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Company reserves

**Integrating biological reserves
owned and managed by commercial
companies into the global protected
areas network – a review of options**



A white paper for WWF

Sue Stolton and Nigel Dudley

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Front cover: private protected area in Bamburi Quarry, Mombassa, owned by Lafarge

Summary

This paper looks at the options for developing company protected areas, current initiatives and implications and gives recommendations for future developments. It concludes that whilst there are clear incentives for companies in the establishment and management of areas for protection (good press, financial gain, and environmental services), formalising these activities into the global network of protected areas would have several important benefits for the private sector:

- ✓ Gaining formal recognition from governments and conservation organisations (given increasing interest from the conservation community on private reserves)
- ✓ Demonstrating best practice and commitment to biodiversity conservation (particularly where connected to a certification scheme such as Forest Stewardship Council (FSC) or Marine Stewardship Council (MSC) or application of an High Conservation Value Area (HCVA) process)
- ✓ Improving the image of the company (Good press)
- ✓ Facilitating negotiations with authorities on trade-offs (e.g. to offset land conversion elsewhere) as part of an HCVA process.

Background

IUCN defines a 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.* A key clarification will be presented to the 2008 World Conservation Congress: “many sites ... can have other goals as well, at the same level, such as cultural or spiritual, but *in the case of conflict nature conservation has to be the priority*”.

IUCN identifies six categories of protected area depending on management objective:

- ✓ Ia: *Strict nature reserve/wilderness: for science or wilderness protection*
- ✓ Ib: *Wilderness area: for wilderness protection*
- ✓ II: *National park: for ecosystem protection and recreation.*
- ✓ III: *Natural monument: for conservation of specific natural features*
- ✓ IV: *Habitat/Species Area: for conservation through management intervention*
- ✓ V: *Protected Landscape/Seascape: for landscape conservation or recreation*
- ✓ VI: *Managed Resource Protected Area: for the sustainable use of natural resources*

And also four different governance approaches:

- ✓ State governance (national, local and sometimes ceded to another body)
- ✓ Co-management (shared governance by many stakeholders)
- ✓ Private governance (including by companies)
- ✓ Community conserved areas (community governance)

The report discusses implications of all of these for company protected areas.

The role of private companies in protecting land is recognised in the Convention on Biological Diversity's *Programme of Work on Protected Areas* and by the IUCN World Commission on Protected Areas. Company reserves can gain “official” recognition through being listed on the World Database on Protected Areas and the *UN List of Protected Areas*, although this seldom happens. A WCPA task force on IUCN categories is revising guidelines to the categories and finessing their interpretation: this is a good time to ensure that company reserves are more fully reflected in the future.

Why is now a good time for the conservation community to promote the development of company reserves?

There are a number of reasons why companies might want to consider the issue of company reserves at the present:

- ✓ The CBD *Programme of Work on Protected Areas* is setting a new urgency on completing protected area networks in many countries
- ✓ IUCN is currently revising its guidance defining protected areas and their management categories, and has developed guidance on governance types
- ✓ IUCN has a special task force looking at protected areas and private reserves and is already acknowledged that this is an important area

The World Conservation Congress in 2008 will be an ideal opportunity to launch some initiative with respect to company reserves.

What are the interests of and benefits for companies in developing and managing protected areas?

Companies are already involved in active protection of landscapes. Although no quantitative review has taken place, it seems that many company reserves are in forests (boreal, northern temperate and tropical moist forest), prairie and savannah, small wetlands and in former industrial sites such as quarries. We distinguish four main types and give examples of each:

- ✓ Sale of land to conservation organisations or similar
- ✓ Contributing land for biodiversity conservation and handing over management (e.g. conservation easements, covenants, donation etc)
- ✓ Owning and managing land for biodiversity conservation
- ✓ Managers of land for biodiversity conservation (e.g. tourism operators in Africa or for other purposes but with some land set aside for conservation)

There are a range of incentives (again examples are given for each):

- ✓ Good press (or responding to bad press!)
- ✓ Pre-condition (e.g. part of certification scheme)
- ✓ Trade-offs (e.g. to offset land conversion elsewhere)
- ✓ Financial gain (e.g. tax and profit - access to grants and commercial activities)
- ✓ Environmental services
- ✓ Direct interest in biodiversity conservation

Mechanism and challenges to recognising company-owned protected areas – the need for active partnerships

Five main issues emerge:

- ✓ Mechanisms for encouraging company reserves
- ✓ Integrating company protected areas into national protected area networks
- ✓ Recording on the World Database on Protected Areas and the UN List of Protected Areas
- ✓ Assignment of IUCN protected area management categories
- ✓ Providing guarantees of permanence

These are discussed and suggestions made for further work needed.

How does a company reserve become recognised as a protected area?

The report suggests a draft list of the various stages needed for companies to develop a “company protected area”:

- ✓ Deciding if a protected area really is the most effective strategy
- ✓ Considering the process of protection
- ✓ Identification of the values of the proposed protected area including issues relating to biodiversity, land tenure and attitudes of local communities:
- ✓ Identification of partners
- ✓ Models of protection ranging from full protection through various forms of sympathetic management to restoration with links to IUCN categories
- ✓ Models of governance including company ownership, joint management and ceding management to other institutions
- ✓ Determining management objectives
- ✓ Recording on the WDPA

Next steps

The paper finishes with some recommendations on:

Implementation: it is clear that there is a wide range of quality in terms of company involvement in protected areas – some excellent example exist but there are also cases where setting aside a reserve is little more than a publicity exercise. If WWF is to get involved in promoting company protected areas it should do so in the context of best practice and some work is needed to help develop models and guidance. Some suggestions include:

- ✓ **Best practice and Guidance** – collecting examples and case studies of best practice in company-run protected areas and drawing together lessons learned together with other relevant material (from IUCN, CBD etc) into a company-specific guide for protected areas management, possibly through a workshop setting and associated publication. **Partners:** WWF, IUCN WCPA Private protected areas task force, FSC, MSC and selected companies
- ✓ **Planning** – encouraging company protected areas to be established in optimum locations through involvement in wider planning processes such as HCVA and gap analysis. Bringing partner companies into planning exercises in some key network initiative regions would be a good way to test out the role of company reserves in wider ecoregional approaches. **Partners:** WWF and selected companies
- ✓ **Monitoring** – encouraging companies with protected areas to undertake regular assessments of effectiveness, in line with CBD commitments, at least through filling in the WWF/World Bank Management Effectiveness Tracking Tool. **Partners:** WWF, World Bank, The Nature Conservancy, FSC, MSC
- ✓ **Permanence** – ensuring that company protected areas have the same guarantees of permanence as other protected areas. It is clear that further work is needed on this and WWF could help by bringing partner companies into the discussions that will be taking place over the coming months. **Partners:** IUCN WCPA task forces on IUCN categories and private protected areas

Recognition: although company protected areas can already in theory be listed on the WDPA this seldom happens in practice and there is a lack of clarity about the process for listing and for assignment of categories (this affects more than company protected areas). Some specific guidance aimed at companies is required:

- ✓ **Listing on World Database on Protected Areas** – providing specific guidance and agreed protocols for listing company protected areas on the WDPA. **Partners:** UNEP World Conservation Monitoring Centre, WCPA

Promotion: there is an opportunity to add considerably to the world's protected area network through company protected areas, but this will only happen with a certain amount of advocacy and encouragement. Some of the actions under the implementation section (e.g. the publication and workshop) will in themselves encourage development. The following suggestions are early additional ideas about how WWF might engage in this process:

- ✓ **Setting a target for company protected areas** – identifying some target (area, number of protected areas, number of companies etc) for the private sector to contribute to the CBD Programme of Work on Protected Areas. **Partners:** CBD, business bodies (e.g. WBCSD)
- ✓ **Publishing a booklet on how companies could contribute to the CBD POW:** drawing together some of the material collected in the actions above along with an analysis of the possibilities. (This might for instance be a publication in the CBD technical series along with the case studies.) **Partners:** companies, CBD, IUCN
- ✓ **Collecting information on company protected areas:** inviting companies to submit information about reserves that they manage, thus building up a database (that could be loaded onto the IUCN site, or PALNet, or similar). **Partners:** companies, IUCN
- ✓ **Creating an enabling environment:** working with key countries to ensure that national legislation or policy does not provide perverse incentives to companies setting up protected areas. **Partners:** WWF regional offices and selected companies

Part 1: Protected areas

Background

*“Protected areas are the cornerstones of national and international conservation strategies. They act as refuges for species and ecological processes that cannot survive in intensely managed landscapes and seascapes. They provide space for natural evolution and future ecological restoration. People – nearby and further afield – benefit from the genetic potential of wild species, the environmental services of natural ecosystems, recreational opportunities and the refuge given to traditional and vulnerable societies. Most people believe that we have an ethical obligation to prevent species loss due to our own actions. Flagship protected areas are as important to a nation’s heritage as, say, Notre Dame Cathedral or the Taj Mahal”.*¹

Although “protected areas” have existed for millennia, the modern concept is an invention and phenomenon of the twentieth century. The year 1900 dawned with a handful of national parks set up around the world, mainly in Africa and the United States, but over the course of the next hundred years these multiplied rapidly until protected areas cover around 10 per cent of the world’s land surface and a far smaller amount of coastal regions and oceans. This is almost certainly the largest and most dramatic conscious shift in management in the history of humanity. Protected areas are still being set up, in part because much of the 10 per cent is in areas that are politically easy to set aside but not of primary interest for biodiversity (such as huge desert areas, ice-caps, tundra areas etc) and there are still significant gaps in more productive habitats such as forests, grasslands, savannahs and freshwaters. The seas and oceans are badly under-represented and current problems such as the rapid depletion of commercial fisheries stocks is bringing this higher on the international agenda. Figures are approximate and management also differs markedly between protected areas so that by no means all are set aside strictly for conservation.

The term “protected area” covers a broad range of land and water management including national parks, nature reserves and wilderness areas. But these general terms are loosely defined and may be interpreted very differently around the world. Some “national parks” for instance are formal city gardens that would certainly not be regarded as areas of importance for nature conservation, whatever their other values. Nor does all land or water managed in ways that are compatible with the survival of wild nature constitute a protected area: for example land set aside for military training can have high nature values but is not generally regarded as a protected area.

“IUCN ... has agreed a definition of a protected area and six different management categories describing how different protected areas are managed”

To provide some clarity, IUCN The World Conservation Union has agreed a definition of a protected area and six different management categories describing how different protected areas are managed; together these form what might be described as the philosophical framework and also the boundaries of what “counts” as a protected area². ***The IUCN definition and categories are currently under review*** and new guidelines will be presented at the 2008 World Conservation Congress (see section on IUCN categories task force below). All the signs so far is that there will be no major changes in terms of either definition or the number and broad interpretation of the management categories, but there will be some finessing in terms of interpretation and considerably more clarity and guidance than is the case at present. In the section below the current discussions within IUCN are summarised to provide as current a picture of what does or does not constitute a protected area as possible.

Definitions of a protected area

IUCN's definition of a protected area is: *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.*

The wording may change slightly in 2008 although the meaning will stay essentially the same. The emphasis is likely to broaden from "biodiversity" to "nature conservation" – the current definition does not address geodiversity yet a significant number of protected areas have been established to protect important geological sites.

Importantly, current discussions within IUCN have tightened the *interpretation* of the definition. Since 1994 there has been discussion about whether biodiversity conservation always has primacy – i.e. is the first objective of management – or whether it can sometimes be secondary to "natural and associated cultural resources". In effect two interpretations of the definition were running side by side in IUCN and this caused confusion both inside and outside the organisation.

Wording suggested to IUCN and supported by the very large majority of people at a recent consultative meeting in Spain adds an important principle to the definition:

"...only those sites where the main goal or outcome is conserving nature should be considered protected areas... this would include many sites which can have other goals as well, at the same level, such as cultural or spiritual, but in the case of conflict nature conservation has to be the priority"

"For IUCN, only those sites where the main goal or outcome is conserving nature should be considered protected areas. Note that this would include many sites which can have other goals as well, at the same level, such as cultural or spiritual, but ***in the case of conflict nature conservation has to be the priority***" (our emphasis).³

This marks a major clarification. The 1994 *Guidelines for Protected Area Management Categories* suggest that other values can be more important; the "matrix of management objectives" states: "wilderness protection" is a *primary* objective of Category Ib and "preservation of species and genetic diversity" is a *secondary* objective. Similarly, "maintenance of traditional/cultural attributes" is a *primary* objective in Category V and "preservation of species and genetic diversity" is a *secondary* objective⁴. But many users have assumed that biodiversity conservation (or a rough equivalent such as wildlife protection) is always a primary objective of protected areas. In effect, two interpretations have operated in tandem. If IUCN carries this through with its member states, the clarification would mean that some areas currently defined as "protected areas" would no longer meet the definition: this would apply mainly to some of the large landscape areas where biodiversity plays a secondary role to other values such as recreation, conservation of landform and commercial activities.

The principle builds on a statement from IUCN's World Commission on Protected Areas in 1998 which sought to strengthen the interpretation with respect to major industrial projects: "WCPA believes that large-scale commercial activities such as clear-cutting, plantation establishment and other major infrastructure projects are not compatible with any protected area designations".⁵ Further strength was provided by a recommendation agreed at the 2000 World Conservation Congress in Amman, Jordan, which suggested that governments should ban mining in Category I-IV protected areas (see below); this move has been strongly opposed by mining companies.

Confusingly, the **Convention on Biological Diversity** (CBD) has a slightly different definition of a protected area:

The CBD's definition is: *A geographically defined area which is designated or regulated and managed to achieve specific conservation objectives*

IUCN and the CBD tacitly agree that the two definitions are compatible but this is a politically convenient and has never been tested. Indeed the CBD definition has not received the amount of effort on interpretation and many terms have not been defined.

One clear difference is that the IUCN definition and associated categories are distinguished by management objective and make no comment on management effectiveness; the CBD definition on the other hand does imply by the phrase "regulated and managed" that management effectiveness is included. There is now strong pressure from IUCN members to reflect management effectiveness in the IUCN definition and categories as well, although how this will be done still needs to be addressed.

IUCN management categories

"IUCN defines a series of six different categories of protected area by management objective"

Protected areas differ enormously in their size, type and management approaches: a hitherto almost untouched area of natural forest in southern Chile will not and should not be managed in the same way as an abandoned gravel pit reserve somewhere in western Europe, although both play a legitimate role in biodiversity conservation. IUCN defines a series of six different categories of protected area by management objectives. These are listed below, with specific notes added regarding the IUCN position regarding their relationship with commercial involvement.

- ✓ **Category Ia: *Strict nature reserve/wilderness protection area managed mainly for science or wilderness protection*** – an 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. **Commercial involvement:** no commercial enterprises should be involved here, with the possible exception of collection of biological material (e.g. plant extracts that could have commercial medicinal value) under strictly controlled conditions – even visitation is usually strictly controlled in this category
- ✓ **Category Ib: *Wilderness area: protected area managed mainly for wilderness protection*** – large area of unmodified or slightly modified land and/or sea, retaining its natural characteristics and influence, without permanent or significant habitation, which is protected and managed to preserve its natural condition. **Commercial involvement:** possibly some nature-based tourism such as wilderness trekking, canoe trips etc. No commercial activity such as permanent tourist lodges or camps, extractive industries or land management; part of the value of the wilderness area is that it does not have such activities.
- ✓ **Category II: *National park: 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. **Commercial involvement:** Category II protected areas often have high value in terms of tourism and ecotourism and many include permanent infrastructure to support this. IUCN opposes major extractive or similar commercial industries within Category II (although there are certainly many cases where these occur). In some cases permitted activities relating to indigenous or local peoples (such as reindeer herding) will have a commercial aspect.

- ✓ **Category III: *Natural monument: protected area managed mainly for conservation of specific natural features*** – area containing specific natural or natural/cultural feature(s) of outstanding or unique value because of their inherent rarity, representativeness or aesthetic qualities or cultural significance. **Commercial involvement:** usually only minor; Category III protected areas tend to be quite small and established to protect particular features without room for any commercial activity except tourism (which can be considerable in the case of some such reserves). In the case (a minority) of larger Category III protected areas there might be permanent infrastructure relating to tourism.
- ✓ **Category IV: *Habitat/Species Management Area: protected area managed mainly for conservation through management intervention*** – area of land and/or sea subject to active intervention for management purposes so as to ensure the maintenance of habitats to meet the requirements of specific species. This is a category where the definition is likely to change slightly after 2008, taking the emphasis away from management intervention and focusing on protection of particular species and habitat fragments⁶. This implies that management intervention will often be necessary (because the area will be less than a fully functioning, sustainable ecosystem) but does not make it a defining factor. **Commercial involvement:** this Category is included under the recommendation to extractive industries although there will be cases where this is indistinct: for instance some former gravel pits or quarries become Category IV protected areas over time. Some small-scale commercial activities, such as coppicing, management for fruit and nut trees and fishing, may fit into the definition.
- ✓ **Category V: *Protected Landscape/Seascape: protected area managed mainly for landscape/seascape conservation or recreation*** – area of land, with coast or sea as appropriate, where the interaction of people and nature over time has produced an area of distinct character with significant aesthetic, ecological and/or cultural value and high biological diversity. Safeguarding the integrity of this traditional interaction is vital to the protection, maintenance and evolution of such an area. **Commercial involvement:** many commercial activities take place inside Category V areas but at a landscape scale the net combination should be effective nature conservation. Category V has sometimes been applied loosely, and attracted strong from parts of the conservation community as a result⁷; it is likely in the future that this approach will be tightened by IUCN. “Classic” commercial activities for Category V might include cork oak forest management in Mediterranean countries, sustainable forest management, organic agriculture etc. There is a specific Category V task force in WCPA, which is producing a series of reports on the role of Category V including one planned specifically on links with biodiversity conservation.

- ✓ **Category VI: *Managed Resource Protected Area: protected area managed mainly for the sustainable use of natural resources*** – 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. **Commercial involvement:** this definition is currently also the subject of a specific WCPA task force and is the approach most likely to be further strengthened and interpreted over the next couple of years. At the moment it is quite strict (stricter than Category V for instance) with respect to any large-scale commercial activity but this may change.

IUCN also defines a typology of governance types, including state governance, shared governance, private governance and community governance

Governance of protected areas

The IUCN categories are based on the objectives of management but do not say anything about who does the managing. Although many countries assume that protected areas are all managed by the state, both the IUCN and CBD definitions are explicit in including other types of governance. IUCN has developed a typology of governance. This is generally being accepted and used but will be put up for formal adoption by IUCN members at the 2008 World Conservation Congress. The typology recognises four main governance models, each of which has various subsets⁸:

Type A: *Government Managed Protected Areas (state governance)*: a government body (such as a Ministry or Park Agency) holds the authority, responsibility and accountability for managing the protected area, determines its management objectives and often also owns the protected area's land, water and related resources. Sub-national and municipal government bodies can also be in charge. In some cases, the government retains full land ownership and/or control and oversight but delegates management to a para-statal organization, NGO, private operator or community. Companies could be involved here if for instance they were managing part of a state-owned forest concession as a protected area under a long-term lease.

Type B: *Co-Managed Protected Areas (shared governance)*: complex institutional mechanisms and processes that share management authority and responsibility among many entitled governmental and non-governmental actors. In weak forms, sometimes called "collaborative" management, decision-making authority and responsibility rest with one agency but this is required – by law or policy – to inform or consult other stakeholders. Stronger "collaborative" management has multi-stakeholder bodies developing proposals for regulation and management, submitted to a decision-making authority. In "joint" management, various actors sit on a management body with decision-making authority and responsibility. Co-management is usually needed in transboundary protected areas.⁹ Companies are increasingly involved in co-management arrangements (e.g. tourism companies but also sometimes other industries)

Type C: *Private Protected Areas (private governance)*: comprises protected areas under individual, cooperative, corporate for-profit, and corporate not-for-profit ownership. Examples are lands acquired by NGOs explicitly for conservation. Many individual landowners also pursue conservation objectives, including corporations. Utilitarian purposes, such as gaining revenue from ecotourism, hunting or the reduction of levies and taxes, are additional incentives. Authority for management rests with the owners, who determine the objective and remain in charge of decisions, subject only to applicable legislation. Some forms of accountability may be negotiated with the government in exchange for specific incentives (as in the case of Easements or Land Trusts).

Type D: Community Conserved Areas (community governance): “natural and modified ecosystems including significant biodiversity, ecological services and cultural values voluntarily conserved by indigenous, mobile and local communities through customary laws or other effective means”.¹⁰ Here authority and responsibility rest with communities through a variety of forms of ethnic governance or locally agreed organizations and rules, tailored to the specific context of application. Land and/or some resources may be collectively owned and managed, while other resources may be individually managed or managed on a clan-basis. Different communities may be in charge of the same territory at different times. The community’s accountability to the larger society is also usually limited, but it can be enhanced and made specific through negotiations, which at times result in co-management arrangements with other stakeholders (thus changing the governance type from D to B). External companies are unlikely to be directly involved in management of Community Conserved Areas.

The categories and governance types define different aspects of the protected area and any particular category can include any governance type and *vice versa*. Table 1 below shows a matrix where the different categories and governance types are shown together; those particular relevant to corporate areas are highlighted in grey.

Table 1. “The IUCN protected area matrix”: a classification system for protected areas comprising both management category and governance type

Governance types	A. Government managed protected areas			B. Co-managed protected areas			C. Private Protected Areas			D. Community Conserved Areas	
	Federal or national ministry or agency in charge	Sub-national ministry or agency in charge	Government-delegated management (e.g. to an NGO)	Trans-boundary management	Collaborative management (various forms of pluralist influence)	Joint management (pluralist management board)	Declared and run by individual land-owner	...by non-profit organizations (e.g. NGOs, universities, co-operatives)	...by for profit organizations (e.g. individual or corporate land-owners)	Declared and run by Indigenous Peoples	Declared and run by local communities (sedentary and mobile)
PA Categories											
I a– Strict Nature Reserve											
Ib- Wilderness Area											
II – National Park											
III – Natural Monument											
IV – Habitat/ Species Management											
V – Protected Landscape/ Seascape											
VI – Managed Resource Protected Area											

Thus IUCN explicitly recognises that companies can own land managed as a protected area; in theory this could be in any management category, although as discussed below some are more likely to occur than others. Such protected areas can and in a few cases are already recognised within the “official” global protected areas network. The IUCN WCPA has a task force looking explicitly at the role of private protected areas.

The CBD Programme of Work on Protected Areas

In 2004, the UN Convention on Biological Diversity agreed a wide-ranging and ambitious plan for completing an ecologically-representative global network of protected areas¹¹. This is by far the largest and most binding commitment that governments have ever made to biodiversity conservation through protected areas, with almost a hundred specific, time-limited actions running until 2015¹². While it is clear that not all countries are on track to meet all the deadlines, the CBD Programme of Work has provided a massive boost to protection around the world and also added important elements of science (for instance in the use of gap analysis to select protected areas¹³) and social values (such as the many new stipulations regarding protection of the rights of local and indigenous peoples¹⁴).

The *Programme of Work* (POW) refers specifically to the role that the private sector can play in developing protected areas and their role in the ecologically-representative global protected areas network. Some of the relevant paragraphs from the POW are in the box below.

Box: Relevant sections from the CBD *Programme of Work on Protected Areas*

2.1.2. Recognize and promote a broad set of protected area governance types related to their potential for achieving biodiversity conservation goals in accordance with the Convention, which may include areas conserved by indigenous and local communities and **private nature reserves. The promotion of these areas should be by legal and/or policy, financial and community mechanisms.**

3.3.2 Assess needs for **relevant technologies for protected area management** involving indigenous and local communities and stakeholders such as the, research institutions, non-Governmental organizations and **the private sector.**

4.3.6 Develop and consolidate working partnerships with appropriate organizations and institutions that have developed and maintained **monitoring systems and databases on protected areas**, in particular with the UNEP-WCMC and the IUCN World Commission on Protected Areas.

4.3.7 Explore establishment of a harmonized system and time schedule for reporting on sites designated under the Convention on Wetlands, the World Heritage Convention, and UNESCO MAB programme, and other regional systems, as appropriate, taking into account the ongoing work of UNEP-WCMC on harmonization of reporting and the IUCN protected area management category system for reporting purpose

Our emphasis throughout

The CBD POW is significant because it makes explicit what has for a long time been implicit with IUCN and its World Commission on Protected Areas; namely that private protected areas can be officially recognised as fully functional protected areas within the global system. So far the large majority of such areas are in the hands of non-profit organisations or increasingly also private individuals. However a significant and growing number are owned and/or managed by private, for-profit companies, although this aspect of ownership is generally less well explored.

Recognising protected areas

Official recognition for protected areas is becoming increasingly important from political and strategic perspectives. Commitments such as those made to the CBD, but also the Millennium Development Goals, regional commitments such as the European Community's Natura 2000 and national targets mean that countries are increasingly concerned to be able to record and verify the areas of land and water they have under protection.

Two separate issues are important:

- ✓ Whether an area set aside is “really” a protected area
- ✓ Whether it is being managed effectively

“The nearest that exists to official recognition of protected areas is the UN List of Protected Areas, published periodically by the United Nations Environment Programme in association with the UNEP World Conservation Monitoring Centre”

The nearest that exists to official recognition of protected areas is the *UN List of Protected Areas*, published periodically by the United Nations Environment Programme in association with the UNEP World Conservation Monitoring Centre (UNEP-WCMC). The *UN List* in turn draws from the World Database on Protected Areas (WDPA), maintained by UNEP-WCMC in collaboration with a consortium of NGOs (including WWF). These databases have grown rapidly as protected areas have expanded and it is clear that the current level of data accuracy is quite poor for some regions of the world¹⁵. The WDPA is currently undergoing a major reorganisation to address these issues. It has been suggested that in time IUCN might run a verification or certification system to ensure that an area really is protected and that the correct category has been assigned¹⁶. Some initial work has been done to suggest ways in which this might be attempted by WCPA in Europe and a certification of the category of Hohe Tauern National Park in Austria took place in September 2006.

The question of whether protected areas are being managed effectively is more complex. IUCN has defined the elements of effective management in a framework for assessment¹⁷ and WWF has been one of the organisations most closely involved in developing and testing methodologies for assessment. This is currently still separate from the debate about what is and is not a protected area. It is worth noting because companies have been amongst the loudest voices calling for management effectiveness to be taken into account when determining whether an area is truly protected and its management category (and implicitly governance type). The three are interlinked as demonstrated in Figure 1 below.

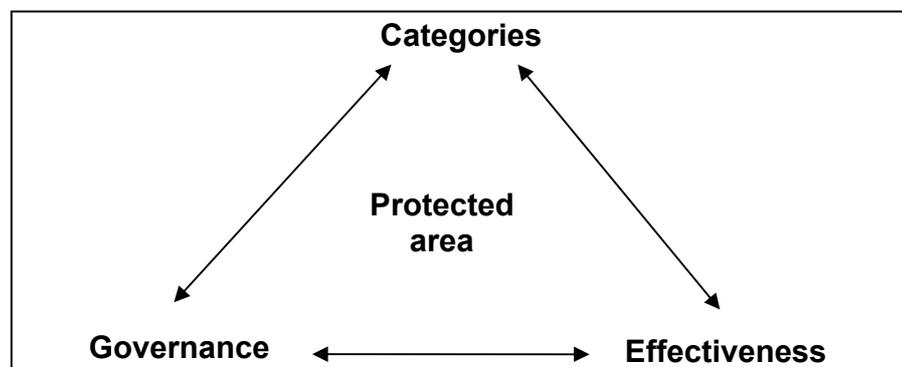


Figure 1: Relationship between category, governance type and effectiveness

WCPA task force on protected area categories

Ten years after the present version of the IUCN categories were agreed and adopted, IUCN carried out a review of their effectiveness in association with the University of Cardiff in Wales, published as *Speaking a Common Language*¹⁸. Following wide consultation and a resolution at the 2004 World Conservation Congress in Bangkok, IUCN was requested to revise the guidance to the categories drawing on the recommendation in the report and to establish a task force to carry out this work.

The task force has to date commissioned around 40 papers looking at different aspects of application of the categories, including one on private protected areas¹⁹, which explicitly separates out different private models:

Embedded in the private protected area type description ("C" in the typology above) are four ownership models:

Private protected areas exist in four ownership models: private, co-operative, non-governmental and corporate

- ✓ Individual (areas in which ownership is held by a single person or family)
- ✓ Co-operative (perhaps the rarest form; examples include the Ahuenco Conservation Community in Chile)
- ✓ Non-governmental Organization (private not-for-profit organizations operating to advance a specific mission and usually controlled by a board and specific regulations)
- ✓ Corporate (a for-profit company or group of people authorized to act as a single entity, usually controlled by an executive, an oversight board, and ultimately individual shareholders)

The fourth is the subject of the current paper. There is a clear recognition within IUCN and its World Commission on Protected Areas that greater attention needs to be paid to private protected areas than hitherto and that company protected areas form a legitimate subset of private protected areas.

The role of protected areas in conservation planning

Protected areas are an important element of most national and international conservation strategies. They are set aside to protect species and ecological processes that cannot survive in intensely managed landscapes and seascapes. Larger and more natural protected areas also provide space for evolution and future ecological restoration, both increasingly important under conditions of rapid climate change.

Today protected areas are increasingly being selected through more rigorous processes of identification, to ensure inclusion of the most valuable areas from a conservation perspective within protected area networks. Global analyses such as the Global 200²⁰ and identification of Key Biodiversity Areas²¹ pinpoint the most important places to start looking and techniques such as gap analysis²² help to refine the search. High Conservation Value Areas (HCVA) provide a wider analysis that includes social and cultural issues and has been used to identify important areas initially in forests²³ and latterly on a more general level. Designation as a protected area is one common way of addressing an HCVA and this could provide a valuable approach for companies with HCVAs on land that they manage or own.

Part 2: Company protected areas

The concept of companies owning and / or managing protected areas is not new and there are already many examples around the world. A glance through annual reports of many of the world's largest companies will produce plenty of case studies. However, these vary widely in their impact, the degree of commitment from the company and their security. At worst, such actions are little more than 'greenwash', such as when companies claim credit for simply selling unwanted land to conservation organisations at a healthy profit, whereas at the other extreme companies have collaborated with a wide range of stakeholders to make a long-term commitment to protecting land of the highest value. This section provides a guide to the various types of involvement, their role in conservation strategies and their relative importance.

Companies contribute land for protected areas by selling it, handing over management rights, managing land they own themselves and managing land that they lease...

For-profit company involvement in protected areas

Companies have a range of different options for engaging in active protection. For simplicity, we distinguish four main types:

- ✓ Sale of land to conservation organisations or similar
- ✓ Contributing land for biodiversity conservation and handing over management (e.g. conservation easements, covenants, donation etc)
- ✓ Owning and managing land for biodiversity conservation
- ✓ Managers of land for biodiversity conservation (e.g. tourism operators on group ranches in Africa or for other purposes but with some land set aside for conservation)

▪ Sale of land

At the simplest, companies can sell land that they own to conservation organisations. This is commonly claimed as a positive action for conservation; in fact it depends very much on how much the land is sold for, what the alternative uses might be and how the company engages in the process. Land sold for its full value to a conservation organisation is a straight commercial exchange and should not be listed as a contribution; on the other hand valuable land sold for less than the market price or less than the potential resources it contains is a genuine contribution; it is often difficult to make a judgement from published information.

- ✓ **International Paper** notes in its *Sustainability Update* that it has “*donated more than 81,000 ha and protected approximately 566,000 ha through fee sales and conservation*”²⁴. Although lands protected following sale by production companies can be important for conservation, protection through profitable sale is surely the most nominal contribution a company can make. The case of International Paper (IP) is illustrative. During the 20th century IP donated ecologically important, but possibly unproductive, areas for protection (e.g. in 1977 the company donated 6,000 ha to be incorporated into the 438,000 acres Okefenokee Swamp National Wildlife Refuge²⁵ and in 1981 donated 19,000 ha to the 44,920 ha Great Dismal Swamp National Wildlife Refuge²⁶). However more recently the company decided to sell all or most of its US forestlands and concentrate on the paper and packaging business. In the first quarter of 2006, IP sold about 90 per cent its US forest holdings, totalling nearly 2.3 million hectares. Some of the most ecologically important lands (totalling of 116,000 ha) were sold (for US\$383 million) under partnership agreements to conservation groups²⁷.

▪ **Contributing land for biodiversity conservation and handing over management**

In the US, and to a lesser extent in the Caribbean and Latin America, conservation easements have become a commonly-used conservation tool. Easements are a transfer of usage rights that creates a legally enforceable land preservation agreement between a landowner and partner organisation, which limits certain types of uses or development in perpetuity. In the United States, easements have protected millions of hectares of wildlife habitat²⁸, and have been central to conservation policies of organisations such as The Nature Conservancy (TNC). Easements are either voluntarily sold or donated and constitute legally binding agreements. The landowner who gives up 'development rights' continues to own and manage the land and may receive significant state and federal tax advantages for the conservation easement. Similar systems of land covenants occur, for example in Canada. Easements range from complete protection to various forms of sustainable management.

Easement examples:

- ✓ A conservation agreement between TNC and **Great Northern Paper** in Maine, known as the Katahdin Forest Project, is protecting forest land around Baxter State Park (IUCN Category II, 80,800 ha). In 2006 TNC transferred the total conservation easement agreed under the project, nearly 79,000 ha buffering Baxter State Park, to the Bureau of Parks and Land in the State of Maine with a stewardship endowment of half a million dollars to cover management²⁹.
- ✓ In 2001, Willamette Industries donated 190 ha of wetlands and adjacent uplands to TNC under a permanent conservation easement. The easement expanded TNC's existing Gearhart Bog preserve, which now makes up 240 ha. **Weyerhaeuser Inc.** subsequently bought Willamette Industries, and is now a major partner with the preserve. The Gearhart Bog Preserve features several rare plant communities and at just over 140 ha is the largest contiguous wetland of its kind remaining on the Oregon Coast³⁰.

▪ **Owning and managing land for biodiversity conservation**

Companies can also carry out conservation directly on land that they own. This may be a long-term commitment to setting up and managing protected areas, or a shorter term commitment to conservation as part of restoration. As an example of the latter case, the quarry company Lafarge aims to restore high biodiversity values to all suitable quarries that it operates, but eventually the land will be sold or passed on to other managers with the conservation values intact.

- ✓ **Veracel** is a joint venture between the Swedish-Finnish forest company **Stora Enso** and Brazilian-Norwegian company **Aracruz**. The companies' holdings in Brazil include the 6,000 ha forest reserve Veracruz Station (IUCN Category 1a), which is part of the Discovery Coast Atlantic Forest Reserves UNESCO World Heritage site, in the states of Bahia and Espírito Santo. The WH site consists of eight separate protected areas containing 112,000 ha of Atlantic forest and associated shrub (*restingas*)³¹. In total the Discovery Coast Atlantic Forest Reserves conserve almost 80 per cent of remaining Atlantic forest that remains in Brazil³². Veracruz Station, was declared under total legal protection by Resolution 240/1998, and is classified as a Private Natural Heritage Reserve. Veracel also states that it will set-aside a further 78,000 hectares of forest for the "preservation and recuperation" of the mata atlantica forest³³.

- ✓ In 1996, an extensive Old-Growth Forest (OGF) Protection Programme was implemented in Northern Finland. As a result of the multi-stakeholder process, 293,000 ha of forests were strictly protected; however forest in Lapland was excluded due to the existing high (i.e. over 40 per cent) protection. In 2003, **Metsähallitus**, the Finnish state forestry company, WWF and the Finnish Association for Nature Conservation started a dialogue process to evaluate the protection needs of an additional 360,000 ha in Northern Finland. In February 2006, WWF and Metsähallitus reached an agreement by which Metsähallitus protected a further 100,000 ha of which 55,000 ha is productive forest³⁴. Agreeing what should and should not be protected has been a protracted and time-consuming process but has resulted in large areas of old-growth forest being set aside for conservation.
- ✓ The Ramsar site, **Santuario de la Naturaleza Laguna Conchalí**, in Chile is owned by the copper mining company **Minera Los Pelambres**. The reserve is a brackish coastal lagoon representative of wetlands in central Chile, where the wildlife of the Atacama-Sechura Desert and Chilean Matorral ecoregions meet, and it is a key area for migratory birds along the central Chilean coast. When Los Pelambres purchased the site in 1997, the environmental permit associated with the facility indicated that the wetland area should be protected. However, the company realised that just fencing the area off to protect it from the cattle and dogs would not be sufficient for its conservation, the site was cleaned, fenced and a full restoration process began. The University of Chile carries out the site monitoring and management planning³⁵.
- ✓ The French quarrying company **Lafarge** has established nature reserves in several of its quarry holdings for example in **Hope Quarry** in Derbyshire, England. Perhaps the most famous of these is in **Bamburi**, near Mombassa in Kenya where the mining company has carried out extensive restoration on areas that have been heavily quarried for limestone. Exotic species are used to restore vegetation cover in what is initially bare rock and later native species are encouraged through planting and natural regeneration. The quarry operates a nature trail and education centre, aimed particularly at local populations, and including both wild and captive animals³⁶.

▪ **Not direct owner of land but managers for biodiversity conservation**

Many, probably most, major resource management companies lease more land than they own outright. For example, although there has been a trend to privatisation around the world, the majority of the global forest estate is still owned by national governments³⁷ so that most logging and forest management operations and many mining operations are inevitably under leases of varying lengths. Therefore it follows that many company reserves are managed on land that is not actually owned by the company. (The challenges that this poses in terms of company protected areas is addressed in Part 3.)

In popular tourist destinations agreements between local land owners and tourism companies often result in land being managed for conservation and related ecotourism activities (such as game viewing or trophy hunting). In Namibia, for example, over seven million ha of communal land is managed as communal conservancies, i.e. areas in which rural communities gain rights to use, manage and benefit from wildlife. In 2003 over US\$500,000, 46 per cent of conservancy income, was earned from joint ventures with private tourism companies³⁸.

- ✓ In January 2006 the Senepis-Buluhala Tiger Conservation Area in Indonesia was approved by the Indonesian Minister of Forestry. The peat swamp forest conservation area, close to the city of Dumai in Riau province, is specifically being conserved as habitat for the Sumatran tiger (*Panthera tigris sumatrana*). Land classified as 'Forest Zone' is controlled by the government who give forest companies concessions to manage the land. The majority (91,000 ha) of the conservation area is made up of land operated by a forestry company, **PT Diamond Raya Timber**. Diamond Raya is certified by both the Forest Management Certificate issued by Indonesian Ecolabelling Institute (LEI) and FSC-SGS Qualifor³⁹. 11,000 ha of the reserve is from the long established Peat Swamp Protected Forest (Kawasan Lindung Gambut) and a small contribution (3,850 ha), from an area protected under previous provincial spatial plans. These companies will maintain ownership of the land under their concession licences but, according to the Ministerial letter, will be responsible for supporting the mission and activities of the Senepis conservation area in the future. In early 2005 the 200,000 hectares of existing peat swamp forests in this region supported approximately 60 tigers, making it the seventh largest tiger population in Sumatra, and an important component of Indonesia's overall efforts to conserve its last tiger subspecies⁴⁰.
- ✓ In the Danum Valley of the Malaysian Borneo several large primary forest protected areas including the Maliau Basin and Imbak Canyon Conservation Areas, make up the large (>10,000 km²) forest concession operated by **Yayasan Sabah**. The bulk of the of the area is under a regime of natural forest management, but it also includes extensive timber and oil palm plantations, community forestry programmes, eco-tourism sites and two of the region's largest forest rehabilitation projects. Income from the Foundation's natural forest and plantation resource base is used to fund welfare, education and conservation initiatives in Sabah. Covering 43,800 hectares the Danum Valley Conservation Area is one of the largest, most important and best-protected expanses of pristine lowland forest remaining in south-east Asia⁴¹.

Incentives for companies to set up protected areas include good press, meeting certification conditions, trade-offs for land conversion elsewhere, accessing grants or commercial possibilities, for environmental services and because company officials are committed to biodiversity conservation.

Why should a company consider setting up a protected area?

Companies owning land are usually in the business of resource management or extraction of some kind. Their conservation activities have hitherto been aimed at reducing detrimental impacts from their everyday activities rather than taking on responsibility for land dedicated to nature conservation. To do so implies expense, development of new expertise and opportunity costs; possibly also direct costs in terms of land retained that serves no commercial purpose.

Companies become involved in managing land for protection for a number of reasons. Straightforward interest in conservation is important and should not be over-looked; many company officials are interested in nature and many people choose a job that involves managing natural resources because they are interested in wider aspects of the outdoors. But there are also more utilitarian reasons for companies to engage in the protected areas field. We have identified six main drivers, listed below and then discussed in greater detail:

- ✓ Good press (or responding to bad press!)
- ✓ Pre-condition (e.g. part of certification scheme)
- ✓ Trade-offs (e.g. good practice in one area buys support for continuing 'business as usual' in other areas)

- ✓ Financial gain (e.g. tax and direct profit - access to grants etc and commercial activities)
- ✓ Mitigation/protection linked to 'core business' (e.g. to prevent soil loss, buffer against climate change, protect watersheds, water purity)
- ✓ Biodiversity conservation

- **Good press**

There is clearly considerable gain to be had from telling stakeholders, shareholders and the general public about the wide range of philanthropic commitments a business is making. Sustainability and conservation partnership reports have become *de rigueur* for large companies and are seen as a necessary part of best practice.

However, the claims made do not always tell the whole story and sometimes protection in one place is also a way of deflecting bad press from events elsewhere. Some of the case studies discussed in this section, although now lauded as examples of company best practice, came out of long term conflict.

The **Anglo Base Metals** initiative in the Succulent Karoo of South Africa (see box below) was at least in part a response to a major criticism of Anglo-America's proposed massive open-pit Gamsberg Zinc Project⁴². The fall in world zinc prices led to the mining project being put on hold, and thus providing a breathing space for the resulting constructive engagement with various stakeholders in the region⁴³. Similarly, when **Veracel** arrived in Bahia, Brazil in 1991, the company planned to convert 80 per cent of its land into eucalyptus plantations. It was only after the intervention of Brazilian NGOs and the union of forestry workers, that the Brazilian environment agency insisted that 6,000 ha of forest be set aside as a protected area⁴⁴.

- ✓ **Anglo Base Metals** operates a zinc mine in the Succulent Karoo in South Africa. The Karoo is home to 6,356 plant species, 40 per cent of which are endemic. Yet only three per cent of its 116,000 km² is protected. The company along with conservation groups, communities, farmers, tourist operators and government agencies took part in a landscape-scale conservation planning process to identify options for meeting scientifically set conservation targets. One outcome was a proposal to establish a protected area nested within a much larger multi-use landscape with other parts being managed extensively for grazing and a third area being allocated for more intensive development activities, including mining⁴⁵. The protected area is being established on portions of the Black Mountain and Gamsberg properties, in an area known as the Bushmanland Inselbergs area, located on the northeast margin of the Succulent Karoo hotspot, just south of the Orange River and the border between Namibia and South Africa. The mine will manage the 60,000-hectare protected area during its operational phase, and a Memorandum of Agreement (MoA) has been put in place between the Botanical Society of South Africa and Anglo Operations Limited. The MoA sets out the roles, responsibilities and expectations of the partners for the next phase of the initiative. A Conservation vision and land consolidation framework has been established for the priority area and a monitoring and evaluation framework has been developed for the project⁴⁶.

✓ WWF has been critical of the “conservation” claims made by the company **Asia Pulp & Paper Co Ltd** (APP). In 2006, WWF assessed a full page advertisement on ‘APP’s Commitment: Conservation beyond Compliance’ placed in the *New York Times* and London-based *The Times* in August 2006. One section deals with the Senepis-Buluhala Tiger Conservation Area. As noted above most of this forest block is inside the Selective Logging Concession of PT Diamond Raya Timber; the remaining forest, which is also important tiger habitat, is licensed to four timber plantation concessions (at least three are known to be associated with APP) which will be cleared and not selectively logged. A small area from these concessions is included in the reserve; however, the area to be clear cut includes 31,615 ha that in 2004 was proposed as Senepis National Park and a 22,245 ha of natural forest delineated as Protected Area (Kawasan Lindung) in the currently active Riau Land Use Plan 1994. Although the Conservation Area is now implemented and supported by PT Diamond Raya Timber, the history of the designation as reported by WWF is unusual: “The new Tiger Conservation Area boundary proposed by APP was ratified in an agreement signed on 21 June 2006 by Sinar Mas Forestry (APP), APP’s joint venture partners, PT Suntura Gajapati and PT Ruas Utama Jaya and two NGOs, Sumatran Tiger Conservation Program TPF. For unknown reasons, the most important stakeholder in this new APP-driven proposal, PT Diamond Raya Timber, was not included in the agreement despite the fact that they are supposed to provide most of the land for the new conservation area. In an interview on 11 August 2006, PT Diamond Raya Timber management staff told WWF that they did not know that there was a discussion between these parties to sign the agreement. Diamond Raya Timber staff said that in principle, they do not object to the proposal to have their selective logging concession as the core area of Sumatran Tiger Conservation Area. However, they are concerned that this new proposal protects only a small fraction of the natural forests in the concessions of PT Suntura Gajapati and PT Ruas Utama Jaya, and in practice allows the rest of the remaining natural forests to be clearcut, thus pushing more tigers into their Selective Logging Concession on the north and increase the likelihood of human-tiger encounters and conflicts in the now much smaller habitat”⁴⁷.

▪ **Pre-condition**

Increasingly, some eco-labels, grants or even permission to operate are dependent on setting aside particularly sensitive areas for conservation. Some examples follow.

- ✓ Certification of timber and wood products under most schemes accredited by the **Forest Stewardship Council** includes setting some forest as protected areas. Research in Sweden found that this added up to 250,000 ha more forest in the national protected area system.⁴⁸ Companies would typically expect to set aside areas of old trees, fire refugia, wetland areas and other places particularly valuable to biodiversity. In some habitats veteran trees are conserved as raptor nesting sites.
- ✓ Certification of fishery products under schemes accredited by the **Marine Stewardship Council** does not require establishment of protected areas as such, but many of the certified schemes have temporary or permanent closures as part of their policies for sustainable management (for example the Western Australian rock lobster, Patagonian scallop, Australian mackerel icefish).⁴⁹
- ✓ Organic farms certified by the Swedish certification body **Krav** have to include a biodiversity conservation plan as part of the certification process and this usually includes areas set aside from production.

- ✓ Under the **Common Agricultural Policy** in Europe there may be incentives to set aside specific areas on farms, including small corridor areas (for example field margins or hedgerows) or habitats such as upland moor or lowland heath.

✓ Many certification inspections make specific recommendations about protected areas in commercial forests. For example, a 1999 certification of 42,000 ha of forest in **Altai Province**, southern Siberia, Russian Federation by the **Woodmark** scheme (affiliated to the **Forest Stewardship Council**) added a condition of certification that protected areas within the concession be increased from 84 ha (to protect a population of Lady Slipper Orchid) to at least 5 per cent of the total. Two additional protected areas were proposed on the basis of survey information: one near a lake and the other adjacent to an area where beaver colonies are present. In particular a reduction in grazing was proposed and the use of botanical survey information was to be incorporated into plans for zoning protected areas within the forest estate⁵⁰.

▪ **Trade-offs**

Some companies have set up protected areas as a trade-off for land converted in other places – e.g. forest lost through mining is “offset” through investment in conservation elsewhere. In other cases, high quality habitat is traded off as a protected area in a deal to help raise finance. The concept of trading off is controversial and needs careful consideration; loss of one area will not necessarily be compensated by conservation of another. On the other hand, compensation is often much better than nothing.

✓ The agreement between TNC and **Great Northern Paper** describe above aimed to save the financially-struggling company’s operations in Maine, USA. Under the agreement, the non-profit conservation group agreed to provide low-cost, long-term financing to the paper company. TNC agreed to take over a US\$50-million mortgage held by Great Northern with John Hancock Financial Services and pay off US\$14 million of the debt. The Conservancy refinanced the remaining US\$36 million at about half the interest rate being paid by Great Northern, who then planned to repay the US\$36 million in monthly payments to the Nature Conservancy⁵¹. In exchange, the company introduced sustainable forestry practices to the majority of its land holdings and transferred the Debsconeag Lakes wilderness area, over 16,500 ha, to TNC⁵².

▪ **Financial gain**

Conservation can be a money making venture. Ecotourism, in particular in the large savannah areas of Sub-Saharan Africa, has along and successful history – both in terms of financial gain and biodiversity conservation. Long-term research from 32 private reserves from Sub-Saharan Africa and Latin America (including Taita Hills noted below) found that reserves can be a profitable venture thanks to ecotourism⁵³. Trophy hunting is also increasingly linked with privately conserved areas, although a revue of private reserves in South Africa found that ecotourism rather than hunting was the greatest income earner (as an example indication the total gross incomes of three private game reserves in South Africa in 2002/3 totalled US\$2.8 million)⁵⁴.

✓ The 11,330 ha Taita Hills Sanctuary (IUCN Category IV) is a privately owned game ranch in Kenya set up by **the Hilton Hotels International** (and now managed by a tour company) with two game lodges (Taita Hills and Salt Lick) within the sanctuary. The Sanctuary is close to Tsavo National Park, the largest national park in Kenya⁵⁵.

- **Mitigation/protection**

Companies may also protect land and water for the direct benefits from the environmental services that they provide: these are particularly related to water quality and sometimes supply; prevention of erosion; protection against avalanche or landslide risk; and sometimes more directly biodiversity conservation and carbon sequestration⁵⁶.

In many parts of the world water companies rely on natural ecosystems for their water supply and in particular to ensure high quality water in terms of purity⁵⁷. For example, in Australia the state owned **Melbourne Water Company** derives 90 per cent of its water supply from uninhabited mountainous catchments to the north and east of the city. Melbourne Water manages some catchments just for water collection, and works closely with the Department of Sustainability and Environment and Parks Victoria in managing catchments in state forests and National Parks⁵⁸. Similarly, Seattle has developed a *Habitat Conservation Plan*, which includes commitments to establish an ecological reserve on about 64 per cent of the land it owns and operates; and to develop a programme to manage the commercial harvest of timber on lands not part of the ecological reserve⁵⁹.

✓ In Madagascar a mining company is conserving parts of its holdings as “biodiversity stores” for restoration after mineral extraction. **QIT Madagascar Minerals** (QMM) – a Malagasy company jointly owned by **Rio Tinto plc**, UK, and the Malagasy State, is planning to exploit over the next 50-70 years heavy mineral sands, a source of titanium dioxide, over an area of about 6,000 ha along the coast in southeastern Madagascar. Most of the proposed mining area is in heavily degraded areas, but major deposits are also located underneath some of the last remnants of littoral forest. These forests are under severe pressure from the local populace, who depend on them for wood and charcoal for cooking and construction. Conservation zones of about 500 ha are being established within the main mining area and another 250 ha zone will be added outside the actual mining area. These conservation zones will serve as the centre points for recolonisation of restored habitats⁶⁰.

- **Biodiversity conservation**

Companies that take their environmental responsibilities seriously are now increasingly prepared to invest directly in biodiversity conservation as part of best practice, alongside health and safety and social programmes. In some cases this simply means setting aside parts of their own holdings, but in other cases companies have been prepared to put time and money into being full partners in landscape-scale planning exercises to ensure that conservation efforts are as successful as possible.

✓ One approach that **BP plc** is taking to manage its impacts on biodiversity effectively 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 Spain⁶¹. One example of a BAP is linked to the multi-billion dollar liquefied natural gas (LNG) project in Tangguh, Papua province of Indonesia. The onshore project site is located between the Saengga and Manggosa rivers within an area of approximately 3,266 ha. The LNG plant and operations buildings will occupy approximately 600 ha, and the remaining area (approximately 2400 ha) will be set-aside as limited- use and future use areas (including, but not limited to uses such as walking trails and dedicated wildlife habitat). The BAP plans also include support for the strategic management plan for the nearby Bintuni Bay Strict Nature Reserve (IUCN Category Ia)⁶².

- ✓ **Stora Enso Port Hawkesbury Ltd.** manages approximately 630,000 ha of Crown and Company owned lands in the seven eastern counties of Nova Scotia, Canada. From 1990 to 1998, the company was involved in a province-wide protected areas planning and consultation process, by the Nova Scotia Department of Environment and Labour. As a result 31 wilderness areas on Crown lands were designated throughout Nova Scotia. In 1998, the company commissioned a study with the Nova Scotia Nature Trust to identify which of the company's private land holdings contain ecological features and representation opportunities suitable for conservation or special management⁶³. The project concluded that a Stora-Enso-owned system of nature reserves could help to fill significant representation gaps within the province-wide system of protected areas, since nearly three-quarters of landscape units containing Stora properties are inadequately represented with existing protected sites⁶⁴. As a result 32 company-owned properties were identified to be of high priority for protected area designation and since 1998, have been protected from all forest harvest operations⁶⁵. Most recently the company formally designated the 362 ha River Inhabitants Nature Reserve in Inverness Co under the provincial Special Places Protection Act⁶⁶. This reserve is home to one of the last undisturbed floodplains in Nova Scotia, several rare plants, the provincially vulnerable wood turtle (*Clemmys insculpta*), and several oxbow lakes⁶⁷.
- ✓ In the early 1950s, the mining company **Companhia Vale do Rio Doce** (CVRD) began to buy up forest in the states of Bahia and Espírito Santo, Brazil to maintain timber reserves for the production of railroad ties for its Vitória-Minas railway. At the time CVRD was worried that the forests would disappear undermining its rail-tie production⁶⁸. The forest was however never exploited and the results of research carried out in the forest convinced CVRD to maintain the natural forest⁶⁹. The forests are special because they contain an extraordinary number of endemic plants, birds, primates and butterflies species, many of which are endangered. The companies concerns over the future of the forests of coastal Bahia were justified – forest cover has been reduced by 95 per cent and today they are considered among the more endangered habitats on Earth. In southern Bahia, only 0.4 per cent of the original forest remains and the largest blocks of habitat are protected by Sooretama Biological Reserve (240 km²), and the contiguous Linhares Forest Reserve (220 km²)⁷⁰. The Vale do Rio Doce Natural Reserve/ The Linhares Forest Reserve (IUCN Category 1a) is now part of the Discovery Coast Atlantic Forest Reserves World Heritage site. The Linhares Forest Reserve has become an economically viable enterprise for the CVRD, due to varied activities that contribute to sustained management of the area. Generation of technological data from taxonomy to silviculture on species, harvest and sale of seeds from selected mother-trees, production and sale of seedlings, as well as other activities have made the reserve an economic asset. The Linhares Forest Reserve is also greatly valued for research, due to easy access, the availability of laboratories and lodging, extensive road and trail systems within the forest and an observation tower that overlooks the canopy. This reserve is used as a training centre for administrators and staff of conservation units due to its administrative efficiency and the maintenance, enforcement and fire-control programmes⁷¹. In 1998, CVRD and the World Bank jointly drew up the Master Plan for the use of the Reserve, establishing guidelines for environmental protection and economic self-sustainability. Estimates put CVRD investments in this Reserve at US\$14 million, from the time when the first properties were purchased through to the present⁷².

Although no quantitative survey has been carried out, it appears that many company reserves are in forests, grasslands, small freshwater habitats and former quarries.

Types of habitat in company reserves

There has been no systematic survey of the extent of company reserves or the types of habitat protected. In principle any type of land or water can be protected, although protection is most likely under certain conditions. Surveys of the literature for the current paper and our own knowledge leads us to identify in a qualitative way the most likely habitats for protection in company reserves:

Forests: particularly northern temperate, boreal and tropical moist forests: through public pressure, preconditions of certification and for environmental management

- ✓ **Savannah and grassland habitat:** both through easements on pasture and prairie in the United States and through private protection of savannah habitat for ecotourism and hunting in sub-Saharan Africa
- ✓ **Freshwaters:** pools and lakes but usually only on a small scale (usually protection of freshwaters as part of environmental management particularly in forestry operations and plantations)
- ✓ **Former industrial sites:** many former quarries become protected areas; again these are usually small scale but often include ponds and cliffs, thus adding heterogeneity at a landscape scale

They are often, but not always, in relatively uneconomic areas where the company can set aside land without incurring major costs in terms of either management obligations or opportunities foregone. This is certainly not an exhaustive list and more detailed research is needed to increase our understanding.

Part 3: Mechanism and challenges to recognising company-owned protected areas

“...there is widespread acceptance of the concept of company-owned reserves being integrated fully into national or international networks of protected areas, including from IUCN and the CBD”

To recap: there is widespread acceptance of the concept of company-owned reserves being integrated fully into national or international networks of protected areas, including from IUCN and the CBD. There are many good reasons for companies to set up protected areas and already a number of examples from around the world. The next section looks at some of the practical implications of an attempt to bring company reserves more fully into protected area systems and some of the remaining challenges. Five main issues emerge:

- ✓ Mechanisms for encouraging company reserves
- ✓ Integrating company protected areas into national protected area networks
- ✓ Recording on the World Database on Protected Areas and the UN List of Protected Areas
- ✓ Assignment of IUCN protected area management categories
- ✓ Providing guarantees of permanence

Two more issues are also relevant and merit brief discussion:

- ✓ Providing guarantees of management effectiveness
- ✓ Providing guarantees of social acceptability

None of these are exclusive to protected areas owned or managed by companies although issues of permanence are perhaps more relevant here than in many other situations. Each will be discussed in turn below.

Mechanisms for encouraging company reserves

In principle, some existing mechanisms should be providing the spur for the creation or management of company reserves as discussed above, in particular the various certification schemes that are currently available for farming, forestry and marine harvest. However, in practice these have on the whole not drive the process. Most accreditation schemes do not insist on setting aside areas of land or water as reserves, which is instead left up to individual certification bodies and this is still quite rare, or is left as a voluntary contribution.

Perhaps more importantly, there is little information within such schemes to explain to companies seeking certification why they might set up reserves, what the potential costs and benefits would be and what implications there are for long-term management. Most forestry or farming professionals will have little experience of nature conservation and may well be reluctant to set aside areas as “waste” or “wilderness”.

An important first step in encouraging greater protection might therefore be to:

- ✓ Engage with key accreditation and certification bodies to explore whether reserve areas could be given greater prominence in requirements for certification
- ✓ Develop explanatory literature looking at the role of reserves on company land and their potential contribution to broadscale conservation approaches, again in association with accreditation agencies and their certification bodies.

Integrating company protected areas into national protected area networks

Literally speaking protected areas do not have to be integrated into networks at all; in the past most protected areas were set up and run independent of other sites and many protected areas are probably still established in this way today. But the situation is changing and the importance of networks is increasingly recognised⁷³. The CBD POW stresses the need for planning protected area networks and ensuring that protected areas are linked biologically with other reserves or other land or water able to support wild nature. WWF's own ecoregional⁷⁴ and landscape approaches⁷⁵ both stress the need for linkages and site selection. It is important that land or water set aside by companies plays a useful role in delivering regional, national or global conservation objectives; it is not enough for a company to set aside areas of land that are of no use to its own enterprises and call them "protected areas". (The same criterion applies to other areas outside the standard state-run protected area system, such as community conserved areas.) Usefulness will depend on several factors:

- ✓ **Broad geographical location:** considerable efforts have been made to pinpoint the most important parts of the world to focus on for biodiversity conservation; for example the WWF Global 200⁷⁶, Conservation International Hotspots⁷⁷ and key biodiversity areas⁷⁸, Birdlife International's Important Birds Areas⁷⁹ and Endemic Bird Areas⁸⁰, Plantlife International's Important Plant Areas⁸¹ and the Alliance for Zero Extinction's list of priorities (not a complete list). Land within globally-recognised priority areas will be particularly valuable, especially if these are currently under-protected.

At present much data on protected areas and ecological / regional cover is drawn from analysis of the World Database on Protected Areas (WDPA), which does not necessarily give a full global picture of protected area coverage. In most countries, government owned protected areas form the basis of WDPA data, with few records even for other government land that has a protected function. In Africa at least a proportion of the forests reserves are often akin to the more frequently recorded national parks; in fact many national parks were once forests reserves. However there is little recording of such reserves on the WDPA. Forest reserves do nonetheless play a major role in biodiversity conservation; for example, an analysis of the 2005 WDPA data suggests that only an average of 7.39 per cent of the nine continental African biomes are protected in IUCN category I-IV protected areas; however by adding state-managed forest reserves to the protected area network the tropical and subtropical grasslands and tropical and subtropical moist broadleaf forests biomes would both exceed 10 per cent reserve coverage⁸².

- ✓ **Type of habitat or biome:** distinct from geographical priorities there are also priorities with respect to particular biomes and habitats. For example, major gaps occur in protection of freshwater habitats (e.g. only 1.54 per cent of lake systems are protected) and marine biomes (only 0.5 per cent protected), according to the World Database on Protected Areas in 2003⁸³.
- ✓ **Presence of important species:** potential protected areas are much more valuable if they contain important species – importance here being defined in various ways but likely to include some or all of the following characteristics: endemic, rare, endangered, charismatic (i.e. of particular recognised cultural or social value) or representative.

- ✓ **Role in the wider landscape or seascape:** protected areas are increasingly expected to fulfil a wider role than simply protecting individual locations, particularly though linking different habitats either by connecting them directly (biological corridors), buffering more strictly protected areas (buffer zones) or providing habitat useful for migrating species (stepping stones).⁸⁴

The example of Stora Enso in Nova Scotia quoted above shows that companies can be a valuable partner in wider planning exercises and select reserves that provide maximum gains for conservation. The extent to which this is done will vary on a case-by-case basis but the general principle that reserved land needs to be valuable for nature conservation should always be applied.

Recording on the World Database on Protected Areas and the *UN List of Protected Areas*

To date UNEP-WCMC, the body responsible for maintaining the WDPA, has lacked sufficient resources to catalogue private protected areas⁸⁵. But, to quote one journal paper “*anecdotal evidence suggests that private parks number in the thousands and that their numbers are growing rapidly*”⁸⁶. Thus, for example, the Government of Brazil reported to the CBD that paper and pulp companies reserve more than one million ha in the Atlantic Forest alone⁸⁷. But little of this information is recorded on the WDPA. Further, for example, only 234 of the 429 Private Natural Heritage Reserves (Reserva Particular do Patrimônio Natural –RPPN) established by the Brazil Environmental Agency (IBAMA) in 1990, have been listed in the WDPA and only 11 of the 100 private reserves recognised by NGOs in Costa Rica appear to be listed⁸⁸. A similar situation exists in Africa. It has been estimated, for example, that in Southern Africa (Botswana, Namibia, South Africa and Zimbabwe), there is some 14 million ha of private land under some form of wildlife protection or sustainable wildlife management⁸⁹, however at present just under 1 million ha is recorded on the WDPA⁹⁰.

There is, however, in principle no reason why company owned or managed land should not be recorded on the WDPA and hence eventually be included on the UN List. The redesigned WDPA will include a field for governance type and several classes of private reserves will be defined, including company reserves.

Assignment of IUCN protected area management categories

Until recently assignment of categories has been an ad hoc affair, with the degree of rigour depending on attitudes and capacity within individual countries. In the past staff at UNEP-WCMC have themselves sometimes assigned categories in the case when governments or others have not supplied data; in other cases categorisation has been left to quite junior individuals in governments who have done so without consultation.

This situation is changing. In part the category is becoming more important. Until recently it was primarily a statistical tool (and use is voluntary – some governments simply choose not to categorise protected areas). Now the category sometimes determines land-use, funding and status and more stakeholders are demanding a say in what a particular category is applied and why. If a government bans mining in a Category II protected area but not in a Category V it is clearly of interest to mining

companies which category is selected. Local communities also want to know what will and will not be allowed under the new designation⁹¹.

This issue has still not been finally resolved but some proposals exist for a process of assignment, outlined in Figure 2 below⁹². Company protected areas, which will be a relatively new concept to some people and will possibly be viewed with a certain amount of suspicion, could provide a testing ground for assignment processes that will in time be standard practice for all protected areas.

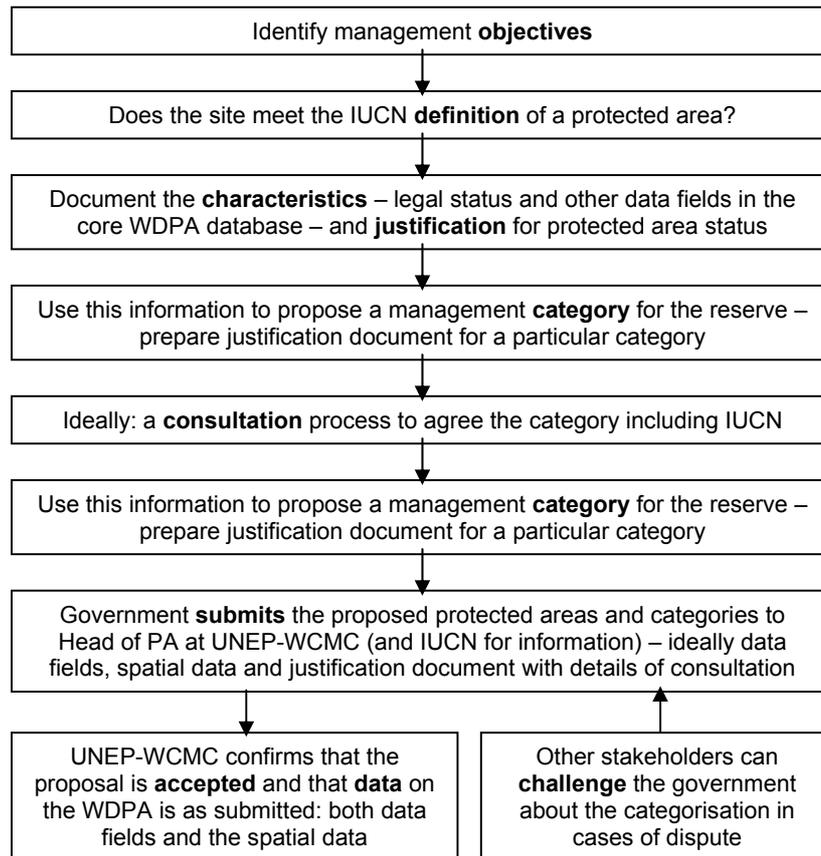


Figure 2: Process for assigning IUCN categories to protected areas

These questions are still not fully resolved and it is important that industry representatives are included in discussions about assignment of IUCN categories and recognition of protected areas in the World Database on Protected Areas to ensure that their concerns are met within IUCN and the World Commission on Protected Areas.

Providing guarantees of permanence

The last of the four key points is the most challenging: how can companies provide some confidence that they have a long-term commitment to a protected area?

To some extent these questions apply to all protected areas: governments have been known to de-gazette areas and private trusts can go out of business or be folded up. But there are some particular issues relating to for-profit enterprises, namely:

“Addressing the issue of permanence and security is one of the key challenges to establishing company reserves as formal parts of a protected areas system”

- ✓ Maintaining liquid assets is a key commercial strategy and companies will be reluctant to guarantee to “tie up” unproductive land in perpetuity if, for example, they want to disinvest from the region, change direction, shed capital etc
- ✓ Many natural resource management companies do not own land but only lease it for a few years, so that land set aside during one leasehold period may be used by the next managers for some other purpose altogether
- ✓ Ownership of companies is becoming increasingly fluid, with changes in majority shareholders commonplace, often affecting the whole company culture; even a change of CEO brings major changes in many situations.
- ✓ Some of the ways in which protected areas are established that have been described above, such as those in response to certification systems or occasional grants, are only agreed on an annual or perhaps several year system with no long term guarantees that use will not change.

Addressing the issue of permanence and security is one of the key challenges to establishing company reserves as formal parts of a protected areas system.

Management effectiveness and social acceptability

Finally, it should be noted that good protected areas also need to be well managed and also supported by local communities – the CBD lays great stress on the need to ensure that protection does not disadvantage those living in the area. Companies engaging with WWF and IUCN on protected areas have laid great stress on this issue and argued that management effectiveness should also be linked to assignment of category, so that these issues should be included in future discussions of company protected areas.

Part 4: When does a company reserve become a protected area fully recognised by IUCN and the CBD?

Before deciding on whether or not to develop a company protected area, a number of key steps should be taken to provide the basis for a clear and logical strategy

Previous sections have shown that company reserves already exist and that there is no reason in principle why they should not be fully accepted as part of national protected area networks and recognised as such by both IUCN and the CBD. But so far this is not generally happening. There are some practical reasons why this is the case, mainly to do with providing clearer guidance from IUCN and UNEP-WCMC, but it is also in part because companies have never been asked to contribute in a more formal way to protected area strategies. The point when a company reserve becomes a fully protected area is not clear (a situation mirrored for some other types of protected land including sacred natural sites, community conserved areas and others.) The current section therefore looks at the various steps that companies might consider in setting up an official company protected area; part 5 then lists some concrete recommendations for taking these ideas further forward.

1. **Deciding if a protected area really is the most effective strategy for the company:** there are many ways of conserving nature both inside and outside protected areas. Managing land or water with conservation in mind should be good practice anywhere and should be celebrated wherever it occurs. Taking on the responsibility for a protected area implies additional commitments and responsibilities and probably extra expense. It is on the other hand a chance to make a solid and permanent contribution to biodiversity conservation, the CBD *Programme of Work* and international commitments relating to the environment. But the choice to develop a fully-fledged protected area related to company activities or on company land should not be made lightly.
2. **Considering the process of protection:** as several of the examples in the report show, setting up a protected area is not necessarily a single step. Some companies start with a form of conservation management involving less commitment, such as a temporary arrangement, or an easement that stops short of full protection. It is worth thinking early on whether the company wants to step straight into the designation of an officially protected area or if it would be safer to move more gradually.
3. **Identification of the values of the proposed protected area:** as mentioned previously, protected areas need to protect something worth conserving and, ideally, also be integrated into wider protected area networks. They also need to be secure and, if they are to provide sustainable biodiversity conservation, also accepted by local communities. Some of the most successful examples described earlier have been established as part of a wider gap analysis (literally an analysis of gaps in the protected area network in terms of species and habitats that are not sufficiently protected) to identify specific protection needs. An early stage in protection is therefore to find out some important values of the proposed area including:
 - ✓ Value to **biodiversity** (in terms of geographical importance, biome importance, presence of important species and role in wider conservation landscapes)
 - ✓ Security of **tenure** (e.g. are there existing land claims on the area, have people been displaced from the area?)
 - ✓ Attitudes of **local communities** to protection

4. **Identification of partners:** setting up a protected area is complicated and involves skills not necessarily present in a commercial company. Identifying local partners in research institutes, NGOs and governments, as well as representatives of local communities, is an important stage in planning.
5. **Models of protection:** at this stage it is also important to work out exactly what kind of protection is needed. Discussion of the IUCN management categories earlier has shown that protected areas are not standard land management options but embrace a wide variety of approaches. Although in theory, company reserves could fit into any category, in practice some are far more likely than others – for example private for-profit companies would not usually be expected to set up large ecosystem-protection reserves such as those of IUCN Category II. Three broad models of protection are likely to be suitable for companies, outlined in the box below:

Models for company protected areas

Protection: complete protection of remaining important habitat types or specific features, sometimes existing as fragments, of original vegetation, sometimes linked to particular endangered species, or geological forms: closely related to IUCN Category I, III or IV protected areas

Management: protection as part of a wider landscape-scale management system, which may include some management and commercial activity but which aims to retain existing biodiversity at a landscape scale: equivalent to Category V or perhaps VI. (Category V is currently in some ways the loosest IUCN management category although this is likely to change in the future, with tighter controls on what may or may not take place within such protected areas.)

Restoration: protection as part of a long-term restoration of an area used for commercial purposes such as a quarry, plantation or industrial site: usually equivalent to IUCN Category IV but may over time develop into another category

6. **Models of governance:** the company also needs to decide the best governance model. Will the protected area be managed by the company alone? Or in partnership with others? Or is the plan to sell it or hand it over eventually to some other body entirely. These decisions do not need to be made immediately but early discussions about the type of governance would be useful.
7. **Determining management objectives:** most protected areas draw up a detailed management plan, identifying targets for management, indicators to monitor if the management is being successful and the elements of a day to day work plan. The extent to which this is necessary depends to some extent on size – if the company is setting aside a small lake or area of remnant woodland then simply ensuring that it remains relatively intact is probably enough. But for larger areas some measure of planning will be necessary and before committing to the protected area it is worth thinking through the management implications (which will also have a bearing on governance structure and who is involved in management). Identifying indicators that could be monitored is particularly important if the company wants to show progress in conservation over time.

8. **Recording:** eventually if the reserve is to be an official protected area it should be listed on the WDPA and have a category assigned to it: this process should be coordinated with the UNEP World Conservation Monitoring Centre. There is currently no protocol agreed for doing this in the case of company reserves and agreement on such a process is an early need in development.

Part 5: Conclusions

Company protected areas already exist in many parts of the world and have proved to be an effective addition to conservation approaches. Current developments in international protected area policy make this a particularly good time for companies to consider developing and perhaps formalising protected areas on their lands. Whilst we have identified a number of clear incentives for companies to establish and manage protected areas on their land (for instance good press, financial gain and environmental services), formalising these activities into the global network of protected areas would have several important additional benefits for the private sector:

- **Gaining formal recognition from governments and conservation organisations (given increasing interest from the conservation community on private reserves)**

There are a number of reasons why companies might want to consider the issue of company reserves in more detail in the short term:

- ✓ The CBD *Programme of Work on Protected Areas* is setting a new urgency on completing protected area networks in many countries and attention will as a result be focused on this issue for the next few years
- ✓ IUCN is currently revising its guidelines to the application of the protected area definition and categories, and has further developed guidance on governance types, creating an ideal opportunity to engage in a process that aims to be completed in September 2008
- ✓ IUCN has a special task force looking at protected areas and private reserves are already acknowledged as an important area of potential growth
- ✓ The World Conservation Congress in Barcelona in 2008 will see the new protected area category guidelines presented for approval by IUCN members; industry representatives will be at the meeting and this would be an ideal opportunity to launch an initiative with respect to company reserves – perhaps some guidelines, or case studies or even a target for company contributions to the global protected areas network.

- **Demonstrating best practice and commitment to biodiversity conservation**

Setting up a reserve can provide a relatively cost-effective way of showing commitment to best practice, particularly where connected to a certification scheme such as the Forest Stewardship Council (FSC) or Marine Stewardship Council (MSC) or application of a High Conservation Value Area (HCVA) process.

- **Improve the image of the company**

Company reserves help to develop good press stories and long-term material for inclusion in annual reports, reports to shareholders etc

- **Facilitate negotiations with authorities on trade-offs**

Sometimes setting up a reserve can provide an acceptable trade-off for land conversion as part of an HCVA process, or commitment to setting up a reserve following restoration after quarrying or mining.

Despite the existence of company reserves, there are still a number of important questions remaining relating to their management and incorporation into formal protected area networks. Some next steps are identified in the recommendations section following.

Part 6: Recommendations

“A relatively small amount of work could greatly enhance the possibility of expanding and strengthening company-owned or managed reserves around the world and making these part of an integrated protected areas network”

A relatively small amount of work could greatly enhance the possibility of expanding and strengthening company-owned or managed reserves around the world and making these part of an integrated protected areas network. The following recommendations cover key issues related to implementing such reserves, achieving recognition through IUCN and some thoughts on promotion of the concepts with companies and others.

Implementation: it is clear that there is a wide range of quality in terms of company involvement in protected areas – some excellent examples exist but there are also cases where setting aside a reserve is little more than a publicity exercise. If WWF is to get involved in promoting company protected areas it should do so in the context of best practice and some work is needed to help develop models and guidance. Some suggestions include:

- ✓ **Best practice and Guidance** – collecting examples and case studies of best practice in company-run protected areas and drawing together lessons learned together with other relevant material (from IUCN, CBD etc) into a company-specific guide for protected areas management, possibly through a workshop setting and associated publication. **Partners:** WWF, IUCN WCPA Private protected areas task force, FSC, MSC and selected companies
- ✓ **Planning** – encouraging company protected areas to be established in optimum locations through involvement in wider planning processes such as High Conservation Value Area (HCVA) and gap analysis. Bringing partner companies into planning exercises in some key network initiative regions would be a good way to test out the role of company reserves in wider ecoregional approaches. **Partners:** WWF and selected companies
- ✓ **Monitoring** – encouraging companies with protected areas to undertake regular assessments of effectiveness, in line with CBD commitments, at least through filling in the WWF/World Bank Management Effectiveness Tracking Tool. **Partners:** WWF, World Bank, The Nature Conservancy, FSC, MSC
- ✓ **Permanence** – ensuring that company protected areas have the same guarantees of permanence as other protected areas. It is clear that further work is needed on this and WWF could help by bringing partner companies into the discussions that will be taking place over the coming months. **Partners:** IUCN WCPA task forces on IUCN categories and private protected areas

Recognition: although company protected areas can already in theory be listed on the WDPA this seldom happens in practice and there is a lack of clarity about the process for listing and for assignment of categories (this affects more than company protected areas). Some specific guidance aimed at companies is required:

- ✓ **Listing on World Database on Protected Areas** – providing specific guidance and agreed protocols for listing company protected areas on the WDPA. **Partners:** UNEP World Conservation Monitoring Centre, WCPA

Promotion: there is an opportunity to add considerably to the world's protected area network through company protected areas, but this will only happen with a certain amount of advocacy and encouragement. Some of the actions under the implementation section (e.g. the publication and workshop) will in themselves encourage development. The following suggestions are early additional ideas about how WWF might engage in this process:

- ✓ **Setting a target for company protected areas** – identifying some target (area, number of protected areas, number of companies etc) for the private sector to contribute to the CBD Programme of Work on Protected Areas. **Partners:** CBD, business bodies (e.g. WBCSD)
- ✓ **Publishing a booklet on how companies could contribute to the CBD POW:** drawing together some of the material collected in the actions above along with an analysis of the possibilities. (This might for instance be a publication in the CBD technical series along with the case studies.) **Partners:** companies, CBD, IUCN
- ✓ **Collecting information on company protected areas:** inviting companies to submit information about reserves that they manage, thus building up a database (that could be loaded onto the IUCN site, or PALNet, or similar). **Partners:** companies, IUCN
- ✓ **Creating an enabling environment:** working with key countries to ensure that national legislation or policy does not provide perverse incentives to companies setting up protected areas. **Partners:** WWF regional offices and selected companies

References

- ¹ WWF (2003); *Protected area position paper*, WWF International, Gland, Switzerland
- ² IUCN (1994): *Guidelines for Protected Area Management Categories*, IUCN and World Conservation Monitoring Centre, Gland, Switzerland and Cambridge UK
- ³ Final presentation at the IUCN Categories Summit in Almeria, Spain, May 2007: over 100 delegates voted on this proposal and there were two dissensions: the voting was one the end of the sentence only – i.e. “*in the case of conflict nature conservation has to be the priority*”
- ⁴ IUCN (1994): op cit
- ⁵ Phillips, A (1998); Protecting protected areas, editorial in *arborvitae* **10**, IUCN and WWF, Gland, Switzerland
- ⁶ Dudley, N and G Borrini-Feyerabend (2007); Category IV, a working paper for the WCPA task force on IUCN categories, available on <http://www.iucn.org/themes/wcpa/theme/categories/summit/papers/2categories.html>
- ⁷ Locke, H and P Deardon (2005); Rethinking protected area categories and the new paradigm, *Environmental Conservation* **32** (1): 1-10
- ⁸ This section is edited from Borrini-Feyerabend, G. (2007); Governance of protected areas, a paper for the IUCN Categories task force.
- ⁹ Sandwith, T, C Shine, L Hamilton and D Sheppard (2001); *Transboundary Protected Areas for Peace and Co-operation*, IUCN, Gland, Switzerland and Cambridge, UK. Accessible on <http://app.iucn.org/dbtw-wpd/edocs/PAG-007.pdf>
- ¹⁰ Borrini-Feyerabend, G, A Kothari and G Oviedo, *Indigenous and Local Communities and Protected Areas. Towards equity and enhanced conservation*, IUCN/WCPA Best Practice Series no. 11, IUCN Cambridge (UK), 2004
<http://www.iucn.org/themes/ceesp/Publications/TILCEPA/guidelinesindigenouspeople.pdf>
- ¹¹ CBD Programme of Work on Protected Areas: <http://www.cbd.int/protected/pow.shtml> (accessed 15/7/2007)
- ¹² For a thorough discussion of the implications see: Dudley, N, K J Mulongoy, S Cohen, S Stolton, C V Barber and S B Gidda (2005); *Towards Effective Protected Area Systems: An action guide to implementation of the Convention on Biological Diversity Programme of Work on Protected Areas*, CBD Technical Series number 18, Secretariat of the Convention on Biological Diversity, Montreal
- ¹³ Dudley, N and J Parrish [editors] (2006); *Closing the Gap: Creating ecologically-representative protected area systems*, CBD Technical Series number 24, Secretariat of the Convention on Biological Diversity, Montreal
- ¹⁴ Secretariat of the CBD (2004); *Akwé: Kon Guidelines: Voluntary guidelines for the conduct of cultural, environmental and social impact assessments regarding developments proposed to take place on, or which are likely to impact on, sacred sites and on lands and waters traditionally occupied or used by indigenous and local communities*, Convention on Biological Diversity, Montreal
- ¹⁵ Stolton, S and N Dudley (2007); Protected Areas in Eastern and Southern Africa: Reporting protected areas and applying the IUCN categories, UNEP-WCMC, Cambridge
- ¹⁶ Dudley, N, M Hockings and S Stolton (2003); *Protection Assured: Guaranteeing the effective management of the world's protected areas – a review of options*, IUCN, Gland, Switzerland
- ¹⁷ Hockings, M, S Stolton, F Leverington, N Dudley and J Courrau (2006 2nd edition); *Evaluating Effectiveness: A framework for assessing management effectiveness of protected areas*, Best Practice Protected Area Guidelines number 14, IUCN and James Cooke University, Gland Switzerland and Brisbane Australia
- ¹⁸ Bishop, K, N Dudley, A Phillips and S Stolton (2004); *Speaking a Common Language*, IUCN and the University of Cardiff

-
- ¹⁹ Mitchell, B (2007), Private protected areas, paper prepared for the IUCN categories task force
- ²⁰ Olsen, D M, E Dinerstein, E D Wikramanayake, N D Burgess, G V N Powell, E M Underwood, J A d'Amico, I Itoua, H E Strand, J C Morrison, C J Loucks, T F Allnut, T R Ricketts, Y Kura, J F Lamoreux, W W Wettengel, P Hedao and K R Kassem (2001); Terrestrial ecoregions of the world: a new map of life on Earth, *Bioscience* **51** (11): 933-938
- ²¹ Eken, G, Bennun, L, T M Brooks, W Darwall, L D C Fishpool, M Foster, D Knox, P Langhammer, P Matiku, E Radford, P Salaman, W Sechrest, M L Smith, S Spector, and A Tordoff (2004); Key Biodiversity Areas as Site Conservation Targets. *BioScience* **54**: 1110-1118
- ²² Dudley, N and J Parrish (2006); *Closing the Gap: Creating ecologically representative protected area networks*, CBD Technical Series 24, Convention on Biological Diversity, Montreal
- ²³ Jennings, S (2004); *HCVF for Conservation Practitioners*, ProForest, Oxford
- ²⁴ International Paper (2006); 2004-2006 Sustainability Update, Tennessee, USA
- ²⁵ Fact Sheet L Okefenokee at a Glance (<http://www.fws.gov/okefenokee/>, accessed 4/7/07)
- ²⁶ <http://www.fws.gov/northeast/greatdismalswamp/> (accessed 4/7/07)
- ²⁷ International Paper (2006); op cit
- ²⁸ <http://www.nature.org/aboutus/howwework/conservationmethods/privatelands/conservationeasements/> (accessed 4/7/07)
- ²⁹ <http://www.nature.org/aboutus/howwework/conservationmethods/privatelands/conservationeasements/about/acrossland.html>; <http://www.nature.org/pressroom/press/press742.html> and <http://www.nature.org/wherewework/northamerica/states/maine/press/press2537.html> (accessed 4/7/07)
- ³⁰ TNC (2005); Conservation easements in Oregon, Fact Sheet (<http://www.nature.org/aboutus/howwework/conservationmethods/privatelands/conservationeasements/about/art15087.html>) and http://www.ohjv.org/projects/coast_range.html#Gearhart
- ³¹ <http://whc.unesco.org/en/list/892> (accessed 4/7/07)
- ³² http://www.unep-wcmc.org/protected_areas/data/wh/discover.html (accessed 4/7/07)
- ³³ WRM (2003); Brazil: Stora Enso and Aracruz plan the world's biggest pulp mill, *WRM Bulletin*, **67**, February 2003 (www.wrm.org.uy/bulletin/67/Brazil.html, accessed 4/7/07)
- ³⁴ Stora Enso (2007); *Sustainability Facts*, Fact Sheet April 2007
- ³⁵ http://www.ramsar.org/wn/w.n.chile_conchali.htm and <http://www.icmm.com/casestudy.php?rcd=14> (accessed 3/7/07)
- ³⁶ Personal communication from Paula Kahumba and other staff at Bamburi, August 2006
- ³⁷ Molnar, A., S. Sherr, and A. Khare (2004); *Who Conserves the World's Forests? Community-Driven Strategies to Protect Forests and Respect Rights*, Forest Trends and Ecoagriculture Partners, Washington DC
- ³⁸ Davis, A (ed) (2004); *Namibia's communal conservancies: a review of progress and challenges*, NASCO, Windhoek, Namibia
- ³⁹ <http://www.diamondraya.com/eng/home.htm> (accessed 4/7/07)
- ⁴⁰ <http://wild-tiger.blogspot.com/2006/01/senepis-tiger-conservation-area-106000.html> (accessed 4/7/07)
- ⁴¹ <http://www.searrrp.org/danum.cfm> (accessed 4/7/07)
- ⁴² <http://www.icmm.com/casestudy.php?rcd=20> (accessed 5/7/07)
- ⁴³ http://www.botanicalsociety.org.za/default.php?pageID=ccu/ccu_projects.htm#Bushmanland (accessed 5/7/07)

-
- ⁴⁴ WRM (2003); Brazil: Stora Enso and Aracruz plan the world's biggest pulp mill, *WRM Bulletin*, **67**, February 2003 (www.wrm.org.uy/bulletin/67/Brazil.html, accessed 4/7/07)
- ⁴⁵ Carter, A S (2005); Extractive industries as a new constituency for protected areas, in McNeely, J A, *Friends for Life: New partners in support of protected areas*, IUCN, Gland, Switzerland and Cambridge, UK
- ⁴⁶ <http://www.skep.org/projects.php?intProjectId=62> and http://www.cepf.net/xp/cepf/news/in_focus/2004/may_feature.xml (accessed 5/7/07)
- ⁴⁷ WWF-Indonesia (2006); Hiding Destruction behind False Advertisements: APP continues to ignore calls for conservation beyond "legal compliance", and even fails on the latter, *WWF Monitoring Brief October 2006: Asia Pulp & Paper (APP)*,
- ⁴⁸ Stolton, S N Dudley and K Beland-Lindahk (1999); The role of large companies in forest protection in Sweden, In *Partnerships for Protection: New strategies for planning and management for protected areas* (eds.) S Stolton, N Dudley, B Gujja, B Jackson, J-P Jeanrenaud, P Rosabal, A Phillips and S Wells, Earthscan, London
- ⁴⁹ http://www.msc.org/html/content_1255.htm (accessed 16/7/2007)
- ⁵⁰ Soil Association (2000); Woodmark Forest Certification Public Report, Kosinski Forest Enterprise, The Soil Association, Bristol UK
- ⁵¹ Pulp & Paper (2002); Great Northern in \$50 million land swap, *Pulp & Paper*, October 2002
- ⁵² <http://www.nature.org/aboutus/howwework/conservationmethods/privatelands/conservationmethods/about/acrossland.html> (accessed 4/7/07)
- <http://www.nature.org/pressroom/press/press742.html> and <http://www.nature.org/wherewework/northamerica/states/maine/press/press2537.html> (accessed 4/7/07)
- ⁵³ Langholz, J (1996); Economics, Objectives, and Success of Private Nature Reserves in Sub-Saharan Africa and Latin America, *Conservation Biology*, **10**:1, 271–280.
- ⁵⁴ Sims-Castley, R, G Kerley, B Geach and J Langholz (); Socio-economic significance of ecotourism-based private game reserves in South Africa's Eastern Cape Province, *Parks*, **15**:2, IUCN, Gland, Switzerland
- ⁵⁵ <http://sea.unep-wcmc.org/sites/pa/0313p.htm>
- ⁵⁶ Millennium Ecosystem Assessment (2005); *Ecosystems and Human Well-being: Synthesis*, Island Press, Washington, DC, USA
- ⁵⁷ Dudley, N and S Stolton (2003); *Running Pure: The importance of forest protected areas to drinking water*, World Bank / WWF Alliance for Forest Conservation and Sustainable Use, WWF, Gland, Switzerland
- ⁵⁸ Melbourne Water (2002) *Social review 2001-02*, Melbourne Water, Australia
- ⁵⁹ EPA (1999); *Protecting Sources of Drinking Water Selected Case Studies in Watershed Management*, United States Environmental Protection Agency, Office of Water, EPA 816-R-98-019, April 1999, <http://www.epa.gov/safewater>
- ⁶⁰ <http://www.icmm.com/casestudy.php?rcd=12> (accessed 3/7/07)
- ⁶¹ Bishop, K, N Dudley, A Phillips and S Stolton (2004); *Speaking a Common Language – The uses and performance of the IUCN System of Management Categories for Protected Areas*, IUCN, Gland, Switzerland
- ⁶² BP (undated); *BP Indonesia Biodiversity Action Plan*, BP
- ⁶³ http://www.storaenso.com/CDAvgn/main/0,,1_EN-4827-16716-,00.html (accessed 4/7/07)
- ⁶⁴ Miller, C A (2004); Reserve planning on private land holdings of the forestry company, Stora Port Hawkesbury Limited: Cape Breton Island and Eastern Mainland Nova Scotia, *Proceedings of the Nova Scotian Institute of Science*, **42**: 2, 393-408

-
- ⁶⁵ http://www.storaenso.com/CDAvgn/main/0,,1_EN-4827-16716-,00.html (accessed 4/7/07)
- ⁶⁶ <http://www.gov.ns.ca/JUST/REGULATIONS/regs/spprinat.htm> (accessed 4/7/07)
- ⁶⁷ http://www.storaenso.com/CDAvgn/main/0,,1_EN-4827-16716-,00.html (accessed 4/7/07)
- ⁶⁸ http://www.cvrld.com.br/hot_sites/linhares/e_reserva_hist.htm (accessed 4/7/07)
- ⁶⁹ <http://www.nmnh.si.edu/botany/projects/cpd/sa/sa13.htm> (accessed 4/7/07)
- ⁷⁰ http://www.worldwildlife.org/wildworld/profiles/terrestrial/nt/nt0103_full.html (accessed 4/7/07)
- ⁷¹ <http://www.nmnh.si.edu/botany/projects/cpd/sa/sa13.htm> (accessed 4/7/07)
- ⁷² http://www.cvrld.com.br/hot_sites/linhares/e_reserva_hist.htm (accessed 4/7/07)
- ⁷³ Noss, R (1995); *Maintaining Ecological Integrity in Representative Reserve Networks*, WWF Canada and WWF US, Toronto and Washington DC, USA
- ⁷⁴ Olsen, D M, E Dinerstein, E D Wikramanayake, N D Burgess, G V N Powell, E M Underwood, J A d'Amico, I Itoua, H E Strand, J C Morrison, C J Loucks, T F Allnut, T R Ricketts, Y Kura, J F Lamoreux, W W Wettengel, P Hedao and K R Kassem (2001); Terrestrial ecoregions of the world: a new map of life on Earth, *Bioscience* **51** (11): 933-938
- ⁷⁵ Louks, C, J Springer, S Palminteri, J Morrison and H Strand (2004); *From the Vision to the Ground: A guide to implementing ecoregion conservation in priority areas*, WWF Conservation Science Program, WWF, Washington DC
- ⁷⁶ Olson, D M, and E Dinerstein (1998); The Global 200: A representation approach to conserving the Earth's most biologically valuable ecoregions, *Conservation Biology* **12**:502-515
- ⁷⁷ Myers, N, R A Mittermeier, C G Mittermeier, G A B Fonseca, and J Kent (2000); Biodiversity hotspots for conservation priorities, *Nature* **403**:853-858; and Mittermeier, R A, G P Robles, M Hoffmann, J Pilgrim, T Brooks, C G Mittermeier, J Lamoreux and G A B da Fonseca (2004); *Hotspots: Revisited*, CEMEX, Mexico
- ⁷⁸ Eken, G, Bennun, L, T M Brooks, W Darwall, L D C Fishpool, M Foster, D Knox, P Langhammer, P Matiku, E Radford, P Salaman, W Sechrest, M L Smith, S Spector, and A Tordoff (2004); Key Biodiversity Areas as Site Conservation Targets. *BioScience* **54**: 1110 – 1118
- ⁷⁹ See for example Heath, M F, and M I Evans (2000); *Important Bird Areas in Europe: Priority Sites for Conservation*, BirdLife International, Cambridge; and Evans, M I (1994); *Important Bird Areas in the Middle East*, BirdLife International, Cambridge
- ⁸⁰ Stattersfield, A J, M J Crosby, A J Long, and D C Wege (1998); *Endemic Bird Areas of the World. Priorities for Biodiversity Conservation*, BirdLife International, Cambridge
- ⁸¹ Anderson, S (2002); *Identifying Important Plant Areas in Europe: A Site Selection Manual for Compilers*, PlantLife, London
- ⁸² Burgess, N, C Loucks, S Stolton and N Dudley (2007); The potential of forest reserves for augmenting the protected area network in Africa, *Oryx*, **41**: 2
- ⁸³ Chape, C, S Blyth, L Fish, P Fox and M Spalding (2003); *2003 United Nations List of Protected Areas*, UNEP World Conservation Monitoring Centre, WCPA and IUCN, Cambridge UK
- ⁸⁴ Bennett, A (1999); *Linkages in the Landscape*, IUCN The World Conservation Union, Gland, Switzerland
- ⁸⁵ Langholz, J A and J P Lassoie (2001); Perils and Promise of Privately Owned Protected Areas, *BioScience*, **51**:12, 1079-1085
- ⁸⁶ *ibid*

⁸⁷ Ministry of Environment (??); *First national report for the Convention on Biological Diversity*, Government of Brazil

⁸⁸ Mitchel, B (2007); *op cit*

⁸⁹ Krug, W (2001); *Private Supply of Protected Land in Southern Africa: A Review of Markets, Approaches, Barriers and Issues*, Workshop Paper, World Bank / OECD International Workshop on Market Creation for Biodiversity Products and Services Paris, 25 and 26 January 2001, OECD Working Group on Economic Aspects of Biodiversity

⁹⁰ Stolton, S and N Dudley (2007); *op cit*

⁹¹ Bishop, K, N Dudley, A Phillips and S Stolton (2004); *op cit*

⁹² *ibid*