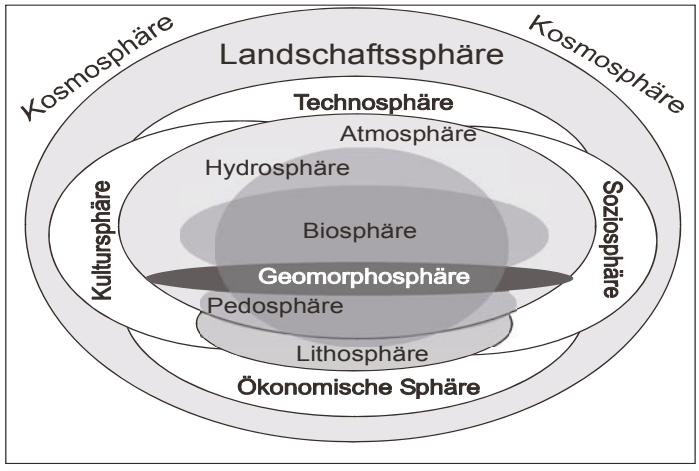


Abb. 2.1-3 Modellvorstellung zu den Kompartimentsphären Landschaft (Löffler 2002c)

Danach erübrigt sich eine Differenzierung in „Naturlandschaft“ und „Kulturlandschaft“; der „Naturraum“ selbst besitzt nur hypothetischen Charakter, da nahezu alle Teile der Erdoberfläche durch menschliches Wirken (beispielsweise durch die Fernwirkung von Emissionen) beeinflusst sind. Mit dem Begriff „Naturraum“ wird von der Landnutzung abstrahiert. Er verkörpert nicht reelle Gegebenheiten.

Ungeachtet aller wissenschaftlichen Exaktheit ist Landschaft offenbar ein Begriff, der verbindet, ein Begriff der die Kommunikation zwischen Menschen ganz unterschiedlicher Herkunft, Interessen und Werthaltungen erleichtert (Deutsches MAB Nationalkomitee 2004). Auch wenn Landschaft nur als Manifestation menschlicher Werthaltung existiert: Eine Unterscheidung in „Naturlandschaften" (Gebiete, in denen menschliches Wirken nicht zu einer **substanziellen** Veränderung der Landschaftseigenschaften geführt hat) und „Kulturlandschaften" (Landschaften, die in ihren Eigenschaften **maßgeblich** durch menschliches Wirken gestaltet worden sind) ist dann offensichtlich sinnvoll.

2.2 Raum-zeitliche Hierarchien

2.2.1 Räumliche Dimensionen oder Wie groß ist eine Landschaft?

Bei dem Versuch der Definition des Begriffs „Landschaft" in Kap. 2.1 wurde u.a. formuliert, Landschaft sei ein durch die naturräumlichen Komponenten vorgeprägter und durch anthropogene Einflüsse gestalteter Ausschnitt aus der Erdoberfläche. Wie groß aber nun kann/darf/ muss dieser Ausschnitt sein? Entspricht das Porensystem im Boden diesem Begriffsverständnis? Zunächst soll versucht werden, eine untere Grenze zu finden. Bei der Suche nach der kleinsten Landschaftseinheit gibt es – wie in Kap. 5 noch gezeigt wird – auch verschiedene Begriffsvorschläge, die einem nahezu gleichen Gedanken folgen: Der zu betrachtende Ausschnitt sollte **horizontal homogen** sein.
Löffler (2002c) hat versucht, mit der Einführung des neuen Begriffs **Econ** Klarheit – auch im Sinne einer internationalen Verständigung – in die Sache zu bringen:

> Das **Econ** ist ein konkreter Teil der Landschaft mit einer spezifischen Vertikalstruktur der Landschaftskomponenten. Diese Komponenten bedingen spezifische Prozesse zwischen den Kompartimentsphären der Landschaft. Demnach ist ein **Econ** ein kleiner repräsentativer Ausschnitt aus einer größeren Landschaftseinheit, der als Grundlage für die Analyse der landschaftlichen Vertikalstruktur und der dort ablaufenden Prozesse dient. (Löffler 2002c)

Chapter 1.2: The emergence of an international system of protected areas categories

See "The history of the international system of protected areas management categories", Chapter 2.1

The idea of protection of special places is universal: it occurs in the traditions of communities in the Pacific (e.g. 'tapu' areas), in the sacred groves of Africa and in hunting areas in parts of Europe and Asia. However, the idea of protected areas as we now know them can be traced back to the nineteenth century. It is generally agreed that the first 'modern' national park came into being in 1872 with the dedication of Yellowstone by United States law "*as a public park or pleasuring ground for the benefit and enjoyment of the people*". Similar forms of protected areas emerged in several other countries around the same time. In 1885, Canada gave protection to the hot springs in the Bow Valley of the Rocky Mountains, now part of Banff National Park and in 1887 the Maoris took steps to protect the sacred summits of Tongariro, Ngauruhoe and Ruapehu in New Zealand: the Tongariro National Park Act was passed in 1894 and the park was gazetted in 1907.

While the modern protected areas movement thus had its origins in the then 'new' nations of North America, Australia, New Zealand and South Africa, other countries were quick to follow suit. During the twentieth century the idea spread around the world, though the driving force for protection differed between regions. For example, in Africa large game parks were created for wildlife, whilst in Europe landscape protection was more common. By the end of the twentieth century, nearly every country had adopted its own protected area legislation and designated sites for protection and many organisations in the public, private, community and voluntary sectors became active in creating protected areas. This very short history hints at some of the issues that gave rise to the move to develop a system for categorising protected areas which:

- Have been set up for different reasons
- May be established in areas ranging from wilderness to long-settled landscapes
- Have been set up in forests, savannahs, grasslands, mountains, deserts, wetlands, ice caps, lakes and at sea
- Vary greatly in size
- Have been given many different names at the national level
- Are based on national legislation which takes many different forms
- Came about through a wide variety of governmental and other initiatives
- Are owned by different interests
- Are run by different kinds of organisation.

Early protected areas in Africa tended to be game parks whereas Europe focused more on landscape protection

Lion in Serengeti, Tanzania: Marc Hockings and Parc Jurassien Vaudois, Switzerland: Nigel Dudley

First moves to categorise protected areas

The first effort to clarify terms relating to protected areas was made in 1933, at the International Conference for the Protection of Fauna and Flora, held in London. In 1942, a rather different classification was incorporated into the Pan American Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere. With the emergence of a world-wide conservation movement after the Second World War, a global framework for protected

areas began to emerge. The main instrument for this has been the IUCN international network – or commission – of volunteer experts on the topic of protected areas. The International Commission on National Parks was established in 1960. Within a few years, it became the Commission on National Parks and Protected Areas of IUCN (CNPPA) and since 1996 it has been the World Commission on Protected Areas (WCPA).

In 1972, the II World Conference on National Parks adopted a resolution which recommended that IUCN, "*taking into account existing terminology in international treaties and in close consultation with governments concerned (should): (1) Define the various purposes for which protected areas are set aside; and (2) Develop suitable standards and nomenclature for such areas*". In 1975, CNPPA began work on developing a categories system for protected areas. The outcome of this work was a system of ten categories of protected area, based on management objectives rather than their national names[2]. These categories represented a variety of conservation-related management purposes to be thought of as "*members of one family, free from dominance one by another*".

The 1978 report suggested that such a categorisation system could achieve several purposes, including:

- Showing how national parks might be complemented by other land management categories
- Helping countries develop management categories which reflected particular resources and needs
- Providing "*the possibility to gradually establish systematic procedures to remove ambiguities and inconsistencies due to variations in administrative, institutional, legal and political mechanisms among nations*"
- Ensuring that "*regardless of nomenclature used by nations or consistent to particular languages, a conservation area can be recognised and categorised by the objectives for which it is in fact managed*"
- Providing the scientific community with access to more complete data on natural areas under conservation management
- Helping IUCN to secure the support of "*development banks and development institutions*" by showing how a range of land conservation tools could address both conservation and development needs
- Aiding IUCN to produce more informative versions of its directory of national parks and other protected areas.

Despite these strengths, there were some limitations in the system as well:

- It did not contain a definition of a protected area as such, so the 'universe' covered by the categories system as a whole was not evident
- It apparently went beyond protected areas, into broader areas of land management, leading to some confusion as to whether it was a system for categorising land management or of protected areas, or both
- It included two international categories (IX – Biosphere Reserve and X – World Heritage Site: Natural), while acknowledging that many such sites might already be protected under a previous category – a confusing arrangement
- Distinctions between definitions of categories were not always clear
- The system was largely terrestrial in its concepts and language. Better coverage of the marine environment was needed.

The 1994 protected area management categories

As early as 1984, CNPPA established a task force to consider up-dating the categories system in light of the limitations described overleaf. The task force conducted a debate, initially amongst Commission members, and then more widely, which culminated in a three day workshop at the IV World Congress on National Parks and Protected Areas in Caracas, Venezuela in 1992. As a result of the workshop's conclusions, the Caracas Congress adopted a recommendation urging CNPPA and the IUCN Council to: "*endorse a system of six protected area categories based on management objectives; recommend this to governments; and explain it through guidelines*".

In fact, the IUCN Council referred this matter to a higher level and in 1994, ten years after the review of the 1978 system had begun, the IUCN General Assembly approved the new system, commended it to governments and called on CNPPA to finalise guidance to explain it. Later in 1994, IUCN and the World Conservation Monitoring Centre (WCMC) published *Guidelines for Protected Area Management Categories*, in English, French and Spanish[3].

An analysis of the new system of categories compared to the 1978 system reveals some interesting developments:

- Whereas the definitions used in the 1978 system implied that human occupation or resource use were unwelcome or unacceptable in some protected areas, the 1994 system explicitly recognises that some permanent human presence – albeit very slight in certain cases – may occur in all categories except Ia (Strict Nature Reserve)
- The 1978 system is fairly prescriptive about the type of agency that would normally manage each category. The 1994 system allows for more flexibility, including management by private individuals and bodies, non-governmental organisations, indigenous peoples, community groups and governments at all levels
- The 1978 system tends to see all protected area categories as managed for the broader public good. Though this perspective is still strong in the 1994 guidance, it also recognises that the interests of indigenous peoples and other local groups should also be taken account of
- The 1994 system of categories also introduced a new category of protected area: a protected area managed mainly for the sustainable use of natural resources (Category VI). This represented a response to a widely held concern among many developing country participants at the Caracas Congress that the system needed to recognise that there are many places where resources are conserved in essentially their natural condition as a basis for sustainable use.

In his introduction to the 1994 Guidelines, the then Chair of CNPPA, P.H.C. (Bing) Lucas wrote that "*These guidelines have a special significance as they are intended for everyone involved in protected areas, providing a common language by which managers, planners, researchers, politicians and citizens groups in all countries can exchange information and views*"

New Zealand
Nigel Dudley

The 1994 system explained

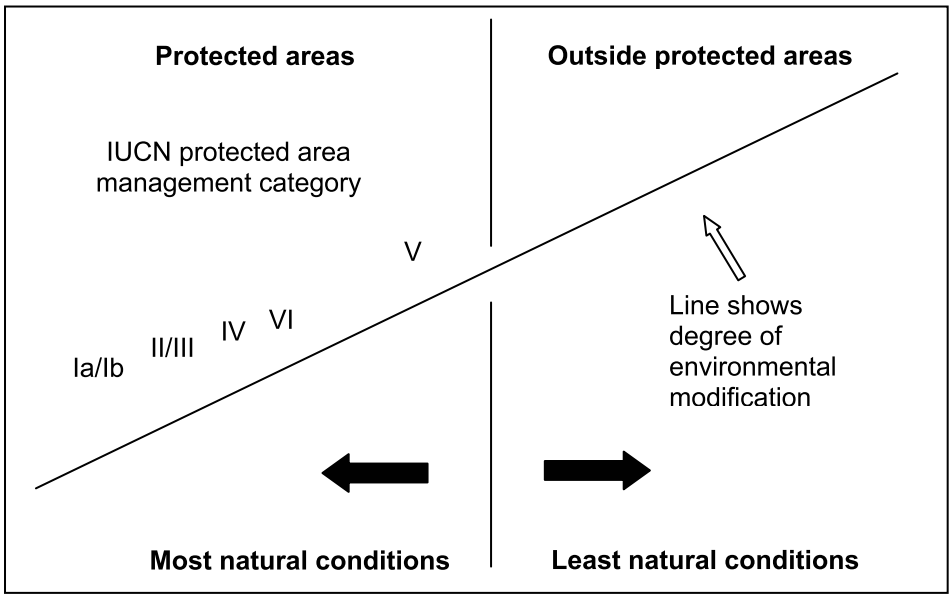
The 1994 Guidelines sets out a definition of 'protected area' as: *An area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means*[4]. This is the foundation of the system, as it defines the "*universe*" to which the categories apply. If an area does not meet this definition, it is not a protected area as far as IUCN is concerned and is not covered by any protected area category.

Conversely, any area that is recognised under this definition should be capable of being assigned to a category. Furthermore, the definition:

- Explicitly applies to the marine as well as the terrestrial environment
- Requires that there should always be a special policy for conservation of biodiversity
- Allows for conservation of natural resources, and those cultural resources which are *associated* with these
- Requires that a management regime be in place, but acknowledges that in some places this may be done effectively through tradition or ownership rather than a formal legal means.

The six protected area management categories which follow this definition are given in detail in Appendix 1. In the 1994 Guidelines, each category is explained in detail through an overall definition, the objectives of management, guidance for selection and organisational responsibility. The text also referred to the equivalent category in 1978 system. The explanation is illustrated by a set of case studies from around the world. A number of important principles found in the 1994 Guidelines help to further explain the categorisation system. These include that:

- the basis of categorisation is by primary management objective
- assignment to a category is not a commentary on effectiveness of management
- the categories system is international
- national names for protected areas may vary
- all categories are important (i.e. the system is not intended as a hierarchy), ***but***
- a gradation of human intervention is implied (see Figure below).



IUCN protected area categories and degree of environmental modification[1]

[1]This diagram is a schematic representation to illustrate the extent to which the natural environment is likely to have been modified in each category of protected area. It does not mean that in every case one category will relate to another as shown. Nor, of course, is it meant to imply that the environment of protected areas is invariably less modified than that to be found outside protected areas.

The 1994 Guidelines also deal with the application of the categories system, giving some basic rules for its interpretation. Many of the questions that are often asked about the system are answered here. The main points are summarised below but, for a definitive explanation, the reader should consult the original text.

- The **management unit** is the protected area for the purposes of the categories system: usually this will be a separate legal entity
- **Size** is not a relevant factor in assigning the system of categories, though the size should be sufficient for the area to fulfil its objectives
- Where **zoning** is applied for management purposes at least 75 per cent of the area should be managed for the primary purpose (and uses in the remaining area should not conflict with the primary purpose)
- **Governance** may rest with the public, private, community or voluntary sectors, regardless of category
- **Ownership of land** may similarly be in the public, private, community or voluntary sectors, regardless of category
- The system is intended to be sufficiently **flexible** to meet the needs of all regions
- **Multiple classifications** may arise when several protected areas in several different categories are contiguous; or surround one another
- **International designations** are to be considered as quite separate from the categorisation exercise.

The definition states that at least 75 per cent of a protected area should be managed for the primary purpose

Triglav National Park, Slovenia: Nigel Dudley

Finally, the system was not specifically designed to provide the basis for management standards of individual protected areas. Indeed IUCN/WCMC advised that it was not to be used as a "*driving*" mechanism, but that protected areas should first be established to meet national or local need and then be "*labelled with an IUCN category according to the management objectives*".

Chapter 1.3: Evaluating the original purposes of the IUCN Categories

Please note that throughout the text the more detailed case studies prepared by the project are referred to in grey type in the side margins.

The 1994 guidelines identified six purposes for the categories system (see box below). Drawing on the 18 case studies and working papers developed by the project, an assessment of the original purposes follows in the sections below. Only four of the six purposes are discussed in detail: the first is considered to be very general and the last is really a summation of the whole list.

The purposes of the guidelines as published in the 1994 Guidelines are:

1. **To alert governments to the importance of protected areas**
2. **To encourage governments to develop systems of protected areas with management aims tailored to national and local circumstances**
3. **To reduce the confusion that has arisen from the adoption of many different terms to describe different kinds of protected areas**
4. **To provide international standards to help global and regional accounting and comparisons between countries**
5. **To provide a framework for the collection, handling and dissemination of data about protected areas**
6. **And generally to improve communication and understanding between all those engaged in conservation.**

Encouraging national protected area systems

"A system plan is the design of a total reserve system covering the full range of ecosystems and communities found in a particular country. The plan should identify the range of purposes of protected areas, and help to balance different objectives."[5]

This purpose – to "*develop systems of protected areas with management aims tailored to national and local circumstance*" – really has two distinct aims: that protected area systems should wherever feasible include the diversity of protected areas and associated management regimes as suggested in IUCN's categories system; and that management regimes should reflect national and local realities. This purpose reinforces the overall goal of the categories to provide a global framework rather than a series of prescriptive management objectives to be imposed on national protected area systems.

The wealth of experience behind the design of the categories system make it a valuable tool for developing regional and national protected area systems. Indeed, the volume on protected area systems development in the WCPA best practice series recommends that governments consider establishing protected areas using the IUCN system as a means to implement Article 8a of the Convention on Biological Diversity (which calls on States Parties to develop systems of protected areas)[6].

See case study on "The influence of the IUCN Categories on legal and policy frameworks": Chapter 2.2

Research by IUCN's Environmental Law Centre (ECL) shows that several countries have used the system of categories as a basis for developing or reviewing their system of protected areas; however, although the ELC maintains records of environmental legislation, there is no central

information resource monitoring environmental policy, and so the exact extent to which the categories have been used is hard to assess. Examples of IUCN categories being referred to in protected area policy were found in Argentina, Australia, Brazil, Bulgaria, Ecuador, Guatemala, Guinea Bissau, Hungary, India, Kuwait, Russia, Saint Lucia, Saudi Arabia, Slovenia, Spain and Ukraine. At the sub-national (i.e. state) level, examples include Canada, where the Québec Government has developed a Strategic Action Plan for implementing a protected areas network in the province using the IUCN categories as a basis[7]. Even from this incomplete survey, it is clear that more countries around the world have policy documents incorporating the IUCN categories than have incorporated them into legislation (see Chapter 1.4): a result to be expected from a system developed barely ten years ago, as policy or strategies tend to be updated more regularly than legislation.

Reducing confusion about terminology

The third purpose of the categories system in the 1994 Guidelines refers to reducing the confusion that has arisen from the adoption of the many different terms to describe different kinds of protected areas. While the 1994 Guidelines give prominence to the numbers and related objectives of protected area management (i.e. Categories I to VI), they also retain the names traditionally attached to protected areas (i.e. Strict Nature Reserve and National Park), even though they are often used at the national level to encompass protected areas with very different management objectives. To retain the names may therefore be considered as somewhat inconsistent with the aim of developing a common language that is independent of the variable terminology used at the national level. The decision to do so was the result of a compromise between the traditionalists, who were opposed to the loss of all mention of national parks in particular and others who wanted to move to entirely "*neutral*" titles[8].

Nevertheless, the system has apparently been successful in encouraging at least some governments to consider the management objectives of individual protected areas when reporting them internationally, whatever their name. For instance, 'national parks' existed long before the system and some had very different aims from those defined under Category II: as a result some countries have categorised their national parks under other IUCN categories, whilst keeping the name 'national park' (see Table below).

Category	Name	Location	Size (ha)	Date
Ia	Dipperu National Park	Australia	11,100	1969
II	Guanecaste National Park	Costa Rica	32,512	1991
III	Yozgat Camligi National Park	Turkey	264	1988
IV	Pallas Ounastunturi National Park	Finland	49,600	1938
V	Snowdonia National Park	Wales, UK	214,200	1954
VI	Expedition National Park	Australia	2930	1994

Examples of national parks in different IUCN categories

See case studies on "Applying the IUCN Categories in Vietnam (Chapter 2.18)", "The role of the categories in developing self-declared Indigenous Protected Areas in Australia"(Chapter 2.13) and on "Creating a common language" (Chapter 2.4)

In other cases, however, retaining names such as national park in the international system has undoubtedly caused confusion, both legally and culturally. For instance in Vietnam (see Chapter 2.18), where the category system was used as the basis for the protected areas' legal and regulatory

framework, the initial interpretation of the IUCN categories was primarily based on name rather than on the management objectives of the country's protected areas. In Australia, when the categories system was used as the basis for discussions aimed at developing a system of Indigenous Protected Areas (see chapter 2.13), questions were raised over the title and definition of Category Ib (Wilderness), as from the perspective of indigenous people no 'wilderness' areas exist since there is no landscape without people or cultural significance.

Another way to ensure harmony in the way protected areas are classified internationally is to provide awareness raising and capacity building for all those using the categories system. First steps in this direction have been made with the publication of notes on interpretation and application of the system in Europe[9] and draft guidelines in Australia[10]. WCPA's Cardiff Best Practice series has published a volume specifically on Category V, which develops principles and guidelines for the planning and management of this category[11]. There is an urgent need for similar advice for other categories, but particularly on the new Category VI.

Providing international standards

See case studies on "Use of the categories in criteria and indicator processes" (Chapter 2.10) and "Certification of forest management" (Chapter 2.11)

The fourth purpose outlined in the 1994 categories is to provide international standards to help global and regional accounting and comparisons between countries. The system of categories is increasingly being used to provide standards for a range of initiatives, from the assessment of the effectiveness of protected areas by governments and NGOs, to institutions in the private sector using them to promote corporate environmental standards.

At the 1992 IVth World Parks Congress, in Caracas Venezuela, most discussion focused on the creation of new protected areas. There was relatively little focus on the need for a systematic approach to assessing and raising the effectiveness of management of existing areas. In the years since, the emphasis has changed dramatically and a number of new developments mean that protected area quality is assuming ever greater importance.

Many of these developments come from the recognition of the extent to which existing protected areas are under threat or are undergoing actual degradation, and thus a greater emphasis on the management effectiveness of protected areas. To set standards, and to assess and guarantee effectiveness, the protected area management objectives need to be clear. The IUCN system of protected area management categories should help to achieve this, and examples exist of its use. The WCPA Framework for Assessing Management Effectiveness offers some advice on distinguishing between different management categories in assessments[12], and there is a proposal from WCPA in Europe to develop a certification system for application of the categories system to protected areas. There is also interest in the development of standards for protected area management, including a WCPA project to agree basic standards and discussions about ways of guaranteeing management effectiveness, ranging from danger lists to certification systems.

The drive to certify protected area categories in Europe came partly because the Austrian government linked level of financial support to the category

Austrian Alps: Nigel Dudley

In other areas the category system remains poorly reflected in situations where it seems ideally suited to contribute. For example, the movement towards certification of good forest management, which has emerged since

the categories system was agreed and overlaps with many protected areas, does not consider the implications of the category system (see Chapter 2.11). The same is true for other environmental certification systems such as organic farming and the Marine Stewardship Council. Efforts to set standards for good environmental management still tend to judge protected areas as single management entities rather than as a suite of quite different management systems. An assessment of the various regional criteria and indicator processes to encourage good forest management, found that they ignored the categories, and a superficial analysis of similar approaches in other biomes suggests that this is indicative of a more general lack of awareness (see Chapter 2.10).

Just as the categories are receiving increasing attention from resource using industries, like mining and energy (see Chapters 2.15 and 2.16), so it should be of increasing concern to financial institutions which invest in many of their activities. They too may find the category system provides a useful framework for their investment strategies and decisions.

Creating a framework for handling data

See case studies on "Improving category assignment (Chapter 2.3); large multiple use areas (Chapter 2.5); marine protected areas (Chapter 2.8); regional criteria and indicators processes (Chapter 2.10) and "Vietnam" (Chapter 2.18)

The fifth purpose for the category system given in the 1994 Guidelines, and perhaps the most pressing at the time was provision of a framework to standardise protected area data collection, handling and dissemination. During the 1990s, the political profile of protected areas rose dramatically as NGOs and civil society clamoured for protection of fragile habitats. IUCN's call for at least 10 per cent of the world to be in protected areas created many associated campaigns. It also meant that governments were under pressure to prove their conservation credentials. One inevitable result was a great amount of confusion as to the precise facts about the area of land and water under protection.

The system of categories aimed to provide a transparent and credible framework for reporting on protected areas. This is reflected most clearly in the World Database on Protected Areas (WDPA) maintained by the UNEP-World Conservation Monitoring Centre, and the reporting of the categories in various editions of the UN List of Protected Areas[13]. The wide uptake of the system by national governments in their reporting to UNEP-WCMC shows that in this respect the categories system has been highly successful.

Should plantations in category V protected areas be counted as "forest protected areas"? Further guidance is needed on the use of the categories in forest statistics

Plantation in Snowdonia National Park: Nigel Dudley

Unfortunately, while reporting needs created a major spur for development of the system of categories, it also created problems. Perhaps the broad philosophy behind the system does not always mesh well with the needs for precision in reporting. For example, when the UN Economic Commission for Europe (UNECE) asked countries to report on forest protected areas for its *Temperate and Boreal Forest Resource Assessment 2000*, information was requested on the IUCN categories. The results were confusing as, for example, it was not clear whether plantations in Category V protected areas should be considered as 'forest protected areas' or when forests managed for avalanche control or watershed management became 'forest protected areas'.

Therefore the statistics using the IUCN categories do not always provide wholly reliable data in respect of forests. As a result, the UNECE and the Ministerial Conference on the Protection of Forests in Europe created an alternative set of definitions, which although compatible with the IUCN

categories, also contain many ‘protective forests’ which do not meet IUCN’s definition of a protected area.

There is also confusion about whether different zones within a protected area can be assigned to different categories, an issue that has particular relevance to marine protected areas. For instance, many Category V or VI marine protected areas contain zones that are more strictly protected than others (no take zones). Although there are precedents for addressing this (e.g. in Australia), many protected area agencies find this issue difficult and are looking for further guidance.

More fundamentally, there have been problems in assigning categories and in some cases understanding the system of categories – especially when those assigning categories do not fully understand English, French or Spanish, the languages of the 1994 Guidelines (although translations have been made into several other languages).

Many countries have not assigned all their protected areas to categories, or have assigned them incorrectly. In the past, UNEP-WCMC has assigned categories to protected areas when countries have not done so. This practice has now been abandoned by the Centre: only those sites that have been assigned a category by the Government concerned are given a category in the 2003 UN List.

Chapter 1.4: Evaluating the new uses of the IUCN Categories

As well as being used for purposes in-line with the original aims outlined in the 1994 Guidelines, the IUCN categories have also developed a variety of new roles. Many of the questions that have arisen occur because the system of categories is being used in ways that were not originally planned. The sections below identify and discuss some major points that have been raised or became obvious during our research.

Providing a basis for legislation

See case study on "The influence of the IUCN categories on legal and policy frameworks": Chapter 2.2

Although not one of its original intentions, the IUCN categories have been used by some governments as the basis for their protected area legal frameworks. From a conservation perspective, using the system of categories in legislation can provide specification of objectives (e.g. to give guidance to decision makers) and regulation of activities.

An initial review of the extent to which legal (and policy) frameworks have used the IUCN categories, carried out for the SaCL project by IUCN's Environmental Law Centre (ELC) in 2002, found that 20 countries out of the 164 reviewed have used the IUCN categories system (both the 1978 and 1994 versions) in national law and or in binding national regulations. As many national laws were passed some time ago and reviews are infrequent, perhaps more important in determining trends is that the system has been used in ten per cent of the reviewed legislation developed since 1994[2]. In most cases the categories have been amended to suit the national situation. As noted earlier, the ELC study also found that more countries have national policy documents incorporating the IUCN categories system than those that have incorporated it into their legislation. This also suggests that the inclusion of the categories system within legislation may become more widespread as policy recommendations are adopted into law.

The ELC study also looked at international processes and agreements. Most instruments at a global level pre-date the development of the categories system. There are however some important exceptions to this, which highlight the use of the categories internationally. The categories system has been recognised by the 2000 Intergovernmental Forum on Forests and the revision of the 1968 African Convention on the Conservation of Nature and Natural Resources, adopted in July 2003, incorporates the IUCN Protected Areas Management Categories in an Annex to the text. In February 2004, CBD adopted a Programme of Work on Protected Areas, which includes an endorsement the categories system and calls on governments to use it in reporting.

Queensland state government in Australia has used the categories in legislation to help broaden the type and reach of protected areas

Lamington National Park: Nigel Dudley

Opinions differ as to whether IUCN should actively promote the use of the categories system in legislation. However, there is general agreement that the issue should be monitored and that more advice is needed on the category system and legal issues relevant to its use in national legislation.

[2] The research assessed the degree to which legislation and policy frameworks adopted the IUCN categories. The figures quoted here include those countries where the IUCN protected area management categories are incorporated exactly into legislation and those where very similar wording is used in legislation.

Helping to regulate activities

See case studies on "The categories, mining and the Amman declaration" (Chapter 2.15) and "Hydrocarbon extraction and the categories" (Chapter 2.16)

On a number of occasions, the system of categories has been used as a tool for controlling major changes in land use within protected areas. This has created tension, partly because some of those affected are unconvinced that the categories are assigned with enough care, or enough stakeholder participation, to support such significant policy positions or legislation.

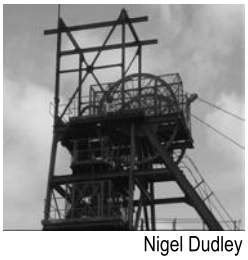
Many people would assume that that a category system for protected areas would require that certain activities should not take place in some categories. And in fact since 1994, challenges to the categories system have encouraged WCPA and IUCN to refine and develop guidance relating to particular categories or to certain issues raised by stakeholders. Guidance has been developed in three main ways:

- **Detailed technical guidance from WCPA**: prepared with the participation of the protected area community (but not always of wider stakeholders) – for instance the technical guidance on Category V protected areas gives some advice about appropriate land uses in these areas.
- **Stakeholder-driven clarification**: where groups have formally proposed clarification on key issues, such as the recommendation to governments that they ban mining in category I-IV protected areas, passed by the 2000 World Conservation Congress in Amman, Jordan
- **Emergency responses**: prepared by WCPA in response to urgent policy issues, and thus with less stakeholder input, for example the clarification of the role and limitations of industrial timber production in protected areas prepared as a result of proposals from Ontario, Canada[14].

Three issues emerge from this debate:

- Does designation of a 'protected area' automatically mean that some activities are prohibited?
- If so, is the IUCN system of categories a strong enough foundation upon which to base these decisions?
- Should such decisions be made based on management objective or management effectiveness?

The "Amman Recommendation" advised governments to ban mining, including fossil fuel extraction, from category I-IV protected areas, causing a storm of controversy that has raised many other questions about the role of the categories and about mining and protected areas



Nigel Dudley

There is no serious doubt that the existence of a protected area implies restrictions on management activities, otherwise the whole concept becomes meaningless. There also seems to be little opposition to the principle that the IUCN system of categories should be used as a basis for such decisions. The question about management effectiveness is more controversial but reflects concerns that the objectives for each category do not always adequately reflect the situation on the ground. The issues above could thus be restated:

- How are decisions made about which activities should be prohibited in protected areas, who is involved in making these decisions and how are such decisions integrated into land-use planning and regional development strategies?
- How are IUCN categories assigned, who is involved in assignment and how can categories be challenged once assigned, if at all?
- How should issues relating to management effectiveness be reflected in discussions about activities prohibited in protected areas?

If category assignment is to have major implications for land use, it becomes even more important that categories are applied correctly and consistently and whether there should be systems for verifying and challenging particular choices of category. In some cases, assignment has been undertaken by junior civil servants who may not fully understand the system, and without adequate consultation with relevant stakeholders. And in the past some assignments were made by UNEP-WCMC with little knowledge of the situation on the ground. Clearly, neither system is appropriate, particularly since the resulting categorisation may be used to make decisions which have significant development implications for a country.

It is sometimes the case that protected areas may have been reassigned (e.g. from Category II to V) on grounds of deficiencies in protection. But this confuses questions of management objectives with those of management effectiveness – and thus goes against the idea of an objectives-based system. If management is found lacking, the technical question is how to record the effectiveness of management; and the policy question is how to improve management (rather than change the management objectives and thus category assigned to the protected area).

The debate on using the categories system to regulate activities in protected areas is ongoing, but has already raised questions about assignment of categories that need to be addressed with some urgency if the system is to be strong enough to carry the weight of wide-ranging management decisions. One positive outcome is that stakeholders previously not involved in protected area issues are now engaging fully with governments and NGOs on the issue of assignment. These stakeholder dialogues should be expanded and new stakeholders engaged, although this in turn creates challenges and potential problems for the protected area community.

Interpreting or clarifying land tenure and governance

See case studies on "Using the Categories to support the needs and rights of Traditional and Indigenous Peoples" (Chapter 2.12), "Developing self-declared Indigenous Protected Areas in Australia" (Chapter 2.13) and "Linking governance to the IUCN Categories" (Chapter 2.14)

The presumption of the people creating the earliest protected areas was that these would be set aside entirely for wildlife and scenery: indeed, human communities were often expelled to maximise the perceived values of these areas, which were at that time primarily aesthetic – particularly the preservation of so-called 'wilderness'. Over the past few decades, such perspectives have gradually changed. The creation of protected areas in populated landscapes – particularly the Category V protected areas in Europe – showed that protection need not be incompatible with the presence of people. Research has shown that many existing protected areas in other regions also contain people; for example it is estimated that over 80 per cent of national parks in Latin America contain permanent settlement[15].

Managers of protected areas are increasingly recognising the rights, needs and desires of indigenous and local peoples. Management agencies of protected areas that once excluded people have in some case rethought their policies and are opening up these areas for traditional sustainable uses, such as collection of non-timber forest products or controlled game hunting. For many new protected areas, agreements with local communities are reached before final decisions are made on location, management plans and protected area aims.

Protected areas are gradually developing from a threat to indigenous peoples to being a possible vehicle for preserving traditional lifestyles

Sami hut in Swedish national park: Nigel Dudley

Although the IUCN categories system accepts a range of tenure and governance regimes, legal and political regulations on issues like ownership and statutory powers within protected areas at the national level often contradict the concepts of the categories system. For example, categories with the highest potential to respond to indigenous peoples' claims, like V (Protected Landscapes/Seascapes) and VI (Managed Resource Protected Areas) are often under-utilised and poorly understood. Often countries rely on public ownership of lands within in protected areas. Sometimes, national protected areas legislation does not provide for any private or communal property to exist within protected areas in any category, and indeed may require the expropriation of land for the purposes of declaring, expanding, or consolidating areas or systems[16].

By separating the ownership of land and resources from the requirements and objectives of management, the1994 version of the IUCN system of categories allows for a range of models of protected areas to ensure that both indigenous and other traditional peoples' rights can be respected and also that conservation objectives can be achieved. Furthermore, the recognition of private lands (of communities, individual or corporations) in the category system should allow some Community Conserved Areas to be recognised as protected areas under the IUCN definition[17]. One result, is that the system is sometimes used as a tool for helping to interpret or clarify land tenure and different governance regimes in protected areas, for instance as a way of both defining and in some cases creating sanctuaries for indigenous or traditional peoples.

Attention has been focused by on how the categories system can be used to help promote a range of governance types in protected areas, and specifically to develop the role (in management, access to resources, etc) of people in protected areas.

A proposal was made at the Vth World Parks Congress to incorporate reference to 'governance type' in the categories system. This would not be done by altering the existing six objectives-based categories but by adding a governance *dimension*. To this end a draft matrix for detailing the governance of protected areas has been developed, which could help in assessing and strengthening national protected area systems, by 'recognising' new elements. The governance dimension would be listed in the database alongside the existing category system.

Use of IUCN categories for advocacy by conservation NGOs

See case study on "Use of categories by non-governmental organisations ": Chapter 2.17

From the mid 1990s, many of the larger conservation NGOs undertook a concerted drive to increase the number and extent of protected areas, often through vigorous lobbying and advocacy efforts. However, they made little use of the IUCN system of categories, though there is a clear bias towards certain types of protection. A series of issues can be identified:

- **Field projects**: most conservation NGOs focus their efforts on the more strictly protected area. For example, analysis of over 200 forest protected areas around the world where WWF has projects found only two in Category V[18] and both the Wildlife Conservation Society and Fauna and Flora International say that they generally work in what they call the 'higher' categories of the IUCN system

WWF "counts" all the IUCN categories towards its forest targets in Africa, but only Categories I-IV in Europe

Uganda: Sue Stolton
Latvia: Nigel Dudley

- **Advocacy**: in a few cases, the categories have been named specifically in NGO campaign targets. For instance, when WWF ran a global campaign to increase the proportion of forests in protected areas to 10 per cent of the total, some parts of the WWF network specified that only certain categories of protected areas should be included (see box below). Many NGOs have also promoted or supported category-specific advocacy positions, most notably related to the Amman mining recommendation but also with respect to logging and hunting
- **Sustainable use**: a smaller but growing number of NGO are involved in various forms of land management which are compatible with biodiversity conservation, i.e. in buffer zones of protected areas and in Category V and VI protected areas. These tend to be NGOs involved in activities such as organic farming, sustainable fishing and certified forest management rather than traditional wildlife conservation organisations.

Use of protected area system of categories by WWF in advocacy
WWF has been running a campaign to increase the number of forest protected areas, but the categories included have varied in different parts of the world, for example:

- WWF Brazil only counts Categories I-III
- WWF European Programme only counts Categories I-IV
- WWF Africa and Madagascar Programme counts all categories

No real problems have been identified in the use of the IUCN categories by NGOs, although there is clearly a debate needed about the role of different types of protected area in biodiversity conservation and perhaps an under-valuing of Categories V and VI. (This is less a problem of the categories, and more an issue of NGO strategies.)

The IUCN categories as a tool for bioregional planning

See case studies on "Using the categories for bioregional planning" (Chapter 2.6) and "Reporting the categories and transboundary conservation areas" (Chapter 2.7)

Current lobbying for an increase in coverage of protected areas is taking place in the wider context of a more comprehensive and planned approach to conservation, which has grown over the last decade and involves both large NGOs and a number of governments. Three developments are critical:

- **Prioritisation**: there is a need to prioritise within global conservation, so as to focus most attention on areas that have the greatest biodiversity richness, intactness or which are under most threat. Important global prioritisation exercises include the IUCN/WWF/Kew 'Centres of Plant Diversity', Birdlife International's 'Endemic Bird Areas of the World', Conservation International's 'Biodiversity Hotspots', the World Resources Institutes 'Frontier Forests' and WWF's 'Global 200 Ecoregions'.
- **Broadscale conservation**: development of larger scale approaches to conservation, which consciously plan conservation interventions over a large area, such as an ecoregion or bioregion, based around an agreed biodiversity vision and involving a mosaic of protected areas and other forms of sustainable land use. Amongst NGOs, The Nature Conservancy, WWF and Conservation International have been the most active, and governments, such as Australia, Canada and the Netherlands, have made broader-scale commitments to conservation.

The CBD is promoting the ecosystem approach, which reflects many of these values.

- **Integration of conservation and development objectives** in land-use planning and regional development strategies, based on ecosystem approach.

Focusing on ecoregion conservation within priority countries and regions means looking beyond individual sites, at a whole land or water mosaic, aiming to build up a mixture of protected areas of various categories, linked and buffered by various other types of sustainable land use, including land within Category V and VI protected areas (use of land outside protected areas is generally less well developed in current ecoregion conservation plans). One of the most ambitious examples of this, currently under development, is the MesoAmerican Biological Corridor, a set of reserves and sustainable use areas stretching over seven countries and involving negotiations with literally hundreds of communities, organisations and businesses along the way.

The categories system can play a role in both planning and measuring the success of these initiatives. For example, The Nature Conservancy notes that one important measure of conservation status of ecoregions is "*area and percentage under conservation management designation categories*", noting that "*the classification system needs to be updated in many plans to correspond with globally applicable IUCN categories*"[19]. However, while there is much theoretical debate, the extent to which it has been translated into reality is unclear: most ecoregional plans still focus almost exclusively on protected areas in Categories I-III or perhaps IV and few distinguish different categories in ecoregional plans.

Chapter 1.5: Using the IUCN categories more effectively

As conservation develops from a minority passion to a mainstream necessity, it follows that conservation practice must also grow and mature, to reflect the subtleties and the extra obligations that emerge from a period of rapid growth. If protected areas are to play the central role demanded of them in this process, they must also reflect the multiplicity of needs of different stakeholders, different ecosystems and different socio-economic and political environments. While it is important not to place too much reliance on a system that was developed mainly as a way of standardising protected area records, the categories system can help to define and sometimes even guide this process. However, given that the demands on the system are considerably greater than they were in 1994, this also implies that categories are used more effectively to reflect this expanded role. The following section draws on the previous analysis and makes some further and more general recommendations for development in the future. The five key issues discussed below are:

- **Clarifying the definition of a protected areas and the purposes of the categories system**
- **Collection, analysis and dissemination of data about the categories**
- **Assigning protected areas to categories**
- **Zoning and the categories system**
- **Responsibility for the operation of the categories system.**

The definition and purposes of the categories

To recap, the foundation of the1994 protected areas categories system is the definition of a protected area: *"An area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means".*

Use of the categories within the implementation of Convention on Biological Diversity would be a major step towards using them more effectively

Chile: Sue Stolton

The IUCN guidelines state that: *"All categories must fall within this definition. But although protected areas meet the general purposes contained in this definition, in practice the precise purposes for which protected areas are managed differ greatly".* The inclusion of an area under the definition and the assignment of it into a category thus form a sequence: an area that appears to fulfil the requirements of one of the categories but does *not* meet the overall definition is not to be conceived of as a protected area as defined by IUCN. The definition of a protected area is therefore critical to the process of category assignment, and is generally accepted by the international community. The Convention on Biological Diversity (CBD) contains a very similar definition, as outlined in the box below.

Definitions: CBD and IUCN

International understanding about protected areas has been somewhat confused by IUCN and the CBD adopting different definitions of a protected area. The CBD definition reads: "*Geographically defined area which is designated or regulated and managed to achieve specific conservation objectives*" (Article 2).

In practice, however, these definitions are only marginally different and both of them consider protected areas:

- to be area-based concepts that might be found anywhere
- to focus on conservation objectives
- to require specific measures (dedication, designation, regulation) for the purposes of biodiversity conservation (i.e. protection and maintenance)
- to require management, delivered through legal or other effective means
- by implication, to require that some kind of management authority is in place to secure conservation.

The very act of publishing definitions, categories and guidelines for their use tends to open up every word and sentence contained within such guidance to interpretation – and inevitably interpretations vary between different interest groups and perspectives. The more that the conservation community attempts to use the categories for purposes such as controlling undesirable forms of development, the more the precise wording will be subject to critical scrutiny. However many working groups, meetings and conferences are held to refine the language in the definitions used, it is likely that a variety of interpretations will remain. It is therefore suggested that guidance on the IUCN system of protected area management categories should include a section which discusses two fundamental questions:

- What is the *purpose* of the IUCN categories system?
- What are the *principles* that underpin this system?

The first sections of this report reviewed the *original purposes* of the categories and identified some of the new uses that have emerged. As set out in Chapter 1.3, the four substantive purposes in the original guidance (based on text from page 5 of the 1994 IUCN Guidelines for Protected Area Management Categories) remain important:

1. To encourage governments to develop systems of protected areas with management aims tailored to national and local circumstance;
2. To reduce the confusion which has arisen from the adoption of many different terms to describe different kinds of protected areas;
3. To provide international standards to help global and regional accounting and comparisons between countries; and
4. To provide a framework for the collection, handling and dissemination of data about protected areas

A range of other uses have also emerged (see Chapter 1.4) and as such may need to be reflected, or at least acknowledged, in an update of advice on the category system. From this discussion, these new purposes could be added to the guidance:

5. To provide a basis for legislation
6. To provide a framework for land-use changes and management in particular categories
7. To provide a framework for existing and traditional land uses within protected areas, such as subsistence hunting and fishing and collection of non-timber forest products
8. To provide a framework for interpreting and clarifying land tenure
9. To provide information for advocacy
10. To serve as a tool for bioregional planning, or for large-scale conservation and development planning.

Dissemination of information

Currently the accuracy of the World Database on Protected Areas rests largely with governments, not all of which have the expertise or resources to report accurately. While the larger and richer countries are able to maintain records, many others are failing to do so

New York State
Nigel Dudley

The provision, analysis and dissemination of information can be viewed from three perspectives: the data user, the data holder (in this case UNEP-WCMC) and the data collector. The need for thorough and accurate information on protected areas and their categorisation is increasing. From the perspective of the providers of the information, these demands have created an increasing challenge, as the protected area estate increases and tenure and governance forms become more varied.

The international status of the global protected areas system needs to be complemented by a single international repository of protected area data. The United Nations first endorsed the preparation of a list of "*national parks and equivalent reserves*" in 1962. Since 1981, data for this list has been collected by UNEP-WCMC, on behalf of IUCN, as a component of the World Database on Protected Areas (WDPA).

The *2003 UN List of Protected Areas* presents data on 102,102 protected areas (covering 18.8 million km^2)[20]. Within this total figure 68,066 protected areas have been assigned an IUCN Category, showing the progress that has been made in assigning categories to most of the world's protected areas (67 per cent of the total number and 81 per cent of the area). The 34,036 protected areas without IUCN categories however cover a 3.6 million km^2 and therefore represent a significant proportion of the global conservation estate. Of the 243 countries and territories in the list only 13 have no management categories allocated to their protected areas. Therefore although clearly there is still work to be done in assigning categories to protected areas most of the gaps lie in countries that have gone some way to designating categories.

Two main issues arise relating to the accuracy of the WDPA with respect to the IUCN system of categories:

- Category assignment (this question of assignment is dealt with later in this section)
- Quality of data.

With a database of over 100,000 international records some errors are bound to occur. Although no systematic study of the records was made, even a short scan of the current publicly available data reveals that errors and inconsistencies are not hard to find, particularly when the category on the list is compared with that on the more detailed, but more dated, site sheets (see the examples in the Table below).

Name of protected area	Category assigned
Soufriere Marine Management Area, St Lucia	VI on WDPA; none on site sheet
Saba Marine Park, Netherlands Antilles	VI on the site sheet; none on WDPA
Montego Bay Marine Park, Jamaica	II on WDPA; III on the site sheet
Hol Chan Marine Reserve, Belize	II on WDPA; IV on site sheet
Palawan Wildlife Sanctuary and Biosphere Reserve, Philippines	No classification

Comparison of data from the UNEP-WCMC database

The World Database on Protected Areas Consortium hopes to increase the capacity for data collection and verification

Phatam Transboundary Protected Area Complex – Thailand and Laos: Nigel Dudley

The database can only be as accurate as the information reported to UNEP-WCMC (see the box below for a detailed explanation of the process undertaken to update the WDPA for publication in the *2003 UN list of Protected Areas*). For the 1997 List UNEP-WCMC received only 180 responses from requests to 512 protected area agencies, or about a 35 per cent rate of return. In 2002/3, official updates were received from 103, or 56 per cent of all countries, a marked improvement but still a long way short of satisfactory.

Although the rates of returns are improving, the gaps still mean major problems in terms of accuracy of the list. It is likely that countries with accurate data at the national level will find it easier to complete effective reporting for global assessments and monitoring. Improving the process for providing information on protected areas and category designation at a national level is therefore a priority. This will need to be supplemented by guidance both for specific biomes and some of the categories. Furthermore, the advice of the 1994 IUCN Guidelines that "*final responsibility for determining categories should be taken at the international level*" still remains an elusive ideal: there is no satisfactory mechanism as yet for how this might be achieved.

The clear understanding, interpretation and translation of the six IUCN Protected Area Management Categories are also essential prerequisites for their correct adoption and reporting internationally. As noted earlier, there is a need to translate the IUCN categories and guidelines into many more languages – and for these translations to involve the participation of in-country specialists who are familiar with the issues, thus ensuring that translation is as precise as possible.

UNEP-WCMC has indicated that it needs stronger support from the international conservation community if it is to be able to maintain what is already a huge database and which is likely to grow still further in the next few years. The importance of the database was reflected in the 2002 agreement by IUCN and UNEP and a number of non-governmental organisations to form the WDPA Consortium[3].

Producing the *United Nations List of Protected Areas*

Participation of national protected area agencies and other organisations in updating data in the WDPA is central to the UN List process. The task of updating the 2003 *UN List of Protected Areas,* the 13th to be produced, began in early 2002, when the UNEP Executive Director and IUCN Director General jointly wrote to national environment ministers, seeking their cooperation in updating protected areas information for their respective countries. At the same time, the WDPA Consortium members agreed to contribute the WDPA country and regional protected area information that they held, or to which they had access. UNEP-WCMC sent requests for updates and verification to 183 countries in November-December 2002, with hard copies of each country's protected areas information held in the WDPA.

[3] UNEP-WCMC, IUCN-WCPA, Conservation International, WWF, Wildlife Conservation Society, BirdLife International, The Nature Conservancy, Conservation Biology Institute and Fauna and Flora International. In addition, UNEP-WCMC has separate cooperation agreements with ARCBC and EEA to form a WDPA Consortium to facilitate more effective updating and development of the database.

Explanatory notes to assist countries in completing the update were also provided; including information on the IUCN protected area definition and application of the management categories. Through its cooperative agreement with UNEP-WCMC, the European Environment Agency (EEA), undertook, through the European Topic Centre on Nature Protection & Biodiversity (ETC/NPB), the updating of data for the 38 countries covered by its authority. Although requests were sent to individual countries in Southeast Asia, data were also provided by the Association of Southeast Asian Nations Regional Centre for Biodiversity Conservation (ARCBC) for countries in the ASEAN region. In the event that no information was received from official sources, research was undertaken by UNEP-WCMC to obtain data – wherever possible – from published material and other sources.

UNEP-WCMC received 86 direct official national replies, representing 47 per cent of the total. In addition, 15 official responses were received from European countries through the EEA/ETC-NC 2003 review of Europe in time for inclusion in the *2003 UN List*. However, the WDPA was updated for all European countries through the Common Database on Designated Areas (in partnership with EEA) in December 2002. Official data was also received for seven ASEAN countries through ARCBC, although direct official responses were also received from five of these countries. In effect, official updates were received from 103 countries, or 56 per cent of all countries, through the combined efforts of UNEP-WCMC, EEA and ARCBC.

This text has been edited from the 2003 United Nations List of Protected Areas.

Assigning the IUCN categories to protected areas

The value of the categories system lies in its allocation of categories by primary management objective – which can then be used as a more refined measurement of approaches to biodiversity conservation by countries. When the categories were used as convenient shorthand for data collection, the question of assignment was at worst irksome for those charged with data collection, but was not particularly controversial. As the system of categories has assumed greater political significance – for instance because it is linked to funding or restrictions on use – then the issues of who decides on the category, and to whom they are accountable, become correspondingly more important.

A constant theme in the discussions, research and case studies carried out during the SaCL project was the significance of category assignment. A particular concern was whether the current methodology for assigning a particular category to a protected area is sufficiently systematic, transparent and verifiable. It is clear from discussions with UNEP-WCMC and other stakeholders that there are a number of shortcomings with the way in which assignment of protected area categories currently occurs, including:

- Information sent from governments for incorporation into the WDPA is not always of high quality and does not necessarily emerge from a rigorous process of assignment
- There is no way in which a decision to assign a particular category can be appealed against by a person or institution who feels that they have been unfairly penalised by an inaccurate decision nor are there systems for verification of assignments

- UNEP-WCMC has indicated that it does not have the resources to follow up with governments where no information is forthcoming or to assign categories in the absence of data
- The current system is operated almost entirely through dialogue between governments and UNEP-WCMC, and to some extent WCPA, without an opportunity for other stakeholders to express opinions about the assignment of categories.

The SaCL project's workshop in the Cotswolds, England, proposed that there be a series of **principles** for assignment of categories (see box below) and made some preliminary suggestions about the basis for these principles.

Some implicit and proposed principles for assignment of the system of categories

Five distinct areas that could be regarded as principles underlying the categories system can be found in the 1994 edition:

- Objectives led
- International
- Flexible
- Clear, consistent and logical
- All categories are important

In addition, we propose a range of 'key words' which might form the basis of principles relating to the implementation of the categories system:

- Participatory – all stakeholders are able to play their part
- Accountable – those responsible for providing, storing, analysing and publishing data can be called to account
- Equitable – all interests are equally well served by the system
- Transparent – everyone can see how decisions are made
- Performance-led – standards are set and pursued
- Part of a continuum of responses – collection of data on categories is part of a wider process of data collection on protected areas
- Rights-based approach – the system operates with due regard to the rights of individuals and groups

In general there should be shared ownership, inclusiveness and openness in the whole process of assignment involving national agencies and other stakeholders: all stakeholders need to agree the full range of roles that protected area categories are performing, including advocacy in international conservation debates.

Responsibility for the system of categories

As it was originally developed by IUCN, through WCPA, the IUCN membership as a whole – which includes both government and non-governmental members – have a direct stake in the protected area definition and categories. But then so too does the United Nations, as the instigator and publisher of the global database, and UNEP-WCMC as the body responsible for assembling the information. Governments have a stake too, whether or not they are members of IUCN, as they are the ones requested to report using the system of categories. And increasingly other stakeholders are demanding a say too, whether it is the mining industry concerned about loss of mineral rights, organic farmers interested in

exploring the options for sustainable agriculture in Category V and VI protected areas, local communities and indigenous peoples who are directly impacted by protected areas, or civil society in general, who are expected to shoulder many of the costs of the global protected area network through taxation.

Below options for giving wider stakeholder representation in issues related to assignment are suggested. But eventually responsibility for making final decisions on some of these issues – which in some cases are and will remain controversial – will fall on particular institutions. This section looks at how responsibility might be assigned.

Ultimately IUCN is the body responsible for the integrity and application of the categories

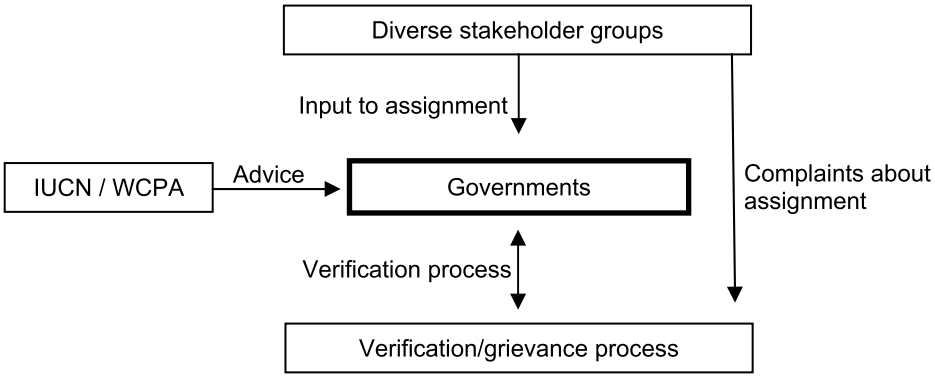
Ultimately IUCN is the body responsible for the integrity and application of the categories. Beyond this, the issue of responsibility is pertinent to three key areas of work:

- Assignment of protected areas to individual categories
- Reporting data about protected area categories
- Reviewing and updating the system

IUCN headquarters, Switzerland: Nigel Dudley

- **Assignment of protected areas to individual categories**

As noted above, ultimate responsibility for assignment of categories rests with governments. However, there is clearly a desire and a need for other stakeholders to be more closely involved, and discussion as to whether assignment should be to a greater or lesser extent the subject of negotiation. In the case of Community Conserved Areas, the local or indigenous groups have a clear interest to be involved. In the case of private protected areas, the individuals or organisations who own them clearly should also have a major stake in assignment. Other stakeholders are demanding the right to have some more formal way of verification. The following diagram outlines how these responsibilities might be related.



Responsibility for assignment

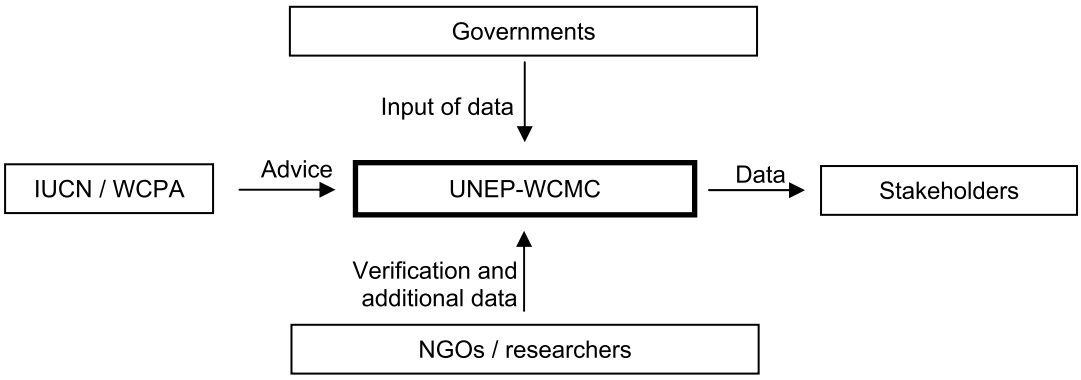
- **Reporting data about protected area categories**

In the same way as assignment must ultimately remain the role of governments, responsibility for *recording* data should remain with the UNEP-WCMC, although this institution will only be able to function effectively if it receives appropriate support from governments and others in terms of *reporting*.

However, many governments do not respond to calls for information, many have not assigned the system of categories to all protected areas and, even if data are available, the task of checking or verifying these is beyond the reach of UNEP-WCMC, a small organisation with limited resources.
Over the last few years, the WDPA consortium, drawn from major conservation NGOs, has been formed to help improve and strengthen the database (see Chapter 1.3). Recording and reporting of protected area category information could be further strengthened by:

- **Convention on Biological Diversity**: following the adoption of the Programme of work on Protected Areas at CBD/COP7, the CBD should recognise the central role played by the *UN List of Protected Areas* and the WDPA and strongly encourage Parties to report protected areas information to UNEP-WCMC as part of the requirements under the convention
- **Governments**: should provide protected areas data to UNEP-WCMC in accordance with the decisions of the CBD/COP7; and develop an inclusive process on assigning categories for stakeholders
- **Non-governmental organisations, research institutions etc**: should seek opportunities to work with governments to check protected areas data and provide additional information for the database (biological information, effectiveness etc)
- **WDPA Consortium**: all members should develop supportive positions on the use of the categories system in terms of information, liaison with governments etc
- **IUCN / WCPA**: should develop the capacity to check protected areas data, particularly through members and regional groups.

The relationship might be illustrated as follows:



Responsibility for reporting and recording

- **Reviewing and updating the system**

As a larger proportion of the earth's land and water area are protected, and protected area management becomes more professional, many more stakeholders are demanding a role in determining the size and location of protected areas, their management aims and – as a result – their category. Within the particular remit of this report, five main groups are already involved in debate and advocacy with respect to how the category system develops:

- **Non-governmental organisations**: including those interested in environment, social issues and human rights; NGOs do not bring a single perspective but represent diverse interests – many have an opportunity to shape the categories through membership of IUCN
- **Industry**: demanding a greater role and interested in what type of category might be applied in cases where this will have a direct impact on potential and future investment – interact with IUCN through special task forces and dialogues and also through representative membership
- **Local government**: designation and day-to-day management of protected areas are increasingly devolved to a local level in many countries – currently have little opportunity to influence direction of development of the categories but this may change in the future
- **Local and indigenous peoples' communities**: indigenous peoples associations become more effective lobbyists and governments and protected area agencies recognise their legitimate claims – have been increasingly effective in getting their message across, for instance at the Vth World Parks Congress in 2003
- **Civil society**: as tourists, day visitors or people with a keen interest in the natural heritage – currently the major route to influence would be through a relevant NGO

Zoning and the categories

Linked to the issue of assignment is the question of how to assign categories to protected areas with different zones following different management regimes.

Zoning is a key strategy for combining human use with biodiversity protection. It requires that decisions be taken as to which area of land or water should be used for what purposes. Zoning may be applied within a single protected area; in the areas around a protected area; or as a strategic framework for the planning of a group of protected areas. These different situations raise different issues pertaining to the categories.

Zoning is particularly critical in the case of many marine protected areas, where parts of the protected area are frequently set aside to allow fish stocks to build up, but where such protective zones may change over time

Within a single protected area, there may be zones for intensive use and others to be managed for very limited public access. Often there is a core area – a strict reserve or no-take area – which protects critical habitat and species, surrounded by a buffer zone which allows more uses but insulates the core from the majority of threats. While the core will always be a protected area, the buffer may be part of that same area, it may be a separate area outside it, or it may be a separate protected area altogether. Zoning can also be applied to landscape or ecoregional conservation approaches, for example, where a series of protected areas of different categories form a mosaic with different management aims, which may also include other areas of compatible land management. In such cases, the zones form part of a bioregional approach.

Greater St Lucia protected area, South Africa: Marc Hockings

Categories are increasingly being used to help define management zones to facilitate, for example, management of marine resources (e.g. 'no take zones'), non-timber forest products collection and traditional hunting etc. This is particularly through the use of Categories V and VI to facilitate management of cultural resources, but many Category II-IV protected areas have also evolved to allow these uses.

Although zoning is an integral and recognised part of protected area management, the 1994 Guidelines to the IUCN Categories do not fully address this issue, which has created some challenges when applying the system:

- It is not clear how to classify large protected areas containing a range of zones, each with different management objectives
- This problem is especially acute in relation to large marine protected areas where ecosystem scale management is sought
- Where one protected areas lies within another (e.g. a strict reserves exist within a broader landscape or seascape protected area categories), each with its own category, 'double counting' may occur: for example this occurs in the UK in relation to Category IV nature reserves which are nested within Category V national parks
- There is also some confusion about how to report transboundary protected areas. The possibility of having a different category was examined and rejected but one option would be to include a separate list of such areas as an appendix to the UN List of Protected Areas and possibly to identify constituent protected areas within the main text

See case studies on "Applying the categories to large multiple use protected areas" Chapter 2.5) and "The needs and rights of Traditional and Indigenous Peoples in protected areas" (Chapter 2.12)

The solution lies in the development of clearer advice. This should not depart from the basic principles developed in the 1994 Guidelines but should interpret these in a range of circumstances (e.g. large protected areas with a number of management zones, marine protected areas, transboundary protected areas, biosphere reserves, bioregional projects). Such advice needs to be accompanied by number of illustrative case studies.

Chapter 1.6: Conclusions and recommendations

The issues brought to light by this research project are more complex and challenging that had been assumed at the outset. By looking at the way in which protected areas are classified, more fundamental questions have emerged, about what protected areas are for, who should decide how they are managed, and how they should fit into wider landscapes and seascapes. Although there are important actions to be taken in respect of the categories system, the issues raised in this research go much wider and affect many aspects of conservation policy. But of course a protected area classification system cannot and should not be required to deal with all such problems.

Nonetheless, the study has led to a number of recommendations, falling into three main areas – outlined below:

- **Guidance in use of the categories, including preparation of a new version of the explanatory guidelines**
- **Awareness-raising and capacity building**
- **Monitoring and research.**

New guidance for the protected area category system

We propose that the new uses for which the system is now being applied, coupled with the continuing confusion about some of the original uses of the guidelines, necessitate the production, through an open, participatory process, of a revised, **up-dated edition of the 1994 guidelines to the protected area category system**.

This should:

- Build on the existing objectives set out for each category, including by developing improved summary definitions of the categories
- Include a set of criteria and principles which should underpin the categories system and its application
- Explain how the category system relates to ecological networks, wider regional planning and broadscale conservation initiatives
- Consider removing generic names of protected areas from the category system and using only management objectives and numbers for each category
- Present a redesigned version of the "Matrix of Management Objectives and IUCN Protected Area Management Categories" in the 1994 edition, so as to relate better to current experience in protected areas
- Give more emphasis to marine, freshwater and forest protected areas
- Give more consideration to the linkage between protected areas and sustainable livelihoods
- Include a full description of the criteria used when suggesting that certain activities and land uses be excluded from particular categories of protected areas
- Give greater recognition to cultural and spiritual values, so that the full range of special qualities of each protected area is recognised

The project is proposing a new edition of the guidelines on the IUCN protected area categories

Queensland, Australia: Nigel Dudley

- Suggest how protected areas, which are assigned to their category by primary management objectives, can also be described by reference to the organisation responsible for their governance, with reference to the governance matrix being developed within WCPA, the effectiveness of their management and the degree to which they retain their naturalness
- Explain how zoning policies within, around and between protected areas should be reflected in the application of the categories; and how to avoid 'double counting' when one protected area sits within another
- Clarify the recommended process by which protected areas are assigned to categories, including reference to principles of assignment
- Explain clear lines of responsibility for both assignment and reporting of the system of categories.

The revised guidelines should be available in IUCN's official languages and in other languages as permitted by available resources. Principles for translation should be agreed, and better use made of technical glossaries.

Supplementary guidance

In addition to the overall guidelines, we also recommend that additional advice be issued in the form of separate publications from IUCN, sometimes working with other institutions, regarding specific aspects of the category system:

- **Biomes**: advice on specific biomes (as is currently being prepared for forest protected areas) particularly with respect to freshwater protected areas and marine protected areas, including in the latter case clarifying how no-take zones should be categorised.
- **Categories**: specific published advice is required on at least some of the categories (building on the Category V guidelines), starting with Category VI but possibly also including Category Ib (wilderness) and Category III (natural monuments, with specific reference to sacred sites)
- **Legal use**: a possible task for the IUCN Environmental Law Centre is to develop a manual for governments and others on both when the use of the system of categories in law might be useful and how this could be achieved
- **Best practice**: there is scope to promote better management practice in relation to the categories, for example on sustainable collection of non-timber forest products by local communities, or for extractive industries in Categories V and VI; this work might also explore the relationship between the categories and systems of certification (e.g. for forestry, fisheries)
- **Reporting**: development of a manual by UNEP-WCMC and WCPA to help governments to collect protected areas data, review its quality with stakeholder input and report adequately to the World Database on Protected Areas (WDPA).

One key need is for greater awareness of the categories and the project therefore proposes a series of capacity-building actions

Workshop on the IUCN categories in the Cotswolds, England: Sue Stolton

Awareness-raising and capacity building

One problem in implementing the system of categories, and more generally in building effective protected area networks, is a lack of detailed understanding of the system and limited technical, institutional and financial capacity to implement it. We therefore recommend that IUCN, in collaboration with partner organisations, should invest in awareness raising and capacity building about the use of the categories system, drawing on

the results of the SaCL work and in collaboration with partners such as UNEP/WCMC and the CBD Secretariat. Over a period of several years, this will involve training, case studies and additional published guidance. Such awareness raising and capacity building should give priority to promoting an open, inclusive and transparent in-country procedure for assignment of categories to protected areas at the national level, including a 'grievance procedure' in relation to assignment decisions. Specific interventions might include:

- **Accessibility**: translation of advice on the category system into more languages (currently in English, French and Spanish)
- **Legal advice**: from the IUCN Environmental Law Centre
- **National databases**: capacity building, in association with governments and development agencies, in building information and national databases on protected areas (for example along the lines of the Strengthening Protected Areas Management project in Vietnam)
- **World Database on Protected Areas**: capacity building including fund-raising to help the UNEP-WCMC to strengthen the WDPA and so be better placed to assist governments through the CBD process and all parts of IUCN
- **Information**: a concerted effort by the WDPA Consortium to build up the information held on protected areas in the database
- **Awareness**: publicity material and other means of raising awareness about the system of categories more generally.

Monitoring and research

We further recommend that IUCN develop a monitoring and research programme around the use of the categories, giving particular attention to:

- The implications of the categories system for indigenous and community rights, including indigenous protected areas
- The use made of the system of categories by governments in policy and law
- The fuller integration of the system of protected areas management categories with the WCPA framework on management effectiveness of protected areas
- The use made of the categories in relation to initiatives such as: environmental certification (e.g. forest, farming, marine and tourism); environmental and social criteria and indicator processes (e.g. Ministerial Conference on the Protection of Forests in Europe)
- A verification process for assignment and a process for resolving any disputes in relation to assignment.

Leadership by WCPA

The above is a fairly wide-ranging programme. It needs to be led by a focal point within WCPA with close links to UNEP-WCMC. We therefore welcome the recent establishment of a Task Force on the IUCN Protected Area Management Categories under the WCPA Management Effectiveness theme. This needs to be followed by the inclusion of a work programme on categories in IUCN's Inter-sessional Programme Framework for 2005–2008, which will be considered by IUCN's members at the 3rd World Conservation Congress (November 2004). This programme of work should be linked into other initiatives (e.g. the CBD work programme on protected areas, the development of the WDPA and the IUCN/ICMM Dialogue).

A vision for the categories

If the above action is taken, the SaCL project team believe that it might be possible to realise a vision for the categories by the time of the next World Parks Congress in 2013 – see below

A vision for the IUCN Protected Area Management Categories

By the time of the next World Parks Congress in 2013: the IUCN definition and management categories of protected areas are respected as the practical and philosophical framework for planning, managing and monitoring protected areas. They are widely understood and are used as an important tool in protected area management by national agencies, international bodies such as the Convention on Biological Diversity, the business sector, NGOs and many local communities.

As such, they provide accepted guidance to help plan protected area networks in the broader context of sustainable development across the whole landscape and seascape. They also help to make rational decisions about issues of policy that affect protected areas.

Because of their management implications, designation of IUCN protected area categories is an important part of any protected area planning process. The system is increasingly decided with the full involvement of stakeholders, who can draw on a wide range of tools to help them in the form of agreed principles, material in local languages and additional guidance on use in particular situations.

Questions and disagreements are addressed through a globally-agreed grievance system and some national protected area agencies already use independent assessors working to a certification system, to ensure that categories have been successfully assigned.

The IUCN WCPA provides support for the categories system, ensuring that guidance is up to date, helping to build capacity within countries and coordinating research, developing additional advice and monitoring use of the system.

Data on protected areas are stored, analysed and made widely available by the UNEP-WCMC, providing a global information source not only on the size, location and management aims but also the success of the protected area in terms of management effectiveness, information about its governance and values and reference material such as management plans. The database is maintained by national agencies working directly with UNEP-WCMC.

SECTION 2: CASE STUDIES

Introduction

The Speaking a Common Language project developed 18 detailed case studies and papers covering a wide range of issues. The case studies, detailed below, have been prepared with experts on the issues concerned and all contain detailed recommendations which provide the foundations for the strategic recommendations given at the end of Section 1 of this report.

The first case study – *The history of the international system of protected areas management categories* – provides an historical context and background to the issues discussed in this whole report. This is followed by a case study, based on a report by the IUCN Environmental Law Centre, on the application of the system in national, regional and international legal and policy frameworks: *The influence of the IUCN Categories on legal and policy frameworks*. This in turn is followed by a series of case studies on the interpretation of the system, which look at: *Improving category assignment*; *Creating a common language*; *Applying the categories to large multiple use protected areas*; *Using the categories for bioregional planning*; and *Reporting the categories and transboundary conservation areas.*

Four case studies then look at the application of the categories in specific biomes: *Using the categories in marine protected areas*; *Using the categories to measure forest protected areas*; *Use of the Categories in regional criteria and indicator processes for sustainable forest management* and *Certification of forest management and its relationship to protected areas and the categories*. Three case studies then address issues relating to people, protected areas and the categories: *Using the Categories to support the needs and rights of Traditional and Indigenous Peoples in protected areas*; *The role of the categories in developing self-declared Indigenous Protected Areas in Australia* and *Linking governance to the IUCN Categories*.

A further three case studies examine how the categories have been used by those beyond the immediate protected area constituency: *The categories, mining and the Amman recommendation*; *Hydrocarbon extraction and the categories* and *Use of categories by non-governmental organisations*. A final case study, *Applying the IUCN categories in Vietnam*, brings together in one country study many of the issues raised in the previous chapters.

Chapter 2.1: The history of the international system of protected areas management categories

Summary

Protected areas have a long history and are a feature of many cultures. Governments first became involved in the second half of the nineteenth century, when the USA and a few other countries began to protect near-natural areas as parks and reserves mainly for tourism. During the twentieth century, a remarkable expansion in the number and types of protected areas took place around the world. Nearly every country adopted its own protected area legislation and designated sites for protection. In all, there are now over 100,000 sites that meet the IUCN definition of a protected area: "*An area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means*". Together, places thus defined cover nearly 11.7 per cent of the land surface of the planet and about one per cent of the marine environment.

Protected areas have been set up for different reasons, including protection of species, habitats and scenery, watershed protection, promotion of tourism, for recreation, research, education and to protect important non-material values. They vary greatly in size, are given many different names at the national level, and derive from diverse national legislation and other initiatives. Many different interests manage and own protected areas.

There is much potential for confusion in this complex, fast changing situation. Thus, as the number of these places has grown, so has the need for consistent, universally applicable terminology and standards. This prompted the predecessor of IUCN's World Commission on Protected Areas to publish its first attempt at an international categorisation system for protected areas in 1978. It proposed ten categories of protected areas to ensure that "*regardless of nomenclature used by nations or consistent to particular languages, a conservation area can be recognised and categorised by the objectives for which it is in fact managed*". The system would also provide "*the possibility to gradually establish systematic procedures to remove ambiguities and inconsistencies due to variations in administrative, institutional, legal and political mechanisms among nations*".

As there were a number of shortcomings with the 1978 system, the Commission undertook a wide ranging review of it. The outcome was examined in detail by a workshop at the IVth World Parks Congress (Caracas, Venezuela 1992). As a result, the Caracas Congress adopted a recommendation to the IUCN Council to endorse a system of six protected area categories based on management objectives, recommend this to governments and explain it through guidelines. In fact, the IUCN Council referred this to the IUCN General Assembly, meeting in Buenos Aires in 1994. It approved the new six category system, commended it to governments and called for published guidance to explain it.

IUCN and the World Conservation Monitoring Centre (WCMC) published *Guidelines for Protected Area Management Categories*, in English, French and Spanish in 1994. The guidelines provide an introduction to the system,

This chapter was written by Adrian Phillips, with thanks to Jerry Harrison, Benita Dillon, Kenton Miller and Stuart Chape.

January 2003

explain each category in turn and set out a number of worked examples of the application of the system to existing protected areas.

Since the 1994 publication, IUCN with others has published a guide to the application of the categories within Europe, and has participated in a number of national and regional events to consider how the categories system can be applied in different parts of the world. In recent years there has been an active debate about its significance in setting standards for such matters as mining and forestry operations affecting protected areas.

A short history of protected areas

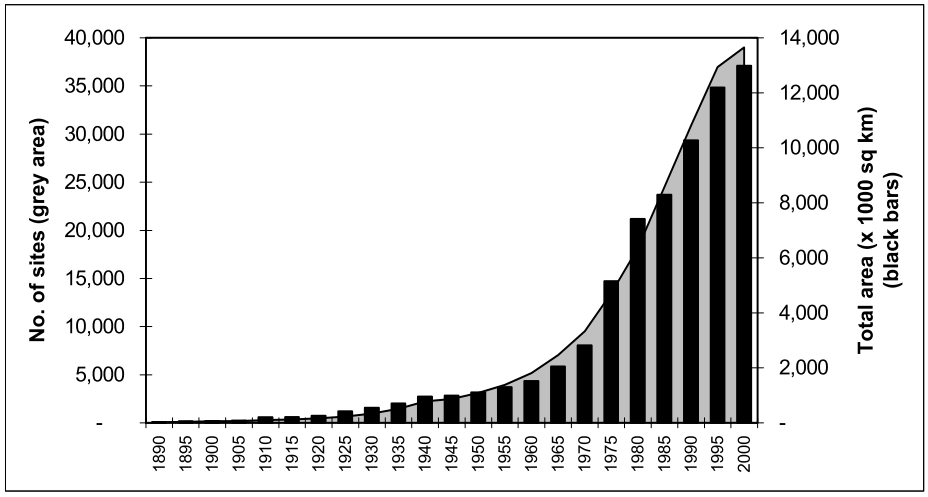
The background to the modern system of protected area management categories adopted by IUCN in 1994 can only be understood in the context of the history of protected areas themselves.

Protected areas are a cultural artefact, their history is entwined with that of human civilisation. Some areas were specifically set aside by royal decree in India for the protection of natural resources more than two thousand years ago[21]. In Europe, some areas were protected as hunting grounds for the rich and powerful nearly a thousand years ago. Moreover, the idea of protection of special places is universal: it occurs among the traditions of communities in the Pacific ('tapu' areas) and parts of Africa (sacred groves), for example.

However, the idea of protected areas as we know them now can be traced back to the nineteenth century. The English poet, William Wordsworth, wrote in 1810 of his vision of the Lake District as "*a sort of national property*". And in 1832, the American poet, explorer and artist, George Catlin, pointed to the need for "*…a nation's park, containing man and beast, in all the wild and freshness of their nature's beauty*". In 1864, with the Yosemite Grant, the US Congress gave a small but significant part of the present Yosemite National Park to the State of California for "*public use, resort and recreation*". The first true national park came in 1872 with the dedication of Yellowstone by United States law "*as a public park or pleasuring ground for the benefit and enjoyment of the people*". Interestingly, the creation of Yellowstone did not allow for the sympathetic treatment of native people and their environment as envisaged by Catlin.

The idea of protected areas emerged in several other countries around the same time. Thus in 1866, the British Colony of New South Wales in Australia reserved 2000ha of land west of Sydney, for protection and tourism, which later became part of the Blue Mountains National Park. In 1879, Royal National Park was created in the wilds south of Sydney, to provide a natural recreation area for the burgeoning populations of the city. In 1885, Canada gave protection to hot springs in the Bow Valley of the Rocky Mountains, part of which became the Banff National Park. Several forest reserves were set up in South Africa in the last years of the nineteenth century. In 1887 in New Zealand, the Maori Chief Te Heuheu offered the Crown 2,400ha of the sacred summits of Tongariro, Ngauruhoe and Ruapehu, with a view to its being treated as a tapu place under the protection of Queen Victoria: the Tongariro National Park Act was passed in 1894, and the park was gazetted in 1907. The provincial or state tier of governments also started to create protected areas: the Province of Ontario in Canada created Queen Victoria Niagara Falls Park in 1885, and Algonquin National Park in 1893 (later Algonquin Provincial Park).

While the modern protected areas movement had nineteenth century origins in the then 'new' nations of North America, Australia, New Zealand and South Africa, other countries were quick to follow suit. During the twentieth century the idea spread around the world, though the driving force has been different in different regions. For example, in Africa, a number of large game parks were created; in Europe, landscape protection was more common. But in all parts of the world a remarkable expansion in the number and types of protected areas took place over the past century. The growth trend in the number and extent of protected areas is shown below.



Growth of Protected areas over time (source UNEP/WCMC)

By the end of the twentieth century, nearly every country had adopted its own protected area legislation and designated sites for protection. Many organisations in the public, private, community and voluntary sectors are now active in creating areas for protection. As well as action at the local and national level to set up protected areas, international networks of protected areas have been established at the global level (under the World Heritage and Ramsar Conventions, for example) and regional level (Natura 2000, for example in Europe). In all, there are now over 100,000 sites that meet the IUCN definition of a protected area (see below). Together, these cover nearly 11.7 per cent of the land surface of the planet (data source: UNEP/WCMC).

In light of this diversity, it is not surprising that many different terms have been used at the national level to describe protected areas: hundreds of names in all, with - for example – about 50 in Australia and some 12 in the UK.

Already this very short history hints at some of the issues that gave rise to the development of the categories system:

- Protected areas have been set up for different reasons,
- Protected areas may be established in wilderness areas and in long-settled landscapes,
- Protected areas have been set up in forests, savannahs, grasslands, mountains, deserts, wetlands, ice caps, lakes and at sea,
- Protected areas vary greatly in size,
- Protected areas have been given many different names at the national level,

- Protected areas are based on national legislation which takes many different forms,
- Protected areas came about through a wide variety of governmental and other initiatives,
- Protected areas are owned by different interests, and
- Protected areas are run by different kinds of organisation.

- **The start of an international framework for protected areas**

Although the idea of protected areas spread from country to country through the first half of the twentieth century, each nation developed its own distinct approach. So although there was a world-wide movement to set up protected areas of various kinds, there were initially no common standards or terminology. If there was a shared idea, it was only that the best scenic, wildlife or outdoor recreation areas of each country should be identified and protected for the public good.

The first effort to clarify terms was made in 1933, at the International Conference for the Protection of Fauna and Flora, held in London. This set out four protected area categories: national park, strict nature reserve, fauna and flora reserve, and reserve with prohibition for hunting and collecting. In 1942, a rather different classification was incorporated into the Pan American Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere: national park, national reserve, nature monument and strict wilderness reserve[22].

Developing a list of the world's protected areas was a first stage in their categorisation, over 40 years ago

With the emergence of a world-wide conservation movement after the Second World War, a global framework for protected areas began to emerge. The main instrument for that has been IUCN international network – or commission – of volunteer experts on the topic of protected areas. The International Commission on National Parks was established in 1960 under the leadership of Hal Coolidge. Within a few years, it became the Commission on National Parks and Protected Areas of IUCN (CNPPA); since 1996 it has been the World Commission on Protected Areas (WCPA).

Terre del Fuego National Park, Argentina: Sue Stolton

Thus significant international action for protected areas began around 1960. In 1962, the first World Conference on National Parks was held at Seattle, in the USA. Already there was concern over the issue of what protected areas were called – the debate was about 'nomenclature', and was based on a paper by C.F. Brockman[23].

A 1959 resolution of the 27th session of the United Nations Economic and Social Council (ECOSOC) had recognised that "*national parks and equivalent reserves are important factors in the wise use of natural resources*". In response, IUCN's new protected areas commission compiled a 300-page long *World List of National Parks and Equivalent Reserves*. This – the first version of the now familiar 'UN List' of protected areas - was published in 1961 and presented at the Seattle meeting[24]. The ECOSOC decision was subsequently endorsed by a resolution adopted at the 16th Session of the General Assembly of the United Nations in December 1962, on 'Economic Development and Nature Conservation'[25]. In 1966, IUCN published the second version of the list, which was prepared by Sir Hugh Elliott, under the guidance of the new chair of the Commission on National Parks, Jean-Paul Harroy (a French version was published a year later). A classification system was developed for this purpose, though as yet it was fairly simple, covering just 'national parks', 'scientific reserves' and 'natural monuments'[26].

A growing concern with the need for standard nomenclature was apparent at the IUCN General Assembly in New Delhi in 1969. A resolution passed then sought to define 'national park' in the following terms: "*a relatively large area where one or several ecosystems are not materially altered by human exploitation and occupation*". The resolution went on to call on countries "*not to describe as national parks*" those areas that did not meet the definition.

In 1972, the II World Conference on National Parks was held at Grand Teton and Yellowstone National Parks (thus marking the centenary of the founding of the Yellowstone National Park). IUCN's Senior Ecologist, Dr Ray Dasmann, wrote a paper for the conference on the Development of a Classification System for Protected Natural and Cultural Areas[27]. It was published in 1973 under the title *Classification and Use of Protected Natural and Cultural Areas, IUCN Occasional Paper No. 4*. Dasmann presented a system of protected area classifications and uses as follows:

1. Protected Anthropological Areas (Natural Biotic Areas, Cultivated Landscapes, Sites of Special Interest)
2. Protected Historical or Archaeological Areas (Archaeological Sites, Historical Sites)
3. Protected Natural Areas (Strict Natural Areas, Managed Natural Areas, Wilderness Areas)
4. Multiple Use Areas
5. National Parks
6. Related Protected Areas (Provincial Parks, Strict Nature Reserves, Managed Nature Reserves, National Forests and Related Multiple Use Reserves, Anthropological, Archaeological or Historical Reserves).

The 1972 Conference adopted a resolution (no. 10) which recommended that IUCN, "*taking into account existing terminology in international treaties and in close consultation with governments concerned (should):*

- *Define the various purposes for which protected areas are set aside; and*
- *Develop suitable standards and nomenclature for such areas*"[28].

Several further editions of the UN List were published between 1971 and 1975. A more detailed publication, the World Directory of National Parks and Protected Areas, was published by IUCN in 1975.

By the mid-1970s, several trends were apparent:

- An acceleration in the pace at which protected areas were being established (see diagram overleaf),
- The growing impact of international programmes and treaties (such as the Man and Biosphere Programme, initiated in 1971, the Ramsar Wetlands Convention, 1971, and the World Heritage Convention, 1972),
- A series of IUCN publications had documented the growth in the number and extent of protected areas, but the collection and analysis of information about them had revealed confusion over the meaning of terms like 'national park' and 'nature reserve',
- There was a particular focus in many conservation circles on national parks, including an IUCN-led attempt at New Delhi to agree their purposes. Other categories of protection received less attention. Indeed they were often covered by catch-all phrases like 'equivalent reserves' or 'other

protected areas' which perhaps implied that they were of secondary importance in some way,
- At the same time, more forward looking conservationists advocated using a variety of approaches to conservation land management, to complement the attention on strictly protected areas, and
- A debate was underway on getting an agreed international terminology for all kinds of protected areas.

- **The 1978 IUCN Report on Categories, Objectives and Criteria for Protected Areas**

This was the background to the decision taken by CNPPA in 1975 to develop a categories system for protected areas, which was also of course a response to the Resolution 10 from the 1972 Yellowstone/Grand Teton Conference. The work was led by Dr Kenton Miller who chaired the CNPPA Committee on Criteria and Nomenclature, work which was funded by the Rockefeller Foundation. Its final report was published in August 1978. Though issued as a 'discussion paper', in fact it quickly became seen as IUCN guidance, offering clarification where there had previously been much confusion[29].

The committee set out the challenge facing it in the following terms. Though it incorporated the agreed 1969 New Delhi definition of national park, it recognised that this was only one approach among many to protected areas conservation. "*The national park was the most common method for the management of conservation areas …(but it) can be complemented by other distinct categories, which when taken together, can provide land managers and decision makers with a broad set of legal and managerial options for conservation land management*"[30]. In short, the report took a much wider view than had been advocated hitherto by IUCN, with its pre-occupation with national parks (however defined); instead it set out to promote a range of categories, based on management objectives rather than their national names. These categories of land were to be managed for a variety of conservation-related purposes and to be thought of as "*members of one family, free from dominance one by another*".

The report suggested that such a categorisation system could achieve several purposes:

- It could show how national parks might be complemented by other land management categories
- It would help each nation develop management categories which reflected its particular resources and needs
- It would ensure that "*regardless of nomenclature used by nations or consistent to particular languages, a conservation area can be recognised and categorised by the objectives for which it is in fact managed*"[31]
- The approach would also provide "*the possibility to gradually establish systematic procedures to remove ambiguities and inconsistencies due to variations in administrative, institutional, legal and political mechanisms among nations*"[32]
- IUCN would be able to "*assemble and analyse information on national parks …. as well as for other categories*". Such data could then be "*stored, recalled, updated and printed*"[33]
- The scientific community would have access to more complete data on natural areas under conservation management
- The tourism sector would likewise have meaningful data on protected areas of importance to tourism

- IUCN would be better placed to play its part in international initiatives, such as the Word Heritage Convention
- CNPPA would be better placed to work with the other IUCN Commissions in matters relating to protected areas (e.g. in the legal and policy fields, or in relation to species protection)
- IUCN would be able to use the categories system to secure the support of "*development banks and development institutions*" by showing how a range of land conservation tools could address both conservation and development needs
- IUCN's could produce more informative versions of its directory of national parks and other protected areas.

The system advocated in the report was based upon an analysis of objectives against types of protected areas, which was used to develop ten categories. These categories were set out under three broad groupings, see box.

The protected areas categories system advocated by IUCN in 1978

Group A: categories for which CNPPA will take special responsibility

I	Scientific Reserve
II	National Park
II	Natural Monument/National Landmark
IV	Nature Conservation Reserve
V	Protected Landscape

Group B: other categories of importance to IUCN, but not exclusively in the scope of CNPPA

VI	Resource Reserve
VII	Anthropological Reserve
VIII	Multiple Use Management Area

Group C: categories that are part of international programmes

IX	Biosphere Reserve
X	World Heritage Site (Natural)

The key points to note about the 1978 system are these:

- It was (Group C apart) based upon the objectives for which areas are managed,
- All categories were considered important, and it did not treat any one category as inherently more valuable than another,
- It encouraged governments to develop systems of protected areas based on using those categories which were appropriate in national circumstances,
- The system assumed that land in certain categories was likely to be owned or managed by government, but recognised that other interest groups might also be involved,
- Though there was some uncertainty about the "*outer limit*" of what were considered protected areas (see below), the system sought to influence land use planning within areas not previously considered as protected.

Despite these strengths in the system, there were some limitations as well, which soon become apparent:

- It did not contain a definition of a protected area as such, so the 'universe' covered by the categories as a whole was not clear;
- It apparently went beyond protected areas, into broader areas of land management, leading to some confusion as to whether it was a system for categorising land management or of protected areas, or both. The confusion was increased by the use of several terms to describe the entire suite of ten categories: 'categories for conservation management', 'conservation areas' and 'protected area categories';
- It included two international categories (IX and X), while acknowledging that many such sites might already be protected under a previous category. In other words the categories were not always to be considered discrete – a confusing arrangement;
- Some of the distinctions between definitions of categories were not always clear; and
- The system seemed rather terrestrial in its concepts and language. A more explicit reference to the marine environment was needed to make it universally applicable.

- **The Adoption of the 1994 System of Protected Areas Management Categories**

Although the 1978 system enjoyed only a provisional and consultative status, it was used in compiling the 1993 UN list of protected areas (which set out protected areas under Categories I-V). It was also taken up in some national legislation. However its shortcomings, indicated above, soon became evident. As early as 1984, therefore, CNPPA established a task force under the chairmanship of Hal Eidsvik to consider up-dating the categories system. It had to take on board not only concerns about the 1978 system but also subsequent resolutions on relevant topics like wilderness areas, indigenous peoples and protected landscapes and seascapes passed at the IUCN General Assembly in Perth, Australia in 1990. The task force conducted a wide-ranging debate, initially amongst Commission members, then more extensively. It reported to CNPPA members in 1990, advising that a new system be built around Categories I-V of the 1978 system, whilst abandoning Categories VI-X[34]. The report was adopted by CNPPA at its meeting in Perth (27 November, 1990) and tabled at the IUCN General Assembly a day later. It was however referred by CNPPA to the next World Parks Congress for review before any action was taken upon it.

The IVth World Parks Congress in Caracas played a key role in agreeing the current IUCN categories of protected areas

Canaima National Park, Venezuela: Sue Stolton

Accordingly, a three day workshop took place at the IV World Congress on National Parks and Protected Areas (a title that suggests that even then national parks were seen as somewhat different from other protected areas) in Caracas, Venezuela[4]. This addressed the task force's recommendations, and was informed also by a paper from an IUCN consultant[35]. A major feature of the workshop debate was a move, led by several experts from developing countries, to add a new category to the first five of the 1978 system so as to accommodate the idea of protected areas for sustainable use of natural resources.

As a result of the workshop's conclusions, the Caracas Congress adopted a recommendation (number 17) urging CNPPA and the IUCN Council to: "*endorse a system of six protected area categories based on management*

[4] Note that during the 1990s this remaining use of "national parks and (other) protected areas" was progressively removed from: the title of CNPPA, which became in 1996 the World Commission on Protected Areas; the *UN List of National Parks and Protected Areas*, which became the *UN List of Protected Areas* in 1998; and the title of the international parks congresses, since that being held during 2003 one will be called the 'Fifth World Congress on Protected Areas'.

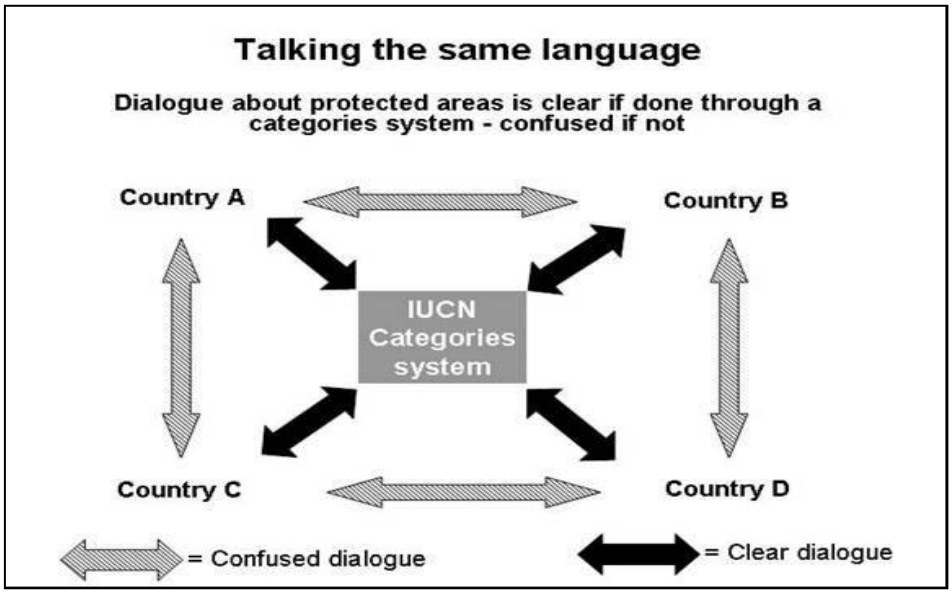
objectives; recommend this to governments; and explain it through guidelines". In fact, the IUCN Council referred this matter to a higher level. Thus in 1994, ten years after the review of the 1978 system had begun, the IUCN General Assembly, meeting in Buenos Aires, approved the new system, commended it to governments and called on CNPPA to finalise guidance to explain it.
Later in 1994, IUCN and the World Conservation Monitoring Centre (WCMC) published *Guidelines for Protected Area Management Categories*, in English, French and Spanish[36]. The guidelines provide an introduction to the system, explain each category in turn and set out a number of worked examples of the application of the system to existing protected areas.

The system explained – the main points from the 1994 Guidelines

- **The basic concepts**

In his introduction to the 1994 guidance, the then Chair of CNPPA, P.H.C. (Bing) Lucas wrote that "*These guidelines have a special significance as they are intended for everyone involved in protected areas, providing a common language by which managers, planners, researchers, politicians and citizens groups in all countries can exchange information and views*". The idea of the categories system providing a common language can be expressed graphically the figure below.

Talking a Common Language (via the categories system)



The purposes of the guidelines are developed further in the main body of the text as follows:

- "*to alert governments to the importance of protected areas*
- *to encourage governments to develop systems of protected areas with management aims tailored to national and local circumstances*
- *to reduce the confusion that has arisen from the adoption of many different terms to describe different kinds of protected areas*
- *to provide international standards to help global and regional accounting and comparisons between countries*

- *to provide a framework for the collection, handling and dissemination of data about protected areas*
- *and generally to improve communication and understanding between all those engaged in conservation.*"

It should be noted that the system was not originally intended to set or drive up management standards, nor to lay down a precise template to be applied at the national level. Indeed IUCN/WCMC specifically advised that it was not to be used as a "*driving*" mechanism, but that protected areas should first be established to meet national or local need and then be "*labelled with an IUCN category according to the management objectives*".

Part I of the Guidelines sets out a definition of 'protected area' as follows:
An area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means[37].

This definition forms the foundation of the system, as it defines the 'universe' to which the categories system applies. If an area does not meet this definition, it is not a protected area as far as IUCN is concerned and is not covered by any protected area category: conversely, any area that is recognised under this definition should be capable of being assigned to a category.

The following should be noted about the definition of protected area:

- it explicitly applies to the marine as well as the terrestrial environment;
- it requires that there should always be a special policy for conservation of biodiversity;
- it allows for conservation of natural resources, and those cultural resources which are associated with these (but not cultural sites *per se*); and
- it requires that a management regime be in place, but acknowledges that in some places this may be done effectively through tradition or ownership rather than a formal legal means.

The Guidelines include an analysis of the main purposes for which protected areas – as thus defined – have been established, based upon a refinement of an earlier matrix in the 1978 version. Based on this, it goes on to recommend six categories, see box.

The protected areas categories system advocated by IUCN since 1994
Areas managed mainly for:

I. Strict protection (i.e. a) Strict Nature Reserve and b)Wilderness Area)
II. Ecosystem conservation and protection (i.e. National Park)
III. Conservation of natural features (Natural Monument)
IV. Conservation through active management (i.e. Habitat/Species Management Area)
V. Landscape/seascape conservation and recreation (i.e. Protected Landscape/Seascape)
VI. Sustainable use of natural resources (i.e. Managed Resource Protected Area).

The categories are more fully explained below. The first five equate broadly to the first five of the 1978 system, whereas Category VI embodies some of the ideas from former Categories VI, VII and VIII. It should also be noted that, while the new guidelines gave prominence to the numbers and related objectives,

they did not bury the names attached to the categories entirely. This might be thought inconsistent in view of the need to develop a common terminology that was quite independent of that which was used in so many different ways at the national level. The decision to retain names for the categories, albeit in a subordinate way, represented the outcome of an uneasy compromise between the traditionalists, who were opposed to the loss of all mention of national parks in particular, and others who wanted to move to entirely "*neutral*" titles for different kinds of protected area as far as the international classification system was concerned.

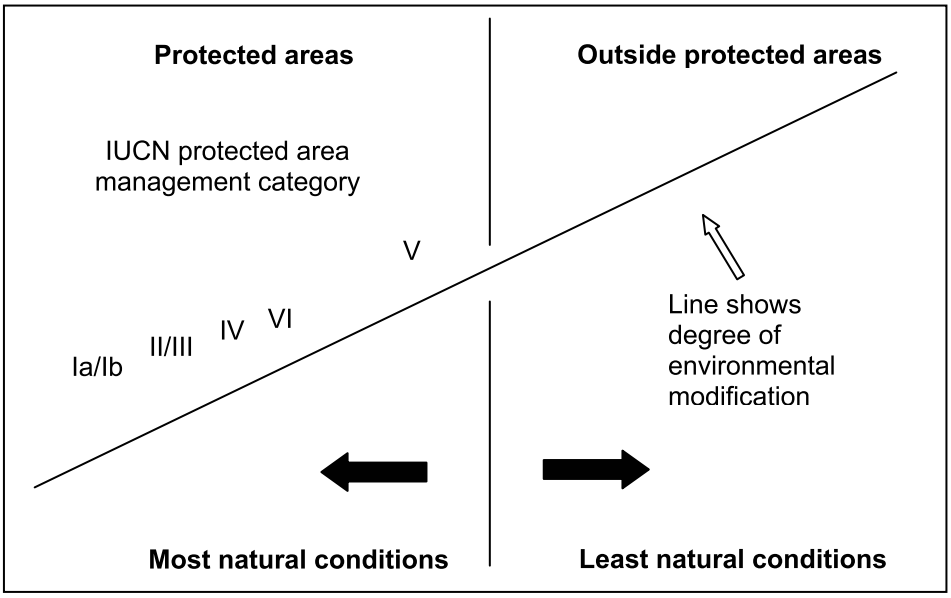
Protected area management objectives and IUCN categories

Management objective	Ia	Ib	II	III	IV	V	VI
Science	1	3	2	2	2	2	3
Wilderness	2	1	2	3	3	-	2
Biodiversity protection	1	2	1	1	1	2	1
Environmental services	2	1	1	-	1	2	1
Natural/cultural features	-	-	2	1	3	1	3
Tourism and recreation	-	2	1	1	3	1	3
Education	-	-	2	2	2	2	3
Sustainable use	-	3	3	-	2	2	1
Cultural attributes	-	-	-	-	-	1	2

1 = Primary objective; 2 = Secondary objective; 3 = potentially applicable objective; - = Not applicable

A number of important principles are set out in the 1994 guidelines to help explain the system:

- the basis of categorisation is by primary management objective;
- assignment to a category is not a commentary on management effectiveness;
- the categories system is international;
- national names for protected areas may vary ;
- all categories are important; but
- a gradation of human intervention is implied (see diagram below).



Rules for application of the Categories System

- **The management unit** is the protected area for the purposes of the categories system: usually this will be a separate legal entity
- **Size** is not a relevant factor in assigning the categories, though the size should be sufficient for the area to fulfil its objectives
- **Zoning** within protected areas may allow for uses that would not be accepted throughout: but at least 75 per cent of the area should be managed for the primary purpose
- **Management responsibility** may rest with the public, private, community or voluntary sectors, regardless of category
- **Ownership of land** may similarly be in the public, private, community or voluntary sectors, regardless of category
- **Regional flexibility** is intended to be a feature of the application of the system
- **Multiple Classifications** may arise when several protected areas in several different categories are contiguous; or surround one another
- **International designations** are to be considered as quite separate from the categorisation exercise

- **The six categories**

Part II of the 1994 Guidelines set out the following for each category:

- A definition
- Objectives of Management
- Guidance for Selection
- Organisational Responsibility
- Equivalent Category in 1978 System

An analysis of these definitions etc. compared to those for the equivalent first five categories of the 1978 system reveals some interesting developments in thinking:

- Whereas the definitions etc. used in the 1978 system implied that human occupation or resource use were unwelcome or unacceptable in Categories I-IV, the 1994 system explicitly recognises that some permanent human presence – albeit very slight in certain cases – may occur in all categories except Ia (Strict Nature Reserve)[38].
- The 1978 system is fairly prescriptive about the type of agency etc. that would normally manage each category. The 1994 system allows for more flexibility in this sense, including management by private individuals and bodies, non-governmental organisations, indigenous peoples, community groups and governments at all levels; and:
- The 1978 system tends to see all protected area categories as managed for the broader public good. Though this perspective is still strong in the 1994 guidance, it also recognises that the values of indigenous peoples and other local groups should also be taken account of.

Finally, the introduction of Category VI is an especially important development. As noted above, this represented a response to a widely held concern among many developing country participants at the Caracas Congress that the system needed to recognise that there are many places where resources are conserved in essentially their natural condition as a basis for sustainable use. There was however some concern that the inclusion of this category might

extend the concept of a protected area so far that it would include commercially worked forest areas etc. For that reason the guidelines lay down some qualifying considerations to apply in the case of Category VI. Thus, as well recalling that all such areas have to fit within the overall definition of a protected area (see above), the 1994 Guidelines state that a Category VI protected area must:

- Be managed for the long term protection and maintenance of biodiversity;
- Contain at least two thirds of the area should be, and is planned to remain in its natural state;
- Exclude large commercial plantations; and
- Have a management authority in place.

- **Case Studies**

Part III of the 1994 Guidelines contain a set of 40 case studies, showing how the categories have been applied in 33 countries. These pen portraits vary from a short paragraph to a full page with accompanying photograph. All the longer descriptions include a final paragraph setting out the reasons for assigning the area to a particular category.

Developments since 1994

Since the publications of the guidelines, IUCN in general and WCPA in particular have sought to promote the understanding and use of the categories system in many countries and international fora. In addition, WCPA has responded to a number of requests for advice on how to apply the system at a national, regional or international level. Examples of follow up initiatives include:

A series of national workshops have explored application of the categories in a local context

Helsinki, Finland: Nigel Dudley

- **National level workshops designed to explore how to apply the guidelines in a local context**, examples include: Australia (Robinson, New South Wales, 1994); UK (Cambridge 1997); New South Wales (Sydney, 1998); Finland (Helsinki, 1999); Canada (Prince Edward Isle, 2001); China (Suzhou, 2004).
- **Publications on how to apply the guidelines in specific geographical or other contexts**, examples include: Guidelines for Protected Area Management Categories – Interpretation and Application of the Protected Area Management Categories in Europe[39]; Application of the IUCN Protected Area Management Categories – Draft Australian Handbook[40]; Biosphere Reserves and the IUCN System of Protected Area Management Categories[41], various papers on how to apply the system to the marine environment[42].
- **References to the 1994 system have been made in numerous IUCN/WCPA publications**. Especially relevant are the publications in the IUCN/Cardiff University Protected Areas Best Practice series, which promotes the use of the system in all nine volumes published to date, notably:
  - Guidelines 1 on national system planning, which recommends that governments consider establishing protected areas according to the IUCN system, as a means to implement Article 8a of the Convention on Biological Diversity (which calls on States Parties to develop systems of protected areas)[43].
  - Guidelines 6 on Evaluating Effectiveness, which states that the system "*could provide the basis for a common set of indicators*" against which

to measure management performance vis à vis protected area objectives[44].
    - Guidelines 8 on Sustainable Tourism in Protected Areas, which sets out a table showing what kinds of tourism – from 'hard' ecotourism, through 'soft' ecotourism to other kinds of tourism – would be appropriate in each category[45].
    - Guidelines 9 on Category V Protected Areas – Protected Landscapes/Seascapes, which develops the principles and guidelines for the planning and management of this particular category of protected area[46]
    - Guidelines 11 advise on the interpretation of the IUCN categories in the context of forests and protected areas[47]
    - Guidelines 12 on Local Communities discuss the relationship between Community Conserved Areas and the IUCN categories as well as the need to take account of governance in the interpretation of the categories[48]
- **The publication of the United Nations List of Protected Areas** (1998 and 2003 versions) which classifies individual protected areas according to the management category to which they have been assigned.
- **A position statement on mining and protected areas**, developed by WCPA 1998, which argued governments and others should ensure that mining operations of all kinds were excluded from protected area Categories I-IV. This principle was taken up in a recommendation (number 2.82) adopted by the IUCN World Conservation Congress in Amman. The significance of this development is that for the first time IUCN sought to link the categories system directly to land use decisions and management standards; this went beyond the purposes for using the system as set out in the 1994 guidelines. Also, it begs the question: if for mining, why not for other activities as varied as sport hunting or hydro power?

The debates about protected area categories and mining and forests, the question of how to recognise community-based protected areas, concerns over the way in which individual sites have been categorised in the UN list and other factors, are the reasons behind this study of the application of the 1994 categories system. In brief it seeks to answer such questions as:

- The Caracas congress was held in 1992: what have we learnt since?
- A big investment in the system has been made by IUCN and WCPA and others: what impact has it had?
- Representatives of some indigenous and local community groups see problems with the system: are they right?
- After the Amman recommendation, industry is looking on the categories in a new (and somewhat suspicious) light: are their concerns justified?
- There is a growing interest in linking categories to management standards: is the system robust enough to be used in this way? and
- How should the system be developed and promoted in future?

Chapter 2.2: The influence of the IUCN Categories on legal and policy frameworks

Summary

As a contribution to *the Speaking a Common* language project, IUCN's Environmental Law Centre (ELC) was asked to review available protected area legal and policy frameworks to see "*how these have been influenced by the IUCN protected area management categories*".

Of 322 relevant pieces of national legislation developed since 1978 from 164 countries reviewed by ELC, seven per cent (22 pieces of legislation) were strongly influenced by the IUCN categories. When narrowing this review to 126 pieces of legislation developed between 1994 and 2002 (the revised categories were published in 1994), the figure rose to 10 per cent (13 pieces of legislation in total) incorporating the IUCN categories. When used, the categories have been adapted to suit the national situation, as is recommended in the guidelines.

The IUCN protected area management categories appear to have been reflected more frequently in national and sub-national policy than in legislation. Since policy developments can be expected to influence new and revised legislation over time, the number of countries incorporating the categories into legislative documents may increase. Although this information was not reviewed as comprehensively as national legislation, 16 countries were found to have included the categories in national policy frameworks. Of these nine had used the categories in national legislation and seven had not.

Many international agreements that relate to protected areas were adopted before the 1978 or 1994 guidelines were published. However, there are three examples of where the IUCN categories have had an influence at this level. In early 2004, the Convention on Biological Diversity (CBD) adopted a global Programme of Work on Protected Areas that endorses the categories system, the Intergovernmental Forum on Forests in 2000 also recognised the categories, and – at the regional level – the revised African Convention on the Conservation of Nature and Natural Resources has been influenced by the categories. It should be emphasised however that the adoption of the IUCN categories in policy and legislation by countries, individually or in international processes, is not in itself a measure of the success of the system, nor even of IUCN's influence. After all, it was not a specific intention of the 1994 guidelines that they should be used in this way, but rather that they provide an international framework for dialogue about protected areas. The fact that the system has been used as the foundation for some national and international policy and legislation should be seen as unexpected bonus and a tribute to the robustness of the system. It also highlights the need to provide better guidance on the categories system to all those involved in the development of protected area policy and legislation.

Finally, as this research is only an initial review of the extent to which legal and policy frameworks have been influenced by the IUCN categories, it is recommended that information related to the IUCN categories and protected area policy and legislation continue to be researched, collated and published.

This chapter has been edited from a report written by Benita J Dillon, Scientific Officer, of the IUCN Environmental Law Centre, Bonn, Germany

January 2003

The research

- **Methodology**

A classification was developed to gauge the degree, or 'level', in which the legislation and policy frameworks have been influenced by the IUCN protected area management categories. These four levels are described in the box below and have been used throughout the working paper and correspond to the matrix given at the end of this paper.

- IUCN protected area management categories are incorporated into instruments exactly and IUCN is specifically mentioned (specifically mentioned and followed).
- Very similar categories to those of IUCN are used and/or IUCN is not specifically mentioned (strong influence with very similar categories).
- Contains concepts that are similar to the IUCN categories (few similar categories with no clear or direct influence).
- No similarities seem to exist between the protected areas established and the IUCN categories (no apparent influence).

- **Sources of Information**

The information outlined in the paper has been gathered from many sources. The most important source was ELC literature, legislation libraries and ECOLEX (incorporating FAOLEX) – a comprehensive and up-to-date legislative database holding a large electronic collection of environmental agreements, laws and regulations from IUCN, UNEP and the Food and Agriculture Organisation (FAO) (www.ecolex.org/). The Internet has also been an important source of information, including the World Database on Protected Areas and the UNEP-WCMC prototype Nationally Designated Protected Areas Database (www.unep-wcmc.org/protected_areas/data/nat2.htm). ELC is also currently contacting countries seeking information regarding their protected area legislation, and this information has been used where appropriate. Information has also been gathered and verified by country experts from around the world.

- **Limiting Factors**

Factors to take into consideration when reading this working paper include:

- The research was focused on protected area information dated from 1978 onwards, which is when the IUCN categories system was first published.
- Due to limitations of time and resources, effort has been targeted at national protected area legislation. Other types of legislation such as land use planning have not been actively sought; however these may be relevant in some cases.
- Information made available to ELC, and generally only those documents or abstracts originally in English or available as English versions on ECOLEX, provided the basis for the review and therefore gaps are inevitable.
- Only those countries with protected areas listed on the World Database on Protected Areas were included in the statistics.
- Draft legislation was not actively sought and has only been reviewed when it has been made available.
- Applying the four-point classification (see above) involved informed judgement, but was inevitably a somewhat subjective exercise.
- A scientific officer, not a legal officer, has undertaken the research.
- This is an initial review and should be up-dated as information becomes available.

Summary of findings[5]

- **Global Documents and Processes**

In early 2004, the Convention on Biological Diversity (CBD) adopted a Programme of Work on Protected Areas, which endorses the categories system and supports the *Speaking a Common Language* project. The Intergovernmental Forum on Forests (IFF) in 2000 also recognised the categories. These are significant developments though the IUCN categories have as yet had little impact so far on other key instruments at a global level.

- **Regional Conventions and Agreements**

IUCN protected area management categories have been specifically included or incorporated in adjusted form in just one of documents examined (the African Convention).

- **National Legislation**

In 20, out of the 164 countries reviewed, the IUCN categories have had a direct influence on national law and/or national binding regulations.

Of the 322 pieces of national legislation reviewed, according to the classification system described above, Level 1 was assigned to 0.6 per cent (two pieces of legislation), Level 2 to 6.2 percent (20 pieces of legislation), Level 3 to 35.4 per cent (114 pieces of legislation) and Level 4 to 57.8 per cent (186 pieces of legislation). Thus nearly seven per cent of all the national legislation included in the research either specifically quoted the IUCN categories or used very similar categories.

For national legislation developed ***after*** 1994 (126 documents reviewed), the figure increases to over 10 per cent (13 pieces of legislation): Level 1 (1.6 per cent) and Level 2 (8.7 per cent).

The higher percentage of countries whose use of the categories system has been classified at Level 2 (strong influence with very similar categories) reflects the adaptation of the categories system to suit national conditions, as recommended in the 1994 Guidelines.

- **National Policy**

More countries appear to use the IUCN protected area management categories in policy documents than in national legislation.

Although not reviewed as comprehensively as national legislation, 16 countries were found to have included the categories in policy frameworks. Of these, nine had used the categories in national legislation and seven had not.

- **Sub-national Legislation and Policy**

This information was not actively researched, however some case studies of sub-national policy that have used the IUCN categories are included in the paper. Again, there are examples of countries who have used the categories at this level and not in national legislation.

[5] A complete list of the instruments reviewed during this project can be found in the full working paper prepared for this project, which can be found on the Speaking a Common web site. Appendix 1 provides summaries of those classified as Levels 1 and 2. A record of all information collected is contained in a Microsoft Excel spreadsheet titled Protected Areas_IUCN categories.xls. Hard copies of much of the data used in the report are contained in reference folders, which are available from ELC (contact the ELC Library at ELCSecretariat@iucn.org with the subject header “ELC Library Request").

Discussion of findings

The research found that the IUCN Categories have had a significant influence on some protected area policy and legislation internationally and nationally. In most cases, however, the categories have been adapted to suit national or sub-national circumstances (as is recommended in IUCN's *Guidelines for Protected Area Management Categories*).

Relatively few global and regional documents/processes have been developed or revised since the IUCN categories were published; therefore there has been little opportunity to incorporate them. The three examples given in the report (Intergovernmental Forum on Forests adopted in 2000, the revised African Convention on the Conservation of Nature and Natural Resources adopted in 2003, and the recent Programme of Work on Protected Areas of the Convention on Biological Diversity, also adopted in 2004), provide evidence that the IUCN categories are beginning to have an impact, although there is a recognised need for further development.

Similarly at the national level, protected area legislation in many countries was established or developed before the IUCN guidelines were introduced and is unlikely to be reviewed for some time. It is a long process to develop and adopt legislation and it is unrealistic to expect the IUCN guidelines published in 1994 to have an immediate influence in many countries. The data suggests, however, that in developing new and revised legal frameworks reference is being made by an increasing number of countries to the IUCN categories. It should be noted that those countries that have used the categories system in legislation, which are highlighted as case studies later in this paper, are characterised by having experts with a good understanding of the IUCN categories system involved in the legislative process.

There is also evidence that some countries are undertaking a retrospective exercise, without altering their legislation, to relate or rationalise their pre-existing category system to the IUCN categories (this rationalisation has been marked by '#' in the summary table at the end of this chapter). This underscores the relevance of the categories system. Regardless of whether national legislation incorporates the IUCN categories, there is a critical need for consistent understanding of the meaning of the various categories, and the manner in which they are internationally reported. This need is formally reflected in the CBD Programme of Work on Protected Areas, which speaks of '*the value of a single international classification system for protected areas*'.

As part of the verification exercise, consultees suggested several reasons for not adopting the IUCN classification system, including:

- They pointed out that their national category system pre-dates the IUCN categories and that it was difficult to amend a system that existed and was up and running.
- They feared that the IUCN categories might change, thus rendering the legislation out of date, so it seemed wiser to incorporate the categories only into policy documents.
- They considered that the IUCN categories were difficult to interpret.

Although, as highlighted above, the IUCN categories will not be reflected in all new or revised policy and legislation on protected areas, it is clear from this initial review that reference to, and use of, the categories in policy and legislation is taking place. It is therefore important that this use of the category

system is documented and that every effort is made by IUCN and its relevant commissions to ensure that those considering using the categories system in policy and/or legislation have a full understanding of it.

The following recommendations drawn from the results of this research thus deal with these two crucial issues: up-to-date and accurate information, and education and capacity building, and are subject to resources being made available.

Recommendations

- **Up-to-date and accurate information:**
  - IUCN's Environmental Law Centre (ELC) should continue to ensure that the ECOLEX (incorporating FAOLEX) database is kept up-to-date with information on protected area legislation, conventions and agreements.
  - ELC should ensure that the information contained in this working paper is updated periodically.
  - IUCN's World Commission on Protected Areas (WCPA) and ELC should ensure information related to protected area legal and policy frameworks is included in the World Database on Protected Areas.
  - ELC and the UNEP- WCMC should review the opportunities to include an updated report of this kind in future editions of the UN List of Protected Areas.
  - WCPA and IUCN's Environmental Law Programme (ELP) should consider undertaking a more detailed review of the extent to which the IUCN categories have been influential in the development of protected area policy at the national and sub-national level.

- **Education and capacity building:**
  - ELP should consider developing a practical manual, focussed on national and sub-national levels, on points to consider when developing national protected areas legislation and/or policy. This document should also explain the IUCN protected area management category system and discuss the legal issues relevant to its use in national legislation.
  - ELP should consider providing capacity building and technical advice to those countries reviewing and amending their protected area legislation or policy documents.
  - All relevant IUCN technical assistance given to countries should include capacity building on the category system, linked, where appropriate, to the development of national protected area legislation and policy.
  - IUCN could provide additional assistance (handbook or other guidance) to countries that have adopted the categories in policy or legislation, explaining how best to translate this into practice.
  - IUCN should showcase model examples of policy and legislation to assist countries thinking of using the IUCN categories.
  - IUCN should assist governments to take into account the IUCN categories when implementing the CBD.

Global documents and processes

There are a multitude of global documents and processes that relate to protected areas around the world, most of which were adopted before the 1994 IUCN Protected Area Management Categories were published. These international documents and agreements are often used by countries to develop protected area policies and guidelines and therefore it may be of

interest to IUCN to ensure that the international category system is considered when new agreements or processes are being developed. For example, many countries have produced National Biodiversity Strategies in response to the requirements of the CBD. If the IUCN category system is embedded into these relevant international agreements, it is more likely to be considered in national and sub-national policy and legal frameworks.

The global documents and processes researched as part of this project include:

- Agenda 21 (1992)
- Convention Concerning the Protection of the World Cultural and Natural Heritage (1972)
- Convention on Biological Diversity (1992)
- Convention on the Conservation of Migratory Species of Wild Animals (1983)
- Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention) (1971)
- Intergovernmental Forum on Forests (2000)
- UNESCO Man and the Biosphere Programme (1970)
- United Nations Law of the Sea (1982)
- World Charter for Nature (1982)

Three cases where the categories are reflected in global agreements are described below.

- **Intergovernmental Forum on Forests 2000**

(Level 1)
The report of the Intergovernmental Forum on Forests makes reference to the IUCN categories, after detailed discussions on the issue of IUCN and forest categories (pers. comm. Carole Saint-Laurent). The Forum encouraged countries to contribute to a global and regional assessment of the current status of protected forest areas, including total number, extent of each area, objectives of establishment, and effectiveness of management, IUCN equivalent category and basic biological and social information available.

The Forum invited countries, relevant international organisations and institutions to work collectively to develop further guidelines for consistency in the interpretation and use of the existing IUCN categories of protected areas for application in a national context. The Forum also invited the development of a global approach for assessing the effectiveness of protected forest area management in relation to environmental, social, cultural and other relevant objectives.

The conclusions of the report describe several existing categories of protected areas, but note that: "*The one developed by the World Conservation Union (IUCN) World Commission on Protected Areas is being used by many countries, United Nations institutions and major Levels. IUCN is currently working with other organisations and countries to interpret the categories for use in national and international statistics. The categories need to be more flexible in order to encompass the wide range of forest protection regimes existing in various countries. There is also a need to develop common understanding on the key concepts, definitions and terminology concerning management regimes consistent with forest conservation inside and outside protected areas. In establishing and managing protected forest areas and*

identifying them with appropriate categories, consideration should be given to their value as representative of unique forest types, their potential to generate information on ecological processes, conservation of biodiversity and environmental services, and their impact on the indigenous and local communities and others depending on them for sustenance".

Source: Pers. comm., Carole Saint-Laurent, IUCN and WWF Forest Policy Advisor www.un.org/documents/ecosoc/cn17/2000/ecn172000-14.htm

- **The Convention on Biological Diversity 1992**

(Level 1)
Although the protected area categories are not specifically mentioned in the Convention on Biological Diversity (CBD), the 7th Conference of the Parties to the Convention on Biological Diversity (CBD/COP7), meeting in Kuala Lumpur, Malaysia in February 2004, adopted a Programme of Work on Protected Areas. The relevant decision includes an important paragraph in as follows: (The CBD COP) **Recognises** *the value of a single international classification system for protected areas and the benefit of providing information that is comparable across countries and regions and therefore* welcomes *the on-going efforts of the IUCN WCPA to refine the IUCN system of categories and* **encourages** *Parties, other Governments and relevant organisations to assign protected area management categories to their protected areas, providing information consistent with the refined IUCN categories for reporting purposes.*

Source: The full text of the CBD/COP7 decision can be found on www.biodiv.org/doc/meetings/cop/cop-07/official/cop-07-l-32-en.pdf

- **Biosphere Reserves and the IUCN System of Protected Area Management Categories**

UNESCO biosphere reserves have received special attention with respect to the use of IUCN categories

(Level 4)
Although the IUCN categories are not mentioned in the official documents of the UNESCO Man and Biosphere (MAB) Programme, in 1996, a joint publication of IUCN, the UNESCO MAB and the Australian Nature Conservation Agency was issued under the above title. It aimed to "*demonstrate that the IUCN management categories system is not only compatible with the Biosphere Reserve concept, but that it can inform the planning, management and effectiveness of Biosphere Reserves*".

Dyfi Biosphere Reserve, Wales: Nigel Dudley

The publication recommends a process for assigning a Biosphere Reserve, or part of it, to one or more of the IUCN categories. The first step it to identify whether the whole Biosphere Reserve should be classified under one or more categories. This requires the identification of which of the following three scenarios applies:

- there is one management authority for the entire Biosphere Reserve, and for legal purposes the whole unit is classified by law as having one primary management objective (in which case the whole site should be assigned one category);
- there is one management authority responsible for two or more areas making up the Biosphere Reserve, but each such area has separate, legally defined management objectives; or

– there are two or more management authorities responsible for separate areas with different management objectives, which jointly make up the Biosphere Reserve.

In the case of the second and third scenarios, parts of the Biosphere Reserve can be assigned to individual categories. The relationship is clarified further in the following table taken from the publication:

The relationship between the IUCN categories and Biosphere Reserve zones

PA management category	Biosphere Reserve Zones		
	Core	Buffer	Transition
Ia	Yes	No	No
Ib	Yes	No	No
II	Yes	No	No
III	Yes	No	No
IV	Yes	Yes	No
V	No	Yes	Perhaps
VI	Perhaps	Yes	Perhaps
Yes = compatibility of management purposes No = incompatibility of management purposes Perhaps = management purposes may be compatible			

The publication also includes a number of case studies to illustrate each of the scenarios referred to above.

Source: Bridgewater P., Phillips A., Green M. and Amos B. (1996) *Biosphere Reserves and the IUCN System of Protected Area Management Categories*. ANCA, Canberra, Australia

Regional conventions and agreements

Thirty-five regional[6] Conventions and agreements were reviewed and of these only one was found to have used the IUCN categories; the *Revised African Convention on the Conservation of Nature and Natural Resources* (2003) uses very similar categories to IUCN (Level 1).

The IUCN categories were used in the revision of the Africa Convention on the Conservation of Nature and Natural Resources

- **The revised African Convention on the Conservation of Nature and Natural Resources**

(Level 1)

The IUCN categories had a strong influence during the development of the revised Convention. An Interagency Taskforce initially endorsed the use of the IUCN guidelines and this was submitted to a group of African governmental experts who modified the text in a few instances to suit the African situation.

Kogelberg Biosphere Reserve, Cape Floral Kingdom, South Africa: Nigel Dudley

Article XII of the Convention states that the: "*Parties shall establish, maintain and extend, as appropriate, Conservation Areas….. The aim of this is conserve those ecosystems which are most representative and peculiar to each jurisdiction, or are characterised by a high degree of biological diversity. It is to ensure the conservation of all species and particularly of those which are only represented in areas under each jurisdiction, threatened, or of special scientific*

[6] The term Regional used throughout this paper refers to the term that is of multi-national scale.

or aesthetic value and of the habitats that are critical for the survival of such species….The Parties shall seek to identify areas critically important to include as Conservation Areas, taking into consideration the work of competent international organisations in this field." Article V, defines a 'Conservation Area' as any protected area designated and managed mainly or wholly for one of the following purposes:

- Science or wilderness protection (Strict Nature Reserve/Wilderness Areas);
- Ecosystem protection and recreation (National Parks)
- Conservation of specific natural features (National Monuments)
- Conservation through management interventions (Habitat/Species Management Areas)
- Landscape/seascape conservation and re-creation (Protected Landscapes/Seascapes);
- The sustainable use of natural ecosystems (Managed Resource Protected Areas)

The definitions and management objectives of these categories are contained in Annex 2 to this Convention and these are virtually the same as the 1994 IUCN guidelines for protected area management categories.

Source: Pers. comm., Francoise Burhenne-Guilmin, Environmental Law Centre, Bonn.

National legislation

National legislation relating to protected areas exists in most countries around the world. Legislation varies greatly between countries, as indeed does environmental legislation in general. Countries generally have developed their own system of protected area categories and the legislation incorporates these category systems in many ways.

Research on national legislation has been the major focus of this paper and the information gathered is comprehensive with 192 countries reviewed. Of these, 164 countries have been included in the statistics as some countries do not have existing national legislation relating to protected areas, their legislation is dated before 1978 or there was not enough information available to make a sensible judgement on content and thus the influence of the categories. A total of 439 pieces of national legislation were reviewed and of these 322 have been included in the statistics. The results of the study on national legislation and of legislation developed from 1994 onwards are presented below. Verification of the information has been undertaken by contacting relevant experts from as many countries as possible. Also information was lacking in the case of some countries.

Level of influence of IUCN categories on National Legislation

Type	Level 1	Level 2	Level 3	Level 4	Total
No. National Legislation	2	20	114	186	322
Percentage (%)	0.6%	6.2%	35.4%	57.8%	100%

Note: This table includes information from 1978 onwards

Level of influence of IUCN categories on National Legislation developed from 1994

Type	Level 1	Level 2	Level 3	Level 4	Total
No. National Legislation (1994 onwards)	2	11	45	68	126
Percentage (%)	1.6%	8.7%	35.7%	54.0%	100%

Countries that have national legislation that reflects directly, or is very similar to the 1978 IUCN categories include:

- Argentina (*Law of National Parks and Reserves and Natural Monuments (National Law No. 22.351 1980*)
- Belize (*National Parks Systems Act* 1981)
- Cambodia (*Regulations on the Creation and Designation of Protected Areas* 1993)
- Guatemala (*Law for the Protection and Improvement of the Environment* 1986*, Law of Protected Areas* 1989 and *Regulation to the Protected Area Law* 1990)
- Philippines (National Integrated Protected Area Systems Act 1992)
- Spain (*Conservation of Natural Areas and Wild Flora and Fauna Act* 1989)
- Turkey (*National Park Act* 1983)

The research reviewing the extent to which the 1994 IUCN guidelines have been incorporated into the new wave of national legislation, shows that of the 126 pieces of legislation reviewed from 87 countries developed since 1994, 10 per cent appear to have used the IUCN categories (1.6 per cent Level 1 and 8.7 per cent Level 2). These are:

Twelve of the countries reviewed had already used the IUCN categories in drawing up legislation

- Australia (Environment *Protection and Biodiversity Conservation Act* 1999)
- Brazil (*Law No. 9.985 establishing the National System of Protected Areas Management* 2000)
- Bulgaria (*Protected Areas Law* 1998)
- Cambodia (*Law on Environmental Protection and Natural Resource Management* 1996 and *Proposed Legislation)*
- Cuba (*Decree Law 201 National System of Protected Areas* 1999)
- Georgia (*Law on the System of Protected Territories* 1996)
- Hungary (*Act No. LIII. Of 1996 on Nature Conservation in Hungary* 1996)
- Kuwait (*Protected Area Law* 1999)
- Mexico (*General Ecology Law* 1996)
- Niger (*Fixant le regime de la chasse et de la protection de la faune* 1998 and *Portant loi-cadre relative a la protection de l'environment* 1998)
- Slovenia (*Nature Conservation Law* 1999), and
- Vietnam (*Regulation of Special Use Forests, Protection Forests and Production Forests, which are Natural Forests (Decision No 08/2001/QD-TTg of January 11 2001).* Note that this was a retrospective exercise to relate a pre-existing category system to the IUCN categories.

Triglav National Park, Slovenia: Nigel Dudley

Although not a focus of the research, some draft legislation that has been influenced by the categories was also identified and is included for information in the summary table at the end of this chapter. Examples include:

- Guyana (*Draft Environmental Protection (Protected Areas) Regulations* 2001)
- Uruguay (*Draft National System of Protected Areas* (Law No. 17234) 2000)

Australia and Georgia are the only two countries that specifically mention IUCN and have directly incorporated the categories in their legislation (Level 1). Other countries listed above have very similar categories indicating a strong influence (Level 2). In most cases, countries have interpreted the categories to suit their local situation. The categories appear to be a good starting point for discussions and providing the ground rules and a framework to begin reviewing or developing legislation for protected area systems.

More detailed information regarding some of those countries that have current or draft national legislation that has incorporated the 1994 IUCN categories is provided below.

Australia has gone further than most national governments in incorporating the categories into national policy

- **Australia: *Environment Protection and Biodiversity Conservation Act (EPBC) 1999***

(Level 1)
In the mid 1990's after the revised IUCN guidelines were published, the Australian Commonwealth Government embarked on a process involving the State and Territory Governments to develop a national approach to the implementation of the categories in Australia (including a workshop in 1994 at Robinson, NSW). This process produced a draft set of benchmarks that provided guidance on the use of the IUCN categories in Australia.

Girraween National Park, Queensland, Australia: Sue Stolton

A Collaborative Australian Protected Area Database was developed whereby all jurisdictions contribute information on their protected areas, classifying these against the IUCN categories. The database assists in the reporting of the status of protected areas in Australia.

In 1999, all States and Territories agreed (through the Australian and New Zealand Environment and Conservation Council) to the Australian Guidelines for Establishing the National Reserve System (see national policy section). Under these guidelines, Protected Areas must be classified using the IUCN categories. During the development of the *Environment Protection and Biodiversity Conservation Act* (EPBC Act) 1999, the then Minister for Environment, Senator Robert Hill, successfully proposed to formalise the use of the categories by embedding them into this new legislation.

The EPBC Act came into force on 16 July 2000. It promotes biodiversity conservation by ensuring the protection of matters of national environmental significance. The Act requires that each Commonwealth Reserve be assigned to one of the categories and that these reserves must be managed in accordance with the Australian IUCN Reserve Management Principles for that category – principles that have been strongly influenced by the IUCN management guidelines and criteria. The EPBC *Regulations* set out the Australian IUCN Reserve Management Principles for each IUCN category. When a management plan is prepared for a Commonwealth reserve, or a particular zone of a reserve, the plan must be consistent with these Australian IUCN Reserve Management Principles. The Act also provides that Commonwealth Reserves may be divided into zones, and each zone may be assigned an IUCN category.

The major benefits of incorporating the IUCN categories in the EPBC Act include:

- each Commonwealth Reserve that is proclaimed must be assigned a particular IUCN category;

- assignment of an IUCN category makes clear to all stakeholders, at the time of proclamation, the primary management purpose for the reserve;
- in the absence of a management plan, the assigned IUCN category is important in governing the management of the reserve; and
- the assigned category is important in guiding the development of the management plan for the reserve, its future use and management.

Australia undertook a great deal of work and consultation in understanding how the international categories system might work before it was enshrined into national legislation. A lot of experience has thus been gained in the application of the categories system, some of which could be applied outside Australia.

The IUCN protected area management categories concept is slowly filtering down into Australian State and Territory legal and policy frameworks and is also beginning to be implemented in the field and incorporated into park management plans.

Source: Pers. comm. Wayne Fletcher, Legislation Policy Section, Environment Australia and www.ea.gov.au/epbc/about/index.html. The *Environment Protection and Biodiversity Conservation Act Regulations* 2000: scaleplus.law.gov.au/html/pastereg/3/1619/top.htm

- **Georgia: *Law on the System of Protected Territories 1996***

(Level 1)
The Law in Georgia makes provision for a system of protected territories for the preservation of ecosystems, fauna, flora, landscapes and areas of particular natural and cultural interest.

In the definitions section of this legislation, it specifically mentions which protected area categories for Georgia correspond with the IUCN categories. This includes State Reserves (IUCN Category I), National Parks (IUCN Category II), Natural Monuments (IUCN Category III), Prohibited Area (IUCN Category IV), Protected Landscape (IUCN Category V) and Territory Areas of Multi-purpose Use (IUCN Category VI). Provisions are also made for including Biosphere Reserves and World Heritage Sites into the system. According to the definitions available in the Law, these categories correspond to the IUCN classifications and the law was aimed to harmonise national legislation with international guidelines.

Source*:* ECOLEX (incorporating FAOLEX) Search and pers. comm. Irina Krasnova

- **Brazil: *Law No. 9.985 establishing the National System of Protected Areas Management – SNUC Law 2000***

(Level 2)
Brazil did not have a consolidated rule of law on environmental conservation until 2000. Law 9.985 allows for the creation of a National System of Conservation Units (SNUC); it defines, unifies and consolidates criteria for the creation and management of protected areas.

The SNUC law reclassifies the various categories of conservation units, updating their concepts and objectives and sorting them into two major categories:

- Sustainable Use (Environmental Protection Area, Relevant Ecological Interest Area, National Forest, Extractive Reserve, Faunal Reserve, Sustainable Development Reserve and Private Natural Heritage Reserve); and
- Integral Protected Areas (Ecological Station, Biological Reserve, National Park, Natural Monument and Wildlife Refuge).

It is reported that the IUCN categories have had a 'passive' influence on the law, and policy has been influenced by the categories. Although there has been no formal adoption of the IUCN system, the categories do incorporate the types of protected areas that exist in Brazil. The personnel drafting the legislation were aware of the IUCN categories and therefore developed the law with the categories system in mind. The SNUC law does not follow the categories completely, but - as in many other countries – the IUCN system has been adapted to suit conditions in Brazil.

Source: ECOLEX (incorporating FAOLEX) Search, pers. comm. Pedro Rosabal, IUCN, Gland and Antonio Herman Benjamin, Brazil

- **Bulgaria: *Protected Areas Law 1998***

(Level 2)
The Protected Areas Law of 1998 allows for the establishment of six categories of protected areas including Strict Nature Reserve, National Park, Natural Monument, Managed Reserve, Natural Park and Protected Site. The Act has been strongly influenced by the IUCN categories in order to bring national nature conservation practice in line with the world practice and allow comparability in the conservation status of protected areas. The definitions and management objectives do not follow the IUCN guidelines exactly, but have been interpreted to suit the situation in Bulgaria.

Source: ECOLEX (incorporating FAOLEX) Search and pers. comm. Liliana Maslarova, CEL Member

- **Cambodia: *Law on Environmental Protection and Natural Resource Management 1996, and Proposed Legislation***

(Level 2)
The 1996 Cambodian *Law on Environment Protection and Natural Resource Management* mentions that natural resource protected areas, which include National Parks, Wildlife Sanctuaries, Protected Landscape Areas and Multiple Use Areas, are determined by Royal Decree. Information on these categories is included in the *Regulations on the Creation and Designation of Protected Areas* (1993). These categories have many similarities to the IUCN protected area management categories.

New legislation is proposed for Cambodia (currently in draft form in the Cambodian language). It is reported that the draft divides the protected area network into ten categories, taking most of the IUCN categories as guidelines. The process for finalising the legislation is underway and the Department of Nature Conservation and Protection is organising provincial consultation workshops in five regions to discuss further development of the legislation. Non-governmental organisations will then be consulted and discussions will be conducted with other relevant stakeholders as appropriate.

Source: ECOLEX (incorporating FAOLEX) Search and pers. comm. Meng Monyrak, Cambodia

- **Cuba:** ***Decree-Law 201 National System of Protected Areas 1999***

(Level 2)
The management categories in Cuba were adopted by *Decree-Law 201*. These categories have been strongly influenced by the IUCN protected area management categories, and mirror to a great extent the IUCN definitions, although they have been amended to suit the Cuban context. This Law *(Del Sistema Nacional De Areas Protegidas*) deals with the National System of protected areas. It allows for the following categories to be established: Reserva Natural (Natural Reserve), Parque Nacional (National Park), Reservea Ecologica (Ecological Reserve), Elemento Natural Destacado (Natural Monument), Reserva Floristica Manejada (Flora Reserve), Refugio de Fauna (Fauna Refuge), Paisaje Natural Protegido (Protected Landscape) and Area Protegida de Recursos Manejados (Managed Resource Protected Area).

Previous to this law there were between 12 and 16 protected area categories and the system was quite complex. The process of incorporating the IUCN categories into policy and legislation involved a participatory process with national workshops held in 1989, 1995 and 1998.

The main differences exist with Category II (National Park), which has been split into two categories, National Park (similar to IUCN Category II) and Ecological Reserve, which is smaller and does not comprise a whole ecosystem. This was seen as a necessity in Cuba as there is considerable habitat fragmentation. The other change concerns IUCN Category IV (Habitat/Species Management), where Cuba differentiates between flora and fauna and has created two categories, Managed Flora Reserve and Fauna Refuge. This division is a tradition in Cuba, however the management concepts applied to these categories comply with those in Category IV of the IUCN guidelines.

The lessons learned during this technical and participatory process were of benefit to all involved and allowed Cuba to gradually improve and simplify their category system.

Source: Pers. comm. Pedro Rosabal, IUCN and Reinaldo Estrada, Cuba

- **Hungary:** ***Act No. LIII. Of 1996 on Nature Conservation in Hungary, 1996***

(Level 2)
Hungary's Nature Conservation Act provides for the conservation of natural values and areas, their natural systems and biodiversity. The legislation stipulates that protected natural areas may be categorised as National Parks, Landscape Protection Reserves, Nature Conservation Areas and Natural Monument. The category system used in Hungary has been defined by using the IUCN protected area management categories, but does not allow for Strict Nature Reserves/Wilderness Areas (Category Ia/Ib) or Managed Resource Protected Areas (Category VI).

The process to incorporate the IUCN categories was lengthy as initially there was a need for those involved to become familiar with the IUCN category system. After the political and economic changes of 1990, there was a need to ensure the protection of the formerly state-owned protected lands. The IUCN category system provided Hungary with a tool that could be referred to and used to introduce the idea of an effective and representative system of protected areas into the political arena. This helped ensure the protection of

conservation areas from privatisation. Hungarian environmental experts have had a long involvement in the modification and implementation of the IUCN category system and they therefore had all the necessary IUCN documentation when developing the legislation. The ranking of the protected areas was based on a participatory process that involved non-governmental organisations and other relevant stakeholders.

Source: Pers. comm. Zoltan Szilassy, Hungary and Act No. LIII. Of 1996 on Nature Conservation in Hungary.

Although the categories were used during development of the Mexican law, they are not reflected exactly in the resulting legislation

- **Mexico:** ***General Ecology Law 1998***

(Level 2)
During a review of protected area legislation in Mexico, it was suggested that the IUCN categories be used to improve the national category system and bring them closer to resembling international standard. Although it was intended to use the IUCN categories as guidelines, for many reasons the result was not entirely as expected. Under the legislation Mexico has eight categories including Biosphere Reserves, National Parks, Natural Monuments, Natural Resource Protection Areas, Areas for Wildlife, Sanctuaries and State Parks and Reserves. Although some of the names are similar, the degree of protection is different to those outlined by the IUCN guidelines, however it is hoped that eventually the national system will become more similar to IUCN's.

Protected mangroves, Quintana Roo, Mexico: Nigel Dudley

Mexico thus provides an example of where the IUCN categories had some level of influence during the development of this legislation, but for political reasons the outcomes were not as originally intended. This clearly indicates that, although a universal category system has some benefits, it is sometimes hard to accommodate it to different situations, ideas and opinions.

Source: Pers. comm. Ramon Perez Gil Salcido, Mexico

- **Slovenia:** ***Nature Conservation Law 1999***

(Level 2)
Slovenian legislation allows for the designation of IUCN categories. Although in some cases the names of the categories vary, the management objectives are the same. The legislation was clearly influenced by the IUCN categories and the process of developing the legislation involved many experts from the government and the Agency for Nature Protection, many of whom are members of the World Commission on Protected Areas and/or cooperate with IUCN and other Commissions. IUCN therefore had a presence during the development of this legislation and the process involved people who were familiar with the IUCN category guidelines.

The IUCN categories have been applied to the national situation of Slovenia and protected areas can be established either by Parliament (National Parks), Government (Strict Nature Reserves, Nature Reserves, Natural Monuments, Regional Parks or Landscape Parks) or the Municipalities (Nature Reserve, Natural Monument or Landscape Park). As yet there are no protected areas designated under Category IV or VI, however mechanisms are in place for these to be established.

Source: Pers. comm. Marija Zupanic-Vicar

- **Guyana:** ***Draft Environmental Protection (Protected Areas) Regulations***

(Level 2)
Guyana provides a good example of draft regulations that have been strongly influenced by the 1994 IUCN categories. The draft regulations outline the eligibility and selection of sites and the categories of protected areas that, where appropriate, have been influenced by the IUCN guidelines. The only significant difference between the regulations and the IUCN guidelines lies with the definition of a National Park. These regulations do not mention culture as the conservation of Amerindian culture is covered elsewhere.The draft regulations propose the following categories of protected areas:

- Strict Nature Reserves or Wilderness Areas
- National Parks
- Natural Monuments
- Habitat or Species Management Areas
- Landscapes or Seascapes
- Managed Resource Areas, and
- Any other category that the Agency considers appropriate.

For these draft regulations to become law the responsible minister has to bring them into effect under a statutory power. It is intended that this occurs under the *Environmental Protection Act* 1996 rather than developing new legislation.

Source: Pers. comm. Melinda Janki, CEL Member

- **Uruguay:** ***Draft National System of Protected Areas (Law No. 17234)***

(Level 2)
The draft National System of Protected Areas law was developed in February 2000, but is yet to be adopted or implemented. The categories outlined in the draft include National Park, Natural Monument, Protected Landscape and Protected Sites. All categories except Protected Sites have incorporated the concepts from the IUCN categories.

Source: Pers. comm. Carolina Sans

National policy frameworks

Environmental policy around the world provides guidance and direction for issues related to protected areas and protected area management. Policy is also used for raising awareness, capacity building and as an educational tool – and is often the basis for new or revised legislation.

The information in this section was actively sought from relevant experts from many countries. Compared to the amount of effort that was spent on national legislation however the section on policy information was not as comprehensively reviewed. The majority of the information has been found on the Internet sites of the agencies responsible for protected areas and by communicating with country experts. Generally, information regarding protected area policy is more difficult to find than information on legislation, conventions and agreements. There is no reference centre through which to access environmental policy. The national policy section of this paper is therefore not exhaustive. It does, however, provide some examples of countries whose national policy frameworks have used the IUCN categories.

Many countries have protected area policy or strategies that are more current than their legislation. It is thus not surprising that there are several countries around the world that have incorporated the IUCN categories into policy documents but not into legislation. The countries found to have protected area policy that have used the IUCN categories (Level 1 and Level 2) include Argentina, Australia, Brazil, Bulgaria, Ecuador, Guatemala, Guinea Bissau, Hungary, India, Kuwait, Russia, Saint Lucia, Saudi Arabia, Slovenia, Spain and Ukraine. Countries that have used the IUCN categories in policy but have not incorporated this into national legislation include Ecuador, Guinea Bissau, India, Russia, Saint Lucia, Saudi Arabia and Ukraine. Some examples follow.

Argentina is using the IUCN categories to harmonise its own protected area classification

Marine protected area, Terre del Fuego: Sue Stolton

- **Argentina:** ***National Strategy on Protected Area, 1999***

(Level 1)
The National Strategy on Protected Areas aims to achieve the conservation of Argentina's natural heritage, and to contribute to the sustainable development of the country. The policy specifically mentions the IUCN category system and aims "*To homogenise the different management categories of Protected Areas used at present in the 25 jurisdictions, adapting them to the international terminology that was established by the World Commission on Protected Areas of the World Conservation Union (IUCN)*".

Source: http://200.9.244.58/gnb/Areasprotegidas/gnbareasprotegidas2.htm

- **Australia:** ***Draft Australian Handbook, Application of IUCN Protected Area Management Categories***

(Level 1)
Australia has numerous policies that have adopted the IUCN categories including the *Draft Australian Handbook: Application of IUCN Protected Area Management Categories*. This has been developed to give a national viewpoint to the 1994 IUCN Guidelines and to assist the application of these in an Australian context. It provides further explanation of the IUCN categories and offers interpretation and examples that are relevant to Australian circumstances. It is intended that protected area managers use this handbook to consistently classify protected area systems against the IUCN guidelines.

Source: www.unep-wcmc.org/protected_areas/categories/australia.pdf

- ***National Reserve System Program***

(Level 1)
The National Reserve System Program (NRSP) was established in Australia in 1996 and provides funding and guidelines for the development of a comprehensive, adequate and representative reserve system. The agreed process for reporting national statistics on the establishment of the NRSP is according to IUCN protected area management categories as these provide a convenient framework for comparison and assessment of protected areas and overcome the complexity of nomenclature for protected areas between jurisdictions in Australia[49].

Source: http://www.ea.gov.au/parks/nrs/index.html

- ***Commonwealth Marine Protected Areas Program***

(Level 1)
The Commonwealth Government's National Reserve System of Marine Protected Areas (NRSMPA) programme covers the legal processes for declaring, managing and planning for marine protected areas (MPAs) in

Australia and includes the policy approach to issues such as stakeholder consultation and the application of the IUCN protected areas management categories. It applies to those MPAs proclaimed and managed under the *Environment Protection and Biodiversity Conservation Act* 1999 (EPBC Act). These reserves are assigned an IUCN category and while there is no management plan in place, the reserve must be managed in accordance with the management principles for that category. Once prepared, the management plan must assign the MPA and/or each zone within the MPA to an IUCN management category. To date, IUCN categories III (natural monument) and V (protected landscape/seascape) have not been applied to any of the MPA's in Australia. It is considered unlikely that any future Commonwealth MPA would meet the criteria for these categories. The guidelines developed for identifying and selecting marine protected areas for the NRSMPA illustrates broad support for the use of the IUCN criteria for identifying and selecting protected areas.

Source: www.ea.gov.au/coasts/mpa/nrsmpa/development/number2.html

- **Bulgaria: *National Biological Diversity Conservation Strategy 1994***

(Level 1)
Bulgaria has both legislation and policy that utilises the IUCN protected area management category system. The 1994 Strategy is designed to ensure the long-term protection of the country's natural heritage, its sustainable use and the implementation of the CBD. It describes the Bulgarian protected area network and outlines in detail the protected area categories, their use and status with regard to how these are related to the IUCN categories. The policy states: "*Nature Reserves are strictly protected areas containing representative natural ecosystems and habitats of rare species. They correspond to protected areas in Category I (Strict Nature Reserve/Wilderness Area, a protected area managed mainly for science or wilderness protection) as designated by the World Conservation Union (IUCN)*".

Source: Pers. comm. Liliana Maslarova, CEL Member

- **Saudi Arabia: *Planning a System of Protected Areas***

(Level 1)
This policy document outlines the methodology used to plan a system of 103 protected areas to represent Saudi Arabia's biophysical diversity. It sought to emphasise the socio-economic strengths of traditional conservation within a classification of protected areas in which the goals are comparable with IUCN protected area categories. IUCN provided assistance to the Kingdom of Saudi Arabia to develop a National System Plan for Protected Areas. Based on this system plan 16 protected areas have been proclaimed and are currently managed using the categorisation system that is consistent with the 1978 IUCN categories. The category system in Saudi Arabia includes Special Nature Reserve (Categories I, II and IV), Natural Reserve (Categories I, IV), Biological Reserve (Categories I, IV), Resource Use Reserve (Categories V, VI) and Controlled Hunting Reserve (Category VIII).

Source: Pers. comm. Abdulaziz Abuzinada

- **Slovenia: *Biodiversity Conservation Strategy of Slovenia 2001***

(Level 1**)**
The Slovenian Biodiversity Strategy defines ten-year objectives for activities with a significant impact on the sustainable use of biological diversity and sustainable development. The strategy stresses the conservation of

Slovenia has drawn up laws to ensure complete protection of forests in IUCN Category I and II protected areas

Strictly protected zone in Triglav National Park, Slovenia: Nigel Dudley

ecosystems by maintaining favourable habitat types, especially the most endangered types (coastal, marine and inland waters, bogs, mires and fens, wet and dry grasslands, subterranean habitat types and forests). The strategy has been developed to fit within existing frameworks including the Convention on Biological Diversity and European Union policy in particular the *Directive on the conservation of wild birds* and the *Directive on the conservation of natural habitats and of wild fauna and flora*. The IUCN protected area categories are mentioned in the section on forests, which states: "*Forests are managed in a sustainable manner in Slovenia. They are naturally regenerated and all the activities affecting them are carried out over small areas and at a moderate scale. The management regime corresponds to the IUCN Protected Area Category VI"*. A Direction outlined in this document is "*to ensure the complete protection of forests in the IUCN Protected Area Categories I and II*".

Source: http://www.sigov.si/mop/en/index.htm

Sub national legislation/policy frameworks

Although the research did not specifically focus on legislation and policy at the sub-national scale, a few examples of how the IUCN Protected Area Management Categories have been used in legislation, management planning or policy frameworks at the sub-national level are provided below. As such this is a random sample and does not reflect the extent of influence at the sub-national level. As in the section above, this sample identifies some areas, such as Ontario, Quebec and the British Virgin Islands, that have incorporated the IUCN categories into sub national policies, even though the categories have to date not been incorporated at the national scale.

- **Australia: *Commonwealth Reserves***

In Australia there is evidence that the guidelines are being adopted at sub-national levels. This is mainly due to the IUCN categories being incorporated into national legislation, and filtering down into management planning and park management decisions at the local level. All Commonwealth Reserves designated under the *Environment Protection and Biodiversity Conservation Act* 1999 must be designated and managed in accordance with the IUCN protected area management categories (1994). There are at least 11 management plans available on the Internet and an example of Macquarie Island Marine Park is provided below.

Source: http://www.ea.gov.au/coasts/publications/index.html#mpa

- ***Macquarie Island Marine Park Management Plan***

(Level 1)

The Macquarie Island Marine Park Management Plan assigns the park to IUCN Category IV (Habitat/Species Management Area) in line with strategic objectives. The Plan divides the Marine Park into three zones: one Highly Protected Zone (IUCN Category Ia - Strict Nature Reserve) and two Habitat/Species Management Zones (IUCN Category IV – Habitat/Species Management Area). The management of each of zone is in accordance with the Australian IUCN Reserve Management Principles prescribed by the EPBC Act Regulations (see section under National Legislation). In accordance with the Australian IUCN Reserve Management Principles for Category Ia (Strict Nature Reserve), the Highly Protected Zone is managed primarily for scientific research and environmental monitoring. The Habitat/Species Management

Zones will be managed to ensure the maintenance of habitats or to meet the requirements of collections or specific species.

Source: http://www.ea.gov.au/coasts/mpa/macquarie/plan/index.html

- **Draft Marine National Parks Draft Management Strategy 2002 – Victoria**

(Level 1)
In Australia the former Australian and New Zealand Environment and Conservation Council (ANZECC) endorsed the use of IUCN Protected Area Management Categories for the National Reserve System for Marine Protected Areas (NRSMPA). The State of Victoria has acted upon this and thus assigns appropriate IUCN categories to each Marine National Park. This ensures that their management objectives are consistently communicated to managers, stakeholders and the wider community.

The Victorian Strategy has been prepared to provide clear and consistent direction for Parks Victoria's planning and management programmes over the next seven to ten years. It specifically mentions the IUCN protected area management categories and states that the classification of marine protected areas should adopt the IUCN guidelines for protected area management to ensure their primary objectives are clear. It also states that each marine bioregion is to include some areas managed as highly protected according to the categories defined by the IUCN. The Strategy states that IUCN has developed protected area management categories to ensure that management objectives of protected areas can be consistently communicated across national and international jurisdictions.

Source: www.parkweb.vic.gov.au/1ministory.cfm?story=24

- **Canada**

In Canada policy has been strongly influenced by the IUCN categories in Ontario and Québec, although national legislation does not reflect the IUCN categories at present.

- ***Ontario's Protected Areas: An Examination of Protection Standards with a Provisional Application of IUCN's Protected Area Management Categories, 2002***

(Level 1)
Ontario's protected area legislation pre-dates the IUCN protected area management guidelines however the province has examined how it can apply the IUCN categories[50]. The research includes results of a background study that examined the types of protected areas in Ontario and the degree of protection afforded to areas using five broadly accepted criteria and presents a preliminary classification of protected areas using the IUCN categories. It looks at lessons learned during the study and the benefits of using the IUCN categories in Ontario and concludes that the IUCN categories are helpful in the Ontario context because they can be used to:

- Strengthen understanding, ownership and co-operation among agencies and organisations active in establishing and managing protected areas;
- Provide a consistent overview of area attributes and management objectives across the province and beyond;
- Structure meaningful indicators and standardise monitoring to improve accuracy and consistency in reporting on protected areas over time;

- Enhance reporting efforts so that the full array of protection initiatives are recognised, including those individual landowners who would like to know that their efforts are contributing to Ontario's and Canada's health;
- Identify reserves where management objectives are unclear, or where documentation is lacking on heritage assets;
- Identify new types of protected areas (or classify existing ones) using categories that have not yet been widely used in Ontario (Category V and VI areas);
- Prompt thinking about the appropriate balance in the application of specific categories to realise collective conservation objectives;
- Identify gaps in protected areas coverage where additional areas may be required to protect representative and special heritage values;
- Support legislative and policy developments to better define standards for protection and management across the system; and
- Otherwise aid in the promotion of protected areas as a core stratagem essential for achieving ecological sustainability.

Source: Pers. comm. Dan Paleczny, Ministry of Natural Resources, Ontario

- ***Québec: Strategic Action Plan for Implementing a Protected Areas Network***

(Level 1)
The Québec Government has recently developed a Strategic Action Plan for implementing a protected areas network in the province. The implementation of this action plan acknowledges some specific principles including that the protected areas network should respect as much as possible the international standards. Québec's government has adopted the IUCN categories of protected areas as guidelines. It has categorised all current protected areas and plans to shape its network on that basis.

Source: *Building a comprehensive global system of protected areas for Quebec* by Vincent Gerardin and Léopold Gaudreau, Ministry of Environment Government of Québec, Canada

- **United Kingdom: British Virgin Islands: System Plans and draft National Parks Law**

(Level 1)
The British Virgin Islands are an overseas territory of the United Kingdom. The IUCN categories have been consistently used as the framework and reference for analysis for the British Virgin Islands protected area network and were included in a draft Systems Plan prepared in 1999. A draft National Parks law also proposes to specifically incorporate the IUCN categories.

The development of these instruments began in the mid-1980s when GTZ funded an analysis of protection in the Islands, country visits from protected area specialists and the drafting of new legislation. Many of the key people involved had an excellent understanding of the IUCN categories and the benefits of using an international standard. During early discussions, meetings and seminars, it was therefore mentioned that the IUCN categories were an essential element to include in this revised law. The IUCN categories are being adapted to meet local needs and a few additional categories may be added including a Botanical Park and Cultural Site of Significance, however this has not yet been decided.

Source: Pers. comm. Barbara Lausche

Summary of legal and policy frameworks using IUCN categories

Key

Level 1	Specifically mentioned and followed
Level 2	Strong influence with very similar categories
#	Rationalisation of existing categories rather than a direct influence from IUCN categories
*	Not included in Statistics (draft or proposed legislation)

Jurisdiction	Title	Date	Level1	Level 2
INTERNATIONAL DOCUMENTS AND PROCESSES				
	Convention on Biological Diversity	1992		
	Intergovernmental Forum on Forests	2000		
REGIONAL CONVENTIONS AND AGREEMENTS				
Africa	Draft *African Convention on the Conservation of Nature and Natural Resources*	2003		
NATIONAL LEGISLATION				
Argentina	*Law of National Parks and Reserves and Natural Monuments (National Law No. 22.351)*	1980		1978
Australia	*Environment Protection and Biodiversity Conservation Act*	1999		
Belize	*National Parks Systems Act*	1981		1978
Brazil	*Law No. 9.985 establishing the National System of Protected Areas Management*	2000		
Bulgaria	*Protected Areas Law*	1998		
Cambodia	*Law on Environmental Protection and Natural Resource Management*	1996		
Cambodia	*Regulations on the Creation and Designation of Protected Areas*	1993		1978
*Cambodia	*Proposed Legislation (Draft)*	Draft		
Cuba	*Decree Law 201 National System of Protected Areas*	1999		
Georgia	*Law on the System of Protected Territories*	1996		
Guatemala	*Law for the Protection and Improvement of the Environment (Decree No. 6886)*	1986		1978
Guatemala	*Law of Protected Areas*	1989		1978
Guatemala	*The Regulation to the Protected Area Law, Government Accord (No. 75990)*	1990		1978

Jurisdiction	Title	Date	Level1	Level 2
*Guyana	*Draft Environmental Protection (Protected Areas) Regulations*	Draft		
Hungary	*Act No. LIII. Of 1996 on Nature Conservation in Hungary*	1996		
Kuwait	*Protected Area Law*	1999		
Mexico	*General Ecology Law*	1996		
Niger	*Fixant le regime de la chasse et de la protection de la faune (Loi no. 98-07)*	1998		
Niger	*Portant loi-cadre relative a la protection de l'environment (Loi no. 98-56)*	1998		
Philippines	*National Integrated Protected Area Systems Act*	1992		1978
Slovenia	*Nature Conservation Law*	1999		
Spain	*Conservation of Natural Areas and Wild Flora and Fauna Act*	1989		1978
Turkey	*National Park Act*	1983		1978
*Uruguay	*Draft National System of Protected Areas (Law No. 17234)*	2000		
# Vietnam	*Regulation of Special Use Forests, Protection Forests and Production Forests, Which are Natural Forests (Decision No. 08/2001/QD-TTg of January 11 2001)*	2001		
NATIONAL POLICY				
Argentina	*National System of Protected Areas*	1999		1978
Argentina	*National Strategy on Protected Areas*	1999		
Australia	*Draft Australian Handbook, Application of IUCN Protected Area Management Categories*	2000		
Australia	*National Reserve System Program (NRSP)*	1996		
Australia	*Australian Guidelines for Establishing the National Reserve System*	1999		
Australia	*Commonwealth Marine Protected Areas Program*			
Brazil	*Biodiversity and Forests*	2002		
Bulgaria	*National Biological Diversity Conservation Strategy*	1994		
Bulgaria	*National Biodiversity Conservation Plan*	2000		
Bulgaria	*National Action Plan for the conservation of the Most Important Wetlands in Bulgaria*	1995		

Jurisdiction	Title	Date	Level1	Level 2
Ecuador	*National Strategy of Biodiversity*			
# Finland	*The Principles of Protected Area Management in Finland - Guidelines on the Aims, Function and Management of State-owned Protected Areas*	2000		
Guatemala	*Forest Policy*			
Guatemala	*Impact Evaluation Studies*			
Guinea-Bissau	*National Strategy for Protected Areas (2001-2005)*	2001		
Hungary	*Second National Nature Conservation Plan*	2002		
India	National Wild Life Action Plan			
Kuwait	*Biodiversity Conservation Strategy*	1996		
Kuwait	*Environment Protection Strategy*	2002		
Russia	*Draft Russian State Policy of Federal Protected Areas*			
Russia	*Concept of Environmental Education and Public Awareness in the State Nature Zapovedniks and National Parks of the Russian Federation*	1988		
*Russia	*Draft National Parks Strategy*			
Saint Lucia	*A System of Protected Areas for Saint Lucia*	1992		1978
Saudi Arabia	*Planning a System of Protected Areas*	1991	1978	
Slovenia	*Biodiversity Conservation Strategy of Slovenia*	2001		
Spain	*National Conservation Strategy*	1984		
# Ukraine	Problems of Zapovednik development and sustainable use in Ukraine	1996		
Ukraine	*Prospective of the Development of Natural Reserve Fund (Natural Protected Areas)*			
SUB-NATIONAL LEGISLATION				
Chubut (Argentina)	*Del Sistema De Áreas Naturales Protegidas*	2000		
Coringa-Herald (Australia)	*Coringa-Herald National Nature Reserve and Lihou National Nature Reserve Management Plan*			
Macquarie Island (Australia)	*Macquarie Island Marine Park Management Plan*			

Jurisdiction	Title	Date	Level1	Level 2
# Greenland (Denmark)	*Conservation (Nature and Ancient Relics) Act*	1974		
*British Virgin Islands (UK)	*Draft National Parks Law*	Draft		
SUB-NATIONAL POLICY				
New South Wales (Australia)	*NSW Biodiversity Strategy*	1999		
Tasmania (Australia)	*Tasmanian Marine Protected Strategy*			
Victoria (Australia)	*Marine National Parks Draft Management Strategy*	Draft		
Ontario (Canada)	*Ontario's Protected Areas: An Examination of Protection Standards With A Provisional Application of IUCN's Protected Area Management Categories*	2002		
Ontario (Canada)	*Ontario's Protected Areas: Applying the IUCN Protected Area Management Categories, Discussion Paper*	In prep		
Quebec (Canada)	*Strategic Action Plan for Implementing a Protected Areas Network*			
Quebec (Canada)	*Draft Québec Strategy on Biological Diversity (2002-2007)*	2002		
British Virgin Islands (UK)	*Draft Systems Plan*	1999		

Chapter 2.3: Improving Category Assignment

Summary

Housed and managed by United Nations Environment Programme-World Conservation Monitoring Centre (UNEP-WCMC), the World Database on Protected Areas (WDPA) holds over 100,000 records of information on protected areas. Of these, 68,540 sites, about 67 per cent, have been assigned an IUCN Protected Area Management Category.

To date the collection of global protected area data has largely depended on information provided by national governments, even though the 1994 IUCN guidelines advised that "*final responsibility for determining categories should be taken at the international level*".

This chapter examines the data collection and dissemination process and concludes with a discussion about steps that could be taken to improve data collection in the future.

Context

The United Nations first endorsed the preparation of a list of 'national parks and equivalent reserves' in 1962. Since 1981, data for this list has been collected by UNEP-WCMC, on behalf of the UN, as part of the WDPA. The WDPA currently holds 102,530 records[7]. The importance of the database was reflected in the 2002 agreement by IUCN and UNEP and a number of non-governmental stakeholders[8].

Historically, the systematic collection of global protected area data has been driven by this 'UN List' process, which has been the primary mechanism for gathering official information from national government agencies. Although the List is the 'driver' for the periodic updating of the database it must be viewed as a subset of the total information resource.

This chapter has been prepared by Stuart Chape (head of the World Heritage, Ramsar and Protected Areas Programme at UNEP-WCMC), with Sue Stolton and Nigel Dudley, and commented on by Adrian Phillips.

June 2003

Compilation of the 1997 UN List

The *1997 United Nations List of Protected Areas*, included 12,754 protected areas. Two criteria governed the inclusion of protected areas in the list: size and management objective. For practical reasons only protected areas over 1,000 hectares were included, with the exception of offshore or oceanic islands of at least 100 hectares where the whole island is protected; and all sites included had to meet IUCN's definition of a protected area.

The introduction to the 1997 list included a section detailing the process used to collect and manage the information which formed the basis of the UN List. An excerpt from this introduction is provided below:

[7] All figures at 26 March 2003

[8] UNEP-WCMC, Conservation International, WWF-International, WWF-US, Wildlife Conservation Society, Ramsar, World Heritage Centre, International Center for Tropical Agriculture (CIAT), BirdLife International, Europe Environment Agency (EEA), the South Pacific Environment Programme (SPREP), ASEAN Regional Centre For Biodiversity Conservation (ARCBC), CBD Secretariat and World Resources Institute. In addition, UNEP-WCMC has separate cooperation agreements with ARCBC and EEA to form a WDPA Consortium to facilitate more effective updating and development of the database.

"In preparing the *1997 UN List*, staff at WCMC reviewed existing material, to revise and update the Protected Areas Database. Following this, draft lists of nationally designated protected areas were generated from the database and sent to national management agencies during 1996 with a request that they be checked, updated and returned.

"Based on the responses, WCMC staff revised its Protected Areas Database, following up an queries with agencies in the countries concerned, or with members of WCPA [IUCN's World Commission on Protected Areas]. Copies of the revised lists were then sent to the WCPA Regional Vice-Chairs for review, as well as the IUCN Protected Areas Programme.

"A total of 512 management agencies were contacted and requested to review the appropriate list of protected areas…. In total, 190 responses were received from 180 agencies. In the event that no information was received from official sources, data were taken, were possible from published material and other sources.

"Part of the information gathering exercise including providing summary text to each agency briefly describing the IUCN Management Category System, with a request that the appropriate category be applied to each designation or site. Categories assigned by management agencies were reviewed by WCMC, and, in cases of uncertainty or disagreement, WCPA made the final decision as to the most appropriate category for a given designation or site."

Several changes are incorporated in the 2003 edition of the UN list. The size restriction no longer applies, and all protected areas are included even if they have not been assigned an IUCN category. As Stuart Chape, head of the World Heritage, Ramsar and Protected Areas Programme at UNEP-WCMC states: "*As part of the validation process, categories are an important but - in the present framework - difficult issue to deal with effectively, logistics alone means that this would be an enormous task if undertaken by the IUCN secretariat and UNEP-WCMC*".

The 2003 UN List of Protected Areas included over 100,000 sites

The 2003 UN List includes 102,102 designated sites which were on the database at that time. These cover 18,887,277 km^2 which is the equivalent of 12.71 per cent of the Earth's land surface. When marine protected areas are excluded, the total area that was protected falls to 17.1m km^2. – meaning that the terrestrial proportion protected is around 11.7%. 68,540 sites, about 67 per cent, were categorised - representing 9.95 per cent of global land area[9] (see Table below). This means that 33,990 (cover some 4 million km^2) of the world's protected areas currently have not been assigned an IUCN management category.

Coastal reserve, South Africa: Nigel Dudley

However, of the 243 countries and territories in the WDPA only 13 have no management categories allocated to their protected areas. Therefore most of the gaps lie in countries that have gone some way to designating categories – or have had it done for them by UNEP-WCMC or IUCN. There is also no particular correlation between 'north' versus 'south' or 'industrialised' versus 'developing' countries in terms of a country's designations. For example, Finland has 1,993 protected areas but only 270 are categorised, Netherlands 1,634 and 86, USA 7,904 and 3,482, Uganda 1,080 and 54, Kenya 349 and 68,

[9] These percentages need to be treated with caution as they include marine protected areas or protected areas with a marine component

and Malaysia 794 and 186; whereas India has 497 out of 554 protected areas categorised, Russia 10,837 out of 11,207, Saudi Arabia 78 out 86, etc.

Global protected areas by IUCN Management Category (March 2003)

Categories	No. of protected areas	Area (km^2)	% Global land surface area
Ia	5,020	1,037,718	0.70
Ib	863	920,739	0.62
II	3,684	4,123,763	2.77
III	16,127	245,951	0.17
IV	29,308	3,104,831	2.09
V	10,499	1,132,036	0.76
VI	3,039	4,219,472	2.84
Total	**68,540**	**14,784,510**	**9.95**

Dealing with the issue

The two main issues when considering the WPDA and the IUCN categories are 1) the completeness of the record of categories in relation to protected areas on the data base, and 2) the accuracy of assignment.

These issues affect the overall value of the WDPA. As the global protected area estate continues to expand, so too does the importance of protected areas as indicators for global progress in conserving the Earth's biodiversity and other natural and cultural heritage. If the IUCN category methodology is universally and consistently applied, it can contribute to a more complete and effective means of measuring global progress in meeting internationally adopted benchmarks and targets for biodiversity conservation and sustainable development (e.g., Millennium Development Goals and WSSD Plan of Implementation). The reliability of the data held in the WDPA will also become increasing important as the conservation movement makes new alliances and demands on industry, such as the IUCN Amman resolution on the banning of mineral activity in protected area Categories I-IV (see Chapter 2.17).

The value of the categories system lies in its allocation of categories by primary management objective – which can then be used as a more refined measurement of approaches to biodiversity conservation by countries. For example, current trends indicate a marked increase in the number of Category V and VI protected areas. This could reflect an increasing acceptance of the need to integrate human needs with conservation objectives and/or indicate that more and more countries are now finding that few opportunities remain to preserve areas with little or no human influence.

If the WDPA, as the interactive repository for global protected area information, is to be credible, relevant and effective then the information that it receives and disseminates must be equally credible and relevant. This is particularly so in relation to designation of IUCN management categories.

Implications for the protected area categories

In collecting global protected area data for the WDPA, including IUCN categories, UNEP-WCMC has largely depended on the information provided by national governments, even though the IUCN 1994 *Guidelines for Protected Area Management Categories*[51] states:

"*It…follows from the international nature of the system, and from the need for consistent application of the categories, that the final responsibility for determining categories should be taken at the international level. This could be IUCN, as advised by its CNPPA[10] and/or the World Conservation Monitoring Centre (e.g., in the compilation of the UN List) in close collaboration with IUCN*"

Although in past years the UNEP-WCMC protected area programme has allocated management categories based on professional judgement, knowledge and external (non-government) advice, it is not a practice that can be effectively or practically undertaken in a consistent manner by Centre staff given the large number of protected areas and resource constraints. This is especially so if feedback on externally allocated categories is not forthcoming from countries – or from IUCN/WCPA – as part of the UN List or other update processes. It is for these reasons that UNEP-WCMC is no longer itself allocating management categories, in the absence of a more effective 'umbrella' process for assessment and review.

National response levels
The periodic review of information held on the WPDA carried out before the publication of a new UN List is undertaken primarily through questionnaire sent to protected area agencies worldwide (these data are supplemented by additional research, contacting known experts etc). One problem with this method of research is the reliability and consistency of data input from national sources – especially with regard to assigning categories to protected areas. For the 1997 List UNEP-WCMC received only 180 responses from requests to 512 protected area agencies, or about 35 per cent rate of return. It appears that the rate of return for the 2003 UN List was about the same as previous years.

Although the 1994 IUCN Guidelines advised that "*final responsibility for determining categories should be taken at the international level*", UNEP-WCMC has found that practical and national interest considerations suggest that this is best be done at the country level – by national governments and other entities (such as tribal corporations and conservation trusts). Fundamentally, this means ensuring that countries have a full understanding and a sense of ownership of the categories system. The rationale for such an approach includes the following factors:

- national protected area management agencies, organisations and communities are most familiar with the areas in question;
- many countries have clearly defined management objectives in legislation, policies and plans, but have not articulated these relative to the categories;
- national-level assignment could encourage more consistent approaches to monitoring management effectiveness – and the adoption of international best practice standards at the national level; and
- this, in turn, would encourage countries to complete more effectively national reporting requirements for global assessments and monitoring (e.g. national CBD reports, *UN List of Protected Areas* and the *State of the World's Protected Areas* report).

[10] Now WCPA

Applying the categories at a National Level
Australia has numerous policy guidance documents that have adopted the IUCN categories including the *Draft Australian Handbook, Application of IUCN Protected Area Management Categories*. This advice has been developed to complement the 1994 publication describing the IUCN protected area categories and to assist the application of these in an Australian context. It includes further explanation of the IUCN guidelines and provides interpretation and examples that are relevant to Australian circumstances. It is intended that this handbook be used by protected area managers to classify protected area systems against the IUCN guidelines in a consistent manner. The Handbook has however not yet been formally adopted by Australia.

There *is* scope for a combined international effort to make sure that assessment and decisions at the national level are based on sound knowledge and best practice. Such support could be provided through the WCPA network, IUCN Regional Programmes, UNEP-WCMC and the WDPA Consortium partners and include specific capacity-building and training activities. One of the first steps should be to translate the category definitions and guidelines into all major languages of the world (it is presently available only in English, French and Spanish).

International conventions and agreements that relate to protected areas (approximately 22 instruments) should also be encouraged to adopt the categories approach as a consistent methodology for their reporting requirements.

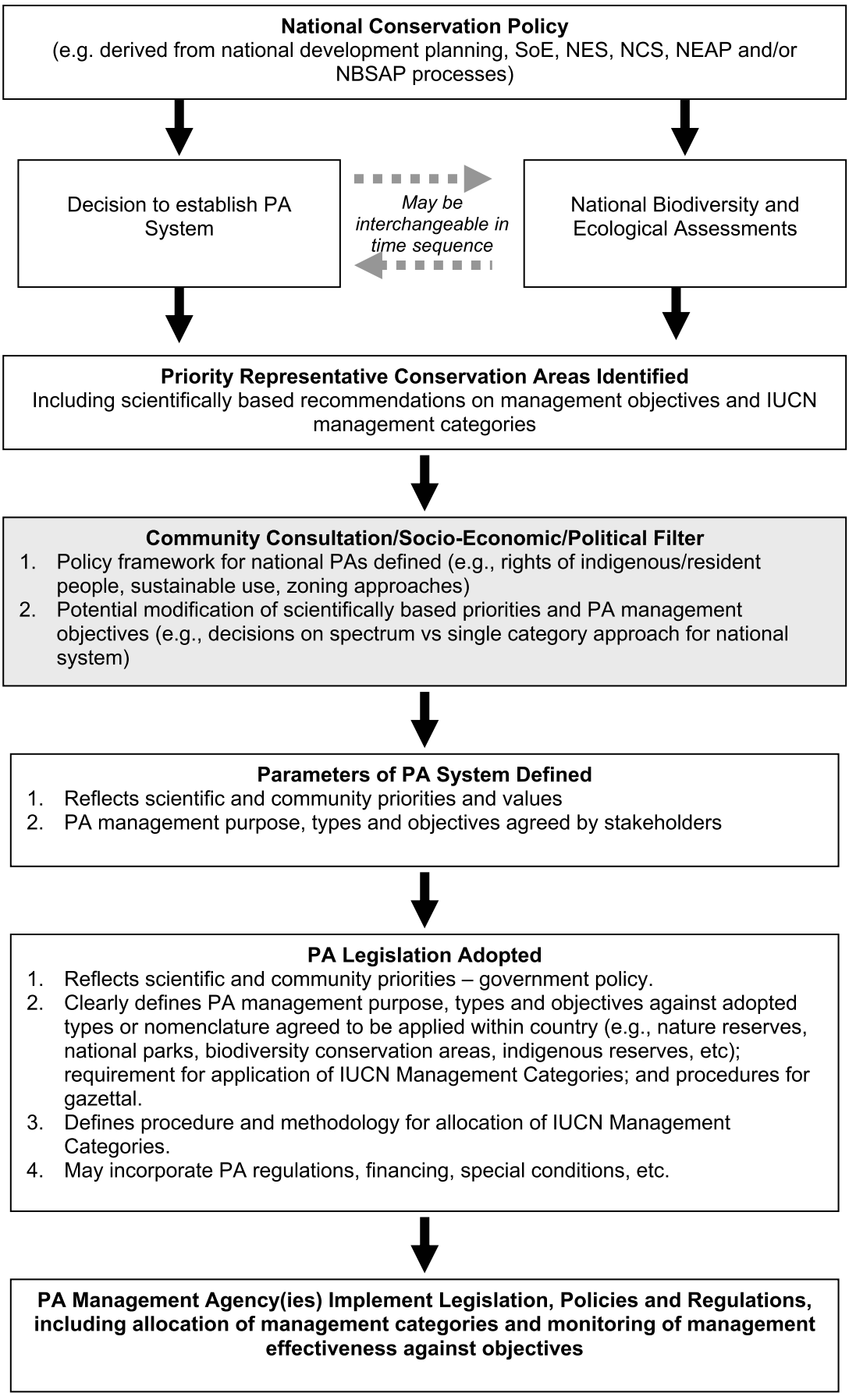
Increasing the effectiveness of the WDPA
A suggested first step need to improve the effectiveness of the data collected by UNEP-WCMC at a national level should be the development of a best practice manual on completing the returns. Best practice guidelines would follow the guidelines indicated in Diagram 3 below, and would include elements of good practice such as:

- The need to develop a thorough understanding of the categories system;
- Ensuring that the return is completed responsibly, and that returns are signed off by the most senior person possible;
- Ensuring the approach is inclusive: arrange wide consultations with stakeholders so that they have a chance to influence the returns; and
- Developing a system which is transparent, making every step needed, and who is responsible for it, to complete the return clear.

Improving the process for category designation at a national level will still need to be supplemented by further guidance both at a biome level and individual category level. Furthermore, the advice of the 1994 IUCN Guidelines that "*final responsibility for determining categories should be taken at the international level*", still remains an ideal.

More fundamentally, UNEP-WCMC requires much stronger support from the international conservation community if it is to be able to maintain what is already a huge database, which is likely to grow still further in the next few years.

Idealised Process of Assigning IUCN PA Management Categories at National Level



An initial response to this has been the development of a guidance note (May 2003) for WCPA members undertaking evaluations of protected areas in relation to the IUCN Protected Area Management Categories and related matters, which was developed by the WCPA Europe Executive Committee and approved by the Head of the IUCN Protected Areas Programme.

Elements of a fuller programme of support might be:

- A global capacity-building programme coordinated by IUCN or the WDPA Consortium to develop national and regional willingness and/or capacity to develop and promote databases on protected areas and to report this effectively to UNEP-WCMC (see Diagram 4 below). Such a programme need not be hugely expensive: making contact with governments and encouraging them to complete returns for the UN list could be a standard part of the work programme of IUCN regional offices for example.
- A parallel programme to increase the richness of data held within the database by using the same partners to encourage staff and consultants (by writing this into contracts if necessary) to ensure that basic information about protected areas, including a resume as well as subsidiary documents, is sent to UNEP-WCMC for storing on the database. Such entries should be identified by the name of the writer, both to facilitate checking and to provide extra incentive for people to send in information.

Lessons learned

This chapter has concentrated on the current work of UNEP-WCMC in collecting data to be recorded in the WPDA, which forms the basis of the UN List of Protected Areas. Many of the case studies developed by the Speaking a Common Language project, have however, viewed the provision of information collection and data from the perspective of the user. From this research it is clear that the expectations of the WDPA, particularly concerning the accurate assignment of categories to the protected areas listed on the database, are great. It is also clear that these demands are likely to grow as initiatives, such as the Amman Resolution on mineral extraction, increase the attention paid to the categories: as a system that has policy, economic and land use implications, rather simply a method for international categorisation and data gathering, the IUCN categories are bound to attract more attention, and the quality of the data held in the WDPA will be subject to more rigorous and critical review. This confirmed by the way in which nearly all the case studies have touched on the subject of assignment of categories and some consistent recommendations have emerged. The issues raised include:

- **The need for biome-based guidance on assignment**. The chapters on marine (Chapter 2.8) and forests (Chapters 2.9 and 2.10) for instance have identified the need for additional guidance.
- **Guidance on individual categories**: The chapter that looks at how the Categories can support the needs and rights of traditional and indigenous peoples in protected areas (Chapter 12) suggests management guidelines for Category VI protected areas could be developed to complement those already developed for Category V. Such guidance could include recommendation on assignment of category.
- **Governance**. The Chapter 2.14 on governance and protected areas suggests a new matrix of governance types to be added, and thus assigned and recorded, to the Categories system.

- **Multiple-use protected areas**: The case studies on multiple-use protected areas and transboundary conservation areas (Chapter 2.7) have suggested the need for new guidance on when parts of a single management unit should categorised separately.
- **Management effectiveness**: There is clearly a need to discuss how issues of effectiveness can also be recorded in the future, given that many protected areas are now actively engaged in management effectiveness assessments.
- **Translation**: Case studies have also identified that the categories system will be better used and understood if it is available in many more of the world's languages.
- **Robustness**: The case studies on mineral extraction and the implementation of the Amman Resolution (Chapter 2.15) have raised questions about the use of categories as a regulatory tool, and in particular whether the current methodology for assigning a particular category to a protected area is sufficiently robust, systematic, transparent and verifiable to support this new role.

Suggested responses from IUCN

Proposed principles for assignment

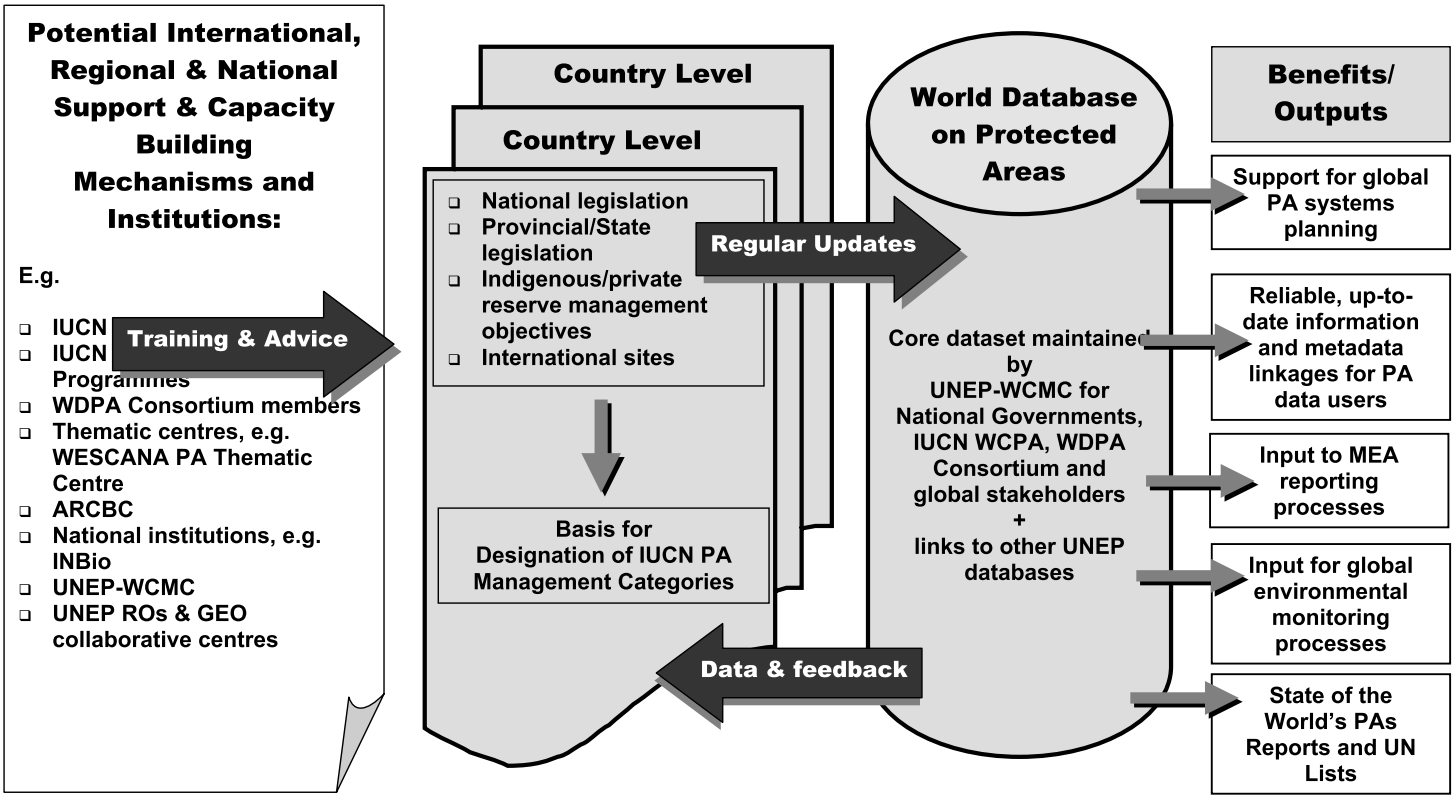
- There should be involvement, shared ownership, inclusiveness, openness and transparency in the whole process of assignment involving national agencies and other stakeholders.
- All stakeholders need to agree the full range of roles for the IUCN categories, including advocacy in international conservation debates.

Recommendations on assignment

- The 1994 guidelines on protected area categories to be revised in consultation with countries and other stakeholders.
- Additional guidance is required on:
  - Inclusion of new areas especially under different governance and ownership arrangements,
  - Application of categories to community owned areas that meet the definition of a protected area, and how these should be reported to UNEP-WCMC.
- Capacity building (see also Diagram 4 below) is required with respect to:
  - National assignment and reporting through an active outreach process,
  - Development of national databases and ensuring that these are compatible with the WDPA,
  - Creating awareness of the categories system and their values and application, to a wider group of stakeholders
  - Translation into local languages (noting the need to seek appropriate funding for this).
- There is a need for an agreed system for addressing grievances and conflicts arising from categories assignment.
- The World Conservation Congress should reconfirm the system, clarify its purposes, and endorse a new programme of work and advice for IUCN.
- The CBD should use the UN List and national reporting system as the principal mechanism for protected area reporting and this should be integrated with the ongoing work programme[11]

[11] This has since been done through the CBD's Programme of Work on Protected Areas.

Applying IUCN PA Management Categories: Capacity Building at the National Level



Chapter 2.4: Creating a common language

Summary

One important reason for developing the IUCN Protected Area Management Categories was to reduce confusion caused by the adoption of many different terms used to describe protected areas. This chapter uses the term 'national park' as an example, it shows that countries have used the guidelines to assign protected areas called 'national parks' into all six categories and that many countries are assigning their national parks into a number of different categories as appropriate. This suggests that, in these countries at least, this aim of the category system has been successful.

However, in other cases the assignment process appears to be more arbitrary: for example 80 per cent of Brazilian national parks contain permanent human communities even if in many cases the impact of this on the natural values is incompatible with the objectives of Category II protected areas. Responses are suggested, including better access to information and the possibility of introducing some certification system for categories; both these issues are discussed in greater detail in other case studies.

Context

At a national level, many different names are used for protected areas. And between countries different names are often used to describe the same kind of protected area, while the same names are frequently used to describe quite different uses and management objectives. It is a measure of the potential confusion that UNEP-WCMC have identified over 1,000 different terms in use[52]. One of the original aims of the category system was to address these differences by providing an overarching set of definitions that could be applied regardless of the local name, thus making it easier both to understand a national protected areas system and to make comparisons between countries (see diagram on page 49). It was also hoped that the definitions would provide a means of standardising names in protected areas established after the categories had been introduced. The *Guidelines for Protected Area Management Categories* states that one of the purposes of the categories is: "*to reduce the confusion which has arisen from the adoption of many different terms to describe different kinds of protected areas*".

Dealing with the issue

Two issues are important here:

- Have the categories been used by countries to clear up ambiguities of protected area names?
- Are the categories being assigned correctly?

This chapter was written by Nigel Dudley

April 2003

Have the categories been used by countries to clear up ambiguities of protected area names?

The categories have apparently had some success in encouraging at least some governments to consider the management objectives of individual protected areas and to label them accordingly for certain purposes.

The term ‘national park’ provides a good example. IUCN defines a national park under Category II as follows: “***protected area managed mainly for ecosystem protection and recreation*** – natural area of land and/or sea designated to (a) protect the ecological integrity of one or more ecosystems for present and future generations, (b) exclude exploitation or occupation inimical to the purposes of designation of the area and (c) provide a foundation for spiritual, scientific, educational, recreational and visitor opportunities, all of which must be environmentally and culturally compatible.” Yet ‘national parks’ existed long before IUCN adopted the categories system and some had very different aims.

In response to the categories, many protected areas people in the countries concerned now refer to their national parks using appropriate IUCN categories for the purposes of communication on technical matters and for international dialogue, whilst keeping the name ‘national park’ for communications with the politicians and the public, and especially for domestic purposes. Examples of protected areas that are referred to nationally as ‘national parks’ can be found in all the categories as the table below demonstrates.

Guanecaste National Park in Costa Rica is a “classical” Category II protected area but “national parks” exist in *all* the categories

Guanecaste National Park, Costa Rica: Nigel Dudley

Examples of national parks in different IUCN categories

Category	Name	Location	Size (ha)	Date
Ia	Dipperu National Park	Queensland, Australia	11,100	1969
II	Guanecaste National Park	Costa Rica	32,512	1991
III	Yozgat Camligi National Park	Turkey	264	1988
IV	Pallas Ounastunturi National Park	Finland	49,600	1938
V	Snowdonia National Park	Wales, UK	214,200	1954
VI	Expedition National Park	Queensland, Australia	2930	1994

In most countries, however, the term ‘national park’ is generally used to fit the specific criteria of Category II. Note that – although the table above shows that Queensland, Australia has ‘national parks’ that the protected area authorities believe fit into Categories Ia and VI, as well as a Category IV national park, 96 per cent of the 120 national parks in the state are designated as Category II. The difference between national names and IUCN standards is most marked in Europe, where ‘national parks’ have in many countries been used to designate large landscape/seascape protected areas now classified as Category V. This is true of most national parks in Germany and all in the UK for example.

Are the categories being assigned correctly?

A more difficult question is whether the new categories are being used correctly, or simply being applied in a relatively arbitrary fashion. Common sense suggests that a full range of levels of professionalism will exist around the world, and general trends are difficult to ascertain. Most Latin American countries are relatively consistent in their use of the IUCN categories, for example by defining all national parks as Category II. Yet it is not clear if designation is being used loosely or not – i.e. if existing ‘national parks’ are automatically being assigned to Category II whether or not this is the most suitable category. Experience in Vietnam (see Chapter 2.18) was that protected areas were simply transferred to IUCN categories according to their existing names and legislation written to match the new categories: with the result that some protected areas mistakenly received less legislative control than originally intended, whereas in other cases the reverse occurred.

Implications for the protected area categories

The IUCN protected area categories have been successful in their original role of providing a means to standardise the ways in which protected areas are classified, without imposing a draconian (and almost certainly unworkable) insistence on individual countries changing protected area names. The current system accommodates regional differences in approaches to and labelling of protected areas. It also provides a simple, parallel classification system that avoids confusing, for example, the cultural landscape protection of British national parks with the far stricter nature protection found in areas with the same name in Australia. In short, it certainly helps to improve communication between countries about the aims of their respective protected areas and has encouraged clearer thinking in general about protected area objectives.

Some countries have been guided by the IUCN advice. They have developed their own classification systems in line with those developed by WCPA, and have even used these in legislation (see Chapter 2.2). In this way the categories can be said to have been be successful. On the other hand, many questions remain about the accuracy of designation and the effectiveness with which management meets the aims of a particular category. Although the explanatory 1994 Guidelines have been published in English, French and Spanish, for those countries where none of these languages is commonly understood, misunderstandings remain common. This has been suggested as a possible cause of confusion in Vietnam for example.

Suggested responses from IUCN

Several responses could address some of the problems outlined above; some are discussed in more detail in different case studies:

- Options for certifying assignment of protected area categories, to allow independent assessment of whether or not national protected area agencies have made a correct assignment.
- Improved access to information about assignment of categories, including translation into a larger number of languages, web-based explanation and the development of subsidiary advice on issues that are liable to cause confusion (see also Chapter 2.3).
- Removal of specific names – such as ‘national park’ and ‘wilderness’ – from the categories of protected areas. The category system exists to get away from the confusion caused by one name being used for many types of protected area and linking specific names to categories may have reduced the clarity of the system. Use of the numbers alone – in conjunction with the objectives of management – might be clearer.
- Development of guidelines for governments to help in the assignment of protected area categories: this is currently often a job given to a fairly junior official who may require additional assistance to make informed choices.

Chapter 2.5: Applying the categories to large multiple use protected areas

Summary

The chapter in IUCN's 1994 *Guidelines for Protected Area Management Categories* on 'Applying the Categories', deals with issues that had emerged from the interpretation of the 1978 system. The discussion includes the issues of zoning within protected areas and protected areas with multiple classifications. It states that "*Protected areas of different categories are often contiguous [and] sometimes one category 'nests' within another*", and notes that such areas can be identified separately for accounting and reporting purposes. It also recognises that zoning is an accepted feature of the management of many protected areas.

There is however some confusion, when trying to interpret the 1994 guidelines, over what is meant by 'multiple classifications'. This term is defined in the *Guidelines* as places "*where parts of a single management unit are classified by law as having different management objectives*". This definition does not make it clear whether the term 'multiple classifications' applies to a single protected area, or as implied by the text in the paragraph above, to several protected areas. As a result of this confusion, the value of protected areas data and reporting is reduced.

This issue is particularly relevant to marine protected areas, where there has been a trend towards creating large, multiple use areas. However as large protected areas are increasingly being declared (for example, transboundary protected areas and other large multiple use terrestrial areas), there is a need to address these issues across all protected areas. For this reason a proposal for clarifying reporting systems in multiple use marine protected areas, or zoning where relevant, has been adopted by WCPA. The proposal aims to clearly allocate relevant nested areas, or zones, within large marine protected areas with a general classification, to the appropriate IUCN categories and thus more accurately reflect the status and objectives of a protected area.

This chapter reviews the proposal and makes some suggestions for strengthening it and extending it to terrestrial protected areas, and for addressing the technical problem of 'double counting' of protected area statistics where one protected area or zone sits within another.

This chapter has been prepared by Sue Stolton, Adrian Phillips and Jon Day of the Great Barrier Reef Marine Park Authority. Text has also been drawn from documents prepared by Jon Day of the Great Barrier Reef Marine Park Authority and Graeme Kelleher of the WCPA Marine Theme.

Thanks to Nigel Dudley, Graeme Kelleher and Jerry Harrison for comments.

April 2003

Context

Problems of interpretation and classification of protected areas arise because a number of different situations occur on the ground and the simple picture of a single protected area with one management aim is often not the case in reality, for example:

– In many protected areas, there is a range of management zones with different policies attached to them (e.g. strict exclusion zones and other zones where agricultural use, fishing or tourism may be permitted). In most cases these are management arrangements only (and usually appear in the management plan). In a few cases, the primary legislation defines the objectives of the whole protected area but also gives effect to a zoning system that will establish zones with specific, separate objectives. These

zones are more than administrative measures: they have a degree of formal legal creation that meets the IUCN requirement for a separate protected area; or

– In many cases, different protected areas (each a separate management unit) sit side by side (or surround one another); they thus form a complex of individual management units whose management may, or may not, be partly or wholly co-ordinated.

Many marine protected areas contain different management zones within them and there has been vigorous discussion about how the IUCN categories can best reflect this

Grey seal: Nigel Dudley

The 1994 IUCN *Guidelines for Protected Area Management Categories* attempts to deal with these situations. As a starting point, they make clear that the unit for the purposes of categorisation is that area defined by "*national legislation (or similar effective means, such as customary agreements or the declared objectives of a non-governmental organisation)*"[53].

The *Guidelines* acknowledge that zoning is a feature of the management of many such areas as thus defined. They state "*management plans will often contain management zones for a variety of purposes…. in order to establish the appropriate category, at least three-quarters and preferably more of the area must be managed for the primary purpose*"[54]. In a section titled 'Multiple Classifications', the *Guidelines* explain that "*protected areas of different categories are often contiguous; sometimes one category 'nests' within another. For example, many Category V areas contain within them Category I and IV areas. This is entirely consistent with the application of the system, providing such areas are identified separately for accounting and reporting purposes*."[55] The Guidelines also recognise that there are cases where "*parts of a single management unit are classified by law as having different management objectives*"[56]. In effect, these 'parts' are individual protected areas that together make up a larger unit, which may also be considered as a single protected area.

Difficulties arise as the use of the words 'zoning' and 'multiple classification' are applied differently in different countries. While the existing arrangements seem to work well for the categorisation and data collection relating to most protected areas, two problems have arisen:

– There is confusion over the interpretation of the statement "*where parts of a single management unit are classified by law as having different management objectives*". This is not intended to apply to any protected area whenever the primary legislation allows for zoning, particularly if the zones do not have any legal standing. However, a narrow interpretation of the circumstances that justify its application – namely that the primary legislation defines and delineates a number of individual protected areas under one management authority – is considered to be much more workable. This is the situation that applies in the case of the Great Barrier Reef Marine Park in Australia, one of the world's largest protected areas (see page 95).
– There is a danger of 'double counting' where the same piece of land is included in two protected areas of different categories, which can happen in the case of some nested protected areas. For example, in the UK, the National Parks (Category V), which cover about 9 per cent of the land area of England and Wales, includes a number of National Nature Reserves (Category IV), covering about 0.7 per cent of the area of the parks. In the 1997 UN List[57], both sets of data are added together in calculating the UK figure, which leads to an overestimate of the total surface area under protection.

Such problems in reporting and listing reduce the value of data, for example, in assessing the extent of ecosystem protection or developing priorities for increased protection.

Dealing with the issue

In order to meet the intent of the *Guidelines* and to address the problems outlined above, any area proposed for a particular IUCN category (and hence category reporting) must first be an area defined by "*national legislation or equivalent….*". Therefore the most common situation, in which zones are determined (often in the management plan and usually by managers) subsequent to the legislative approval process, will not be separately recorded. The exception arises when the zones themselves have legislative approval (i.e. legislative approval of the actual area or map of the specific zones as distinct from approval in principle for the application of zoning).

The issue of interpreting multiple classifications is particularly relevant to large multiple use marine protected areas (MPAs) – see also Chapter 2.8. Partly for this reason, IUCN's World Conservation Congress in October 1996 recommended (Resolution 1.37) *inter alia* that, as part of the IUCN Marine and Coastal Programme, IUCN's WCPA "*develop guidance on the application of the* IUCN Guidelines for Protected Area Management Categories *in the marine environment*"[58].

Discussion on how to further this recommendation took place at the WCPA Steering Committee meeting in June 2000, and it was agreed that a small working group should be formed to investigate the reporting in databases of multiple use MPAs. It was emphasised that the working group's discussions were not aimed at changing the IUCN Protected Area Management Categories; nor were the discussions intended to cater for only a few large multiple use MPAs. Rather, the working group aimed to suggest more appropriate arrangements for improving the value of the protected area data base held at UNEP-WCMC.

The working group prepared a proposal for clarifying the reporting in a situation where several protected areas, with different management aims, are managed as a single unit, so as more accurately to reflect the status and objectives of marine protected areas in the UN List. The proposal was formally adopted by the WCPA Steering Committee meeting in November 2001. It was agreed that its application should be limited to MPAs, since there was some reluctance to apply the amended system to terrestrial protected areas.

The proposed improved form of reporting would require that large multiple use MPAs would be categorised and reported by the various components that together make up the larger protected area according to their relevant IUCN categories (this would be published in the UN List in the form shown in the box on page 95 for the GBRMP). The proposal may not entail a change in the classification of a small multiple use MPA, but in the case of large areas, or multiple use areas where the components are clearly more than 25 per cent of the total area, it would allow analysts to assess accurately and report on the degree of protection afforded by the MPA.

The primary aims of this proposal for an amended system for reporting on MPAs are to:

- improve the usefulness of the existing IUCN category system to account more accurately for the existing IUCN categories (i.e. I-VI) where parts of a single marine management unit are classified by law as having different management objectives;
- improve the reporting in data bases of where parts of a single marine management unit are classified by law as having different management objectives; and
- provide a more accurate basis upon which to identify the need for additional areas for designation in the protected area categories - especially Categories I and II.

It is suggested that the proposal will correct a deficiency in relation to the application of the categorisation system to the marine environment.

Classifying the Great Barrier Reef Marine Park

The Great Barrier Reef Marine Park (GBRMP) is currently classified by IUCN solely as a single protected area assigned to Category VI (i.e. a Managed Resource Protected Area). Yet the primary legislation that set it up in 1975 created a zoning scheme whereby the different zones are in effect separate, clearly delineated individual protected areas, which are also approved through a separate legislative process and are therefore able to be assigned to different IUCN categories. In this way, the zones within the wider GBRMP complex directly meet the special conditions set down in the *Guidelines*. Moreover the current extent of the 'no-take' zones (i.e. equivalent to Categories Ia and II) within the GBRMP alone covers some 16,000km^2, far greater than the total area of many MPAs elsewhere in the world. Assigning all these areas to Category VI in the UN List without explanation creates therefore a misleading picture.

Within the GBRMP, all zones are determined by a process stipulated in the primary legislation (i.e. the Act*) which includes public participation followed by specific legislative approval. The zoning plans are themselves statutory documents (subordinate legislation to the primary legislation) and must be approved by a specific legislative process before they come into effect. For example, Preservation Zones and Scientific Research Zones, which equate to Category Ia, can only be determined as part of an overall statutory process which includes legislative approval of maps of the actual zones along with specific provisions for each zone; similarly Marine National Park Zones are similarly designated and equate to Category II.

According to the proposals laid out above, a more accurate classification for the Great Barrier Reef (as of October 2002) would read:

Commonwealth Marine Park: Great Barrier Reef Marine Park – 34,540,000 ha, comprising: Ia – 48,100 ha; II – 1,577,200 ha; IV – 256,000 ha; and VI – 32,658,700 ha.

*The *Environment Protection and Biodiversity Conservation Act* (EPBC Act) 1999 came into force in Australia in July 2000. The Act requires that each Commonwealth Reserve be assigned to one or more of the IUCN Protected Area categories and that these areas, or zones within them, must be managed in accordance with the Australian IUCN Reserve Management Principles for that category. The EPBC *Regulations* set out the Australian IUCN Reserve Management Principles for each IUCN category. When a management plan is prepared for a Commonwealth reserve, or a particular zone of a reserve, the plan must be consistent with these Australian IUCN Reserve Management Principles.

In light of the WCPA Steering Committee decision to adopt the amended way of reporting, the Australian Government has recently amended the listing against the IUCN categories for other Australian MPAs where the situation is similar to that in the Great Barrier Reef Marine Park.

Implications for the protected area categories

This is clearly an important issue, particularly for the GBRMP and many other large protected areas, and highlights an area where the existing guidance needs to be improved. The work done by the working group of WCPA Steering Committee provides a useful basis for improving the reporting of protected areas.

However several considerations should be taken into account:

- It is desirable that any supplementary advice on reporting should be consistent with IUCN's *Guidelines for Protected Area Management Categories*. It is therefore important that it only be applied in circumstances where:
  - parts of a single management unit are classified by law, or other effective means, as having different management objectives which can be related to the IUCN categories. (Some guidance would be needed as to how this requirement should be interpreted, but this would certainly need to cover the GBRMP situation)
  - the areas concerned are mapped and therefore measurable.
- In principle the same assignment rules should apply to all protected areas, not just marine protected areas.

Lessons learned

- Though the 1994 protected area management category guidelines are in general clear, in some instances they can be confusing in the advice on application
- While it is important to address problems that arise over their interpretation, it is equally important that advice should take into account the possible consequences of such changes. For example, it is important to emphasise that arrangements made to deal with the anomalous position of some very large MPAs should not lead to an attempt to categories all protected areas by their management zones
- It is also desirable that assignment 'rules' should apply to all protected areas (not just one category of them, e.g. marine) and be applied by all those making returns for the protected area data base.

Suggested responses from IUCN

It is recommended that IUCN should develop a supplementary statement to the 1994 guidelines that would explain precisely the circumstances in which parts of a single management unit should be separately reported on, and accounted for. It is suggested that:

- the areas concerned must be defined in the primary legislation, and the areas (or zones) within the PA must also have legislative approval once they have been mapped; and

– the management aims for the individual parts should be unambiguous, allowing assignment to a particular protected area category.

When these conditions are met, each part of the larger management unit should be recorded and classified separately in reporting, on the UNEP/WCMC data base and in the UN List. The larger unit may retain its own categorisation, as now, provided the entire area meets the criteria set down in the guidelines.

The above advice would relate to all kinds of protected areas (marine and terrestrial) and should be a requirement of the reporting process.

On the double counting issue, IUCN should ask UNEP/WCMC to develop a means of identifying and recording any protected areas which are located within other protected areas so as to remove any double counting from the data base and UN List.

2.6: Using the IUCN categories to implement wider landscape and seascape planning

Summary

Governments and conservation organisations are increasingly adopting broadscale approaches to conservation, to conserve biodiversity at the ecosystem, landscape or regional scale, rather than in single protected areas. These usually include core areas, buffer zones ecological corridors, ecological restoration and an integrated range of land uses outside protected areas. Existing schemes, such as UNESCO biosphere reserves and the MesoAmerican Biological Corridor, already incorporate a range of IUCN categories to reflect different uses. This means that the categories are being used as a planning tool in ways not originally envisaged.

The case study reviews these changes. While some users already have a clear idea about how the IUCN protected area categories can be incorporated into these broader approaches, this understanding is not universal and there may be need for some further guidance specifically aimed at the conservation planning community.

Context

Individual protected areas have limitations in their ability to conserve biodiversity because of their size, isolation and vulnerability to climate change and other outside pressures. As these limitations become more obvious, conservation planners are looking at larger scale approaches.

Several terms have been coined to describe conservation planning over large land or sea areas; these include ***landscape scale planning***, ***ecological networks***, ***ecoregional planning*** and ***bioregional planning***, and all these approaches have philosophical links with the ***biosphere reserves*** developed by the UNESCO Man and the Biosphere (MAB) programme and to the ***ecosystem approach*** advocated by the Convention on Biological Diversity. Despite a plethora of names, which demonstrate that the basic concepts were adopted by different actors at around the same time, all these approaches contain certain features in common.

A recent review found 150 such schemes in all parts of the developed and developing worlds and more are being started[59]. While these initiatives vary, their common aim is to conserve biodiversity at the ecosystem, landscape or regional scale, rather than in single protected areas. And they all include proposals for core areas, buffer zones and ecological corridors, as well as programmes for ecological restoration. Finally they seek to integrate a range of land uses with biodiversity conservation.

This chapter has been prepared by Nigel Dudley and Sue Stolton, with considerable input from Adrian Phillips.

September 2004

Their essence is that they seek *both* to integrate different protected areas within a network *and* to integrate the protected area network more generally into a wider mosaic of different management approaches that together protected biodiversity and environmental values.

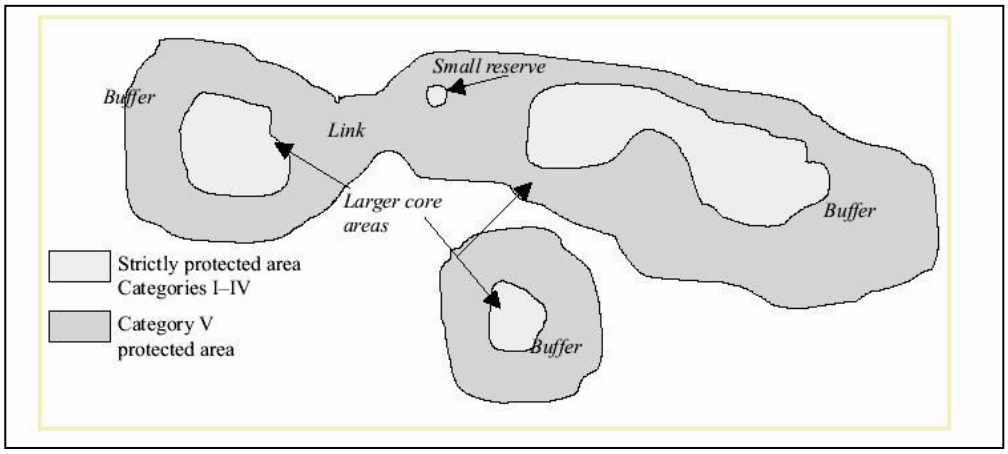
These broadscale approaches recognise that overall landscape or seascape values are more important than individual sites and that conservation aims

need to be integrated with poverty alleviation, human wellbeing and other legitimate forms of social and economic development. This implies that any mosaic of management approaches will have to be negotiated with a wide range of stakeholders.

In this type of scheme protected areas often become the ‘anchors’ of the network, the core zones around which buffers are created and between which corridors are established. Protected areas also set the standards towards which restoration schemes can aspire. Such projects, therefore, have the effect of linking the protected areas to surrounding land and water areas, and to the regional economy. In these cases the protected areas are *usually* clearly defined from the buffer zones, which are themselves *usually* protected areas albeit in a different IUCN category. However there are no hard and fast rules.

Nor are there fixed rules about the extent of protection. Conditions vary between regions and a flexible approach is essential; for instance conservation might in some cases best be achieved through designation of a few very large reserves; sometimes by a network of smaller reserves in a multifunctional landscape and sometimes through working with communities and other stakeholders outside formally protected areas.

Application should therefore be tailored to a particular location and set of circumstances, with strategic interventions being made at a range of scales from local to national, considering livelihood issues and in the context of existing policies, institutions and interests



Diagrammatic representation of the buffer and linkage functions of a bioregional approach to conservation featuring core protected areas, buffer zones and corridors[60]

It follows that these broadscale approaches need to draw on the full range of IUCN categories to build up a coherent and effective conservation strategy. In these cases the categories are used both at a network scale to define different management approaches *between* protected areas (for instance through designating strict reserves and buffer zones) and also for zoning *within* larger protected areas through zoning (see Chapters 2.5 and 2.8 for further details). It is also a clear part of a broadscale strategy to integrate these with other sympathetic forms of management that fall outside the protected areas network.

One important element of such an approach is the idea that the values contained in the more strictly protected areas, such as Category I and II, may best be maintained by these areas being wrapped around with or joined by less strictly protected areas such as Category V and VI.

Large conservation organisations have embraced the ecosystem approach; through for example the ecoregional programmes adopted by The Nature Conservancy and WWF, the biological corridor model used by Conservation International and the Wildlife Conservation Society's Living Landscapes programme. Some governments and intergovernmental initiatives have also developed these methods for example in New South Wales, Australia and through many transboundary protected area initiatives. In the boxes below and overleaf we look at two ways of looking at broader planning at very different scales: the massive MesoAmerican Biological Corridor and the UNESCO biosphere approach.

The Meso American Biological Corridor

The Mesoamerican Biological Corridor (MBC) is a regional initiative launched in Central America that aims to conserve biological diversity while fostering sustainable development. Its particular significance lies in the scope and complexity of its goals and the wide range of institutions and social actors it involves.

The rationale that lies behind the MBC arose from conservation biologists' growing awareness of the need to maintain links between biological habitat areas to ensure species survival. Such an approach aims to maximize the conservation functions of protected areas by promoting forms of land-use in the wider landscape that offer both conservation benefits and sustainable livelihoods. Guided by this rationale, the MBC's planners have endorsed four land-use zones: Core Zones, Buffer Zones, Corridor Zones and Multiple-Use Zones.

Core Zones are locations designated as protected areas, designed to provide secure habitats for wild fauna and flora. **Buffer Zones** surround protected areas and function to filter out negative impacts moving into and out from these areas. **Corridor Zones** link core areas with one another, and either remain under natural vegetation, or are managed to ensure that human land-uses are compatible with the maintenance of a high degree of biological connectivity. Finally, **Multiple-Use Zones** are areas devoted primarily to human use, but managed to facilitate the creation of broader landscapes that are hospitable to wild species. As part of an integrated system for regional land-use, each type of zone provides both ecological and socioeconomic benefits[61].

Although the benefits of a wide range of management approaches – inside and outside protected areas – are well known, there has perhaps been a tendency in many cases to rely rather exclusively on the strictest categories in drawing up large scale conservation programmes (and perhaps also an under-valuing of the potential of land *outside* protected areas). Many of the planning documents we have reviewed still refer to protected areas as a single category of land or water use.

While there are exceptions to this – for instance the MesoAmerican Biological Corridor and the NGO-government initiative in Madagascar – the full potential of the IUCN categories and of multiple approaches to protected areas may not yet be fully developed.

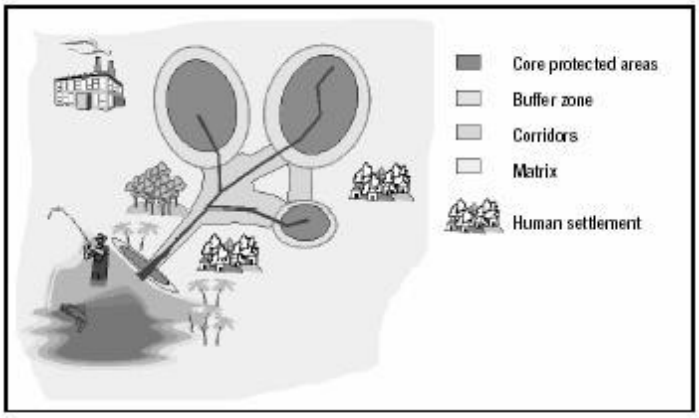
Biosphere Reserves are defined as *areas of terrestrial and coastal ecosystems promoting solutions to reconcile the conservation of biodiversity with its sustainable use*

Biosphere Reserves

Biosphere Reserves are defined as "*areas of terrestrial and coastal ecosystems promoting solutions to reconcile the conservation of biodiversity with its sustainable use*"[62].

The concept of a Biosphere Reserves is based on two distinct management tools: a *participatory management approach* and a *geographical zoning scheme*. The zoning schemes comprise a clearly delineated and legally protected *core area or areas*, devoted to the conservation of the biodiversity. Each core area is surrounded by a well-defined *buffer zone* where only activities compatible with the conservation objectives may take place. These in turn are surrounded by a *transition area* where sustainable resource management initiatives and practices are encouraged, with the cooperation of the population. The management of this zoning system, covering areas which may be owned by various private and public entities, is organised according to local customs and regulations[63].

In 1996, a joint publication of IUCN, the UNESCO Man and Biosphere Programme and the Australian Nature Conservation Agency reviewed Biosphere Reserves and their relation to the IUCN System of Protected Area Management Categories [64]. It aimed to "*demonstrate that the IUCN management categories system is not only compatible with the Biosphere Reserve concept, but that it can inform the planning, management and effectiveness of Biosphere Reserves*". (See Chapter 2.2 on legislation above for more details).



Diagrammatic representation of the UNESCO MAB biosphere concept with core areas, buffer zones and corridors

Dealing with the issue

There is already a certain amount of guidance available. The chapter in IUCN's 1994 *Guidelines for Protected Area Management Categories* on 'Applying the Categories', deals with issues that had emerged from the interpretation of the 1978 system. The discussion includes zoning within individual protected areas; protected areas with multiple classifications; protected areas where zoning is defined by law; and contiguous protected areas with different management objectives. However, the extent to which larger scale planning has now become enshrined within the mission of many government conservation departments and non-governmental organisations perhaps suggests that further guidance should be prepared.

Implications for the protected area categories

A key reason for such new advice would be to promote the creative use of the protected area categories together – to get away from the idea of individual protected areas to that of clusters and groups of protected area of different categories. The wider implications are that protected areas not only need to be viewed far more as networks than as individual entities, but also that they need to be integrated more generally into the wider landscape and seascape.

Lessons learned

Experience to date suggests that the categories can be a key tool in helping to plan and implement landscape and seascape scale conservation programmes, but also that there are still difficulties in applying this. Existing case studies – such as the biosphere reserves in Australia – already show that the categories can be used in bioregional planning. However, gaps in understanding clearly still remain and wider application is needed.

Suggested responses from IUCN

Some protected area agencies and NGOs appear to need further guidance on the technical aspects of this issue. IUCN could provide this in part by making case studies (including examples of both good and bad use of categorising zones) more widely available, through the WCPA web-site, but also perhaps by producing a specific guidance note on assigning categories to protected areas as part of an ecoregional or bioregional approach to protection.

Four responses are suggested

1 Recognise bioregional planning as one of the principal new ways in which the categories are being used
2 Encourage the wider use of the categories in bioregional planning, e.g. through the revised 1994 guidance
3 Consider development of specific guidance on use of IUCN categories in broadscale conservation
4 Collect, analyse and disseminate good examples and case studies as so as to advocate best practice

Points (3) and (4) might be developed as one single technical publication

Chapter 2.7: Reporting the categories and transboundary conservation areas

Summary

Recognition of the importance of the ecosystem approach has led to a rapid increase in the number of transboundary conservation areas (TBCAs), including those with a specific aim of rebuilding peace and cooperation after conflict. Two issues are significant to IUCN categories:

- **Most TBCA initiatives involve protected areas in two or more IUCN categories**
- **WCPA would like to develop some means of distinguishing TBCAs within the UN list of protected areas**

Neither of these factors is necessarily problematic.

The question of distinguishing TBCAs in the UN List could be addressed by identifying all such areas in the country lists by a symbol, and by including a separate list of transboundary conservation areas (in the same way as e.g. Natural World Heritage sites) as an annex. Such a move assumes that the current informal list of TBCA initiatives will be formalised with some agreed criteria and definition for inclusion.

Context

There is increasing recognition that good biodiversity conservation needs an ecosystem approach to management that integrates protected areas with other land and water uses.

One response to this has been a rapid growth in the number of transboundary conservation areas (TBCAs) over the last 15 years – from 59 in 1988, mainly in Europe and North America, to 169 in 2001, with examples from every continent. The unique role of TBCAs is increasingly recognised and the World Commission on Protected Areas recently published good-practice guidelines[65].

TBCAs are driven primarily by the need to address conservation issues – such as migratory species or ecosystem processes – that cross national or regional boundaries. However, even more than many other protected area types, TBCA initiatives are influenced – and sometimes spurred on – by social, economic and political factors.

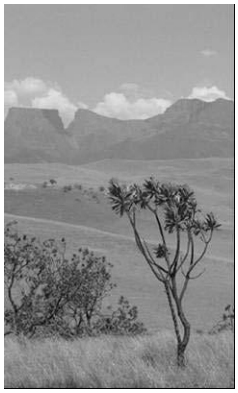
In particular transboundary conservation can be a tool for reconciliation in post-conflict conditions and regional co-operation. Indeed there is a range of social and cultural incentives for cross-border conservation. **Parks for Peace** is a term used for those protected areas developed in security or reconciliation context.

A recent IUCN workshop, held in conjunction with the International Tropical Timber Organization (ITTO), agreed a draft typology for transboundary conservation, which shows the range of different approaches.

This chapter was written by Nigel Dudley and draws from the IUCN/ITTO meeting which took place in February 2003 in Ubon Rathchathani, Thailand

April 2003

The classic transboundary protected area with two or more contiguous protected areas across a national boundary is only one of the possible models



Meloti-Drakensberg transboundary protected area, South Africa and Lesotho: Nigel Dudley

- **Two or more contiguous protected areas across a national boundary**: e.g. the Meloti-Drakensberg transboundary protected area between South Africa and Lesotho
- **A cluster of protected areas and the intervening land**: e.g. as is being developed in a World Bank project in Central Asia
- **A cluster of separated protected areas without intervening land**: e.g. in the Kibiri National Park in Burundi, Virunga National Park in DRC and Volcanoes National Park in Rwanda
- **A trans-border area including proposed protected areas**: e.g. in northern Thailand and Myanmar
- **A protected area in one country aided by sympathetic land use over the border**, e.g. in Kayan Mentarang National Park in Kalimantan bordering Sarawak and Sabah.

Management options can range from simple agreement to cooperate between protected areas to more formal legal arrangements between governments. It is however almost impossible to conceive of a situation where there is just one protected area on both sides of a national boundary. Factors of national sovereignty, legal complications and practical considerations all make it very hard to see how such an ideal could be realised. That said there is great scope for protected areas in two or more adjoining countries to co-operate.

Implications for the protected area categories

Transboundary conservation areas have two possible implications for the existing protected area categories:

- A collection of two or more protected areas may well have different categories and hence different management aims
- There have been suggestions that transboundary conservation areas deserve their own category or perhaps some other way of distinguishing them within the UN List.

The WCPA guidelines suggest that "*Since both transboundary protected areas and Parks for Peace are subsets of protected areas, they should always conform not only to the IUCN definition of a protected area but also to one or more [our emphasis] of the IUCN protected area management categories*". In effect this means that – as everywhere else – to be recognised as protected areas, each of the components of a TBCA should conform to the IUCN definition. Analysis of the list of known transboundary protected areas collated in 1999 shows that of those where categories could be identified, 85 per cent contained protected areas in at least two categories and many had three or more, sometimes with dramatically different management aims[66]. Different categories therefore seem to be the rule rather than the exception. The WCPA guidelines also suggest that it may be helpful to develop an international certification system for Parks for Peace, to provide an agreed way of distinguishing these initiatives.

Suggested responses from IUCN

There currently seems to be little cause for concern in terms of transboundary protected areas and the categories. The existence of several categories within one complex clearly has management implications and should be reflected in the management plan, but this is already often the case (for example many Category V protected areas have some more strictly protected reserves within

them). Many of the points made in the chapter on bioregional planning (Chapter 2.6) are relevant to TBCAs. The relationship of TBCAs and the categories might usefully be expanded upon in subsequent editions of the WCPA guidelines.

The IUCN/ITTO meeting referred to above rejected the idea of a separate category for TBCA initiatives (indeed this would be logically difficult as the constituent parts are already generally assigned to categories) but did want to explore the possibility of a separate listing for transboundary protected areas in the UN List, in the same way that World Heritage Sites and Biosphere Reserves are similarly listed twice.

Two actions could help provide further clarification:

- Development of some specific guidance for TBCA managers and others regarding the integration of different IUCN categories into transboundary initiatives and management plans. The use of case studies to show how this is being done in practice would be helpful
- Development of proposals, and accompanying criteria, for building on the current list of Transboundary Protected Areas (as currently set out in Annex 1 of the Transboundary Protected Areas Guidelines[67]), giving this an official standing and including a list of such areas in future editions of the UN list. One option would be to identify constituent protected areas within TBCAs by a symbol in the main list, augmented by a separate TBCA list included as an annexe.

Chapter 2.8: Using the categories in marine protected areas

Summary

Many marine protected areas (MPAs) specialists feel that MPAs do not always appear to fit comfortably into the existing categories system; and thus the system has been poorly used – both in terms of uptake and in application. This uncertainty about application of categories has resulted in serious data gaps concerning MPAs.

This chapter examines these issues in detail and offers some recommendations as to how the IUCN categories can be applied more effectively and usefully to MPAs.

Context

The UNEP-World Conservation Monitoring Centre (UNEP-WCMC) records nearly 1.6 million km^2 of protected areas with a marine component (this figure excludes the terrestrial areas of the Greenland National Park which total 972,000 km^2). This means that globally under one per cent of the world's oceans lies within MPAs. This compares with some 17.1 million km^2 of protected areas on land (11.5 per cent of the Earth's land surface)[68]. Furthermore most MPAs are under-resourced and poorly managed, offering little in the way of real protection[69].

This chapter has been prepared by Sue Stolton, Nigel Dudley, Sue Wells and Adrian Phillips, with thanks to Meriwether Wilson, Richard Kenchington, Edmund McManus, Scott Smith and staff based at the National Oceanic and Atmospheric Administration (NOAA) in the USA. The text from Australia was written by Peter Taylor, Director, Marine Protected Areas, Environment Australia.

July 2003

The efforts of those working on MPAs in recent years have been focused more on the designation of new MPAs and MPA systems, rather than on the application of the IUCN Protected Area Management Categories. Indeed, many of those currently at the forefront of promoting MPAs are not directly involved with the more general work of IUCN and WCPA on protected areas, and thus may be unaware of the main purposes of the IUCN categories system.

It is therefore worth repeating here that the category system is explicitly intended to cover the marine and terrestrial environment. Categories are based on the **objectives** of the protected area (i.e. not on the approach used to manage it, the activities allowed or disallowed within it, or on its effectiveness) and all categories are of equal importance. It thus provides, among other things:

- a framework for the collection of data on protected areas; and
- a set of international standards that will allow comparison across countries.

For these purposes to be met, the system needs to be capable of recording the relevant information for all types of protected areas, including MPAs.

Defining Marine Protected Areas

One long running debate among marine specialists, linked to the application of the IUCN categories concerns the definition of an MPA.

IUCN's standard definition of a protected area, an *"Area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means"* explicitly covers land or sea areas[70].

However, following resolutions to IUCN's General Assembly in 1988 and 1994, IUCN developed a more specific but compatible definition of an MPA as: "*Any area of intertidal or subtidal terrain, together with its overlying water and associated flora, fauna, historical and cultural features, which has been reserved by law or other effective means to protect part or all of the enclosed environment*"[71].

Some users have found difficulties in applying this second definition; for example, Nijkamp and Peet[72] note that:

- It refers primarily to terrain rather than to marine waters, which seems to emphasize the value of the seabed rather than the value of the overlying water or associated flora and fauna;
- The reference to fauna and flora is too restrictive as it might exclude such marine features as ocean vents, upwelling areas, and so on; and
- An area that is reserved by law is not necessarily protected by law[73].

They therefore suggests a modified definition of an MPA as: "*any area of sea or ocean—where appropriate in combination with contiguous intertidal areas—together with associated natural and cultural features in the water column, within, or on top of the seabed, for which measures have been taken for the purpose of protecting part or all of the enclosed environment*"[74].

Elements of all these definitions were used by the Ad Hoc Technical Expert Group (AHTEG) in their recommendations to the CBD for the following definition of an MCPA*: "*Marine and Coastal Protected Area' means any defined area within or adjacent to the marine environment, together with its overlying waters and associated flora, fauna, and historical and cultural features, which has been reserved by legislation or other effective means, including custom, with the effect that its marine and/or coastal biodiversity enjoys a higher level of protection than its surroundings*.[75]"

Despite these various rewordings of the MPA definition, the essential concept remains the same and thus does not directly influence the application of IUCN categories.

* This chapter uses the term marine protected area (MPA) to describe protected areas with a marine element (reflecting the common IUCN/WCPA usage). The AHTEG uses the term Marine and Coastal Protected Area (MCPA), in its advice to the CBD, to emphasize that marine biodiversity protection applies to coastal areas as well as the sea.

The use of the IUCN categories in MPAs has been uneven, both at the policy level and in practical terms. In some countries, such as Australia (see box below), the IUCN categories have been applied successfully to certain types of MPAs (marine reserves designated under the Environment Protection and Biodiversity Conservation Act – see box). Other countries have tended to feel that the IUCN categories were developed primarily for terrestrial protected areas, and are either not relevant to MPAs, or would have to be substantially revised, to gain any relevance. This is reflected in the lack of literature on the use of IUCN categories for MPAs; probably the only discussions on this are to be found in Kelleher[76] and WWF International[77].

As of May 2002, there were 4,478 marine protected areas (MPAs) recorded on the database, 3,013 of which had an IUCN category[12].

A further complication is the lack of agreement on whether areas that are managed primarily as a fisheries tool (including no-fishing areas that may be more strictly protected than some areas set aside for marine biodiversity conservation) should be recognised as protected areas in the IUCN sense. A number of managed marine areas, that meet the IUCN's definitions for protected areas, thus tend to be overlooked in IUCN's various systems and databases.

Finally, in many countries, MPAs are administered by different agencies from terrestrial protected areas, i.e. the Fisheries Department, and these agencies may not have close relationships with the main national protected area agency or with the IUCN categories system.

IUCN categories are integral to the establishment of Australia's National Representative System of Marine Protected Areas

Nigel Dudley

Use of the IUCN categories system in marine reserves in Australia

In Australia, which has a federal system of government, the marine jurisdiction is managed by seven provincial level governments and the national government. These governments have agreed to cooperate to establish a National Representative System of Marine Protected Areas (NRSMPA) in Australia's marine jurisdiction. The primary aim of the NRSMPA is to provide a national guiding framework for the eight different jurisdictions in the establishment and management of a comprehensive, adequate and representative system of MPAs to contribute to the long-term ecological viability of marine and estuarine systems, to maintain ecological processes and systems, and to protect Australia's biological diversity at all levels.

There has been a major acceleration of the declaration of MPAs in Australia with 78 new MPAs being declared since 1992 when the active cooperation of jurisdictions in establishing the NRSMPA began. Approximately six per cent of the total Australian marine jurisdiction is now included in MPAs.

National System of MPAs

IUCN categories are central to the establishment and evaluation of the NRSMPA. Each jurisdiction has agreed to determine IUCN categories for MPAs proposed for addition to the NRSMPA and to report these periodically to be incorporated into the Collaborative Australian Protected Area Database. The full range of IUCN Categories are used although one of the agreed principles is that the NRSMPA will aim to include some highly protected areas (IUCN I and II) in each bioregion. A national MPA coordination committee made up of representatives from all the jurisdictions plays a coordinating role in ensuring consistency of interpretation and application of IUCN categories. An additional benefit of the IUCN categories in the Australian context is that it allows comparisons across the eight jurisdictions that use very different nomenclature for their MPAs.

Legislative requirement for IUCN categories

In 1999 under the provisions of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) the requirement to assign an IUCN category at the time of declaration of the MPA was enshrined in Australian law for terrestrial and marine reserves declared by the national government.

[12] Of those 1,465 without an IUCN category, 37 degazetted sites and some were proposed sites.

These MPAs are separate from the Great Barrier Reef Marine Park which was set up under separate legislation and is managed by a separate authority*. The legislation includes, for each category, a set of 'Australian IUCN Reserve Management Principles', based on the 1994 guidelines for assigning categories, as well as a set of general principles to assist the process. Reserves may be multiple-use, in which case each zone is assigned an appropriate category.

Stakeholder experiences

The experience of working with the IUCN categories in the marine environment has been a positive one. The assignment of IUCN categories imposes a requirement for clarity and in stating the objectives of an MPA provide consistency across the system of MPAs. This has empowered stakeholders in the negotiating process leading up to the declaration of an MPA, as the 'rules' as set out in the categories and the Australian IUCN Reserve Management Principles are clear. It has taken a concerted effort in stakeholder education to achieve this but now major stakeholders understand the category system and how it is applied. Having the whole range of categories available has also been beneficial in dealing with stakeholders. It provides an opportunity for the negotiation of innovative options which can lead to stakeholders adding vital information to the process (e.g. fisheries habitat information held by the fishing industry and environmental information held by the oil and gas industry) and providing better mechanisms for conflict management which often result in better environmental outcomes.

A major issue recently raised in Australia was how to deal with the desire of marine based industries to know before declaration what activities would and would not be allowed in an MPA to allow them to engage fully in the design and declaration process. Initially in order to provide the certainty required by industry an attempt was made to identify which activities would and would not be allowed in each of the IUCN categories. This was found to be unworkable as the policy included and excluded a whole range of activities without providing an opportunity to assess the impacts of a specific activity against the conservation values of the particular reserve. Another problem was the lack of capacity to take into account technological advances in industry activities that may significantly affect impacts. So while the IUCN categories are useful to set the broad management objectives of an MPA they were not found useful as a more prescriptive tool in the management of specific activities in MPAs.

The issue was resolved by negotiating a process with industry where the Australian IUCN Reserve Management Principles were used as a basis for an objective based, case by case assessment of the impacts of proposed activities on the conservation values to be protected.

Terrestrial and marine issues

There are considerable benefits in having a similar category system for terrestrial and marine protected areas. In Australia, there is a perception that MPAs are in some senses not real protected areas and are second cousins to the National Parks of the terrestrial system. Establishing a separate classification system for MPAs would feed this perception. There is also the very practical problem of how to deal with protected areas that straddle the terrestrial and marine environments. This is a major issue in Australia where the coastal zone is one of the areas of highest environmental pressure and where integrated management of the terrestrial and marine environment is crucial.

Flexibility
It is true that the marine environment provides some challenges to the category system. However the flexibility of the category system has been demonstrated. For example, in the Tasmanian Seamount example where the water column was categorised vertically (see below). It would be useful to explore other possibilities such as IUCN categories being assigned temporally e.g. in seasonal closure situations where an MPA may impose restrictions on certain activities during breeding seasons etc or even spatially where protection regimes may move with a migrating pelagic species.

MPAs and Fisheries Management Arrangements
The NRSMPA counts marine managed areas other than traditional protected areas as contributing to the national system where the area:

- has been established especially for the conservation of biodiversity;
- can be classified into one or more of the IUCN protected area management categories;
- has secure status which can only be revoked by a Parliamentary process; and
- contributes to the representativeness, comprehensiveness or adequacy of the national system.

In general fisheries management arrangements and MPAs have been managed separately to date. This is beginning to change in Australia with the increasing emphasis on the sustainability of fisheries and the Australia's Oceans Policy commitment to integrated ocean's management. Increasingly fisheries management arrangements require areas to be set aside that remain unfished. From a practical point of view where these areas make a contribution to the NRSMPA and meet the identification and selection criteria for MPAs there is an increasing practical and economic imperative to merge the two processes. This is a challenging new area where the full implications for conservation are not yet clear..

Examples of IUCN categories
12 out of the 13 marine reserves managed under the EPBC Act have been assigned IUCN categories, thus providing useful examples for other countries. These include:

- The 300,510 ha Lord Howe Island Marine Park (Commonwealth waters) was declared to protect the volcanic seamount system and its conservation values associated with marine biodiversity, habitats and ecological processes. This protection will also ensure the long-term maintenance of the Island's tourism industry and the traditions and lifestyle of the local community. During the management planning phase, it was initially proposed that the Park be assigned to Category IV (Habitat Protection Zone) and that set drop-line fishing be prohibited. Following public concern it was agreed that approximately 70 per cent of the Park would be assigned to IUCN Category IV and allow for strictly controlled drop-lining to occur. Only Island residents are permitted to drop-line, gear must be limited to 3 lines and 15 hooks per line, a radio beacon must be fitted to each line to prevent lines becoming lost and 'ghost fishing', and fish can only be taken for consumption on the Island. The remaining 30 per cent of the Park benefits from increased protection and has been assigned to IUCN Category Ia (Sanctuary Zone), prohibiting all forms of fishing.

- Tasmania Seamounts Marine Reserve – was declared to protect a sample of the cone-shaped remnants of a range of extinct volcanoes which supports rich benthic communities with a high level of endemism. These seamounts rise from ocean floor depths of 1000- 2000m and peak at between 1940m – 600m below the surface of the water. A major question in assigning an IUCN category was the impact of pelagic fishing on the benthic community. The bulk of the evidence indicated that this impact was insignificant. As a result the upper 500 m is zoned as Category VI, where pelagic long-line fishing is allowed; below 500m, fishing is prohibited and the zone is assigned to Category Ia.
- The Heard Island and MacDonald Islands Marine Reserve of 64,700 km^2 was declared to protect the World Heritage values of the region, the unique features of the ocean floor and sea environments, representative portions of the different marine habitat types; and marine areas used by land-based marine predators for local food foraging. The whole of this reserve was assigned to Category Ia and no commercial fishing is allowed in the Reserve. This reserve is the largest no-take marine reserve in the world and has the support of the Australian licensed fishers working in the region.
- Ashmore Reef National Nature Reserve and Cartier Island Marine Reserve are located some 800km west of Darwin in the remote Timor Sea. The reserves protect unique and vulnerable tropical ecosystems including coral reefs, vegetated sand islands, lagoons, seagrass beds and extensive tidal sand flats. They are vital to the protection of threatened species including dugongs and sea turtles; provide a significant refuge for migratory seabirds and have the largest number of sea snake species recoded in the world. In accordance with their conservation significance both reserves are assigned to Category Ia and are strictly protected. Over the past 300 years these islands have been visited by traditional fishers from the Indonesian region. In recognition of its importance to these people a small part of Ashmore Reef has been zoned a Category II which allows access for fresh water, shelter, visits to grave sites and some limited fishing for immediate consumption.

* Issue associated with the application of the IUCN categories to the Great Barrier Reef Marine Park are described in Chapter 2.5 on large multiple use protected areas.

Confusion with the categories

Four issues are examined in more detail below:

- multiple-use MPAs
- no-take (no-fishing) areas, or no-fishing zones within MPAs (as many people feel that the category system should clearly distinguish such areas)
- fishery management areas (as in some cases it is not clear if these are protected areas)
- data reliability (with gaps resulting from both the relatively poor quality of the global database on MPAs and the perceived difficulty of applying the categories to MPAs).

Multiple-use MPAs

One concern about the use of the IUCN system for categorising MPAs is the general one relating to categorisation of multiple-use protected areas. MPAs typically comprise fluid and dynamic marine ecosystems, have a high diversity of habitats and species within an area and contain highly migratory marine species[78]. This complexity often dictates the need for multiple objectives and

complex management schemes[79]. Multiple-use MPAs may have a spectrum of zones within them, each zone type having different specific objectives, with some allowing greater use and removal of resources than others (e.g. no-take zones are commonly designated as one of the zones of a multiple-use MPA). Indeed zoning is recommended in the IUCN best practice guidelines on MPAs as the best way of ensuring the strict protection of a core zone as part of a larger, multiple-use area[80]. This issue has, in part, been dealt with by a recommendation adopted by the WCPA Steering Committee in November 2001 (see Chapter 2.5 on large multiple-use protected areas), which allows for single management units to be separately reported on and accounted for if:

- the areas concerned were defined in the primary legislation setting up the protected area
- these areas are clearly defined and mapped
- the management aims for the individual parts are unambiguous, allowing assignment to a particular protected area category.

There are also recommendations on zoning in the Guidelines for the use and application of the categories. In some cases, the IUCN categories have been applied to separate zones (see examples in Australia where zoning is being applied not only 'horizontally' but also by depth).

No-take areas

In the marine environment, one of the strictest forms of protection is the no-take area. These areas may comprise a whole MPA or be a core zone within a multiple-use MPA. Within them any removal of marine species and modification or extraction of marine resources (e.g. through fishing, dredging, mining, drilling) is prohibited. Other forms of human disturbance may also be restricted[81]. Although not specified in the IUCN guidelines for assigning categories, it is generally considered that only one IUCN category – Category Ia (Strict Nature Reserves), where the management objectives include preserving species in as undisturbed a state as possible – covers no-take areas. Category Ib (Wilderness Areas) allows subsistence fishing by indigenous communities, as long as the wilderness qualities of the area are not adversely affected. All the other categories permit fishing, where this is consistent with the conservation objectives of the designation. However, as this is not explicitly stated, and as no-take areas often allow for some access and even non-extractive activities, and may have a range of objectives, no-take MPAs have been assigned a range of categories. Thus the Kenyan Marine Parks, which are no-take areas, are assigned Category II whilst the Ngerukewid Islands Wildlife Preserve in Palau, also a no-take area, is Category III (see table overleaf).

Recent research on the role of no-take areas and MPAs in increasing fishery stocks and ensuring an ecosystem approach to marine biodiversity protection, is leading to greater numbers of such areas being established. These management tools have also been recognised at a policy level (i.e. the commitments made at the World Summit on Sustainable Development[13])[82]. Since the category system is based on management objectives, and not on the tools used to manage the area, i.e. the uses (or 'non-uses') of an area, it cannot be used to measure progress towards targets for no-take marine

[13] "*establishment of marine protected areas consistent with international law and based on scientific information, including representative networks by 2012 and time/area closures for the protection of nursery grounds*" (para.31).

protected areas. Some have argued, however, that it would be useful if the IUCN categories could be used for such estimations. Further discussion is required to determine whether the IUCN categories can contribute to this.

Fishery management areas
Fishing is the primary threat to most threatened marine areas. This may be due to inadequate management with incentives for over exploitation and/or through the use of methods that destroy habitat, non-target species and ecological processes. No-take zones are thus a critically important component of virtually all marine protection regimes. But given the nature of fishing activities and the extent of cross boundary effects, protected areas can rarely stand alone, particularly if small. So they should be buffered within a larger area which will almost always be, or depend upon, the active involvement or commitment of a broader fishery management regime.

The conservation issues of seabed and water column communities and for demersal and pelagic species can require a range of responses and a range of physical and temporal scales. The most damaging fishing activities are heavy gear seabed trawling or dredging that 'cleans' the bottom and takes high bycatch of attached and free swimming forms and repetitive trawling that entrenches the habitat modification. Those issues – for example in the case of seamounts – may require localised seabed protection at a scale that is not significant in the context of water column community management. Some sites such as fish spawning aggregation areas or migratory routes are critically important and the species concerned are extremely vulnerable at specific and predictable times of the year while for the rest of the year they do not raise management issues any different from surrounding areas. In both these situations immediate and urgently needed response to the threat may require an approach that does not fit easily with the current IUCN Objectives hierarchy. An example of this is 'The Irish Sea Cod Box', which includes Technical Conservation Measures designed to conserve cod stocks in the Irish Sea by restricting fishing activities during the spawning period.

Data gaps
At the global level, there are serious gaps in knowledge about the number and distribution of MPAs and thus about the extent to which the current global MPA system protects biodiversity. This issue has been addressed by the Ad Hoc Technical Expert Group (AHTEG) in their recommendations to the CBD. The AHTEG recommended the key data that should be collected about MPAs (i.e. location, size, management effectiveness and threat) and made available on a database. Concerning the IUCN categories, the paper states that: "*Data in other fields currently held within the world database on protected areas of proven value to a wider audience, such as the IUCN management categories and GIS boundary data, could also be gathered but are not considered to be as important. IUCN category information will be collected for all sites on the United Nations list and so could be integrated into the above 'global' categories*"[83]. This statement suggests that many marine professionals see only limited relevance in the IUCN categories system as a source of useful information on MPAs.

If the same rationale for assigning categories to terrestrial protected areas (as described above) holds for MPAs, there is an urgent need to:

- inform MPA professionals of their relevance and use;

- clarify remaining problems concerning the use of the categories for MPAs; and
- provide guidelines for and/or promote appropriate assignment of the IUCN categories to MPAs.

Examples of IUCN categories as applied to MPAs

Name of MPA	Size (ha)	Category	Comments
Hol Chan Marine Reserve, Belize	1,115	II (WDPA) IV (site sheet)	4 zones
Monte Cristi Nat. Park, Dominican Republic		II (WDPA) with zones categorised V, VI, VII, VIII	
Siberut National Park and Biosphere Reserve, Indonesia		II (WDPA)	
Montego Bay Marine Park, Jamaica	59 (site sheet) 1,530 (WDPA)	II (WDPA) II (CAMPAM) III (site sheet)	3 zones: fishing; no-fishing; multiple-use
Watamu National Marine Park, Kenya	1,000	II (WDPA)	Entire area is no take – recreation permitted; the Park is surrounded by Malindi-Watamu Marine Reserve which allows traditional forms of fishing so could be construed as highly protected buffered by marine reserve
Saba Marine Park, Netherlands Antilles	820	VI (site sheet; none on WDPA)	4 zones: anchoring; recreational and fishing; recreational diving – no fishing; multiple use
Ngerukewid Islands Wildlife Preserve, Palau	1,100 (marine) 100 (land)	III	Entire area no-take; recreation permitted
Palawan Wildlife Sanctuary and Biosphere Reserve, Philippines		No classification	
Soufriere Marine Management Area, St Lucia	?	VI (WDPA; none on site sheet)	5 zones: no-take (marine reserves); recreation; 'fishing priority areas'; anchoring; multiple use
Mafia Island Marine Park, Tanzania	11,300	VI (WDPA)	3 zones: strict protection (no-take) core zone, restricted fishing, general use

Name of MPA	Size (ha)	Category	Comments
Misali I. Conservation Area, Zanzibar	Marine 2,200; land 90	VI (WDPA)	Zoning: 8 per cent of marine area is no-take
Key: WDPA = World Database on Protected Areas**;** Site sheet = WCMC text description of the site; some of these date from 1988 which explains some discrepancies with WDPA, although not all – some site sheets (e.g. Hol Chan, Soufriere) are dated 2002.			

Suggested responses from IUCN

If the IUCN categories are to be accepted as a global standard for classifying all protected areas, and are to provide a basis for data collection at the global level, they need to be applied in a standardised manner to protected areas in all countries and all biomes.

St Lucia Wetland Area has several zones including no-take and recreational zones

Greater St Lucia Wetland Area, South Africa: Marc Hockings

Perhaps it is worth reiterating here that protected areas are not intended to stand alone in the world as the only viable conservation instrument. Some of the issues raised in this chapter in relation to the protection of the marine environment, such as fisheries management areas, may be valid and successful conservation tools, but trying to fit all of them within the concept of a protected area and the protected area management categories may not be possible. Indeed, within the management of protected areas the idea of linking the management of a fully protected area with corridors, buffer zones and sustainable management areas (e.g. organic agriculture, certified sustainable forestry and Marine Stewardship Council certified operations) are rapidly evolving. As such, protected areas are becoming just one element within a range of protection methods and conservation tools. Perhaps what is needed is not only an acceptable global standard for classifying all protected areas, but similar tools that can quantify other sustainable management methods (as is the case with organic agriculture and sustainable forest and fisheries certification). It is possible to imagine a data set in the future that could combine all these elements to allow a far more informed and complete picture of the different levels of biodiversity conservation.

In relation to improving the use of the categories for MPAs, the following actions by IUCN are recommended:

- Guidelines for the application of the IUCN protected area management categories to MPAs should be produced. These should include guidance on which types of fishery management areas qualify as MPAs; clarification of terms; and re-iteration of the objective-based approach of the categories in relation to uses of MPAs. Any guidelines produced should include a range of practical examples showing how categories are being assigned to MPAs. As the IUCN categories are objectives-based, WCPA-Marine (see Box below) should consider whether the generic MPA objectives being developed through the current initiative to develop a methodology to assess management effectiveness might be used to clarify understanding of the category system for MPAs.
- WCPA-Marine should review categories in relation to current marine scientific and management knowledge (possibly linking this with any revision of the 1995 global MPA review).
- The relevance of IUCN categories to MPAs should be promoted, where applicable, and made clear to all those involved in MPA establishment and

management. Specific activities that could assist with this include UNEP-WCMC's initiative to update the MPA database and modify it to make sure that the updating process is sustainable (as recommended to the CBD by the AHTEG on Marine and Coastal Biodiversity).

- The guidance developed by WPCA on the classification of multiple-use areas (and the refinement of this guidance suggested in Chapter 2.5 on large multiple-use protected areas) should be disseminated to all those involved in establishing and managing multiple-use MPAs to help promote the use of categories.
- There should be some form of organised discussion as to how/if the categories system can help provide data on no-take areas (whether as single entities or as zones within multiple use MPAs), in order to determine national, regional and global coverage.
- A new edition of the overall guidance for the IUCN protected area management categories should be careful to avoid the use of terms that apply only to the terrestrial environment, or that have different meanings or customary interpretations between land and sea, when the topic under discussion relates equally to the marine environment (one notable example is the term 'land-use' which is often used to mean the entire range of human activities that impact the natural environment).
- IUCN/WCPA needs to link more closely into the marine component of the CBD process; in particular it should develop better links to the AHTEG process and the protected area paper that has been developed and recommend the use of the categories as an organising structure for reporting and system analysis.

WCPA-Marine

WCPA-Marine was established in 1986. The group's goal is: "*To provide for the protection, restoration, wise use, understanding and enjoyment of the marine heritage of the world in perpetuity through the creation of a global, representative system of marine protected areas and by building the capacity to manage these areas in accordance with the principles of the World Conservation Strategy*."

To achieve this goal, WCPA-Marine is focused on three primary themes:

- Demonstration of the effectiveness of marine protected areas (MPAs) as a tool of sustainable fisheries management and for protecting and restoring marine biodiversity;
- Implementation of MPAs as exemplary systems of participatory and adaptive management in the context of integrated coastal management; and
- Encouragement of sustainable tourism by creating new partnerships with the tourism community and engaging it in MPA management.

For information see: www.iucn.org/themes/wcpa/biome/marine/programme.htm

Chapter 2.9: Using the categories to measure forest protected areas

Summary

Attempts to use the protected area categories for statistical data collection, prepared under the UNECE Temperate and Boreal Forest Assessment 2000, revealed some confusion, particularly with respect to:

- **What is included as a forest protected area**
- **What to include as forest protected areas within Category V areas**
- **Interpretation of Category V and VI between countries**
- **How to record partially forested protected areas**
- **Protected forests outside IUCN Category I-IV protected areas**

This led the UNECE Timber Division to collaborate with the Ministerial Conference on the Protection of Forests in Europe (MCPFE) on an alternative classification system, which could potentially have undermined the IUCN categories. Collaboration between IUCN, UNECE and MCPFE led to agreement to seek a common solution. The chapter shows that further interpretation is needed in use of the protected area categories and two responses are suggested:

- **Continued engagement with UNECE and MCPFE, to address their legitimate concerns and to seek a mutually satisfactory solution**
- **As part of this process, to complete and agree additional guidance on the use of IUCN protected area categories for forest protected areas.**

Context

Every ten years, the United Nations carries out a global survey of forests, known as the Forest Resources Assessment. For historical and practical reasons this is done in two parts: with the Food and Agricultural Organization of the United Nations (FAO) coordinating results from tropical counties and the UN Economic Commission for Europe (UNECE) handling temperate and boreal forests in Europe, North America, the CIS, Australia, New Zealand and Japan. The presence of generally better data sources in the temperate and boreal countries allows greater sophistication of questions and country respondents fill out a detailed questionnaire that is collated into an overall report in the UNECE headquarters in Geneva.

This chapter was written by Nigel Dudley.

August 2002

The Temperate and Boreal Forest Resource Assessment (TBFRA) has attempted to broaden the range of issues addressed within the survey. At a meeting in Kotka, Finland in 1996, following recommendations by WWF and the UNEP World Conservation Monitoring Centre, it was agreed that the amount of forest protected area would be included as a question to country correspondents in the TBFRA 2000, and that the IUCN categories would be used to help refine the statistics[84].

The following table was included in the enquiry[85]:

Purpose: to provide information on how much forest and other wooded land is protected to conserve biological diversity and whether this area is increasing or not

Ref		Area (1000 ha)
8.1	Forest	
8.2	▪ In IUCN Categories I and II	
8.3	▪ In IUCN Categories III to VI	
8.4	Other wooded land	
8.5	▪ In IUCN Categories I and II	
8.6	▪ In IUCN Categories III to VI	

Please indicate trends over the last 10-20 years in the area of forest and other wooded land in the IUCN protection categories with quantitative information, if possible

The issue

The TBFRA was published in 2000[86]. Unfortunately, statistics relating to protected areas were generally amongst the least satisfactory of those provided and in some cases showed a deep level of misunderstanding about application of the protected area categories. Five key areas of confusion were identified:

- **Confusion about what is included as a forest protected area**

Some countries argued that most or all their forest fitted into the protected area categories, and therefore listed all their forests as having protected area status. Others took a more traditional view of protection and listed only designated protected areas. Six countries listed *all* their forests in protected areas (Azerbaijan, Cyprus, Kazakhstan, Liechtenstein, Tajikistan and Yugoslavia). Several others argued that most of their forests corresponded to protected area Categories I to IV, including Uzbekistan (95.9 per cent), Denmark (95.5per cent), Kyrgyzstan (86.3 per cent) and Germany (71.7per cent). Many of these areas were not designated as IUCN protected areas in the UN list or anywhere else, but were judged by national correspondents as of equal biodiversity value and undergoing similar management regimes.

If all Category V protected areas forests count as "forest protected areas", these could include plantations, like this one in the Snowdonia National park in Wales, UK

- **Confusion about what to include as forest protected areas within protected areas**

Many European Category V protected areas in particular include land-uses that would certainly not, on their own, be included amongst IUCN's definition of protected area. For example, many such areas in England and Wales, France and other western European countries include large areas of conifer plantation, often of exotic species (some indeed established since the creation of the protected area). Similar confusion occurs, although to a lesser extent, in other protected areas categories.

- **Differences in interpretation, particularly of Categories V and VI**

Even within official national protected area statistics, there were great differences in interpretation of protected areas, particularly within categories V and VI, which made comparisons between countries difficult. For example, the USA includes all its National Forests amongst Category VI protected areas (despite much of the land being logged commercially) while Canada does not.

As a result the USA reports 38.9 per cent of its forests in protected areas while Canada reports just 7.9 per cent protected; these statistics may not reflect real differences in the level of protection between the two countries.

- **Problems in recording partially forested protected areas**

Few protected areas are wholly forested (and relatively few terrestrial protected areas will contain no forested or wooded areas). A strict interpretation of the TBFRA question would require calculating the percentage of forest and other wooded land in each protected area, but in many cases these data are not available and will almost certainly not be collected together in one place. In practice this is likely to result in exaggerating the amount of protected forest as protected areas containing large forest areas are likely to be recorded in their entirety, including non-forested areas.

- **Confusion about protected forests outside IUCN Category I-IV protected areas**

Some governments also professed confusion about the fact that a forest could be strictly protected from any management activity, for example for avalanche control, protection of watersheds or as an anti-erosion measure, but not be included within the protected area categories. The distinction between forest protected areas and protected forests is often poorly understood.

These anomalies were summarised in the chapter of the TBFRA dealing with biodiversity and environmental issues[87]. In the TBFRA summary report, the statistics for IUCN Category I-IV protected areas were judged to be fairly accurate while those for Categories V and VI were so variable as to be virtually worthless.

Dealing with the issue

UNECE sought advice from IUCN but still felt that the issue remained unresolved and in consequence set up a series of meetings and working groups to address the issue. Eventually the TBFRA team linked up with members of the Ministerial Conference on Protection of Forests in Europe (MCPFE – formerly known as the Helsinki Process or Pan-European Process), which is one of the regional criteria and indicator processes. MCPFE had also experienced problems in using the protected area categories and was proposing to develop a new set of categories specifically for use in Europe. Meanwhile, WWF sponsored IUCN to carry out some research on interpretation of the protected area categories for forest protected areas, but this work was never completed. WWF then commissioned a short internal paper on further interpretation of the protected area categories [88].

The **MCPFE process**, which continued for two years and held a series of invited meetings, eventually produced proposals for a new set of categories, which are compared in the table below to those used by IUCN and the European Environmental Agency (EEA).

Classification proposed by the Ministerial Conference for the Protection of Forests in Europe

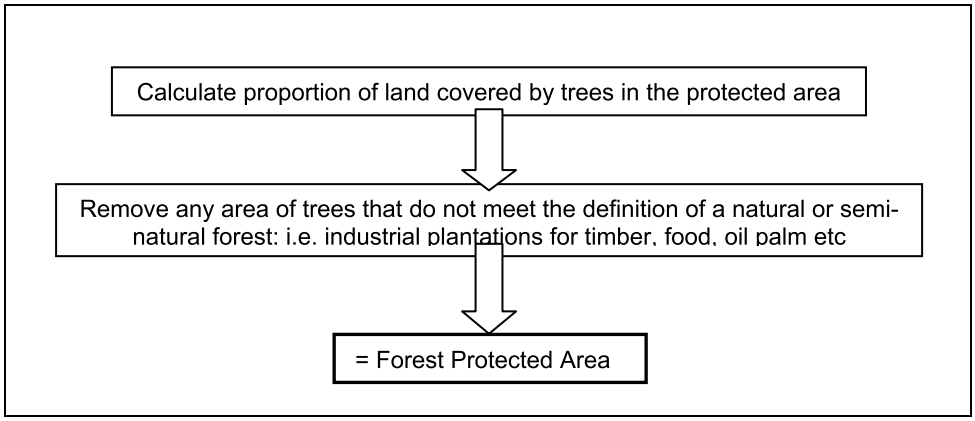
MCPFE proposed categories		EEA	IUCN
1. Management objective: "Biodiversity"	1.1 "No active intervention"	A	I
	1.2 "Minimum intervention"	A	II, (IV)

MCPFE proposed categories		EEA	IUCN
	1.3 “Conservation through active management”	A	IV, (V)
2. Management objective: “Protection of landscapes and specific natural elements”		B	III, (V, VI)
3. Management objective: “Protective functions (soil, water, natural hazards)”		(B)	Not applicable

WWF instead suggested development of further guidance of the existing protected area categories, specifically with respect to:

What is a forest protected area? It should be stressed that any definition *begins* with the IUCN definition of a protected area and is *further refined* by reference to protected area categories. A forest that appears to fit one of the categories but does not meet the minimum definition of a protected area is *not* a protected area. Some protected areas, particularly Categories V and VI, may contain areas of trees that are clearly not protected forests. Examples include exotic plantations in Category V national parks of England and Wales.

If the amount of ‘forest protected area’ is being reported separately from general protected area statistics, a separate calculation will need to take place as in the following:



Proposals for addressing the issue of forest protected areas in Category V

What is <u>not</u> a forest protected area? Several other forest uses may provide biodiversity benefits without being full protected areas, including:

New guidelines aim to help forest managers identify when a forest is or is not a protected area according to IUCN

Nigel Dudley

- Forests managed for resource protection other than biodiversity – e.g. forests set aside to protect watersheds or drinking water, avalanche control, firebreaks, windbreaks and erosion control
- Forests protected primarily as a community resource – e.g. forests managed for non-timber forest products, fuelwood and fodder, recreational or for religious purposes
- Forests protected as a strategic resource – e.g. as a emergency supply of timber in times of conflict
- Forests managed for multiple purposes where there is no specific policy for biodiversity conservation
- Forests set aside by accident – e.g. woodland in the central reservation or verges of motorways, forest maintained for military or security reasons, woodland on firing ranges

IUCN, and particularly the European group of the World Commission on Protected Areas (WCPA), was concerned that the proposed MCPFE categories would seriously undermine the IUCN categories as a global system. If they were taken up by TBFRA in Europe, a logical next step would be to use them through the global Forest Resource Assessment, i.e. also within FAO, so in that case two major United Nations bodies would be classifying forest protected areas using a different system to that used in drawing up the United Nations List of Protected Areas.

At a meeting in Pörtschach, Austria, in June 2002, an emergency resolution was passed in the presence of IUCN Director General Achim Steiner, pointing out the potential confusion that adoption of the MCPFE process could cause. In July 2002, a meeting between representatives from the UNECE TBFRA in Geneva, the MCPFE in Vienna, WWF International and IUCN took place at IUCN headquarters in Gland, Switzerland. At that meeting, it was acknowledged that the current IUCN categories allow some room for misinterpretation when used as a statistical tool and the three organisations agreed to work together to find a common solution to these problems. The MCPFE also agreed to make some minor changes to their own proposed categorisation process, specifically in terms of the increasing equivalence with IUCN categories so that they could be directly compared (i.e. so that each IUCN category would fit into one and only one of the MCPFE categories).

This decision was timely. The next round of questionnaires from MCPFE was to have been finalised the next day: in the absence of the meeting, dual categorisation systems for protected areas would have been in place in Europe. At the time of writing, it has been agreed that the three organisations work together to find a common solution to the problem: it is recognised that this process could take a year to 18 months to complete. This is now being done through discussions around the development of guidelines, in the WCPA Best Practice series, on forest protected areas.

Implications for the protected area categories

The key implication of the interaction with the UN Forest Resources Assessment and the MCPFE is that using the protected area categories for statistical interpretation in the context of forest statistics is problematic with the current level of guidance provided. Whereas some of the questions raised during the TBFRA might have been addressed if correspondents had received more detailed instructions drawn from the IUCN guidelines on the protected area categories, genuine questions of interpretation have come to light. The second implication is that the importance attached to the protected area categories by IUCN is not necessarily shared by other actors: the professional staff at UNECE made it clear that if the IUCN categories did not meet their requirements, they would define a classification system of their own. This means that, at least for some time to come, IUCN should not assume the credibility and acceptance of the protected area categories. Both are subject to critical review by other actors who will, if unsatisfied, reject them and favour an alternative.

Development of the guidelines has involved extensive consultation throughout the world

Experts debating categorisation of forest protected areas in Lithuania: Nigel Dudley

Lessons learned

The issue of forest protected area definitions is far from over. However, a number of interim lessons can already be drawn from the process:

- Further published interpretation of the protected area categories is needed with respect to forest protected areas, if a repeat of the confusion over TBFRA is to be avoided (such advice is now in draft)
- IUCN needs to react quickly when a serious problem arises with the protected area categories, to avoid the situation running away, as it did in the case of MCPFE
- In addressing these issues, IUCN regional offices can and should play a key role, as was eventually the case with the IUCN office in Brussels and the processes in Geneva and Vienna.

Suggested responses from IUCN

Two clear responses are required:

- Continue engagement with both UNECE, FAO and MCPFE, to address their legitimate concerns about use of the protected area categories for forest protected areas and to seek a mutually satisfactory solution
- As part of this process, complete and agree additional guidance on the use of IUCN protected area categories for forest protected areas.

Chapter 2.10: Use of the categories in regional criteria and indicator processes for sustainable forest management

Summary

Regional criteria and indicator (C&I) processes for forests are one major result of the 1992 Earth Summit and are a means of both defining and then measuring progress towards sustainable forest management. Analysis of nine regional C&I initiatives shows that all request information from countries on protected areas although only four mention the IUCN protected area management categories. Furthermore:

- Two do not include definitions of the categories
- One gives an imprecise definition and suggests that other categorisation systems can be substituted
- One suggests combining them in ways that do not accord to IUCN's vision of protected areas
- One has developed a new categorisation system.

This is a pity, because the C&I processes pride themselves on precision and some simple additional guidance could increase both the richness of data received and the understanding of protected areas amongst the forest community. To address this anomaly it is suggested that:

- IUCN develops a guidance note about the IUCN protected area management categories specifically aimed at regional criteria and indicator processes
- IUCN regional offices engage with the relevant C&I process and advocate for more comprehensive and accurate application of the categories.

Context

Following decisions made at the Earth Summit in 1992, and the publication of *Agenda 21* and the associated *Forest Principles*, countries came under increasing pressure to broaden the range of issues that they included in national, regional and global forest assessments.

A milestone in this process was the development of a number of regional criteria and indicator (C&I) processes of sustainable forest management, where countries in a region or biome committed to measure their national forest estate against a standardised set of indicators[89]. It was hoped that by agreeing to, and then measuring a series of social, environmental and economic indicators, regional governments could both shape and help to implement sustainable forest management. The principle of using data collection to help drive sustainable development is enshrined in the *Forest Principles*, which state that: "*The provision of timely, reliable and accurate information is essential for public understanding and informed decision-making and should be ensured*"[90].

This chapter was written by Nigel Dudley.

August 2002

Some of the criteria and indicator processes were developed independently by groups of governments, some coordinated by the Food and Agriculture

Organization of the United Nations (FAO) and some put together by umbrella bodies such as the International Tropical Timber Organization (ITTO). Considerable effort was put into issues of definitions, such as analysis of the meaning of *principles*, *criteria*, *indicators* and *verifiers*[91] and in looking for complementarities between the various processes[92]. Despite similarity between some of the regional processes, there has been a strong desire amongst governments to maintain the independence of the various regional criteria and indicator systems.

Agreeing the indicators was time-consuming and sometimes controversial; to some extent it became a means of redefining national goals with respect to forest management as more and more goods and services were included in the debate. One underlying theme in all the processes was that the perception of forest quality was broadened to include aspects far beyond traditional concerns of foresters such as statistics about the area under trees and rate of annual increment, to encompass a range of environmental and social issues, including the existence of forest protected areas.

This created an additional reason for collecting information about protected areas and also, for the first time, identified *forest protected areas* as a specific subset of protected areas.

The issue

Although governments clearly recognise the importance of protected areas in relation to sustainable forest management, and wish to reflect this in regional criteria and indicator processes, our analysis suggests that the understanding of protected areas remains incomplete.

Assessment of nine regional C&I processes, illustrated in the table below, shows that whilst all include request information about protected areas only four distinguish between different protected area categories.

Criteria and indicator process	Data on extent of forest protected areas	Data on different IUCN protected area categories
Ministerial Conference on Protected Forests in Europe	✓	x
Montreal Process (other temperate and boreal countries)	✓	✓
Tarapoto (South American countries)	✓	✓
Lepaterique (Central American countries and Mexico)	✓	✓
Dry-Zone Africa	✓	x
Dry Asia Initiative[93]	✓	x
Near East Process	✓	x
African Timber Organisation (mainly Central African countries)	✓	x
International Tropical Timber Organisation	✓	✓

Analysis of the actual wording given, summarised in the table below, shows that this confusion is more profound

Process	Wording with respect to definitions of forest protected areas
Ministerial Conference on Protected Forests in Europe[94]	**Criterion 4**: Maintenance, conservation and appropriate enhancement of biological diversity in forest ecosystems 4.1 Change in areas of… – strictly protected nature reserves – forests protected by strict management regime [The MCPFE has developed its own classification system for forest protected areas and protected forest areas (see Chapter 2.9 on the UNECE Temperate and Boreal Forest Assessment) but identifies the need for assessment of protected areas in its criteria and indicators]
Montreal Process[95]	**Criterion 1**: Conservation of biological diversity Indicators Ecosystem diversity – Extent of area by forest type in protected area categories as defined by IUCN or other classification systems – Extent of forest type in protected areas defined by age class or successional stage
Tarapoto Process[96]	**Criterion 4**: Conservation of the forest cover and of biological diversity Indicators – Extent of areas by type of forest in categories of conservation area, in relation to total forest area
Lepaterique Process[97]	*Regional level* – **Criterion 2**: Conservation and maintenance of environmental services provided by forest ecosystems 1. Total forest cover of the region in relation to… – …Area of forest in protected areas 2. Area of forest under management in relation to: – Area of forest in protected areas – Area of forest outside protected areas 3. Percentage and area of various forest types in the protected area network of the region *National level* – [repeated as above and in addition] **Criterion 5**: Biological diversity in forest ecosystems Percentage and area of forest types in the various categories of protected areas ['Category' is not defined, but the role played by the regional IUCN office in the process suggests the IUCN categories are inferred]
Dry-Zone Africa[98]	**Criterion 2**: Conservation and enhancement of biological diversity in forest ecosystems Ecosystem indicators… – Extent of protected areas
Dry Asia Initiative	**Criterion 3**: Maintenance and enhancement of biodiversity – Extent of protected areas
Near East Process[99]	**Criterion 2**: Conservation of Biological Diversity in Forest Areas Ecosystem indicators – Areas of forest reserves and protected areas

Process	Wording with respect to definitions of forest protected areas
African Timber Organisation[100]	– Indicator III.2.1 – Zones of biological protection where no interference is authorised are created in the permanent forest estate – Indicator III.2.2 – The size of biological reserves is adapted to suit the object of preservation – Indicator III.2.3 – Selection of biological preservation areas should take account of their potential for effective protection
International Tropical Timber Organisation[101]	ITTO suggests that statistics for protected areas are divided into different forest types and also divided between protected areas in IUCN Categories I-II "corresponding to strict protection" and Categories III-VI "where protection is combined with management", giving information on: – Number of protected areas – Extent (hectares) – Percentage of forest type covered – Range of sizes of protected areas (hectares) – Average size of protected areas (hectares) – Percentage of boundaries demarcated or clearly defined

A careful reading of the wording in the above table shows that:

To date, most experience in use of regional forest C&I has been in the temperate and boreal countries through the MCPFE and Montreal Processes

- Only four out of the nine processes mention the IUCN categories when referring to protected areas
- Two of the four (Tarapoto and Lepaterique) do not include definitions of the protected area categories
- One (Montreal) includes definitions that are simplistic and likely to lead to misclassification if used alone
- The Montreal Process also includes "*or other classification systems*" within the indicator, creating the possibility of different classification systems being included in the regional surveys
- One (ITTO) suggests combining categories in a way that is likely to lead to misinterpretation about the significance of categories (by assuming that 'management' is acceptable in all but Categories I and II whereas management in terms of commercial timber management is unlikely to be acceptable in either III or IV in most cases)
- In addition, the MCPFE process has recently developed an entirely new classification system for forest protected areas that would, if implemented, again cause confusion (this issue is discussed in detail in Chapter 2.9).

Old-growth forest in national park, Oregon USA: Nigel Dudley

Standards of reporting also vary widely in these processes: some have been a feature of governments' international obligations for almost a decade while others are still under development or have never really been implemented. This variation extends to analysis of protected areas. In the MCPFE reporting, some governments went further than asked in the original criteria but this was on a rather ad hoc basis; for example both Finland[102] and France[103] published detailed English-language reports of the status of their forests but Finland used the IUCN categories while France did not.

Implications for the protected area categories

Although IUCN regional offices have been closely involved in a number of the processes, it seems as if the protected area categories have not been included in most of the criteria and indicators and only in partial form where they are mentioned. This creates a series of potential problems, including:

- Confusion about what is and what is not a protected area within the regional C&I processes
- Risks of misapplying the protected area categories because of misunderstanding about their definition
- Country-level data that cannot be compared within or between regions regarding forest protected areas

Lessons learned

There is clearly a lack of understanding about the protected area categories, their uses and application within the forest community and perhaps also within some parts of the IUCN forest programme.

Suggested responses from IUCN

Although some of the C&I are already quite well developed and implemented, others are still under development or have only been partially adopted. The possibility of refining the indicators through better reference to the protected area categories therefore appears to remain open. C&I processes pride themselves on precision and some simple additional guidance could increase both the richness of data received and the understanding of protected areas amongst the forest community.

To address this anomaly it is suggested that:

- IUCN develops a short guidance note explaining the IUCN protected area management categories, specifically aimed at regional criteria and indicator processes, including a brief explanation of the categories and notes on how they might be used
- IUCN regional offices engage with the relevant C&I process and advocate for more comprehensive and accurate application of the categories
- When additional guidance on use of categories in forest protected areas is complete (see Chapter 2.9) this should be sent to all national correspondents involved in regional C&I processes, ideally with a letter jointly signed by IUCN and the C&I secretariat.

Chapter 2.11: Certification of forest management and its relationship to protected areas and the categories

Summary

Forest certification is now a major industry, with a number of competing schemes. In the area covered by the UN Economic Commission for Europe well over 100 million hectares of forest had been certified under one of five major schemes by summer 2002. Certification schemes relate to protected areas in two ways:

- **Schemes require a proportion of the managed forest estate to be set aside into protection**
- **Certified forests exist in protected areas, particular within Category V**

To date, no certification scheme has been found that makes specific reference to IUCN protected area categories, or even gives general guidance about either the type of protection or about certification within existing protected areas. This represents a major missed opportunity and is already leading to confusion.

We propose that WCPA works to produce additional guidance on protected areas in the context of forest certification. This could usefully include: some general guidance about protected areas for all certification schemes; specific guidance on issues relating to the categories of protected area in forest set aside in certification; and certification of forests within protected areas for the Forest Stewardship Council (FSC). The annual FSC General Assembly would be the obvious forum for the discussion of the latter.

Context

Certification of good forest management has, over the past decade, developed into an issue of major concern for forest managers, timber companies, retailers and timber users. Certification, in this case, refers to an independent, third party process of inspecting particular forests or woodland to see if they are being managed according to an agreed set of principles and criteria, covering environmental and social issues. The precise form of this certification has become the subject of intense debate, with several competing certification systems with different levels of independence, rigour and standards.

This chapter was written by Nigel Dudley, with thanks to Matthew Wenban-Smith of the Forest Stewardship Council

April 2003

The first modern certification scheme aimed specifically at the forest sector was the FSC, launched in October 1993, with a definitive set of Principles and Criteria, together with Statutes for the Council, agreed and approved by the votes of the Founding Members in 1994. The FSC does not itself certify products but evaluates, accredits and monitors independent certification organisations that in turn inspect forest operations and grant labels certifying that timber has been produced from well managed forests. There are National FSC Working Groups operating in a number of countries, which interpret the FSC Principles and Criteria in an appropriate manner for the local forest types and conditions, creating national standards. These groups aim to present an agreed set of national or regional standards to be used for independent certification of forests in their particular countries.

Failure to reach agreement on FSC standards in some countries led to the creation of alternative schemes, while in other cases industry bodies created their own schemes. Prominent amongst these newer schemes are the Pan European Forest Certification scheme (PEFC), the Sustainable Forestry Initiative (SFI), American Tree Farm System (ATFS) and the work of the Canadian Standards Association (CSA). Alternative schemes have emerged in Asia. The relative worth of the various schemes is the subject of intense debate: some standards appear to require only cosmetic changes to current forestry practices. The FSC is the certification organisation that has gained the highest level of support from environmental and social groups but this is not universal; for example the UK-based Rainforest Foundation has been a persistent critic. The Sustainable Forestry Initiative in North America also has representatives from major conservation organisations on its board. Most of these schemes focus on sites, without much consideration of the wider landscape in which the site exists.

The area of the world's forest covered by certification schemes has expanded rapidly. Research found that by summer 2002, third party certified forests covered a total of 118.4 million hectares in the United Nations Economic Commission for Europe Region (32.5 m ha SFI, 8.8 m ha CSA, 23.5 m ha FSC, 43.1m ha PEFC and 10.5 m ha ATFS)[104].

Forest certification schemes have two potential links to protected areas and protected area categories:

- **Creation of new protected areas**: Some schemes (for example several of those operating under the umbrella of the FSC, such as the Soil Association Woodmark scheme) include in their standards a requirement to set aside a proportion of managed forest as a protected area. Some national standards, such as those in Sweden, also include this requirement[105]. In both the Woodmark and Swedish cases companies are expected to set aside five per cent of their forests into protection. However, none of the standards examined make any recommendations about the form of the protected area or about whether it should be in any particular category. The *implication* of these standards is that the areas set aside would be now be managed as Categories I-IV, but this has not been made explicit.
- **Forest management within protected areas**: Protected areas, particularly within Categories V and VI, may contain managed forests and some of these have, in turn, been certified. For example, plantations managed by the UK state-owned Forest Enterprise have been certified in several national parks in England and Wales (Category V) and plantations have been certified in the Greater St Lucia Wetland Area and World Heritage Site in South Africa (Category II). Such interventions are likely to increase in the future.

Confusion about whether to certify or protect forests arose in Bialowiezca forest and national park in Poland.

Bialowiezca: Stephanie Mansourian

Confusion about the relationship between forest certification and protection are also starting to result in mixed messages from conservation organisations. For example, at the end of the 1990s, conservation groups were simultaneously lobbying for protection and certification of the same area of Bialowiezca forest in Poland, around the existing protected areas.

Role of the major certification schemes

Research suggests that very little consideration has been given to the categories by major certification schemes, as summarised in the table below.

Scheme	Reference to protected areas
American Tree Farm System	The standards are very general with respect to protection and do not mention either protected areas or IUCN Categories: "*Performance Measures:* To achieve and maintain certification, forest management practices, to the extent practicable, shall demonstrate concern for special sites"
Canadian Standards Association	No reference has been found to the IUCN standards in CSA information relating to forest management
Forest Stewardship Council	No reference is made to IUCN Categories of protected area although requirements for protection are included in several of the standards accredited by the FSC. No guidance is given regarding certification of forests within protected areas. Both these issues have been discussed within the FSC.
Pan-European Forest Certification	In Europe, the PEFC relies on the site level standards agreed by the Pan European Criteria for Sustainable Forest Management. These refer to "strictly protected forest reserves" but do not refer to IUCN protected area categories (and indeed the Ministerial Conference for the Protection of Forests in Europe has been critical of the categories – see Chapter 2.9).
Sustainable Forestry Initiative	Refers to: "Protecting Special Sites: to manage forests and lands of special significance … in a manner that takes into account their unique qualities" and has a number of criteria relating to protection of biologically or culturally important sites without mentioning protected areas or IUCN Categories. There is no guidance regarding management of forests in Category V and VI protected areas.

Implications for the protected area categories

Forest certification is the highest profile policy response to calls for improved management of natural forests, semi-natural forests and plantations. Through requirements for protection in at least some of the schemes, certification of forest management also forms an important bridge between the timber trade and protected areas. The current lack of guidance about both the type of protection within set aside areas of certified forests and about certification within protected areas represents a missed opportunity to use the protected areas categories to help provide additional guidance to land-use decisions. It also reduces the value of forest certification from a biodiversity perspective.

Suggested responses from IUCN

The lack of detailed reference to protected areas is, at least in the case of the FSC, due to lack of time and the necessary expertise rather than lack of intention. The FSC has indicated informally that clear guidance from WCPA would be welcomed.

Two responses are suggested from IUCN and WCPA:

- Development of general guidance about protected areas for certification schemes – perhaps in the form of a simple leaflet explaining the role of protected areas, the different categories and the implications for forest management (this would be helped by planned additional guidance on forest protected areas and IUCN protected area categories – see Chapter 2.9).
- Development of specific guidance for the Forest Stewardship Council regarding two issues:
  - The type of protection acceptable in forest management unit areas set aside for protection under rules of FSC accredited certifiers or national standards
  - The circumstances in which certified forest management is and is not an acceptable component within protected areas (and possibly some additional guidance for certification within Category IV, V and VI protected areas).

The annual FSC General Assembly would be an ideal forum for presenting the latter, ideally with an accompanying resolution.

Chapter 2.12: Using the categories to support the needs and rights of traditional and indigenous peoples in protected areas

Summary

Many of the world's protected areas, and areas considered for protection, fall within the territories of indigenous and traditional peoples. However protected area policies have tended to exclude people from protected areas. This so-called 'colonial conservation' policy has focused debate for many years on whether human rights and biodiversity conservation can coexist in protected areas. Today the debate centres less on exclusion and more on how to reconcile the dual of aims of protecting both peoples' rights and biodiversity conservation.

The 1994 version of the IUCN Protected Area Management Categories recognised that indigenous peoples may own and manage a protected area. Subsequent guidelines have stressed the importance of indigenous people's participation in conservation and the recognition of indigenous people's rights to their lands and territories.

Despite these steps forward there is clearly more to do, such as ensuring that such an inclusive approach is reflected in national legislation and highlighting success stories around the world where protecting people's rights *and* biodiversity conservation have met with success. The key issue for SaCL is the relationship between this imperative and the protected area management categories.

This chapter has been written by Sue Stolton and Gonzalo Oviedo. It draws heavily on the ideas presented by Gonzalo Oviedo and Jessica Brown in their chapter *Building Alliances with Indigenous Peoples to Establish and Manage Protected Areas*, published in *Partnerships for Protection* (see references list) and from material prepared by the Forest People's Project.

April 2003

Context

Many protected areas worldwide are inhabited by indigenous peoples (see agreed definition below). As land owners and managers in a traditional and a contemporary sense, indigenous and traditional peoples have long called for recognition of their rights, responsibilities and capacity to be fully involved in natural and cultural resource management activities.

ILO Convention 169: Definition of Indigenous and Tribal Peoples

1. This Convention applies to:

a) tribal peoples in independent countries whose social, cultural, and economic conditions distinguish them from other sections of the national community, and whose status is regulated wholly or partially by their own customs or traditions or by special laws or regulations;

b) peoples in independent countries who are regarded as indigenous on account of their descent from the populations which inhabited the country,or a geographical region to which the country belongs, at the time of conquest or colonisation or the establishment of present state boundaries and who, irrespective of their legal status, retain some or all of their own social, economic, cultural and political institutions.

2. Self-identification as indigenous or tribal shall be regarded as a fundamental criterion for determining the groups to which the provisions of this Convention apply (Article 1).

For many decades, however, this call went unheard, particularly in relation to the creation and management of protected areas where management models have developed that excluded, and often forcibly removed, people. This is despite the fact that traditional systems for protection of natural resources, such as preserving sacred sites and sustainable resource use, have existed for centuries and have an impressive record in terms of conservation benefits.

Many of the problems faced by protected areas have been created, or intensified, because local human populations oppose protection. Loss of traditional rights can reduce peoples' interest in long-term stewardship of the land. The creation of a protected area can even increase damage to the very values that the protected area was originally created to preserve if local communities feel disenfranchised and no longer use the area in a sustainable manner. For example, when the collective forests of Yuhu village were incorporated into the Yulongxueshan Nature Reserve in northwest Yunnan China, farmers responded by cutting down trees that they had previously managed sustainably[106]. Putting a fence around a protected area seldom creates a long-term solution to problems of disaffected human communities, whether or not it is ethically justified. There are of course examples of protected areas that are supported by indigenous and traditional peoples (see Chapter 2.13 on Indigenous Protected Areas in Australia), although it is often the case that there is more likely to be conflict than harmony.

Human rights groups argue that conservation organisations have subjected tribal peoples to state or corporate control in setting up protected areas

Examples of indigenous peoples suffering as a result of conservation have drawn criticism from human rights groups to the extent that they now sometimes regard the aims of large conservation organisations as in opposition to their own[107]. In an explicit critique of WWF in 1996, an anonymous commentator from Survival International wrote: "*Lately, it has become fashionable for conservationists to talk about 'consulting' local people and to acknowledge the 'role' of indigenous peoples in 'managing protected areas'. This looks good on paper, but they are hardly an adequate substitute for land ownership rights and self-determination. In practice the conservation movement has subjected tribal peoples to state or corporate control. It has violated their rights and, for the most part, failed in its own objective of environmental protection."*[108].

Masai herdsman, Kenya, Sue Stolton

According to Gonzalo Oviedo, Senior Social Policy Advisor for IUCN, indigenous and traditional peoples require that protected areas:

- do not deprive them from their land and resource rights;
- protect their communities, lands and resources from external threats;
- recognise and support their right to self-determination, which includes the concepts of territorial control and empowerment of traditional authorities and institutions;
- recognise and support their right to self-development;
- are established on the basis of their free, prior informed consent;
- incorporate traditional conservation and land-use patterns, and strengthen local management institutions; and
- provide tangible benefits to them.

Dealing with the issue

Clearly these issues go far beyond that of defining management categories for protected areas. However, the IUCN categories and guidelines can play a role in defining management structures and regimes which, particularly if then reflected

in national legislation, provide a context which is favourable to more equitable treatment of people in protected areas.

- **The IUCN Protected Area Management Categories**

By separating the ownership of land and resources from the requirements and objectives of management, the 1994 version of the IUCN categories allows for a range of models of protected areas, according to the degree of human intervention, that ensure both indigenous and other traditional peoples' rights and conservation objectives can be respected. Furthermore, the recognition of private lands (of communities, individual or corporations) in the category system offers the opportunity to incorporate the concept of Community Conserved Areas[109].

The 1994 categories also included the new Category VI. This followed requests mainly from developing country experts, at the IV World Congress on National Parks and Protected Areas that called for a category that would describe predominantly natural areas that are managed to protect their biodiversity in such a way as to provide a sustainable flow of products and services mainly for the local community.

Although all the IUCN Protected Area Management Categories (the exception is Ia) recognise the presence of humans, the system does imply a gradient of human intervention, ranging from effectively none at all in the case of some Category I areas, to quite high levels of intervention in Category V areas (see Chapter 2.1).

The section below reproduces statements from the 1994 Guidelines relating to people in protected areas. It also identifies ways in which the Categories could be applied to protected areas overlapping with indigenous peoples' territories, according to the degree of human intervention on them and their primary management objectives. For each category, sections that may be relevant to indigenous and traditional peoples from the Guidelines document are quoted, followed by the discussion[110].

- **Category Ia: Strict Nature Reserve**

Guidance for Selection: 'area should be significantly free of direct human intervention and capable of remaining so'.

- **Category Ib: Wilderness area**

Definition: 'Large area….without permanent or significant habitation'

The definition for **Category Ib** explicitly includes a reference to natural areas in which indigenous peoples are living, and states that one of the management objectives for these areas is: "*to enable indigenous communities living at low density and in balance with the available resources to maintain their lifestyle*". This category therefore is applicable to protected areas that includes largely unmodified ecosystems, where indigenous communities are interested in keeping their interventions at a low level, and do not foresee any significant anthropogenic conversion of ecosystems[111]. However, as noted in Chapter 2.13 on Indigenous Protected Areas in Australia, the term 'wilderness' tends not to reflect indigenous peoples' reality as in their experience there are few landscapes without people or cultural significance[112].

Cases where utilisation of this category may be advisable are similar to those suggested for Category II (National Park) below, but with a lower level of human intervention. Features could include:

- Indigenous and traditional communities inhabit large areas of land, with low population density, and practise low-intensity activities like self-subsistence hunting and gathering;
- The area contains neither permanent settlements inside, nor lands dedicated permanently to agriculture or other heavy land-use conversions;
- Communities living in those areas are interested in maintaining traditional practices, and there is no evident or immediate shift towards cash-crops, settlement building, and commercial exploitation of resources; and
- Opportunities for research and tourism can be accommodated from the perspective of both ecological integrity and communities' interests and cultural integrity.

- **Category II: National Park**

Definition: 'Natural area of land and/or sea, designated to……..b) exclude exploitation or occupation inimical to the purposes of designation of the area'

Although its practical application on or near indigenous lands and territories has, in many cases, met with problems, the definition of **Category II** does explicitly address issues related to Indigenous peoples. It includes as a specific management objective to: "*take into account the needs of indigenous people, including subsistence resource use, insofar as these will not adversely affect the other objectives of management*". In terms of institutional responsibilities, the Guidelines specify the option of ownership and management being vested in indigenous peoples' organisations[113].

A review of 82 protected areas which overlap with Indigenous Peoples' land found the highest proportion of protected areas reviewed fall within Category II protected areas[114]. This is likely due to the requirement of national parks that "*the area should be large enough to contain one or more entire ecosystems not materially altered by current human occupation or exploitation*"[115], which has in many cases led to the identification of areas that had been long inhabited by traditional peoples practising traditional, low-intensity lifestyles. Category II protected areas thus seem most suitable for indigenous peoples' interests in cases where:

- Indigenous and traditional communities inhabit large areas of land, with low population density, and practise low-intensity activities like self-subsistence hunting and gathering, or even traditional, migratory pastoralism with limited impact on ecosystems and wildlife;
- The area contains neither permanent settlements inside, nor lands dedicated permanently to agriculture or other heavy land-use conversions;
- Communities living in those areas are interested in maintaining traditional practices, and there is no evident or immediate shift towards cash-crops, settlement building, and commercial exploitation of resources; and
- Opportunities for research and tourism can be accommodated from the perspective of both ecological integrity and communities' interests and cultural integrity.

IUCN Category III protected areas have always included: *natural sites which have heritage significance to indigenous peoples,* and an objective: *to deliver to any resident population such benefits as are consistent with the other objectives of management*

- **Category III: Natural Monument**

Objectives of Management: 'to eliminate and thereafter prevent exploitation or occupation inimical to the purposes of designation'

Category III is very often applicable to areas where Indigenous Peoples, for cultural and spiritual reasons, have established certain access restrictions and

management regulations. Many sacred places which include special natural features of outstanding importance, but which do not meet the criteria of a Strict Nature Reserve, might be included in this category. Taking this into consideration, the Guidelines list, among other features, "*natural sites which have heritage significance to indigenous peoples*". It includes as a management objective: "*to deliver to any resident population such benefits as are consistent with the other objectives of management*"[116].

Examples of Category III protected areas could be areas containing archaeological sites, ceremonial grounds, and particular features of cultural significance (like the forests of monkey-puzzle tree *Araucaria araucana*, a sacred species to the Pehuenche people, a subgroup of the Mapuche people, in the mountains of Chile). This category may be applicable in areas smaller than those in the previous categories, and would accept higher degrees of human modification, on condition that the specific features for which the area is selected are not affected, and no active management is required for it.

- **Category IV: Habitat/Species Management Area**

Objectives of Management: 'to eliminate and thereafter prevent exploitation or occupation inimical to the purposes of designation, and to deliver such benefits to people living within the designated area as are consistent with the other objectives of management'

Category IV requires "*active intervention for management purposes so as to ensure the maintenance of habitats and/or to meet the requirements of specific species*" and includes as a management objective the delivery of: "*such benefits to people living within the designated area as are consistent with the other objectives of management*".

Applied to indigenous lands and territories, this category might correspond to an area under traditional management practices or protected by customary law as breeding or nursery areas (e.g. wetlands, coral reefs and forests) [117]. Areas under protection in this category need not to be large; their size should be determined by management requirements according to the species or habitats to be protected. In terms of human intervention, communities in these areas could have a wider range of options, since maintenance of species or habitats requires anyway active intervention, like forest restoration or water management.

- **Category V: Protected Landscape/Seascape**

Definition: '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.

The Protected Landscape/Seascape category is a multi-use category that can comprise a mosaic of land ownership patterns, including private and communally owned property, which leaves room for the recognition of Indigenous rights to land, territory, bodies of water, coastal zones and other resources. The IUCN definition notes that "*safeguarding the integrity of this traditional interaction is vital to the protection, maintenance, and evolution of such an area*". Similarly, it can accommodate diverse management regimes, including customary laws governing resource management. The Category V designation builds on existing institutional responsibilities, and therefore offers

possibilities to develop collaborative management agreements and other flexible arrangements for management of natural and cultural resources. Finally, it has important specific objectives related to conservation of cultural heritage, and seeks to bring benefits to local communities and contribute to their well-being, through the provision of environmental goods and services[118].

This emphasis on the value of the interactions between people and nature over time, **Category V** is particularly appropriate to the characteristics of indigenous and traditional peoples' lands and territories. However, at present the majority of Category V protected areas are in Europe[119]. Despite this, Category V could work well in certain indigenous territories because it favours decentralisation, reinforces local responsibility for the area, and accommodates traditional uses and customary regulations. The category could be applied, for example, to the protection of indigenous territories that might have a particular scenic value (where, therefore, tourism, recreation and education could be important objectives of public use) as well as those with special natural features (e.g., mountains, coasts, islands), and cultural features (for example, artefacts of ancient civilisations).

The role of Category V protected areas for local people, including traditional and indigenous people, has been reinforced in the recently published WCPA Best Practice Protected Area Guidelines series on Category V protected areas which states that policies relating to Category V protected areas should:

- place the concept of local people as 'stewards' for the Category V protected area at the centre of management planning
- consider the implications of land ownership; and
- adopt policies to involve local people in decision making and management[120].

One interesting application of Category V to indigenous peoples' lands is the creation of Indigenous Protected Areas in Australia (see next chapter).

- **Category VI: Managed Resource Protected Area**

Definition: 'Area containing predominantly unmodified natural systems, managed to ensure long-term protection and maintenance of biological diversity, while also providing a sustainable flow of natural products and services to meet community needs.'

Category VI aims to maintain the sustainable use of natural ecosystems to meet community needs, while ensuring long-term protection and maintenance of biological diversity. Like Category V, this category embraces the concept of an "*area of multiple use"*. It also considers specifically the option of management by local institutions, as well as collaborative management between public entities and local communities.

Following requirements established in the Guidelines, for an indigenous protected area to fit into Category VI protected areas it should:

- be managed for the long-term protection and maintenance of its biodiversity
- at least two-thirds of the area should remain in its natural state
- it must be large enough to absorb sustainable resource uses without detriment to its overall long-term natural values

– contain predominantly unmodified natural systems, whereas the management of the remaining area must not be in conflict with that primary purpose[121].

As briefly examined in previous paragraphs, all the IUCN categories can accommodate diverse forms of protected areas overlapping with indigenous and traditional peoples' lands, territories and resources. Issues concerning land ownership, resource rights, statutory powers, customary institutions, and benefit sharing, are all either contemplated explicitly in the Guidelines or are implicit in the array of management objectives.

- **Additional Guidelines**

The 1994 version of the IUCN categories has not been the only instrument used in order to encourage more inclusive forms of conservation.

In 1996, IUCN passed a resolution to: *establish closer links with indigenous peoples' organisations, with a view to incorporating the rights and interests of indigenous peoples in the application of the IUCN Protected Areas Management Categories*

In 1996, IUCN approved seven resolutions at its World Conservation Congress that refer to indigenous peoples and protected areas. One resolution, 1.35, requested the World Commission on Protected Areas "*to establish closer links with indigenous peoples' organisations, with a view to incorporating the rights and interests of indigenous peoples in the application of the IUCN Protected Areas Management Categories*". Another, resolution 1.53, called for a "*clear policy in relation to protected areas established in indigenous lands and territories*"[122]. At the same time, WWF was working on a new policy on Indigenous peoples and conservation[123]. Since many of the issues that emerged from the work of WWF and IUCN were the same, the two organisations decided to work together on a common position through the development of *Principles on Indigenous/Traditional Peoples and Protected Areas* (see below).

In 2000, WCPA published the fruits of this work. This contained the set of principles in the box below and guidelines to give effect to them. These placed emphasis on co-management of protected areas, on agreements between Indigenous peoples and conservation bodies, on Indigenous participation and on the recognition of Indigenous people's rights to the "*sustainable, traditional*" use of their lands and territories[124].

Principles on Indigenous/Traditional Peoples and Protected Areas
The key principles presented in the WWF and IUCN/WCPA document are:

Principle 1
Indigenous and other traditional peoples have made significant contributions to the maintenance of many of the earth's most fragile ecosystems, through their traditional sustainable resource use practices and their profound, culture-based respect for nature. Therefore, there should be no inherent conflict between the objectives of protected areas and the existence, within and around their borders, of indigenous and other traditional peoples practising sustainable use of natural resources; and they should be recognised as rightful, equal partners in the development and implementation of conservation strategies that affect their lands, territories, waters, coastal seas, and other resources, in particular the establishment and management of protected areas.

Principle 2
Full respect of the rights of indigenous and other traditional peoples to their lands, territories, waters, coastal seas, and other resources should be the foundation of agreements drawn up between conservation institutions, including protected area management agencies, and indigenous and other traditional peoples for the establishment and management of protected areas affecting those lands, territories, waters, coastal seas, and other resources. Simultaneously, such agreements should be based on the recognition by indigenous and other traditional peoples of their responsibility to conserve biodiversity and natural resources harboured in those protected areas.

Principle 3
The principles of decentralisation, democratisation, participation, transparency and accountability should be taken into account in all matters pertaining to the mutual interests of protected areas and indigenous and other traditional peoples.

Principle 4
Indigenous and other traditional peoples should be able to share fully and equitably in the benefits associated with protected areas, with due recognition to the rights of other legitimate stakeholders.

Principle 5
The rights of indigenous and other traditional peoples in connection with protected areas are often an international responsibility, since many of the lands, territories, waters, coastal seas, and other resources which they own, occupy or otherwise use, as well as many of the ecosystems in need of protection, cross national boundaries.

Implications for the protected area categories

The IUCN Protected Area Management Categories and associated guidelines have come a long way in trying to address some of the underlying issues which have soured the relationship between those trying to protected vulnerable land and seascapes and those who live within them or use then for a productive purpose. However, there still remains a need to take this work further.

Key to this is the interpretation and use of the categories and guidelines. Ultimately it is up to individual nations to interpret and define protected area categories and to decide management objectives in relation to issues of ownership and statutory powers. If individual nations decide to limit the ownership and governance of protected areas to specific organisations or institutions excluding indigenous and traditional peoples, that is their prerogative.

A recommendation from the Forest People's Project (FPP) to all those involved in protected area advocacy, declaration and management suggests one way forward. FPP has been running a series of projects and workshops in Latin America, Asia and Africa on 'Indigenous Peoples and Protected Areas in Africa: from Principles to Practice'. One recommendation from a workshop held in Rwanda was the call to: "*encourage more use of IUCN categories V and VI … [and] make such projects more glorious (sic) with higher status than today*"[125].

Lessons learned

Marcus Colchester of the FFP has asked "*whether or not indigenous territories should be seen as protected areas*"[126]? In raising such an issue, he was expressing concern that the needs of indigenous and traditional peoples have often been assumed to be in conflict with those of conservation. The 1994 IUCN Protected Area Management Categories reflect the growing recognition of Indigenous and Traditional peoples' interests and present concrete opportunities to develop new partnerships in protected areas management and create Indigenous protected territories according to a diverse range of models. If protected areas worldwide were in-line with these guidelines, then the answer to Marcus Colchester's question should be 'yes' – provided of course that the territories concerned were so managed that they met the definition of a protected area.

Suggested responses from IUCN

Although IUCN has advocated a framework that would help to recognise and safeguard the rights of indigenous and traditional peoples in protected areas, there remains a need to demonstrate these principles in practice and to disseminate positive examples of this practice widely – indeed to make them 'more glorious'.

To do this, IUCN needs to:

- Be aware of any opportunity arising from the setting or revising of national protected area policy or legislation and lobby for the uptake of the 1994 Categories (see Chapter 2.2 on legislation
- Demonstrate, and disseminate, examples of protected areas that cover the full range of IUCN categories and that have successfully linked the needs of indigenous and traditional peoples with those of conservation
- In particular, management guidelines for Category VI protected areas could be developed to complement those already developed for Category V.

Chapter 2.13: The role of the categories in developing self-declared Indigenous Protected Areas in Australia

Summary

Two issues, protected area representativeness and the role of indigenous peoples in conservation, have resulted in the promotion of a new form of conservation management in Australia. Indigenous Protected Areas (IPAs) allow indigenous land owners to announce their intention to manage their lands primarily for the protection of natural and associated cultural values in accordance with the IUCN Protected Area Management Categories. Today nearly 17 per cent of the total area of the terrestrial protected area estate in Australia is in IPAs. This chapter examines the growth of IPAs and the role played by the IUCN categories in this development.

Context

The country we know as Australia was created on the legal assumption of 'terra nullius' – land which was regarded as not occupied or owned at the time of colonisation. This assumption has had enormous consequences for the Indigenous Peoples (Aboriginal and Torres Strait Islanders) of Australia. The Australian legal system has however now begun to develop ways of recognising rights to native title with respect to land ownership, access and management.

Although Australia's system of protected areas encompasses about 7.8 per cent of the land area[127], it does not represent the full range of ecosystem diversity. To ensure a more representative system the Australian Government committed to a policy to establish a comprehensive system of protected areas across the continent in the 1990's. As about 15 per cent of the country is now recognised as being owned by Indigenous Peoples the opportunities for involving communities in the expansion of the protected area system was investigated. Such participation was also encouraged as although indigenous traditional land holders had an input into the management of some national parks via boards of management and other cooperative management arrangements, they were not consulted in the first place on the establishment of the park.

An outcome of the discussion was the development of the concept of Indigenous Protected Areas (IPA). IPAs are created when indigenous land owners make a formal and public announcement of their intention to manage their lands primarily for the protection of natural and associated cultural values, managed in accordance with the IUCN categories and management objectives. IPAs are managed by local and resident Indigenous People with government support providing resources, training and advice[128]. Such support is provided on a needs basis and in accordance with the management plans for each property.

IPAs in Australia, as distinct from government run parks and reserves, are now gathering momentum, with 28 projects currently either established or being developed[129]. Today nearly 17 per cent of the total area of the terrestrial protected area estate in Australia is in IPAs. The next big challenge is to secure from government a long-term commitment to continue funding these areas to match the equally long-term commitment indigenous land holders are making in establishing protected areas on their lands.

This chapter has been prepared by Sue Stolton and edited by Adrian Phillips of Cardiff University. Much of the text has been drawn from correspondence with Steve Szabo, Director of the Indigenous Policy and Coordination at Environment Australia.

January 2003

Issues raised

The development of IPAs in Australia raises several issues of relevance to the IUCN categories.

The application of the categories system to indigenous territories was analysed at the start of the project by Environment Australia to develop IPAs. The analysis focused specifically on the extent to which each category recognised and accommodated indigenous ownership and management.

Whilst initial discussions on the development of IPAs focused on Categories V and VI, work carried out by Environment Australia during the implementation of the IPA pilot projects showed that there was no impediment to Indigenous Peoples self-declaring their land as a protected area according to the management objectives of other IUCN categories[130]. Discussion and consultations with indigenous communities indicated that, with the exception of Category Ib (Wilderness), the IUCN Protected Area Categories all have some potential for linkages to the concept of IPAs[131].

There was considerable resistance among government and non-government conservation interests when IPAs were initially proposed. The conventional government protected areas management agencies saw IPAs as being temporary and having no parity with the 'true and proper' protected areas being managed through statutory means. Partially in response to this concern Environment Australia deliberately sought to inform Indigenous People about the IUCN categories and asked them to consider their application in the context of their own management aspirations. There were concerns about this strategy, in particular because the category system could have be seen as just one more outsider construct that had little relevance for indigenous people. This concern was, however, not warranted. Once people understood what the categories meant, they were readily adopted and the management plans for each of the 16 IPAs that have been declared to date identify the appropriate IUCN category and operate accordingly.

In discussion it emerged that 'classifying' lands for particular access and uses is not at all foreign to the way indigenous lands were traditionally managed. There are places that few people were allowed to go and there are resources that have strict access restrictions, or seasonal restrictions, or where only people of certain status are allowed. There was, however, some question over the definitions of protected areas, in particular Category Ib (Wilderness) – a land untouched or unmodified by the influence of people. From the perspective of indigenous people no such areas exist, and there is no landscape without people or cultural significance – 'no place which has not been imaginatively grasped through song, dance, and design, no place where traditional owners cannot see the imprint of sacred creation'[132].

Indigenous groups also liked the idea of adopting an internationally recognised system because they felt it reinforced their status as legitimate protected area managers and thus engaged them into an internationally significant agenda, something they have struggled to achieve in Australia. From other stakeholders' perspective, i.e. government and NGOs, the IUCN category system gave the IPA concept more credibility and parity with the mainstream protected area system and so their criticisms were somewhat diminished. From the perspective of the Commonwealth government, who are the funders and promoters of the initiative, it also gave greater confidence that IPAs were worth investing in with scarce conservation dollars. Other sectors affected by the

proposals also noted the value of association with an international system. A briefing paper prepared by the Australian Association for Mining and Exploration Companies, for example, stated that: "*By bringing international standards and guidelines into the IPA process, the Commonwealth has further shored up its position under its Foreign Affairs powers*"[133].

Many indigenous people reject the whole concept of a "wilderness area"

Girraween National Park, Australia: Nigel Dudley

Implications for the protected area categories

IPAs in Australia appear to be a real success story. And this success is in small part at least due to its linkage to the IUCN Protected Area Management Categories. This gave some kind of international recognition to protected areas owned and managed by indigenous groups. As such the system was welcomed by Indigenous People and its authority was accepted by government, NGOs and other stakeholders.

Lessons learned

The development of IPAs in Australia clearly shows, at least for one very large country, that the 1994 version of the IUCN Protected Area Management Categories can be tailored to traditional ideas of land tenure. The international acceptance and standing of the categories are also clearly recognised as important.

Suggested responses from IUCN

IUCN should work with Environment Australia to publicise IPAs more widely. In relation to the categories, this should focus on lessons learned from using the IUCN Protected Area Management Categories as a tool to develop IPAs. The experience gained could then be adapted and applied to other areas where indigenous peoples wish to develop conservation initiatives, but are either denied the opportunity to take part in protected area development or are not fully involved in management processes.

The importance of continuity of protected areas has been stressed by many people and organisations, particularly as the threats to protected area values seem to increase so rapidly. One of the strong arguments in favour of IPAs is that, compared to 'conventional' protected areas, they are both cheap to establish (there is no need to buy the land) and cost effective to run in the longer term. To provide a strong basis for promoting this experience in Australia and beyond, analysis is also needed of the economic costs and the benefits, such as employment and tourism related enterprise, that are associated with the IPAs.

Chapter 2.14: Linking governance to the IUCN categories

Summary

The existing IUCN Protected Area Management Categories do not define who the owner or management authority for any category of protected area should be. However, given the long and often acrimonious debate on the role of people in protected areas there have been calls to further develop the IUCN categories to identify governance types as an additional descriptor to the information available on individual protected areas and systems.

This chapter reviews the history of this debate from the initial suggestion of a new category to the current proposal for a matrix of governance types to be added to the Guidelines.

Context

The protected areas model is developing rapidly, and there is growing support for a new dimension to protected areas characterised by greater social sensitivity and inclusiveness, flexibility in approaches and integration with local development aspirations. These processes are together developing a more favourable policy environment, which should help convergence and cooperation between protected area managers and local, indigenous and traditional peoples.

A major problem however is the inadequacy of some national laws and policies to face the challenge of building partnerships, including in some cases their failure to follow the guidance offered by the IUCN Protected Areas Management Categories. At the national level, legal and political regulations on issues like ownership and statutory powers within protected areas are frequently obsolete and ineffective, particularly in developing countries, and sometimes contradict the fundamental concepts of the categories system. For example, categories with the highest potential to respond to Indigenous Peoples' claims, like V (Protected Landscapes/Seascapes) and VI (Managed Resource Protected Areas), are often under-utilised and poorly understood. Often developing countries rely on public ownership of lands comprised in protected areas. Typically, the protected areas legislation in those countries does not provide for any private or communal property to exist within protected areas in any category, and determines the obligation to expropriate lands whenever necessary for the purposes of declaring, expanding, or consolidating areas or systems[134].

The basis of the IUCN guidelines for protected area management categories is the definition of conservation objectives, not ownership nor management authority. However, the categories system if it is implemented across the full range of categories, as is intended, may well be more successful in terms of conservation objectives and representative in terms of coverage of ecosystems if a range of ownership and management authorities are involved. To this end although the IUCN guidelines do not define ownership or authority, they do suggest that a full range of these options may be appropriate in a protected area system (see box overleaf).

This chapter is based on a draft paper by Gonzalo Oviedo, Senior Social Policy Advisor, IUCN and Seema Bhatt, on behalf of TILCEPA. The chapter was formulated by Sue Stolton with the help of Adrian Philips.

June 2003

Governance is defined: *as the interactions among structures, processes and traditions that determine how power is exercised, how decisions are taken, and how citizens or other stakeholders have their say.*

Source: *Governance principles for protected areas in the 21st century*, draft discussion paper by The institute on governance In collaboration with Parks Canada.

IUCN Guidelines for Protected Area Management Categories
Below the main sections of text looking at management responsibility and ownership in the IUCN Guidelines are quoted*:*

- **Management Responsibility**

"*Governments have a fundamental responsibility, which they cannot abdicate, for the existence and well-being of national systems of protected areas….However, the actual responsibility for management of individual protected areas may rest with central, regional or local government, non-governmental organisations, the private sector or the local community. These guidelines, therefore, contain considerable flexibility in the advice given on the form of managing authority for each category of protected area. The text, after all, is whether the designated authority is capable of achieving the management objectives."*

- **Ownership of land**

"*…the key test is whether the type of ownership is compatible with the achievement of the management objectives for the area. In many countries ownership by some form of public body (whether nationally or locally based), or an appropriately constituted non-governmental body with conservation objectives, facilitates management and is therefore to be favoured in Categories I-III in particular. However, this is not universally true, and - in the remaining categories - private ownership will be much more common, often being the predominant form of land ownership. Moreover, whatever the ownership, experience shows that the success of management depends greatly on the good will and support of local communities. In such cases, the managing authority will need to have good consultative and communications systems, and effective mechanisms which may include incentives, to secure compliance with management objectives*"[135].

Dealing with the issue

Given the discrepancy between the intent of the categories system and the situation on the ground in many countries, it is not surprising that attention has been focused on how the system can be used to help develop a range of governance types in protected areas, and specifically to develop the role (in management, access to resources, etc) of people in protected areas.

Initially discussions centred on the possible introduction of a new category which specifically recognised community protected areas. In June 1995, the International Work Group on Indigenous Affairs (IWGIA) and other indigenous and indigenous support organisations issued a statement at a Conference on Indigenous Peoples, Environment and Development noting that "*no existing IUCN protected area category adequately recognizes the principles listed above [respect for human rights, recognition of spiritual and philosophical distinctiveness of indigenous ways of life, collective territorial rights, right of self-determination]. Therefore, a new category should be promoted to recognize indigenous territories based on the principle of self-determination*"[136]. In April 2000 this proposal was discussed by TILCEPA (see overleaf), who hosted an e-mail debate on the question: Should there be a separate and new category on Community Protected Areas, or should community participation become a cross-cutting approach in all existing categories.....or a combination of both*?*

TILCEPA: IUCN Inter-commission Theme on Indigenous and Local Communities, Equity, and Protected Areas

In 2000, the IUCN Inter-commission Theme on Indigenous and Local Communities, Equity, and Protected Areas (TILCEPA) was set up by the World Commission on Protected Areas (WCPA) and the Commission on Environmental, Economic, and Social Policy (CEESP). It evolved from a Task Force on Local Communities and Protected Areas, created in 1999 with a similar mandate.

TILCEPA seeks the recognition of the rights of indigenous and local communities in the development and implementation of conservation policies and practices that affect the lands, waters and related natural and cultural resources. TILCEPA advocates, as needed, appropriate support to community conserved areas or the development of management partnerships between communities and other relevant stakeholders, including state institutions and agencies.

One of TILCEPA's Guiding Principles is that: "*Indigenous and local communities are rightful primary partners in the development and implementation of conservation strategies that affect their lands, waters, and other resources, and in particular in the establishment and management of protected areas. This should apply to all IUCN categories of protected areas, where local communities are present", and one of the Theme's stated issues to be addressed is that: "Effective community-run conserved areas (including official Protected Areas) can be encouraged or facilitated with great profit to conservation; there is a need to understand and promote such situations either within or outside the current range of IUCN PA categories*"[137]. To achieve these aims TILCEPA's work programme includes: "*Examining issues of indigenous and local communities, equity and protected areas in relation to the IUCN System of Protected Area Management Categories*"[138].

It is suggested that a matrix of mechanisms be developed to complement a matrix of objectives

El Teide National Park taken from Garajonay National Park, Canary Islands: Nigel Dudley

Participants in the debate aligned themselves around two positions: those who favoured the creation of a new category, mainly social scientists and local conservation-and-development practitioners, and those who advocated the application of the existing categories and affirm that there is no need to create a new, separate category - mainly protected area experts and professionals. Despite these opposing views, the group in general shared the desire to see the role of communities in protected areas acknowledged and developed and, in particular, that this role should be recognised by government. One important step towards this goal would be for governments to embrace and promote the legitimacy of *any* governance type for protected areas.

Following the debate the idea of developing a new category of protected areas was put aside, as it focussed on just one type of governance, in favour of a proposal to add a new dimension to the categories system which recognises who manages the protected area. As Seema Bhatt of TILCEPA summarised: "*It might be more productive to focus on the guidelines of establishing the existing categories and see how best they could be modified as a framework to accommodate and support the idea of community resource management. It is suggested that a matrix of mechanisms be developed to complement a matrix of objectives. This could provide a better framework for issues raised by those who support a new category of protected area*".

'La Kompienga Declaration' on Governance of Africa's Protected Areas
The need for more recognition of the range of governance types was highlighted at a workshop on Governance of Protected Areas in Sub-Saharan Africa, held in La Kompienga, Burkina Faso, during March 2003. Of those recommendations made at the workshop, those most relevant to the IUCN categories were:

- Governments need to officially recognise community conservation areas, and also recognise the rights of communities to rationally manage and use these spaces. In addition local communities need to clearly understand that they also have responsibilities for the sustainable management of such areas. The areas should then be registered in the national protected areas lists.
- Noting that there is a general lack of a regulatory structure at the global level concerning protected areas governance, IUCN, through the World Commission on Protected Areas, should assume this responsibility at the international level.

A proposal was thus made to add a new *dimension* of 'governance type' to the categories system in the context of more general principles (e.g. participation, equity, performance or management effectiveness, vision). To this end a draft two-dimensional model for classification of protected areas has been developed (see table below). This could help in assessing and strengthening national protected area systems, by 'recognising' new elements and making countries more aware of their full potential and flexibility. However, as it is still a draft, some key questions remain such as the differences between 'community' and 'local government': as most communities are represented by a local government the distinction between 'community-managed' and 'local government-managed' is not clear.

The benefits of developing this additional dimension were summarised by Kenton Miller, Chair of WCPA, in IUCN's journal *Parks*: "*Conceptually, the existing categories can capture any and all purposes for which PAs are established, but the new dimension will tell us also who did and who now holds authority, responsibility and accountability for its management, including how they do so. One of the difficulties here lies in the relationship between local communities and central governments. Will the latter accept and endorse the action of the former? I would like to see this potential clarification form part of a proposal for discussion at the World Parks Congress at Durban, with the aim of seeking an amendment to the existing IUCN system. After that, we would have to take any proposed change to the next World Conservation Congress as part of a resolution since the existing system has IUCN-wide endorsement*.[139]"

Implications for the protected area categories

The debate to further use, and possibly even revise, the IUCN Protected Area Management Categories to help support a range of governance types in protected area systems has highlighted two important issues in relation to the objectives and aims of the categories system.

- **The role of national and international categories**

There has clearly been some confusion between the international IUCN categories and individual countries own national categories, in particular in understanding the objectives of the international system and how categories are applied. When the advocates of a new international category presented

their arguments, they used examples drawn from the national level. Finding no effective recognition of different governance types - in particular in relation to the role of local communities or indigenous or traditional peoples - they deduced that the reason was the absence of an international category. Therefore they argued that the solution was the creation of a new one.

Two-Dimensional Classification Model for Protected Areas (category and governance type)

Protected area category	Governance Type									
	A. Government management			B. Multi-stakeholder management		C. Private management			D. Collaborative management	
	Central and provincial agencies	Local and municipal agencies	Delegated agencies (e.g. NGO)	Joint management	Collaborative management	NGO and foundations	Research institute & university	Individuals & corporations	Indigenous peoples	Local community
I: Strict nature reserve/ wilderness										
II: National park										
III: Natural monument										
IV: Habitat/ species management										
V: Protected landscape or seascape										
VI: Managed resource area										

However, this misunderstood the process. Individual protected areas are first ascribed to a national category by virtue of the legal designation process and the consequent management planning; only after this is done can the respective national category, and the individual areas belonging to it, be ascribed to an IUCN category.

Decisions on designation of protected areas, ownership and management authority thus lie at the national level and are made in accordance with the categories of the national system.

- **Using the IUCN categories as an advocacy tool**

Secondly, an additional reason for the development of a new category not discussed above but elaborated in the discussion of the task force is the use of the IUCN Protected Area Management Categories as an advocacy tool. Those who advocated the new category argued that in many (mainly developing) countries, community conservation initiatives would not be recognised unless there was legal endorsement as well as government recognition. Thus some

"*felt that local communities should have the authority to declare an area under protection, but this would happen only with the support of the Government and its recognition of community efforts. A new category under the IUCN banner could perhaps help in urging Governments to do so. Also, given the intense pressure on almost all (developing) countries' natural resources from the commercial lobby, local community governance is most often overruled. In this context, it is felt that community managed areas needed appropriate legal endorsement. Since most countries followed the IUCN protected area categories, legal endorsement could come only if a new IUCN category were established*"[140]. This reasoning raises a fundamental question about the objectives of the categories system, and suggests a role, as an advocacy tool, far beyond the original aims which focussed on raising awareness of protected areas and improving communication between conservation professionals, encouraging national protected area systems, reducing confusion and providing international standards for accounting and comparative purposes and a framework for handling data[141].

Lessons learned

The debate on communities and conservation is many faceted and the issues raised in this chapter represent only those that relate to the IUCN categories and governance types. Even so, the previous pages show that there still remain serious misunderstandings about the objectives of the IUCN Protected Area Management Categories, even amongst conservation professionals and thus the need for more education, and possibly clearer guidelines, on the aims and uses of the categories system. It is also clear that there remain in many countries differences between the objectives of the IUCN international system and national legal systems of protected areas.

Suggested responses from IUCN

The underlying issue in this chapter is the need to get national governments to recognise the full range of IUCN Protected Area Management Categories and be aware that individual protected areas can have a range of governance types. Some suggestions as to how this can be achieved are given below:

- IUCN should be encouraged to develop and finalise the governance matrix as a supplement to the IUCN Guidelines
- Better explanation of the categories system is needed at all levels, i.e. from governments through to local people
- A set of case studies should be developed to show how different management and ownership approaches can be reflected in the IUCN protected area categories, using the governance matrix suggested above
- As each nation decides issues of ownership and statutory powers, countries should be encouraged to look at their own definition of protected areas and to see how these can integrate local community concerns, management and ownership issues
- Recommendations on the process by which protected areas are assigned at the country level to categories should involve relevant stakeholders and a peer group review exercise, and should be transparent.

Chapter 2.15: The categories, mining and the Amman recommendation

Summary

Concern about mining within and adjacent to protected areas persuaded a number of IUCN members to propose a recommendation at the 2000 World Conservation Congress recommending, among other things, that governments ban mining in Category I-IV protected areas. The recommendation was controversial, with strong opposition from mining interests and the US government. While it had only lukewarm acceptance from some environmental NGOs at the time, many NGOs and some governments now see it as a critical test of the seriousness with which States implement protected areas.

The Amman recommendation has helped to stimulate a vigorous discussion about these issues. Groups such as the International Council on Mining and Metals (ICMM), WWF and Conservation International – as well as IUCN – have taken an active part in this debate. While there is as yet no consensus on the issue, the debate around the Amman recommendation has raised some important questions about the categories, and their use as a legislative tool, including whether the current methodology for assigning a particular category to a protected area is sufficiently:

- Systematic
- Transparent
- Independently verifiable
- Linked to effectiveness
- Capable of being questioned
- Even-handed between different interest groups.

Other issues that have emerged from this debate relate to: fears of a backlash against conservation if the Amman recommendation is too rigidly applied; questions about the uncertain relationship between the Amman recommendation and the ways in which governments make laws about protected areas; and a discussion about how mining can be integrated with broadscale conservation initiatives such as ecoregional conservation. Some suggestions as to the way forward that have emerged include:

- Development of a stronger and more transparent framework for assignment and verification of IUCN protected area categories
- Agreement on broad principles on land-use within and around protected areas
- Initiation of a process to develop decision-making models that integrate mineral activity and conservation within broad-scale land-use management strategies
- The need for greater involvement of governments and other important stakeholders in this debate, which has until now been conducted mainly between NGOs and the industry.

The chapter also includes an essay from the International Council on Mining and Metals, laying out ICMM perspectives regarding mining and protected areas.

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Introduction

Mining impacts on protected areas in a number of ways:

- Mining that occurs illegally within protected areas, which is by its nature unregulated and likely to be damaging
- Mining that occurs illegally within protected areas, because the government does not enforce its existing laws
- Mining that occurs legally within protected areas, because the law permits mineral exploration and exploitation within protected areas
- The presence of existing or potential mines influencing the shape and size of protected areas
- Mining outside protected areas that affects their ecology through pollution or other impacts
- Mining leases that buffer protected areas against damage by other land uses such as forestry or agricultural encroachment.

Mining is a highly visible intrusion, changing the landscape in ways that can often be seen immediately from aerial photographs or from casual visits to the site. These visible impacts will only be temporary in a well managed operation, although 'temporary' may be measured in terms of several decades. Of greater concern sometimes are the less visible scars caused by badly regulated mining, including changes to vegetation, secondary effects from chemical pollution and the impact of mining tailings and the social impacts from the presence of new roads and immigrant workers.

Illegal mining in protected areas is already a serious issue throughout the tropics and beyond, and small-scale, itinerant miners cause a range of problems, particularly relating to the pollution of waterways and the destruction of native vegetation. Globally, these are almost certainly the most significant mining problems facing protected areas, but also ones about which the legitimate mining industry and environmental NGOs are in general agreement. Responsible companies are also working, both independently and in cooperation with environmental groups, to minimise the associated environmental and social impacts from mining. The issue on which there is the least agreement relates to legal mining within protected areas and this is the main focus of the current chapter.

In some cases, the presence of valuable mineral deposits, or existing mines, has influenced the shape and extent of protected areas – potentially jeopardising their design integrity. For example, in Mount Nimba Strict Nature Reserve between Guinea and Côte d'Ivoire, the boundaries of the World Heritage site were modified to accommodate mining leases. Similarly, when the Kakadu National Park (Australia) was designated, it contained an enclave to allow for uranium mining leases: this was incorporated in the subsequently designated World Heritage site. On the other hand, land swaps associated with the Grasberg lease, which shares in part a common boundary with the Lorentz National Park in Indonesia, enabled relict alpine glaciers and associated ecosystems to be transferred from the mining lease to what is now a World Heritage site.

The Amman recommendation on mining was developed from a strong belief that some areas of the world should be excluded from industrial activity in perpetuity.

The possibility of allowing legal mining within protected areas touches on very deep emotions and has come to be seen by some as a touchstone of government commitment to protection and by others as a signal of the power that large companies can hold over elected governments. It has created oppositional politics and bitterness of an intense degree. Although some

environmental organisations are prepared to work with mining companies, others remain implacably opposed to mining operations in sensitive landscapes, despite efforts to broker common ways forward in recent years.

The more responsible members of the industry claim that mining and conservation need not be mutually exclusive. They claim that mining operations can contribute to biodiversity conservation, while minimising environmental impacts. They believe, moreover, that the economic and social benefits associated with mining can also help reduce pressures on protected areas due to poverty. Responsible companies recognise the principle of 'no-go' areas but have serious concerns with the decision-making processes used to establish protected areas and, more specifically, 'no-go' areas. They argue that non-inclusive processes and 'in principle' decisions of this kind that lead to bans on mining activity are overly restrictive and likely to damage national development, corporate profits and in time the accessibility of essential raw materials.

Environmental and social NGOs respond that all mining brings changes that damage some landscape values – including wilderness values – and argue that experiences with badly managed mines give reason to be suspicious of claims that mining will be better controlled in the future. They claim that it is essential to agree to exclude at least some parts of the world from such activity – with protected areas being the obvious candidates.

Context

It might be assumed that mining would not take place in areas that are 'protected', but in fact the legal situation is often more complex. Many governments retain mineral rights over private property. For example the government of Finland retains rights to minerals over the whole country. In many countries' public lands, governments control mineral rights but there are often questions about which part of the government has decision-making power and whether government bodies concerned with mineral extraction have the power to over-rule those concerned with, for example, housing or conservation. Indeed much of the debate about mining is internal within governments, taking place between different departments.

This complexity is particularly apparent in respect to protected areas. Some governments assume that designation of a protected area means that mineral extraction will be banned while others retain legal access to mineral rights within protected areas. There is sometimes confusion about whether 'protection' stops at the land surface or extends below ground as well. In some cases, protected areas were established without adequate stakeholder consultation and are now being challenged. Some protected areas have significant mineral potential that was unknown when the area was originally designated. Some governments have recently changed, or have tried to change, the law so as to allow mining within protected areas while others have failed to implement existing laws and thus ignored mining activities in protected areas. In some cases, governments and industry have worked with other stakeholders to address problems. For example:

– In Venezuela, there has been enormous controversy about government plans to change the law so as to permit mining within protected areas, such as the Imataca Forest Reserve and the Upper Orinoco-Casiquiare Biosphere Reserve.

- In the Philippines, laws regarding mining concessions were relaxed in 1995, making it easier for foreign companies to mine in the country, and although mining is still officially not allowed in protected areas, the government has been lax in enforcing relevant laws.
- In Guinea, a UNESCO multipartite mission took place in response to threats to the Mount Nimba World Heritage Site. The resulting report led to a management plan that delimited the region into three zones: a protected area, a mining area and a development area. The integrated development approach recommended by the mission addresses the conservation, economic and social development needs of this economically depressed region[142].
- In Australia, government plans to permit a second uranium mine (Jabiluka) within an enclave surrounded by the Kakadu National Park and World Heritage Site caused a storm of protest over indigenous peoples' rights as well as environmental concerns, which almost ended with the protected area being listed on the UNESCO *World Heritage in Danger* list. Rio Tinto, a leading member of ICMM, has decided to place the Jabiluka uranium project on long term care and maintenance as part of an agreement with Aboriginal Traditional Owners not to develop the site without their support, a long standing demand of conservation organizations.
- Mining in and around protected areas has thus become a critical issue. Following the acrimony surrounding the Kakadu debate (and the amount of time that it took up within the World Heritage Committee) and other high profile disputes, there were calls for some globally agreed standards relating to mining and protected areas in general and World Heritage sites in particular.

Dealing with the issue

By the late 1990s, the level of debate was creating serious problems and a number of initiatives – both by NGOs and industry – tried to address the question of 'no-go areas' and mining.

IUCN and the World Commission on Protected Areas

In the mid-1990s, the leadership of the IUCN World Commission on Protected Areas (WCPA) received many reports of mining and energy threats to protected areas, and desperate calls for guidance from protected area managers. As a result, in 1998 WCPA issued a policy position that called on governments to exclude all forms of mining from IUCN protected area Categories I-IV, and made recommendations for strict controls over mining in Category V and VI protected areas, and near protected areas in all categories. In effect, the statement was an 'opinion and advice' from many of the world's leading protected area experts, declaring what they believed should be best practice in regard to resource extraction and protected areas[143]. The logic of a category-based policy is explained thus. Whilst protected areas in Categories I-IV are intended for strict protection, in protected areas in Categories V and VI a degree of multiple use is accepted, including a range of human activities, albeit subject to a tight regime of controls over land use, pollution etc[144].

IUCN's members took up the work of WCPA in a recommendation adopted at the World Conservation Congress in Amman, Jordan in October 2000, which repeated the call that mining should not take place in IUCN Category I-IV protected areas. Recommendation 2.82 includes a section that: "*Calls on all IUCN's State members to prohibit by law, all exploration and extraction of mineral resources in protected areas corresponding to IUCN protected area*

management categories I-IV". At the present time, adoption of the Amman recommendation for Categories I to IV would eliminate around six per cent of global land areas from mineral activity. The recommendation also includes a paragraph relating to Category V and VI protected areas: "*in categories V and VI, exploration and localised extraction would be accepted only where the nature and extent of the proposed activities of the mining project indicates the compatibility if the project activities with the objectives of the protected areas"* [145].

The recommendation was passed by the large majority of IUCN members in Amman, including many governments, but it was strongly rejected by the US government. The mining industry too was strongly opposed; arguing that while in most cases companies would not wish to mine within protected areas, more flexible, science-based approaches based on the principles of sustainable development were preferred to a blanket ban. Though the Amman recommendation had strong support among many conservation bodies, it is true that it did not even convince everyone in IUCN.

Other non-governmental organisations
Two other international environmental organisations are running active programmes relating to mining and energy sources.

The Conservation International (CI) Energy & Mining programme works with industry and environmental leaders to integrate conservation and environmental protection into natural resource development, including development of best practice guidelines, metrics to measure industry's net impact, and criteria for deciding whether to undertake activities in sensitive areas. The CI programme currently includes work with some mining companies in protected areas.

WWF International took a different approach, by going beyond the Amman recommendation itself and working out how the organisation might agree when it would oppose mineral activity more generally – resulting in the development of a decision-tree[146]. The paper specifically backed the Amman Recommendation, in a preface by WWF's director general, Dr Claude Martin. WWF is also involved in developing proposals for a certification scheme for mining operations, the Mine Certification Evaluation Project. This involves several large mining companies, and is looking to establish agreed standards, benchmarks and independent verification of performance[147].

Industry initiatives
The main industry body which is active in the debate on protected areas and mineral extraction is the International Council on Mining and Metals (ICMM, the successor body to the International Council on Metals and the Environment or ICME). ICME produced many papers and reports on mining and the environment. ICMM was established to provide leadership to the industry in meeting the challenges of sustainable development and to carry forward key recommendations of the Mining, Minerals and Sustainable Development project (see overleaf). Its members include many of the world's leading mining companies

In April 2000, the World Business Council on Sustainable Development commissioned the International Institute for Environment and Development to carry out a two-year Mining, Minerals and Sustainable Development (MMSD) project, which produced many working papers and a final report *Breaking New*

Ground[148]. The Amman recommendation on mining was adopted during the time that this project was underway[149].

The MMSD dealt with many aspects of the interface between mining and conservation, but few topics were more difficult than that of protected areas. The report recommended that IUCN, conservation and development NGOs, the mining industry and governmental organisations should establish a multi-stakeholder forum to achieve consensus on 'no-go' areas, giving priority to World Heritage sites. A number of specific recommendations were also made on how IUCN, in collaboration with other members of the Union and WCPA, could improve the consistency and strengthen the application of the IUCN categories. Other recommendations included the need for integrated land-use planning, codes of conduct and dispute resolution systems; adherence to existing laws; and allowing local communities the right to reject developments.

The MMSD process, and the series of workshops that this involved, gave industry and conservation representatives the chance to discuss the issues of mining and protected areas in a relatively neutral setting. One result of this process is that industry had the chance for the first time to set out its own concerns about 'no-go' areas, protected areas and the Amman recommendation.

By bringing the subject into the open, the debate also exposed sharp differences between different NGOs and sometimes within the same NGO in terms of strategy and tactics, and the implications – good and bad – of mineral activity.

IUCN-ICMM Dialogue on Mining and Biodiversity

Responding to the recommendations of the MMSD Project, IUCN and ICMM launched a Dialogue on mining and biodiversity at the World Summit on Sustainable Development in 2002. The purpose of this initiative is to provide a platform for communities, corporations, NGOs and governments to engage in a dialogue to seek the best balance between the protection of important ecosystems and the social and economic impacts of mining.

IUCN and ICMM are committed to discussing a full range of issues to help enhance the contribution of the mining industry to biodiversity conservation. Priority is being given to developing best practice guidance in the area of biodiversity assessment and management. As part of the Dialogue, ICMM has also contributed to the Speaking a Common Language project. Over the longer term, the objectives of the Dialogue are to continue the promotion of performance improvement and to convene a broad working group to establish more transparent, consistent and equitable processes for reconciling development and conservation needs in land access decisions.

A key outcome of the Dialogue has been a Position Statement on Mining and Protected Areas adopted by ICMM in August 2003 just prior to the World Parks Congress[150]. This decision signals ICMM's intention to engage with the conservation community on the contentious issue of 'no-go' areas and contains several commitments that establish precedents not only for the mining industry but also other extractive industries (see Box). The declaration that the members of ICMM would no longer seek to open or expand mining activities in World Heritage sites was well received by many in the conservation movement. Even better, perhaps, is the prospect held out in the ICMM statement that, with time, the protected area categories system can become robust enough to allow

the "*recognition of categories of protected area as no-go areas, and others with a multiple use designation*". Subject to improvements being made, this sounds like acceptance in principle that Categories I-IV may eventually be recognised by at least some in the industry as no-go areas.

Implications for the protected area categories

In theory, the Amman recommendation brings the categories to the centre stage and gives them a role in determining land-use with influence well beyond that envisaged when they were agreed in 1994. In practice, it would be naïve to assume that the issue has yet been resolved. The question is important both from the perspective of protected areas and mining but also more generally for the categories; if the categories prove too weak a vessel to carry a World Conservation Congress recommendation then this may raise more general questions about their reliability.

The questions that emerged from the MMSD process, the Amman recommendation debate, from debates within ICMM, IUCN, WWF and Conservation International and from other NGO-industry dialogues are critical to both the resolution of the mining issue and to future interpretation of the categories. These questions are summarised below:

- ***How much land are we talking about?*** Industry groups have expressed concern that although Category I-IV protected areas currently cover only six per cent of the total, plans for major extensions to protected area networks (i.e. in Brazil, Canada, China, Russia) could result in far more land becoming 'off-limits' to mining.
- ***Are the categories assigned correctly and consistently?*** Currently a category is assigned either by governments or in some cases by the UNEP-World Conservation Monitoring Centre (see Chapter 2.3) and application is, or sometimes has been, slightly arbitrary, so that for example areas listed as Category II are actually being managed as Category V and VI. There are issues about consistency between countries and regions which relate to data held within inventories that have been built over considerable periods of time.
- ***Can categories be challenged?*** Questions have been raised about the transparency in decision-making over assignment of categories, whether categories are unchangeable, who decides on categories and who verifies whether categories have been applied 'correctly'.
- ***Are protected areas managed effectively?*** The categories refer to management intention rather than effectiveness. The mining industry has questioned the justification for banning responsible mineral activity from protected areas that have never been properly implemented and are already being degraded as a result of illegal activity (including sometimes illegal mining).
- ***Are mineral companies being singled out?*** Industry spokespeople have expressed concern that the Amman Recommendation will be used to keep mining out of protected areas whilst other sectors (hydro-electric power, forest management and tourism for example, all of which impact on protected areas) will be allowed more ready access.
- ***Do protected area designation criteria adequately identify compatible and incompatible land-uses?*** There have been challenges to the approach implicit in the Amman recommendation – that all mining is equally incompatible with conservation objectives in protected areas. It is argued that since 'mining' embraces a diversity of activities and that the

Mining is already a critical issue for many protected areas. The Amman recommendation attempted to produce a clarification to reach decisions about land-use, but has also thrown up a range of other questions about how we decide the role and management aims of particular protected areas

risks accordingly vary from one situation to another, the assumption that all mining is equally incompatible with protected areas in categories I-IV may not reflect the reality on the ground.

- ***Will establishment of protected areas be used as a tactic to stop mining?*** With more protected areas being developed, mining interests are concerned that assignment of Category I-IV will be used without assessment and fair and equitable decision-making processes. If listing is used as a tactic rather than an inclusive process, this could sterilise investments made in good faith.
- ***Do conservation organisations risk loss of protected areas altogether if they persist in trying to prevent mining?*** Several NGOs have expressed the fear that rigid adherence to the Amman Recommendation could lead to a backlash against conservation interests by giving governments the excuse to de-gazette protected areas altogether if there are valuable mineral rights within their borders, or at least not to proceed with the establishment of proposed protected areas. The Recommendation contains wording about boundary changes to protected areas to allow exploration or localised extraction, but it is unclear whether this was intended to refer to edges of protected areas or to land within the protected area itself.
- ***How rigid is the Amman Recommendation?*** Several companies and NGOs have questioned the extent to which the ban called for in the Amman Recommendation, and indeed other decision-making tools such as the WWF decision tree, are blanket prohibitions or rather strong indicators that can, nonetheless, be subject to negotiation. Questions include whether it would be possible to trade off small portions of a protected area against larger areas of land nearby, or allow limited mining with highest standards (perhaps through certification schemes) with the aim of creating win/win outcomes.
- ***Can mines help to sustain protected areas?*** Some people have argued that, for all the potential problems with mines, a well-run mine with a clear set of conservation guidelines and constraints, and with commitment to supply funds for conservation work, can in theory provide the resources and capacity needed to run a protected area, which are often lacking at the moment. This argument suggests that a protected area containing a well-run mine is likely in many situations to be in better shape than a protected area with neither a mine nor management resources.
- ***Does a broader-scale approach to conservation help?*** Many of these issues are by their nature site-based; it has been suggested that placing mining into a wider landscape context could help to decide the overall conservation impacts. As conservation organisations consciously scale up their work to ecoregions or bioregions, the opportunity for and need to engage with a wider range of stakeholders, including mining companies, become correspondingly greater.
- ***What happens in categories V and VI?*** Some conservation organisations have pointed out that the Amman Recommendation still leaves mining possible in the remaining two IUCN protected area categories (although it contains recommendations for strict conditions relating to how this should be carried out) and that these are in any case the most likely protected areas to attract company operations. Further guidance for mining within these protected areas is urgently needed. Although some initial recommendations are included in the recently-published guidelines on Category V protected areas, the mining industry has requested greater participation in the development of approaches in such areas[151].

– ***Where are governments in this debate?*** To date, the debate on 'no-go' areas has been conducted primarily between industry and conservation NGOs with little input from governments. Yet successful use of the IUCN category system as a tool to influence management standards and land-use decisions is critically dependent on governments. Mining companies stress the importance of having clear and equitable rules to land access based on transparent, informed and equitable governmental decision-making processes and argue that therefore governments need to be more fully engaged in the debate.

For many companies the issue is less that they wish on a regular basis to have access to protected areas but that the decision-making processes to establish and maintain protected areas are sometimes lacking in rigour and transparency. As a result, they are reluctant to sign up to a ban that they do not fully understand, do not know the full implications of and which apparently has no obvious 'court of appeal'. For many conservation organisations, the issue is that if the global community cannot even agree to eliminate mining from a very small proportion of the world's surface that is in Category I-IV protected areas, the prospects of any kind of control on industrial activity seem bleak. This issue remains unresolved, although there is now a more open dialogue going on between industry and NGOs than there was even five years ago.

Lessons learned

The Speaking a Common Language project is concerned with the impact of the categories system, not the development and implementation of conservation policy. Therefore the question of whether or not mining *should* take place in Category I-IV protected areas is beyond the remit of the project. From the perspective of the categories, however, a number of conclusions can be drawn:

– If IUCN protected categories are to be used as the basis of potentially controversial legislation, they need a stronger and more transparent framework for assignment by governments, possibly including some independent verification that the correct category has been applied
– Furthermore, using the categories as a decision-making tool will also only be acceptable if the spirit of the categories is being followed in other ways as well – i.e. management *effectiveness* is as important an issue as management *categorisation*
– Questions about mineral activity may need to be placed in a wider context of other activity within protected areas. It might be better if guidance about what uses are, or are not, compatible with different categories of protected areas were developed across the board rather than *ad hoc,* or industry-by-industry.
– The implementation of the Amman Recommendation on mining needs careful consideration and dialogue amongst all stakeholders if it is not to be ignored or diluted.
– This implementation must also consider – perhaps as a priority – the implications of mining within Categories V and VI and near protected areas in all categories, including active collaboration with mining companies in looking into these issues.
– Protected areas are part of a wider ecoregion or landscape, and many large conservation organisations are consciously scaling up their activities to look beyond site-level approaches. The integration of mining into ecoregional conservation, or ecosystem approaches to management, needs serious attention.

Guidelines are needed for acceptable practice for mineral exploration and extraction in Categories V and VI

Abisko National Park, Sweden: Nigel Dudley

Suggested responses from IUCN

The Dialogue on mining will hopefully help to address some of these concerns, including mining in Category V and VI protected areas, as will work on certification of categories and guarantees of management effectiveness (see Chapter 2.11). However, a number of other possible responses might also be considered:

- A government-NGO-industry initiative to look at ways in which mineral activity can be integrated into ecosystem approaches to conservation at ecoregional or landscape scale
- Development of guidelines on acceptable practice for mineral exploration and extraction in Categories V and VI, and in the vicinity of protected areas in all categories, produced by IUCN in collaboration with industry, government and NGO stakeholders
- Involvement with the WWF initiative on certification of mining to ensure that this takes full account of issues relating to protected areas
- A survey of IUCN's government members to determine the status of, and obtain information on any issues associated with, the adoption and implementation of the Amman recommendation
- A project by the IUCN Environment Law Centre to establish current practice at the national level regarding the legal constraints on mining in protected areas of different kinds.

ICMM Perspectives on Mining and Protected Areas

The World Summit on Sustainable Development signalled the need for innovative approaches to stem the unacceptably high rate of biodiversity loss caused by human and other factors, including poverty. Poverty alleviation requires development. In this respect, ICMM believes that responsible mining operations can be part of the solution to biodiversity loss, by being an engine of economic and social development and by contributing directly to biodiversity conservation activities, while minimising environmental impacts.

ICMM recognises the role of properly designated and managed protected areas in conservation strategies and that, in some cases, exploration and mining development may be incompatible with the objectives for which protected areas are designated. To give effect to this principle, ICMM announced its landmark 'no-go' pledge in August 2003 wherein ICMM's corporate members undertook 'not to explore or mine in World Heritage properties' and to take all possible steps to ensure that operations are not incompatible with the outstanding universal values of World Heritage properties (www.icmm.com). ICMM members have also made a commitment to respect all legally designated protected areas.

ICMM is committed to working with IUCN to strengthen its system of protected area categorisation. ICMM members recognise that sufficient reform of this system will lead to recognition of categories of protected areas as 'no-go' areas and others with a multiple-use designation.

Amman recommendation
Many in the conservation community believe that the Amman recommendation should be the starting point for industry's 'no-go' policy. However, it must be recognised that the Amman recommendation is aimed at governments not industry and that some governments have not applied or effectively used the IUCN category system. There can also be discrepancies between national legislation and the Amman recommendation regarding restrictions on mining in protected areas. Where mining is allowed in a protected area under national legislation (but excluded according to the Amman recommendation), the conservation interest would be better served if responsible companies were to undertake exploration and mining activities rather than those companies that do not have the same commitments to improved standards of performance

There are a number of application issues associated with the IUCN categories. In categorising national protected areas, the current IUCN category system has been inconsistently interpreted and applied by governments both within and between countries, often in processes that are neither transparent nor inclusive. The final international category assignment of protected areas can also differ from national assignments. For example, a multi-use protected area at the national level can be assigned a Category II status at the international level, based on the interpretation of the management objectives of the site.

ICMM recognises that national and global systems for the evaluation, designation, classification and management of areas listed for protection are needed to ensure consistency of approach to land access decisions. However, if the IUCN category system is to be used as a tool to influence management standards and land-use decisions, it will need to be strengthened in a number of areas including:

- Ensure that conservation and resource use strategies are developed in the context of broad, regional land-use planning frameworks, in which protected areas are considered as one of an array of tools that can be employed to achieve conservation and resource use objectives
- Ensure transparency in the protected area/IUCN category assignment process including a dispute resolution mechanism (i.e., industry and other stakeholders should be at the table).
- Establish systems of verification/certification to ascertain whether a protected area has been assigned to the correct category and the site is being effectively managed.
- Establish a Protected Areas In Danger List and where degradation of conservation values occurs due to poverty or other reasons, make provision for the protected areas in question to be reclassified (e.g. IUCN Category V or VI) and encourage governments in close consultation with stakeholders to explore available development options (e.g., mining, eco-tourism, oil and gas, etc) to address the causes of biodiversity loss.

Transparent, informed and fair decision-making processes
ICMM corporate members clearly accept the principle of 'no-go' areas. However, the decision-making processes used by governments in establishing land-use priorities and protected areas, generally, and 'no-go areas more specifically, are a source of concern.

ICMM believes that more strategic approaches are needed to assist governments in negotiating responses that enable equitable resolution of different land-use, conservation and development objectives.

Such approaches need to be transparent, informed by mineral development potential assessments, among others, based on the principles of sustainable development and take into account the opinions of and consequences for local communities, including indigenous peoples, and the regions involved.

ICMM is committed to contributing to work aimed at strengthening the IUCN category system and to working with IUCN, governments and international organisations in developing decision-making models and assessment tools that better integrate conservation and development into land-use planning strategies and regional development plans. Implementation of these systems by governments will result in clear and equitable rules for land access as well as establish the basis for recognising other categories of protected areas as ‘no-go’ areas as well as those with a multiple-use designation.

Chapter 2.16: Hydrocarbon extraction and the categories

Summary

The activities of oil and gas companies can result in many actual and potential pressures on protected areas. However, because demand for energy continues to rise and national investments in renewable energy sources are unlikely to result in a major reduction of demand for fossil hydrocarbons for many years, protected area professionals and responsible energy companies must for the time being find methods of oil and gas extraction that can take place in a relatively benign way. This chapter focuses on just one main issue in relation to these companies – the categorisation of protected areas using the IUCN Protected Area Management Categories, and related initiatives. As such it does not provide an overview, comment or judgement on the current or planned future activities of such companies in relation to biodiversity protection and conservation.

In 2000, IUCN sought to tackle the issue of extractive industries impacts on protected areas through a recommendation at its World Conservation Congress in Amman (see Chapter 2.15 on mining).

Although this recommendation was aimed at Governments, it clearly has implications for many companies. For instance, BP has 49 units operating in or adjacent to protected areas, with 5 of these units operating within protected areas categorised as IUCN I-IV.

The passing of the recommendation has thus led to a focus on the performance of energy companies in respect of protected areas. It has also led to a questioning of the robustness of the IUCN protected area management categories by those industries affected, particularly if it they are to be used as a basis for instituting this type of restriction through law.

This chapter reviews the hydrocarbon exploration and extraction industries' reactions to the recommendation and concludes with a series of recommendations as to how IUCN can further develop the categories system to provide a sound basis for requirements such as those set out in Amman, and ensure the long-term security of protected areas.

This chapter has been prepared by Sue Stolton and Nigel Dudley, and commented on by Adrian Phillips. The box on Shell was prepared by Sachin Kapila and Andrea Athanas of Shell and IUCN, the text on BP was prepared by Louise Johnson of BP, the text on IPIECA by David Mansell-Moullin and the text on EBI by Assheton Stewart Carter.

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Context

As with other extractive industries oil and gas companies pose many actual and potential threats to protected areas. The wide-ranging methods of extraction, on land and underwater, and the risks of pollution during extraction, transportation, refining and distribution mean that a wide range of impacts is possible. These can range from primary impacts such as air, land and water pollution to habitat loss and fragmentation, or secondary impacts such as access from roads, pipelines or seismic lines leading to increased settlement and related impacts.

Many governments clearly regard protected areas as suitable for oil and gas production, using arguments about the overall importance of energy supplies and the possibility that oil and gas extraction can take place in a relatively benign way. Others prohibit such activities in protected areas absolutely.

Sometimes, both views are expressed within governments due to the differing positions of environmental and resource use ministries, leading to conflict and confusion. Even more common is exploration and exploitation near to protected areas, including in buffer zones. Whether near to or within officially protected areas, there have been increasing pressures on the companies that conduct these extraction activities to operate in a responsible manner, including keeping negative impacts to an absolute minimum, avoiding operations in specified areas and encouraging positive benefit wherever possible.

In 1993, IUCN and the Oil Industry International Exploration and Production Forum (E&P Forum – now the Association of Oil and Gas Producers, OGP – see below for details) jointly published guidelines 'to establish internationally acceptable goals and guidance' for environmental protection for *Oil and Gas Exploration and Production in Arctic and Subarctic Onshore Regions*[152]. The guidelines specifically recommended that selection of the drill site should be guided by a number of pointers, including the "*avoidance of protected and conservation areas"* and listed the "*awareness and avoidance of protected areas"* first in a list of general environmental protection measures that should guide activities. Further guidelines where also produced for: *Oil and Gas Exploration and Production Operations in Mangrove Areas – Guidelines for Environmental Protection; Oil Industry Operating Guidelines for Tropical Rainforests and The Oil Industry – Operating in Sensitive Environments*.

IUCN sought to tackle the issue of extractive industries impacts on protected areas more generally through a recommendation (2.82) at the World Conservation Congress in Amman, Jordan in October 2000 (see Chapter 2.15 for more details).

Dealing with the issue

Two of the biggest privately listed companies involved in the energy business are the Royal Dutch/Shell Group of Companies (Shell) and BP plc. Both these companies were asked to provide constructive commentary on the IUCN categories as part of the process of drawing this chapter together. The case studies (see boxes below) provide two quite different but interesting analyses of the how these companies view the categories system. The case study from Shell concentrates on how the system could be strengthened, whilst the case study from BP focuses on how the company is incorporating the IUCN categories into its working practices and reporting processes.

These companies, however, are not alone in trying to tackle these issues. In particular, two forums provide several of the major extraction companies and conservation organisations the opportunity to discuss issues, share knowledge and create management tools related to the industry and its impacts on biodiversity:

- **The Energy and Biodiversity Initiative (EBI): Integrating biodiversity conservation into oil and gas development**[153]**:** The Energy and Biodiversity Initiative aims to develop and promote best practices for integrating biodiversity conservation into oil and gas development and transmission. The EBI is collaborative effort by representatives of nine member companies and conservation organisations. It was initiated by the Conservation International and involves Chevron-Texaco, BP, Shell International, Statoil, the Nature Conservancy, IUCN, Fauna and Flora International and the Smithsonian Institution. It includes a series of

activities including a site-selection exercise being co-led by IUCN and Shell[154].

- **IPIECA/OGP: International Petroleum Industry Environmental Conservation Association[155]/ International Association of Oil and Gas Producers:** IPIECA was founded in 1974 and provides the oil and gas industry's main channel of communication on environmental issues with the United Nations. There are currently over 35 members, drawn from private and state owned companies as well as national, regional and international associations – the membership covers Africa, Latin America, Asia, Europe, Middle East and North America. In November 2002, a joint IPIECA and OGP Biodiversity Working Group was established.

Case Study: Shell

To understand the issues around oil/gas operations in protected areas further Shell initiated a series of dialogues and research into the protected areas systems of the world including, in particular, the IUCN Categories. Shell respects the need for a global system of categorising protected areas and sees the IUCN Categories as the best available framework. This case study is an edited version of a paper produced by Shell at the request of SaCL[156], and highlights the areas where Shell believes the IUCN Categories System could be strengthened.

1. An inclusiveness and transparent designation process

The Categories could be strengthened by a consistently open, transparent and inclusive (involving key stakeholders such as local communities, government agencies and industry) process for designating protected areas. If category assignment required such a process, they would become a tool for encouraging more strategic land-use planning decisions which, in the end, may better reconcile land use options for a particular region.

2. A degree of confidence in the assignment process

The IUCN Categories could provide companies with a much stronger indication of sensitivity of an area if the companies could be sure that the categories were consistently assigned across countries.

3. Periodic assessment of protected areas

Shell acknowledges that the basis for the IUCN Categories are the management objectives of the protected areas, but sees the need for a system of assessing protected areas on a periodic basis to determine if they are effectively managed – and if not, to highlight or recommend changes to management. If, over time, the management effectiveness and management objectives of the PA consistently do not match, there should be an agreed process to re-assigning the category, through some sort of 'grievance procedure'.

In conclusion, Shell supports protected areas as an important component of the conservation agenda, delivering *in situ* conservation objectives set out in international conventions such as the Convention on Biological Diversity. Shell recognises the importance of protected areas and the years of hard work invested by the conservation community in their establishment and maintenance. Shell is furthermore committed to work with IUCN WCPA to help strengthen the IUCN Categories system for it to better serve its objective of promoting the conservation of sensitive areas.

Case Study: BP plc

BP has a policy goal of *"no damage to the environment"* and states, in its online Environment and Social Report[157], that: "*BP will only work in new areas if we are convinced, after taking the best scientific advice, that we can fulfil our policy standards*".

Reflecting the increasing scrutiny global corporations are experiencing, a shareholder resolution at the 2002 AGM required BP to disclose how the company analyses and seeks to control significant risks from operating in environmentally sensitive areas. Although the resolution was not passed by shareholders, BP undertook "*to include in the annual Environmental and Social Report, descriptions of our risk assessments carried out if we decide to explore or develop in IUCN Category I-IV designated sites where development is permitted, where we have operational control and are legally and commercially able to do so*".

During 2002, BP reviewed its portfolio of assets and potential future projects to determine those that sit within or may enter IUCN designated protected areas. As a result of this review BP reported that there were no decisions taken during 2002 that required them to explore or develop within such areas. BP intends to continue to monitor their exploration and development operations in order to fulfil the commitment, and will provide descriptions of the risk assessment where appropriate.

Recognising the need for transparency of information, BP has also been undertaking an assessment of its operations to identify where sites are in relation to protected areas. During the year end data reporting process, BP required its reporting units to respond to a series of questions designed to better understand this issue. Out of a total of 190 reporting units who responded, 49 units operate in or adjacent to national or international protected areas (several of which were in operation prior to the area receiving formal recognition of protection). Of these, eight are in/near Ramsar sites and seven in/near World Heritage sites. Of these, only five reporting units operate within IUCN Category I-IV protected areas. Following this assessment, BP has published (within the online report and "*to the best of our current knowledge*") a list of their operated and non-operated facilities which occur within IUCN I-VI management categories.

With regard to the IUCN management categories system, BP supports the "*work undertaken by individuals and organisations, such as the World Conservation Union (IUCN), in developing a consistent approach to the identification and designation of protected areas. We believe IUCN designations provide the best framework available and encourage the strengthening and understanding of such systems. We recognize that governments make decisions on protected areas and fully accept that some areas will not be open for development*".

One approach that BP is taking to effectively manage its impacts on biodiversity is the development of Biodiversity Action Plans (BAPs) at many of its operational sites. BP now has 28 BAPs in place or nearing completion. Examples include protection and management of habitat for turtle conservation in Malaysia, contributing to capacity building of protected area staff in Indonesia and restoring habitat for the endangered Iberian Lynx in Spain.

Lessons learned

As with the case of mining in protected areas (see Chapter 2.15), the main issue of relevance to the Speaking a Common Language project is that if IUCN is asking national governments to prohibit activities based on the use of the protected area categories, then the categories system needs a stronger, more transparent and inclusive framework for application, methods of dealing with disputes, and possibly some independent means of verifying that the correct category has been applied.

All these areas are currently being looked at by IUCN and partner organisations. For example, Chapter 2.3 includes a discussion of proposed best practices for assignment, and the Chapter 2.8 on marine protected areas provides an example from Australia of stakeholder involvement in category designation. WCPA in Europe is also developing proposals for a certification scheme to assure that the correct category has been assigned.

The issues raised in this chapter on the differences between managing and categorising a protected area to a set of objectives and the effectiveness of management against these objectives are also important. IUCN has published guidelines on assessing management effectiveness[158] and various projects are underway worldwide to assess and, through assessment, improve the effectiveness of management. However, just as there may be a need to verify the application of a category, so may there be a need to verify assessment methods or even certify management effectiveness. WCPA currently has Task Forces looking at both these issues: at present these are considering options and ways forward but not yet certification systems. WCPA is also defining basic management standards for protected areas which should help ensure protected areas are managed consistently with their objectives and thus maintain their core values.

Suggested responses from IUCN

The responses suggested here mirror those made in the Chapter 2.15, and are that IUCN should consider developing:

- A process to look at the decision-making and governance frameworks for assignment of particular categories of protected area, to create a more systematic and transparent framework with clear lines of communication and appeal.
- Broader advice about what is and is not acceptable within particular categories of protected area, drawing on the views of a wide range of stakeholders, either as supplementary guidance to the categories or as a part of a revised version of the categories guidelines.
- A joint NGO-industry initiative (perhaps starting with a workshop) to look at ways in which extraction activity can be integrated into ecosystem conservation management approaches at ecoregional or landscape scale.
- Guidelines on acceptable practice for hydrocarbon extraction in Categories V and VI.
- More comprehensive information about protected areas, their values and management systems and objectives, to be held within the World Database on Protected Areas.

One outcome of the debate about oil and gas is recognition of the need for clearer decision-making frameworks for assignment of categories

Nigel Dudley

Chapter 2.17: Use of categories by non-governmental organisations

Summary

Large conservation NGOs use the IUCN categories in several ways:

- In choosing areas to work
- For advocacy
- As a means of measuring progress towards targets
- Through specific category-related initiatives

Experience to date suggests that most NGOs remain unsure about how to relate to categories and on a number of occasions different parts of one NGO have used them in different ways or disagreed about their interpretation. There is clearly some catching up to be done with respect to their potential use as tools for non-governmental work. Suggestions in the short term include:

- Development of a guidance note or issues paper relating to relevance of and use of the IUCN categories by IUCN's NGO members
- Perhaps a specific workshop for key IUCN NGO memberss on the IUCN categories and their development, aiming to achieve some agreed policies towards their use.

Context

Many of the larger conservation NGOs have active programmes involving protected areas. Their involvement in, and interaction with, protected areas can include: a role as advocates and critics; participation in planning both on a broad ecoregional scale and within individual protected areas; supporting and undertaking research; coordinating discrete projects including particularly capacity building; ownership and sole management of areas; and, of course, as funding bodies. Some NGOs are principally landowners and active conservation managers, some are mainly lobbyists and some do both.

NGOs interact with the IUCN area categories in four main ways, through:

- Choice of which type of protected area they become involved with in their practical field projects
- Use of the categories for advocacy (for example in opposing development in strictly protected areas)
- Setting specific targets for new or improved protection, either for their own work or 'global' or 'regional' targets that they encourage partners to adopt
- Specific projects or developments based around the categories

This chapter has benefited from conversations with Aaron Brunner, Kent Redford, Stewart Maginnis, Jeff Parrish, Leonardo Lacerda and Rosa Lemos de Sá

July 2003

No NGO engages in all these aspects and few have stated policies towards the categories. The following represents a fairly initial survey of attitudes and engagement towards IUCN categories and considers six conservation NGOs with international programmes: IUCN The World Conservation Union, WWF International (WWF), Conservation International (CI), the Wildlife Conservation Society (WCS), Fauna and Flora International (FFI) and The Nature Conservancy (TNC).

- **Choice of protected areas for field programmes**

None of the NGOs that we contacted has specific policies towards which categories they will work in, although most – for example WCS and CI – have tended to gravitate towards engagement with the stricter protected area categories. Outside Europe, active involvement in Category V protected areas appears to remain relatively uncommon.

- **Advocacy**

The presence of a strict nature reserve is often used by NGOs in advocacy against its exploitation, e.g. for timber extraction or road building, although we have found few occasions in which reference is made to the IUCN category.

One exception relates to the issue of mining and the resolution at the World Conservation Congress in Amman, Jordan, in 2000, suggesting that Category I-IV protected areas be off-limits for mining and oil exploitation (see Chapters 2.15 and 2.16). However, here the situation is confused. While some NGOs have adhered to and defended the Amman Resolution (e.g. WWF), others are themselves running cooperative projects with mining companies in protected areas (e.g. CI).

- **Setting targets**

IUCN set the first 'target' for protection, by agreeing (recommendation 16) at the 1992 World Parks Congress in Caracas, Venezuela, that protected areas should cover a minimum of 10 per cent of each biome by 2000. This decision was supported by recommendation 19.38 'Targets for Protected Area Systems' at the Buenos Aires IUCN General Assembly in 1994, which urged all governments to have regard of this target. It further urged "*that these targets be set to ensure the viability of these biotopes*" and in particular urged "*governments to give priority to protecting the best examples of their major ecosystem types*".

WWF International is to date the only organisation that has translated these general targets into its own work, in relation to forest protected areas and its Forests for Life programme and marine protected areas through its Endangered Seas programme. From 1995-2000 WWF campaigned for countries to set aside at least 10 per cent of their forests into protected areas and from 2000-2005 introduced a specific area target for new protected areas. The latter has gained added impetus for being carried out in partnership with the World Bank. The current protected area targets for the World Bank-WWF Alliance until 2005 are:

WWF has focused on targets for the creation of new forest protected areas, but has "counted" different categories in different parts of the world

- 50m ha of new forest protected areas created with priority given to focal forest ecoregions
- Management improved in 50m ha of existing forest protected areas

The WWF Endangered Seas campaign also has specific protected area targets:

- Effectively managed, ecologically representative marine protected area networks covering at least 10 per cent of the world's seas

However, WWF International did not specify which categories were involved in the target (nor did IUCN in the original Caracas recommendation), and in practice different geographical regions have interpreted the target in very different ways, for example, with respect to forests:

Protected area in Kamchatka, Russian Far East: Nigel Dudley

WWF Brazil	Only counts Category I-III protected areas
WWF European programme	Only counts Category I-IV protected areas
WWF Africa programme	Counts all categories

Despite considerable efforts to agree on one approach across the whole organisation, this has not yet been achieved. There are some good reasons for this; as the 10 per cent target became better known governments grew adept at expanding the definition of protection within the broader categories, thus achieving the target without actually expanding the area protected (this may be more of a function of the use of targets than of the use of categories).

One possible response suggested was to divide targets between categories, although this has never been implemented[159].

Conservation International also intends to set measurable targets for its own work in protected areas, focusing on the 25 CI Biodiversity Hotspots. The organisation considered using the IUCN categories for this but felt that they made it difficult to measure incremental gain in strictness of conservation objectives, and is in practice likely to develop its own ranking based around type of uses permitted. The Wildlife Conservation Society works mainly in the more strictly protected area categories, but has no specific policies regarding different categories. The same is true for Fauna and Flora International.

- **Specific category-based involvement**

To date it is only IUCN's WCPA that has developed a specific engagement in the categories *as categories*, most recently through two task forces on Category V protected areas (resulting in publication of Guidelines[160]) and a newly constituted task force on wilderness (in effect Category Ib)[14].

Prior to that, WCPA attempted to standardise use of the term 'national park' at the 1969 IUCN General Assembly in New Delhi; and produced guidance on categories in 1978 and again in 1994.

As WCPA is the body organising the categories this involvement is hardly unexpected.

Implications for the protected area categories

There has been surprisingly little take-up of the categories by the larger NGOs with international programmes and furthermore when categories have been used they have on a number of occasions led to disagreement rather than harmonisation. It is hard to avoid the conclusion that the categories have not, as yet, been used to their greatest possible effect by NGOs (or perhaps have not been regarded as sufficiently relevant to their activities).

[14]Since the drafting of this chapter, a Task Force on the Categories themselves has been set up by WCPA

Suggested responses from IUCN

Although all the organisations considered here, and many more besides, were involved in the decisions about the structure of the category system, there has been little dialogue about the categories system between IUCN and leading NGOs since the adoption of the 1994 guidelines, nor has agreement been reached within and between NGOs on their use. In developing a future work programme on the categories, WCPA and IUCN might usefully consider two initiatives:

- Development of guidance note on the role and use of the categories aimed specifically at IUCN's NGO members
- Holding a small workshop of IUCN's main NGO members to discuss some agreed approach towards the categories. This agreement might aim to cover the potential value of the system to conservation, a shared understanding about how the categories should be used in advocacy, and actions designed to raise the systems standing.

Chapter 2.18: Applying the IUCN categories in Vietnam

Summary

The chapter charts one country's attempts to declare protected areas, review progress in the development of a system of protected areas, and finally develop policies and recommendations for legislation change to ensure the development of a nationally representative and effective system of protected areas.

The lessons learned show that, although there can be problems arising from issues of interpreting the categories guidelines and applying them to existing systems, Governments are keen to develop their national protected area systems taking into account the international system of protected areas categorisation. The issues raised by the use of the IUCN Protected Areas Management Categories in Vietnam are probably found in many countries around the world.

The chapter concludes with suggestions to aid the understanding and interpretation of the IUCN categories between cultures and languages.

Context

Vietnam's protected areas systems are still evolving in terms of both coverage and institutional arrangements. Currently, the protected areas to have been decreed by the government are primarily Special-use Forests but include a Ramsar site (Xuan Thuy Wetland National Park – this area is also a Special-use Forest) and Can Gio Biosphere Reserve. These protected areas are mainly terrestrial forest sites but some also include a small number of wetland sites and marine areas.

This chapter has been written by Sue Stolton following discussions with Dr. Keith Williams, Chief Technical Advisor, Strengthening Protected Area Management Project (SPAM), WWF Indochina Programme and draws heavily from material prepared by the SPAM project. Thanks also to Kishore Rao and Adrian Phillips.

April 2003

- **Protected Area Legislation**

Until 2001, the principal legal and regulatory framework for Special-Use Forests in Vietnam was laid out in the 1986 Decision[161] of the Minister of Forestry, which categorised three types of protected area: 'national park', 'nature reserve' and 'cultural, historical and environmental area'. This categorisation system was based on the 1978 IUCN Protected Area Management Categories (see Chapter 2.1), which was then adapted to suit Vietnam's requirements. In January 2001, new regulations for the management of Special-use Forests were promulgated[162] by the Prime Minister.

The first protected areas established in Vietnam were initially termed 'prohibited forests'; their objectives, as the name suggests, being towards strict protection. Many of these areas are now termed national parks: i.e. Cuc Phuong National Park (1962), Cat Tien National Park (1978), Con Dao National Park (1984) and Cat Ba National Park (1986).

By 1986, a total of seven areas had been declared as National Parks, 49 as Nature Reserves and 31 as Cultural, Historical and Environment sites.

Nature reserves were, as the figures above suggest, more numerous, tended to cover smaller areas and had less strict conservation objectives. However, it is reported[163] that the interpretation of the IUCN categories was primarily based

on name rather than on the management objectives that were being applied to the protected areas. Thus, 'nature reserves' were defined as protected areas with scientific value, protecting functions of animal and plant genetic resources, and as places for scientific studies, but where tourism services or other cultural demands were not permitted; whilst 'national parks' were defined as protected areas with all-round value in nature conservation, scientific study, protection of cultural relics and tourism services[164]. It should however be noted that as far as international accounting is concerned the current UN list includes all National Parks in Vietnam as Category II protected areas and all Nature Reserves as Category IV protected areas[165].

The 2001 decision[166] clarifies the situation with regard to tourism in Vietnam's protected areas and provides for national parks and nature reserves to be divided into 3 sub-zones: strictly protected; ecological rehabilitation; and service and administrative – this last sub-zone providing working and living facilities for management, research facilities, tourism and recreation, and entertainment services. It further clarifies that tourist services may be established in national parks and nature reserves provided that they were included in the corresponding feasibility study approved by the competent authority.

- **Developing the protected area system**

In June 1997, the Ministry of Agriculture and Rural Development (MARD) issued a formal Decision to expand the system of protected areas from 1 million ha to 2 million ha and in November 1997, the Forest Protection Department (FDP), the body within MARD with responsibility for protected areas, held a national meeting to discuss proposed decrees and policies on the management of protected areas in Vietnam. The meeting concluded that the existing network of protected areas (Special-Use Forests) was not adequately protecting the breadth of biodiversity in Vietnam for a number of reasons.

Vietnam's protected areas network has been deliberately expanded to meet government targets for conservation

Quang Nam Province, Vietnam: Nigel Dudley

- "Some areas have been encroached upon and are therefore no longer effective as protection areas;
- Some forest areas have changed status from being Special-use Forest to Catchment Protection Forest;
- The legal framework is outdated in relation to the management of the various types of protected areas as now established, and they do not follow the IUCN definitions for protected area classification;
- The objectives and strategies for managing the various protected area are unclear and often conflicting with socio-economic development objectives;
- The management approach for most protected areas, lacking formal guidelines from the central FPD, do not fit the new needs of biodiversity conservation under the broader definition;
- The institutional framework, mandates, responsibilities and financial mechanisms for managing protected areas is no longer sufficient in relation to the present protected area system" [167].

As a response the FDP proposed a draft decree officially to expand the protected area network and develop four classifications of protected area, with targets for the number and area to be declared:

- National Park (NP): 10 covering 254,807 ha
- Nature Reserves (NR): 53 covering 1,441,159 ha
- Species and Habitat Reserves (SHR): 17 SHRs covering 488,746 ha
- Landscape Protected Areas (LPA): 21 covering 112,859 ha[168].

Dealing with the issue

The Government of Vietnam, through the FPD, asked the WWF Indochina Programme in Hanoi for technical and financial assistance to revise the framework for protected area management in Vietnam[169]. This resulted in the Danida-funded (Danish Environment and Disaster Relief Fund) WWF project 'Strengthening Protected Area Management in Vietnam' (SPAM), which started work in 2000 to support the FDP to develop improved management objectives and institutional, regulatory and financial frameworks for the protected areas system in Vietnam.

The draft strategy, which provides strategic direction for implementing agreed objectives for an integrated approach to biodiversity conservation in protected areas, was finalised in October 2002[170]. It includes a section on the 'Categorization of protected areas' (annex 6) which suggests a new categorisation system for protected areas as envisaged by the FDP in the draft decree of 1997. A categorisation system has been developed, using the 1994 IUCN Guidelines document as a template. It details definitions, management objectives, criteria for selection and organisational responsibility for each of the four new categories; it also identifies which IUCN category the Vietnamese category resembles. The system has been developed by a group of experts in the nature conservation field. One of the system's aims is that it should be "*based on the IUCN's 1994 protected area categories*", but it is made clear that this has been "*adapted to meet Vietnam's requirements*". The system aims to deal with the problems raised by the current categorisation system, whilst maintaining the values which are inherent in the IUCN system.

Details of the proposed categories and their objectives are given in the full case study on Vietnam which can be found on the SaCL website. In summary the system consists of four types of protected area categories. Objectives are:

- **Category I. National Park**: Protected area managed mainly for ecosystem protection, research, environment education and recreation. Equivalent category to IUCN Category II - National Park.
- **Category II. Nature Reserve**: Protected area managed mainly for ecosystem or species protection, research, monitoring, recreation and environmental education. No direct equivalent to an IUCN category.
- **Category III. Habitat and Species Management Area**: Protected area managed mainly for environment and biodiversity conservation through management intervention. Equivalent category to IUCN Category IV - Habitat/Species Management Area
- **Category IV. Protected Landscape/Seascape**: Protected area managed mainly for landscape or seascape conservation and recreation. Equivalent category to IUCN Category V - Protected Landscape or Seascape.

The difference between the categories of National Park and Nature Reserve do not correspond to different objectives, but reflect a difference in conservation value. Thus nature reserves are: generally smaller; have fewer threatened species of plants, animals and habitats; and are generally of lower biodiversity conservation value than national parks.

As a result, a higher level and wider range of visitor facilities and activities will be allowed inside nature reserves, the areas of lower conservation value, than will be allowed in national parks. New development for visitors in national parks will be limited to park boundaries and buffer zones[171].

Lessons learned

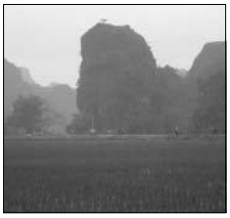
Defining the protected areas system by nomenclature rather than on management objectives led to some problems in the management and structure of the protected area system in Vietnam. As well as the issue of tourism, which is described above, because the 1986 regulation was based on the use of IUCN Categories Ia and II, activities that could have been used to generate incentives for local stakeholders to support protected area management were prohibited, i.e. management regulations prohibited the collection of non-timber forest products (including firewood) or the development of tourism in nature reserves. The result was that there were few incentives to comply with the 1986 regulations, few alternatives to continuing patterns of forest resource use, and limited law enforcement capacity at the local level. Perhaps not surprisingly, unmanaged access to the forest resources of Special-use Forests has been the norm[172].

The clear understanding, interpretation and translation of the six IUCN Protected Area Management Categories are essential for their correct adoption internationally. The IUCN categories system tries to provide order to a protected area estate which internationally has developed in many different ways with different names. However, by using terms such as ‘wilderness’, ‘national park’ and ‘nature reserve’ so prominently in the definitions of the six categories, some countries have developed and classified their protected areas systems more by reference to the names associated with each category rather than the definitions and objectives which are intended to present the clear distinctions between the categories (see also Chapter 2.4). In the case of Vietnam – and one suspects elsewhere – the problem arises because IUCN’s published advice is not available in local languages.

Suggested responses from IUCN

Clearly there is a need to translate the IUCN Protected Area Management Categories into many more languages – and for these translations to involve the participation of in-country specialists who are familiar with the issues, thus ensuring that translation is as precise and technically correct as possible.

Differences between national parks and nature reserves in Vietnam reflect differences in conservation value



Vietnam: Nigel Dudley

Appendix 1: The IUCN Protected Area Management Categories (IUCN, 1994)

CATEGORY I Strict Nature Reserve/Wilderness Area: protected area managed mainly for science or wilderness protection

CATEGORY Ia Strict Nature Reserve: protected area managed mainly for science

Definition
Area of land and/or sea possessing some outstanding or representative ecosystems, geological or physiological features and/or species, available primarily for scientific research and/or environmental monitoring.

Objectives of Management
- to preserve habitats, ecosystems and species in as undisturbed a state as possible
- to maintain genetic resources in a dynamic and evolutionary state
- to maintain established ecological processes
- to safeguard structural landscape features or rock exposures
- to secure examples of the natural environment for scientific studies, environmental monitoring and education, including baseline areas from which all avoidable access is excluded
- to minimise disturbance by careful planning and execution of research and other approved activities, and
- to limit public access.

Guidance for Selection
- The area should be large enough to ensure the integrity of its ecosystems and to accomplish the management objectives for which it is protected.
- The area should be significantly free of direct human intervention and capable of remaining so.
- The conservation of the area's biodiversity should be achievable through protection and not require substantial active management or habitat manipulation (c.f. Category IV).

Organizational Responsibility
Ownership and control should be by the national or other level of government, acting through a professionally qualified agency, or by a private foundation, university or institution which has an established research or conservation function, or by owners working in cooperation with any of the foregoing government or private institutions. Adequate safeguard and controls relating to long-term protection should be secured before designation. International agreements over areas subject to disputed national sovereignty can provide exceptions (e.g. Antarctica).

Equivalent Category in 1978 System
Scientific Reserve / Strict Nature Reserve

CATEGORY Ib Wilderness Area: protected area managed mainly for wilderness protection

Definition
Large area of unmodified or slightly modified land, and/or sea, retaining its natural character and influence, without permanent or significant habitation, which is protected and managed so as to preserve its natural condition.

Objectives of Management
- to ensure that future generations have the opportunity to experience understanding and enjoyment of areas that have been largely undisturbed by human action over a long period of time;
- to maintain the essential natural attributes and qualities of the environment over the long term;
- to provide for public access at levels and of a type which will serve best the physical and spiritual well-being of visitors and maintain the wilderness qualities of the area for present and future generations; and
- to enable indigenous human communities living at low density and in balance with the available resources to maintain their life style.

Guidance for Selection
- The area should possess high natural quality, be governed primarily by the forces of nature, with human disturbance substantially absent and be likely to continue to display those attributes if managed as proposed.
- The area should contain significant ecological, geological, physiogeographic, or other features of scientific, educational, scenic or historic value.
- The area should offer outstanding opportunities for solitude, enjoyed once the area has been reached, by simple, quiet, non-polluting and non-intrusive means of travel (i.e. non-motorised).
- The area should be of sufficient size to make practical such preservation and use.

Organizational Responsibility
As for Sub-Category Ia.

Equivalent Category in 1978 System
This sub-category did not appear in the 1978 system, but has been introduced following the IUCN General Assembly Resolution (16/34) on Protection of Wilderness Resources and Values, adopted at the 1984 General Assembly in Madrid, Spain.

CATEGORY II National Park: protected area managed mainly for ecosystem protection and recreation

Definition
Natural area of land and/or sea, designated to (a) protect the ecological integrity of one or more ecosystems for present and future generations, (b) exclude exploitation or occupation inimical to the purposes of designation of the area and (c) provide a foundation for spiritual, scientific, educational, recreational and visitor opportunities, all of which must be environmentally and culturally compatible.

Objectives of Management

- to protect natural and scenic areas of national and international significance for spiritual, scientific, educational, recreational or tourist purposes;
- to perpetual, in as natural a state as possible, representative examples of physiographic regions, biotic communities, genetic resources, and species, to provide ecological stability and diversity;
- to manage visitor use for inspirational, educational, cultural and recreational purposes at a level which will maintain the area in a natural or near natural state;
- to eliminate and thereafter prevent exploitation or occupation inimical to the purposes of designation;
- to maintain respect for the ecological, geomorphologic, sacred or aesthetic attributes which warranted designation; and
- to take into account the needs of indigenous people, including subsistence resource use, in so far as these will not adversely affect the other objectives of management.

Guidance for Selection

- The area should contain a representative sample of major natural regions, features or scenery, where plant and animal species, habitats and geomorphological sites are of special spiritual, scientific, educational, recreational and tourist significance.
- The area should be large enough to contain one or more entire ecosystems not materially altered by current human occupation or exploitation.

Organizational Responsibility

Ownership and management should normally be by the highest competent authority of the nation having jurisdiction over it. However, they may also be vested in another level of government, council of indigenous people, foundation or other legally established body which has dedicated the area to long-term conservation.

Equivalent Category in 1978 System

National Park

CATEGORY III Natural Monument: protected area managed mainly for conservation of specific natural features

Definition

Area containing one, or more, specific natural or natural/cultural feature which is of outstanding or unique value because of its inherent rarity, representative or aesthetic qualities or cultural significance.

Objectives of Management

- to protect or preserve in perpetuity specific outstanding natural features because of their natural significance, unique or representational quality, and/or spiritual connotations;
- to an extent consistent with the foregoing objective, to provide opportunities for research, education,
- interpretation and public appreciation;
- to eliminate and thereafter prevent exploitation or occupation inimical to the purpose of designation; and

- to deliver to any resident population such benefits as are consistent with the other objectives of management.

Guidance for Selection
- The area should contain one or more features of outstanding significance (appropriate natural features include spectacular waterfalls, caves, craters, fossil beds, sand dunes and marine features, along with unique or representative fauna and flora; associated cultural features might include cave dwellings, cliff-top forts, archaeological sites, or natural sites which have heritage significance to indigenous peoples).
- The area should be large enough to protect the integrity of the feature and its immediately related surroundings.

Organizational Responsibility
Ownership and management should be by the national government or, with appropriate safeguards and controls, by another level of government, council of indigenous people, non-profit trust, corporation or, exceptionally, by a private body, provided the long-term protection of the inherent character of the area is assured before designation.

Equivalent Category in 1978 System
Natural Monument / Natural Landmark

CATEGORY IV Habitat/Species Management Area: protected area managed mainly for conservation through management intervention

Definition
Area of land and/or sea subject to active intervention for management purposes so as to ensure the maintenance of habitats and/or to meet the requirements of specific species.

Objectives of Management
- to secure and maintain the habitat conditions necessary to protect significant species, Levels of species, biotic communities or physical features of the environment where these require specific human manipulation for optimum management;
- to facilitate scientific research and environmental monitoring as primary activities associated with sustainable resource management;
- to develop limited areas for public education and appreciation of the characteristics of the habitats concerned and of the work of wildlife management;
- to eliminate and thereafter prevent exploitation or occupation inimical to the purposes of designation; and
- to deliver such benefits to people living within the designated area as are consistent with the other objectives of management.

Guidance for Selection
- The area should play an important role in the protection of nature and the survival of species, (incorporating, as appropriate, breeding areas, wetlands, coral reefs, estuaries, grasslands, forests or spawning areas, including marine feeding beds).
- The area should be one where the protection of the habitat is essential to the well-being of nationally or locally-important flora, or to resident or migratory fauna.

- Conservation of these habitats and species should depend upon active intervention by the management authority, if necessary through habitat manipulation (c.f. Category Ia).
- The size of the area should depend on the habitat requirements of the species to be protected and may range from relatively small to very extensive.

Organizational Responsibility
Ownership and management should be by the national government or, with appropriate safeguards and controls, by another level of government, non-profit trust, corporation, private Level or individual.

Equivalent Category in 1978 System
Nature Conservation Reserve / Managed Nature Reserve / Wildlife Sanctuary

CATEGORY V Protected Landscape/Seascape: protected area managed mainly for landscape/seascape conservation and recreation

Definition
Area of land, with coast and 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.

Objectives of Management
- to maintain the harmonious interaction of nature and culture through the protection of landscape and/or seascape and the continuation of traditional land uses, building practices and social and cultural manifestations;
- to support lifestyles and economic activities which are in harmony with nature and the preservation of the social and cultural fabric of the communities concerned;
- to maintain the diversity of landscape and habitat, and of associated species and ecosystems;
- to eliminate where necessary, and thereafter prevent, land uses and activities which are inappropriate in scale and/or character;
- to provide opportunities for public enjoyment through recreation and tourism appropriate in type and scale to the essential qualities of the areas;
- to encourage scientific and educational activities which will contribute to the long term well-being of resident populations and to the development of public support for the environmental protection of such areas; and
- to bring benefits to, and to contribute to the welfare of, the local community through the provision of natural products (such as forest and fisheries products) and services (such as clean water or income derived from sustainable forms of tourism).

Guidance for Selection
- The area should possess a landscape and/or coastal and island seascape of high scenic quality, with diverse associated habitats, flora and fauna along with manifestations of unique or traditional land-use patterns and social organisations as evidenced in human settlements and local customs, livelihoods, and beliefs.
- The area should provide opportunities for public enjoyment through recreation and tourism within its normal lifestyle and economic activities.

Organizational Responsibility
The area may be owned by a public authority, but is more likely to comprise a mosaic of private and public ownerships operating a variety of management regimes. These regimes should be subject to a degree of planning or other control and supported, where appropriate, by public funding and other incentives, to ensure that the quality of the landscape/seascape and the relevant local customs and beliefs arc maintained in the long term.

Equivalent Category in 1978 System
Protected Landscape

CATEGORY VI Managed Resource Protected Area: protected area managed mainly for the sustainable use of natural ecosystems

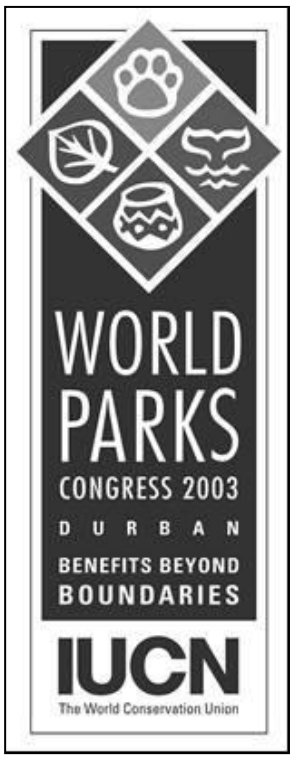
Definition
Area containing predominantly unmodified natural systems, managed to ensure long term protection and maintenance of biological diversity, while providing at the same time a sustainable flow of natural products and services to meet community needs.

Objectives of Management
- to protect and maintain the biological diversity and other natural values of the area in the long term;
- to promote sound management practices for sustainable production purposes;
- to protect the natural resource base from being alienated for other land-use purposes that would be detrimental to the area's biological diversity; and
- to contribute to regional and national development.

Guidance for Selection
- The area should be at least two-thirds in a natural condition, although it may also contain limited areas of modified ecosystems; large commercial plantations would *not* be appropriate for inclusion,
- The area should be large enough to absorb sustainable resource uses without detriment to its overall long-term natural values.

Organizational Responsibility
Management should be undertaken by public bodies with a unambiguous remit for conservation, and carried out in partnership with the local community; or management may be provided through local custom supported and advised by governmental or non-governmental agencies. Ownership may be by the national or other level of government, the community, private individuals, or a combination of these.

Equivalent Category in 1978 System
This category does not correspond directly with any of those in the 1978 system, although it is likely to include some areas previously classified as ‘Resource Reserves’, ‘Natural Biotic Areas/Anthropological Reserves’ and ‘Multiple Use Management Areas / Managed Resource Areas’.



Appendix 2: World Parks Congress: Recommendation 19: IUCN Protected Area Management Categories

Recommendation 17 of the 4th WPC held in Caracas, Venezuela, February 1992 calls for a system of six categories of protected areas based upon management objectives.

Resolution number 19.4 of the IUCN General Assembly in Buenos Aires (January 1994) endorses the system developed at Caracas and urges all governments to consider the relevance of the categories system to national legislation.

Publication of the *Guidelines for Protected Area Management Categories* by IUCN in 1994 provides advice on the new system agreed to at Buenos Aires. Also, the results of the research work (*Speaking a Common Language*) undertaken in preparation for the 5th World Parks Congress on the impact of the 1994 categories system, provide insights.

Finally, the new ways in which the category system is now being used – none of which was clearly envisaged in 1994 – serve to raise the importance of the system, for example:

1. In determining appropriate activities in protected areas (e.g., in respect of mining and protected areas);
2. In establishing relevant criteria to assess management effectiveness;
3. In advocacy in relation to protected areas;
4. As the basis for national protected area legislation and policy, and international agreements; and
5. As a tool in bioregional planning.

Therefore, PARTICIPANTS in the Stream on Management Effectiveness: Maintaining protected areas for now and the future at the Vth World Parks Congress, in Durban, South Africa (8-17 September 2003):

1. DECLARE that the purpose of the IUCN protected area management categories system is to provide an internationally-recognized conceptual and practical framework for planning, management and monitoring of protected areas;

2. REAFFIRM that in the application of the management categories IUCN's definition of a protected area ("*an area of land and/or sea especially dedicated to the protection and maintenance of biological diversity and of natural and associated cultural resources and managed through legal or other effective means*") must always be met as the overarching criterion;

3. REAFFIRM the value to conservation of the 1994 system of protected area management categories, and in particular that the six category, objectives-based approach should remain the essential foundation for the system;

4. REAFFIRM that the integrity of the protected area categories system is the responsibility of IUCN, and that it should reinforce its efforts, through its membership as well as through WCPA and other commissions, to promote the understanding of the full range of IUCN categories at national and international levels;

5. ADVISE, however, that the new uses of the system require that IUCN, working in collaboration with partner organisations, urgently produce, through an open, participatory process, a revised, up-dated edition of the 1994 guidelines, which:

a. Builds on the existing objectives set out for each category, including by improved summary definitions of the categories;
b. Includes a set of criteria and principles which should underpin the categories system and its application;
c. Explains how the categories relate to ecological networks and wider regional planning;
d. Considers removing generic names of protected areas from the category system, as these may have different meanings in different countries, and using only management objectives and numbers for each category;
e. Redesigns the “matrix of management objectives and IUCN protected area management categories” in the 1994 edition, so as to relate better to current experience in protected areas;
f. Gives more emphasis to marine and freshwater protected areas;
g. Gives more consideration to the linkage between protected areas and sustainable livelihoods;
h. Gives greater recognition of cultural and spiritual values, so that the full range of special qualities of each protected area are fully recognized;
i. Provides guidance on the inclusion, within the system, of private protected areas, and of those managed by local and indigenous communities;
j. Enables protected areas to have more than one category when zones within them have been legally defined for different management objectives;
k. Suggests how protected areas, which are assigned to their category by primary management objectives, can also be described by reference to the organisation responsible for their governance, the effectiveness of their management and the degree to which they retain their naturalness;
l. Clarifies the recommended process by which categories are assigned to protected areas; and
m. Makes these revised guidelines available in IUCN’s official languages and also in other languages as permitted by available resources;

6. ADVISE further that IUCN, in collaboration with partner organisations, urgently invest in awareness raising and capacity building about the use of the categories system, based upon the foregoing and working with partners such as UNEP/World Conservation Monitoring Centre, through training, case studies and additional published guidance (linked to the updated 1994 guidelines);

7. RECOMMEND that in such awareness raising and capacity building, priority should be given to:

a. Advocating an open, inclusive and transparent procedure for assignment of protected areas to categories for application at the national level, including an IUCN review procedure in relation to reporting;
b. Providing supplementary guidance on Category VI protected areas;
c. Providing supplementary guidance on the application of the categories in the marine and freshwater environments; and
d. Promoting the use of the categories for protected areas in forest, marine and freshwater environments;

8. URGE IUCN to develop a monitoring and research programme around the use of the categories, including the legal implications of using categories in legislation, and the implications of the categories system for indigenous and community rights;

9. CONSIDER that the foregoing would be aided by the creation of a task force on the protected area management categories within the WCPA Management Effectiveness theme;

10. URGE IUCN to work with parties to the Convention on Biological Diversity, in preparation for, and during the CBD/COP7, so as to secure:

a. Inter-governmental recognition of the IUCN protected area management categories system as the international method for categorizing protected areas; and
b. Agreement to use the system as a basis for national data collection and reporting to the CBD Secretariat on protected areas;

11. Further URGE IUCN to work with the parties and Scientific and Technical Review Panel of the Ramsar Convention on Wetlands to promote application of the categories to the global network of Wetlands of International Importance;

12. CALL on all governments to recognise the importance of the decisions that they take on category assignment, made at the request of IUCN and UNEP/WCMC, and to undertake this exercise in a timely manner through open, inclusive, and transparent procedures;

13. RECOMMEND that UNEP/WCMC reviews the format used in the UN List of protected areas to depict clearly all protected area categories and associated information; and

14. RECOMMEND that IUCN's Inter-sessional Programme Framework for 2005-2008 accommodate a programme of work to further develop and promote the IUCN protected area categories system, which will be considered by IUCN's members at the 3rd World Conservation Congress (November 2004).

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