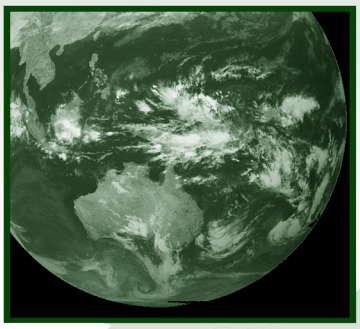
SPECIAL REPORT



Global Trends in Protected Areas

A Report on the Fifth World Parks Congress

Rosemary Hill

Rainforest CRC

GLOBAL TRENDS IN PROTECTED AREAS

A Report on the
Fifth World Parks Congress
8-17 September 2003
Durban, South Africa

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Rainforest CRC

CRC AUSTRALIA

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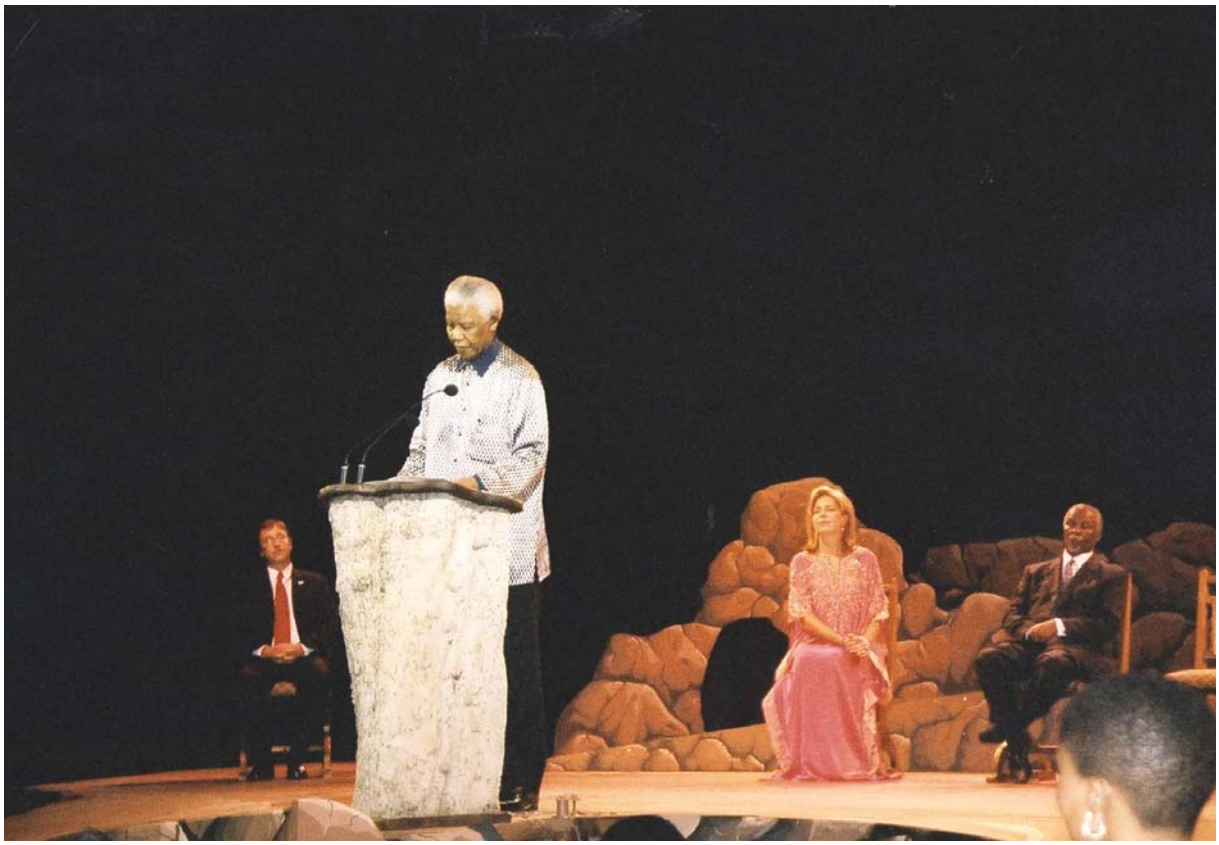
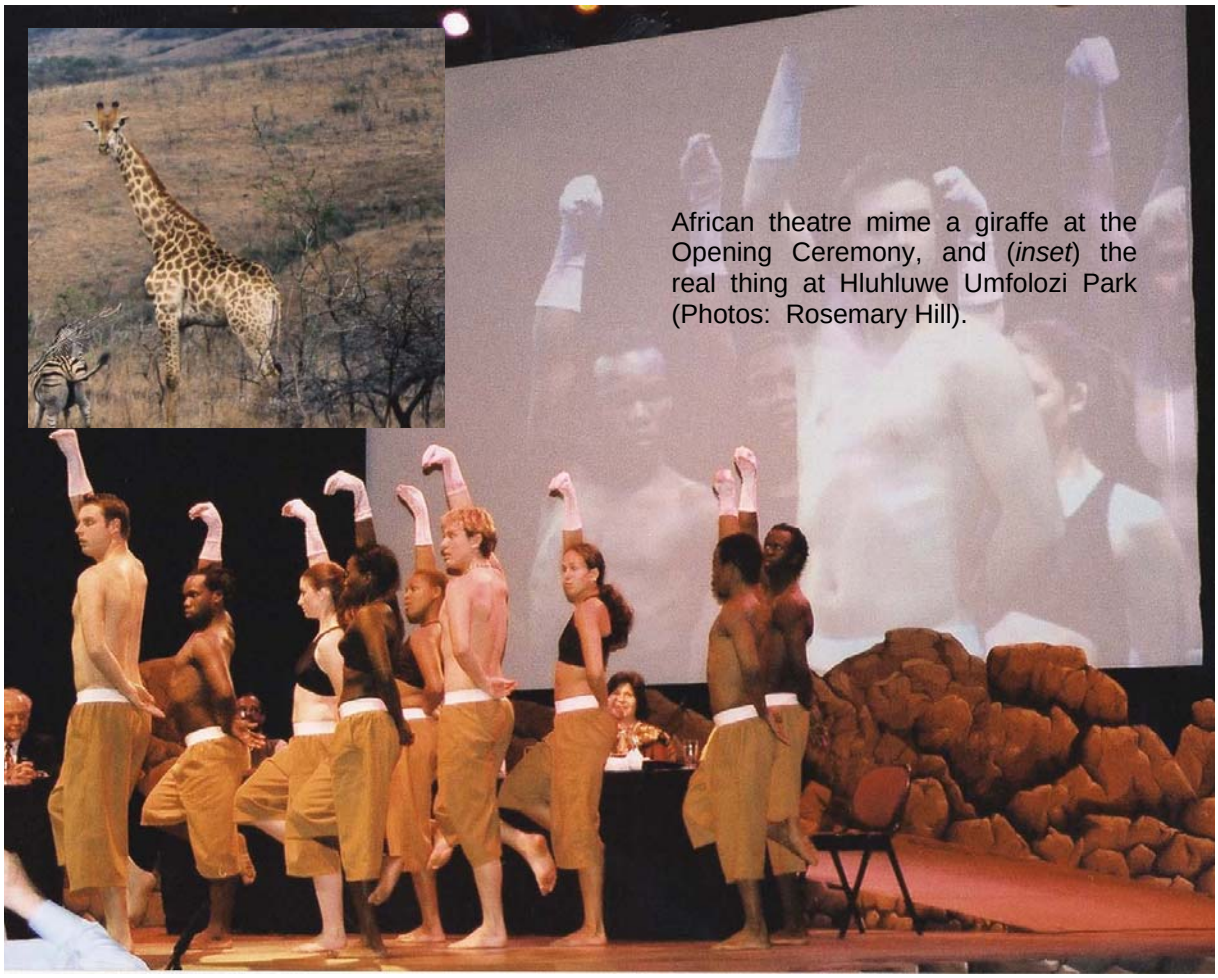
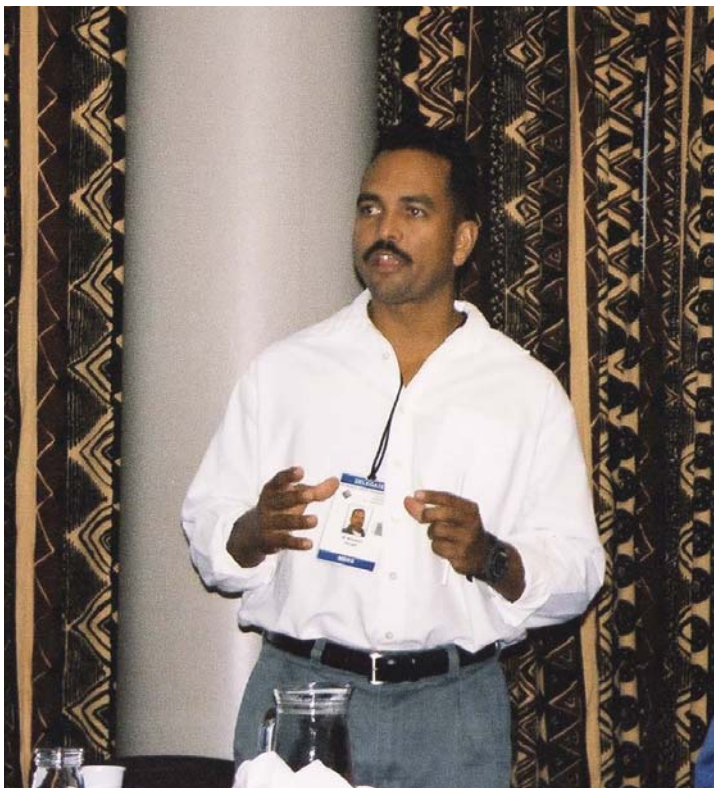


(*Above*) Nelson Mandela, Queen Nor of Jordan and President Mbeki at the Opening Ceremony of the Fifth World Parks Congress (Photo: Rosemary Hill).

(*Below*) Wildlife viewing at Hluhluwe Umfolozi National Park (Photos: Rosemary Hill).



African theatre mime a giraffe at the Opening Ceremony, and (*inset*) the real thing at Hluhluwe Umfolozi Park (Photos: Rosemary Hill).



(*Left*) A presenter from the Teledo Environment Insitute, winner of the Equator Prize (Photo: Rosemary Hill).

(*Above*) Exhibition at the Community Centre.

(*Left, centre*) Hluhluwe Umfolozi Park guards going through their paces.

(*Left, below*) An ecotourism lodge in Hluhluwe Umfolozi Park.

Photos: Rosemary Hill.

The landscapes on either side of Hluhluwe Umfolozi Park boundaries (Photos: Rosemary Hill).

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I would like to acknowledge the support of the Cooperative Research Centre for Tropical Rainforest Ecology and Management (Rainforest CRC), the School of Tropical Environment Studies and Geography at James Cook University, and the Australian Conservation Foundation (ACF), which made my attendance at this Congress possible.

Information and ideas gained at the Congress were very useful in finalising research on Culturally Sustainable Management and Information Support Systems, which I led for the Rainforest CRC during the period 2000 to 2003. Outcomes also contributed greatly to the development of a conceptual framework for the ACF Northern Australia Program and for ongoing research in partnership with the Rainforest CRC in relation to sustainable economic development.

Particular thanks to Professor Nigel Stork, Associate Professor Steve Turton, Professor Geoff McDonald, Associate Professor Peter Valentine, Mr Don Henry and Mr John Connor. I would also like to thank the Rainforest CRC for supporting Dr Dermot Smyth and Traditional Owners from the Wet Tropics, including Mr Phil Rist, Ms Melissa George, Ms Syb Bresolin and Mr Claude Beeron, who also attended the Congress. Their presentation on Cultural Indicators was well received, and highlighted the importance of this research, which the Rainforest CRC has supported over several years.

ABOUT THE AUTHOR

Dr Rosemary Hill is the Northern Australia Program Coordinator for the Australian Conservation Foundation (ACF), based in Cairns. She has extensive experience in environmental science and management and in collaborative research in rainforest and heritage conservation, with a strong focus on Indigenous approaches to environmental management.

Her experience includes natural heritage assessment and criteria, participative planning with Indigenous communities, development of Indigenous Land Use Agreements, conservation planning, collaborative research on Aboriginal fire ecology and management, environmental history, and conservation legislation review. Her role with the ACF involves promoting conservation and research in collaboration with local and Indigenous peoples across northern Australia. Rosemary is currently co-leading a research project on “Appropriate Economies for Cape York Peninsula” for the Rainforest CRC, and is a Member of the World Commission on Protected Areas.

EXECUTIVE SUMMARY

The Fifth World Parks Congress – a technical meeting of experts hosted in Durban in 2003 by the World Commission on Protected Areas – was a once-a-decade event with the overall goal of reviewing the global status of protected areas (PAs), assessing the critical issues facing them and mapping out directions and actions for the next decade and beyond.

Protected areas now cover 12.65% of the Earth's land surface, or 18.8 million square kilometres, but less than 1% of the marine environment. Protected areas are facing imminent threats from global change, including climate change, institutional change and socio-economic change. Urgent action to counter global change requires building the global network of protected areas and the matrix within which it is embedded, strengthening communities and equity, strengthening management and evaluating its effectiveness.

The Congress was attended by over three thousand delegates from many nations over ten days, and involved seven concurrent workshop streams. The Congress identified a Durban Accord, ten major outcomes, 32 recommendations, a message to the Convention on Biological Diversity, a list of Emerging Issues, and particular actions for Africa. Highlights included the announcement of 3.8 million hectare of new protected areas in the Amazon Basin. This report focuses attention on those aspects of the Congress that dealt with building the global terrestrial and marine protected area system, fostering continental-scale conservation, supporting diversity in governance types including Indigenous and community-conservation initiatives, and developing conservation economies.

This report also considers implications of the Congress for protected areas in Australia and our region. The global prioritisation exercises highlight the importance of strengthening protection across northern Australia, in southwest Western Australia, in Papua New Guinea and Timor, and in almost all marine ecosystems. The global analyses also highlight the importance of southwest Tasmania, the eastern Australian rainforests and tall forests, and the Australian desert. Global conservation models are moving away from a focus on protected areas as relatively small fortresses of nature surrounded by environmental degradation, towards continental-scale exercises in designing and coordinating conservation and compatible land use across millions of hectares, in collaboration with the local peoples. A number of exercises are underway globally to urgently increase protection in marine ecosystems. Research and development is recommended in tropical Australia to identify better approaches to protected area selection, to implement both community and continental conservation models, to find ways of integrating across scales and between Indigenous knowledge and conservation science, and to support conservation-based economies.

Africa was deeply inspirational to visit, as all of the issues of our time are brought into stark relief. The invisible military-nuclear complex between ourselves and the majority world is suddenly before your eyes in the human reality of armed guards. Yet the daily media prominence of de-colonisation, of land restitution and redistribution, the vibrancy of engagement with democracy and the role of traditional peoples inspire one with hope that out of this place of immense problems will come immense solutions.

R. Hill

LIST OF ACRONYMS

ACF	Australian Conservation Foundation
AIDS	Acquired Immune Deficiency Syndrome
BEF	Biodiversity Enterprise Fund
BP	British Petroleum
BSP	Biodiversity Support Program
CAR	Comprehensive Adequate Representative
CCAs	Community Conserved Areas
CCC	Community Conservation Coalition
CD	Compact Disc
CED	Compatible Economic Development
CFA	Conservation Finance Alliance
CI	Conservation International
CIFOR	Centre for International Forestry Research
CIOCA	Coordination of Indigenous Organisations of the Amazon Basin
CWM	Community Wildlife Management
DfNS	Debt for Nature Swaps
EF	Environment Funds
GEF	Global Environment Facility
GHG	Greenhouse Gas
HDI	Human Development Index
IBAs	Important Bird Areas
ICDP	Integrated Conservation and Development Project
ICMM	International Council of Mining and Minerals
IIED	International Institute for Environment and Development
IPACC	Indigenous Peoples of Africa Coordinating Committee
IUCN	The World Conservation Union
MPAs	Marine Protected Areas
NAP	Northern Australia Program (of the Australian Conservation Foundation)
NGOs	Non-Government Organisations
NRM	Natural Resource Management
PAs	Protected Areas
RAP	Rapid Assessment Program
RAPPAM	Rapid Assessment and Prioritisation of Protected Area Management
RARE	Not an acronym, name of an organisation, Rare
RSBP	Royal Society for the Protection of Birds
SANParks	South African National Parks
SMEs	Small and medium enterprises
SLSA	Sustainable Livelihoods in South Africa
TNC	The Nature Conservancy
TWS	The Wilderness Society
UN	United Nations
UNDP	United Nations Development Program
USA	United States of America
USAID	United States Agency for International Development
WCS	Wildlife Conservation Society
WCPA-SEA	World Commission on Protected Areas – South East Asia
WPC	World Parks Congress
WTF	Wilderness Task Force
WWF	World Wide Fund for Nature

INTRODUCTION

The World Parks Congress (WPC) is held every ten years by the IUCN's World Commission on Protected Areas. Over three thousand people from 154 countries attended. The primary aim of the WPC was to:

> "Review the global status of protected areas,
> assess the critical issues facing them and map out
> directions and actions for the next decade and beyond."

WPC is a technical meeting of experts, which does not formally recognise any delegation. Congress Outputs are not binding on the IUCN, governments, or other agencies. The overall theme of the WPC was "Benefits Beyond Boundaries". A key tension throughout the meeting was around the recognised need to give protected areas a strong role in the lives of people, without diminishing their strength in protecting nature at this time of accelerated global environmental destruction.

The Congress was an immensely complex event, with a number of combined plenary sessions, and seven concurrent workshop streams on:

- developing the capacity to manage;
- building comprehensive protected area systems;
- building a secure financial future;
- linkages in the landscape/seascape;
- building broader support for protected areas;
- governance of protected areas; and
- evaluating management effectiveness.

In addition, three cross-cutting streams were associated with workshops held in each of the seven streams above:

- communities and equity;
- marine protected areas; and
- World Heritage.

The WPC produced several outputs:

- The Durban Accord – a short statement of causes for celebration, causes for concern and calls for commitment and action for the future of protected areas;
- The Durban Action Plan – a set of key targets;
- The Recommendations – 32 recommendations from workshops within the major themes;
- Message to the 2004 meeting of the Convention on Biological Diversity; and
- Initiatives – funding, political support and technical input to improve the management of protected areas, including for example announcement of major new protected areas in Amazonia.

The key targets were grouped together to form ten major outcomes:

1. Protected areas' critical role in global biodiversity conservation fulfilled;
2. Protected areas' fundamental role in sustainable development implemented;
3. A global system of protected areas linked to the surrounding landscapes and seascapes achieved;
4. Improved quality, effectiveness and reporting of protected area management in place;
5. The rights of indigenous peoples, mobile peoples and local communities recognised and guaranteed in relation to natural resources and biodiversity conservation;
6. Empowerment of younger generations achieved;
7. Significantly greater support for protected areas from other constituencies achieved;
8. Improved forms of governance, recognising both traditional forms and innovative approaches of great potential value for conservation, implemented;
9. Greatly increased resources for protected areas, commensurate with their values and needs, secured; and
10. Improved communication and education on the role and benefits of protected areas

The text of all of the above documents is available from http://www.iucn.org/wpc2003.

Many documents, CDs, leaflets and other information were available at the Congress. This report reflects the information in documents collected, workshops sessions attended, and discussions with participants in my key areas of interest in attending the Congress: conservation finances, diversity in governance arrangements, and fine-scale (community) and broad scale (continental) approaches to conservation.

The Congress had been preceded by a "Dialogue" between IUCN and the International Council of Mining and Minerals (ICMM), which generated a lot of conflict and debate at the Congress as the ICMM's attempts to have mining accepted in protected areas had infiltrated the agenda of numerous workshops. The final Congress recommendation on mining re-iterated the IUCN Congress opposition to mining in IUCN Category I to IV areas, and recognised that although some members of the conservation community wished to continue the dialogue, others were strongly opposed to it.

GLOBAL PRIORITIES, GLOBAL CHANGE AND PROTECTED AREAS

ESTABLISHING THE GLOBAL NETWORK OF TERRESTRIAL AND MARINE PROTECTED AREAS

Progress to Date

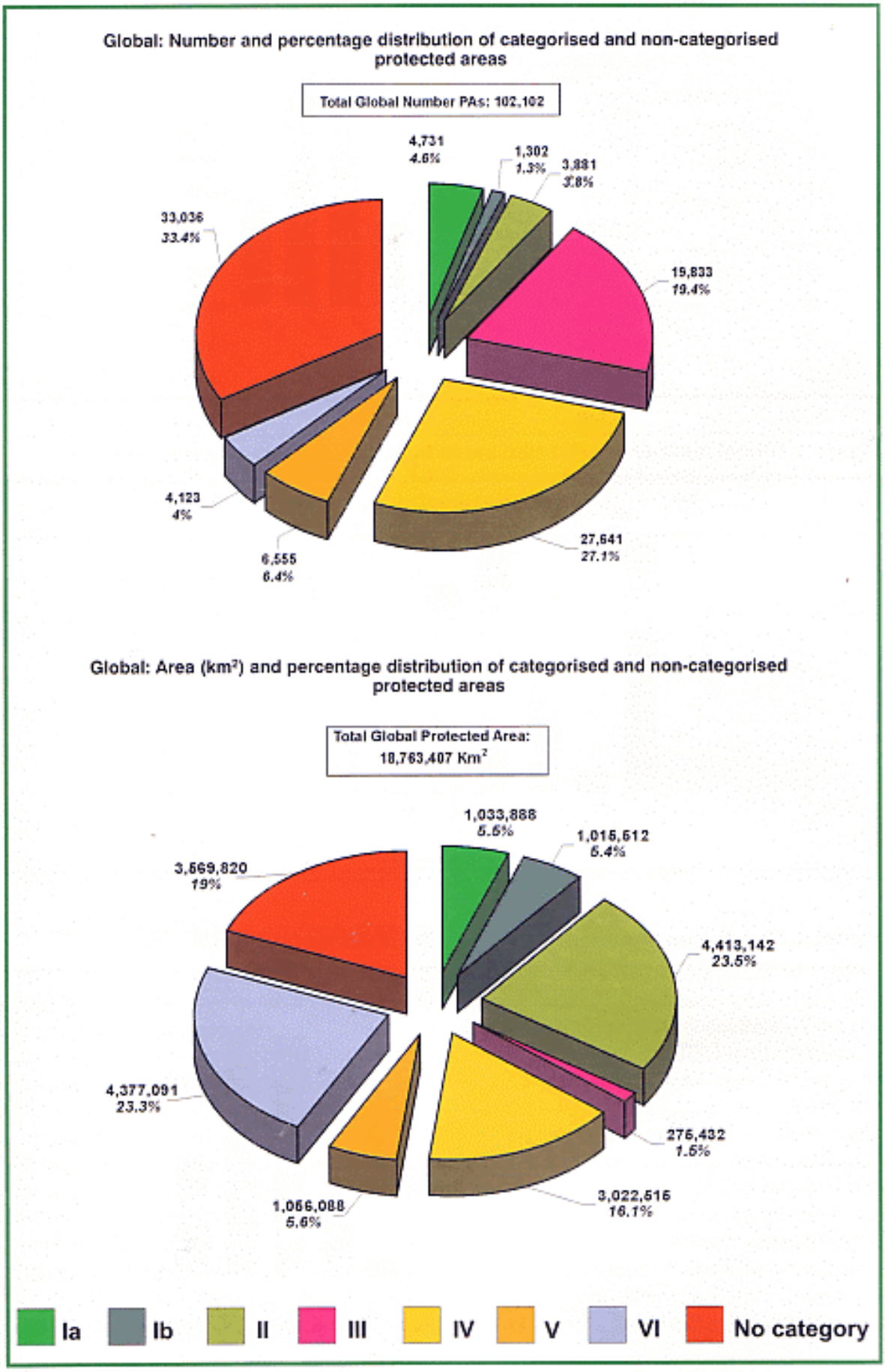
By the time the World Parks Congress (WPC) was held in 2003, 12.65% of the Earth's land surface, or 18.8 million square kilometres, had been recorded as protected areas (Chape *et al.* 2003). An up-to-date list of these protected areas was released on a CD at the WPC, and is also available on the web (http://www.unep.org/PDF/Un-list-protected-areas.pdf). Many gaps remain in the system – for example, less than one percent of the seas and oceans are designated protected areas, and one fifth of all countries have designated less than one percent of their land (Lean 2003). Lake and freshwater systems, and temperate grasslands are still very unrepresented. The greatest proportion of protected areas are in lower IUCN categories, with only 9.9% in Categories 1a and 1b (Chape *et al.* 2003, see Figure 1).

Over three million square kilometres are in sites larger than 100,000 square kilometres, such as the Ar-Rub'al-Khali Wildlife Management Area in Saudi Arabia, comprising 640,000 square kilometres. At the opening ceremony Klaus Toepfer, Executive Director of the United Nations Environment Program (UNEP), highlighted the accelerating disappearance of nature and the fact that protected areas, which are islands in a sea of degradation, are doomed to die.

THE MILLENIUM ECOSYSTEM ASSESSMENT

The Millennium Ecosystem Assessment Framework for reporting on the links between ecosystems and human well-being was released at the Congress (Alcamo *et al.* and contributing authors Bennett *et al.* 2003). The Millenium Ecosystem Assessment was established in 2001 to measure the global trends in ecosystem services, mandated internationally through the UNEP, and with official status for scientific advice to a number of international instruments, including the Convention on Biological Diversity (CBD), Ramsar and others. The Assessment is a major effort involving hundreds of scientists and will be a critical source for countering the work of so-called "sceptical environmentalists". It is scheduled for completion in 2005, and is based on the concept that biodiversity provides the necessary condition to support soil formation, nutrient cycling, and other ecological services which in turn give provisioning, regulatory and cultural services that enable the well-being of people (see conceptual framework in Figure 2). Monetary valuation of ecosystem services forms one part of the Framework.

Figure 1. Global protected area number and extent 2003 Source: Chape *et al.* 2003



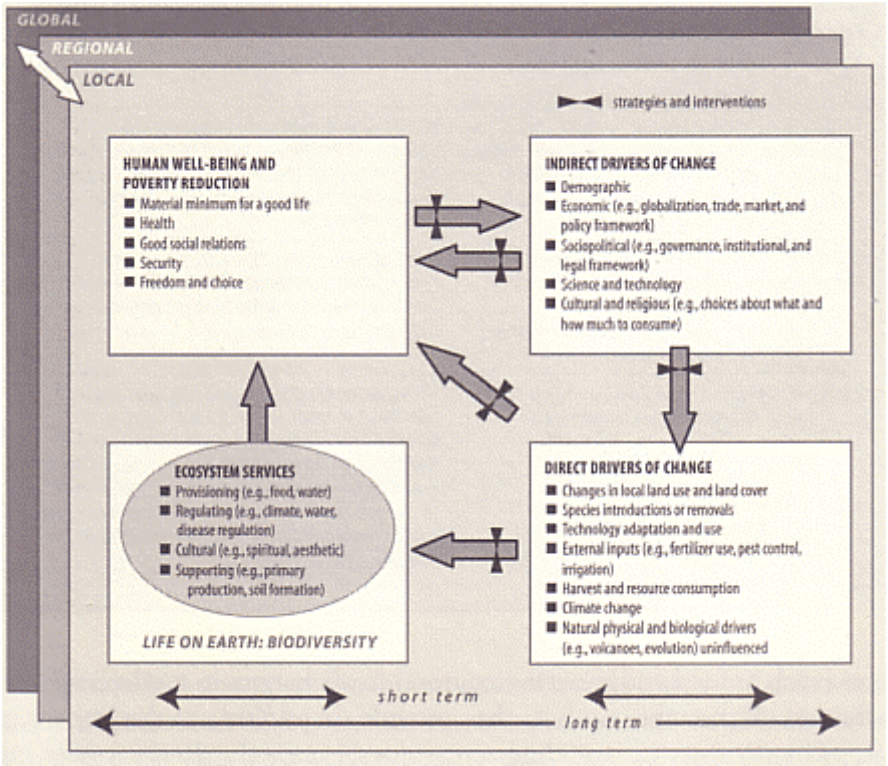
In March 2004, the Millenium Ecosystem Assessment (MA) held a conference "Bridging Scales and Epistemologies: Linking Local Knowledge and Global Science in Multi-Scale Assessments." The goal of the conference was to foster dialogue among academic and Indigenous experts on two central challenges faced by the MA – how to undertake a "multi-scale" assessment and how to create mechanisms that enable the integration or coordination of information and insights from individuals who possess different "ways of knowing the world." Proceedings of the Conference can be found at:

http://www.millenniumassessment.org/en/About.Meetings.Bridging.Proceedings.aspx.

Indigenous people from fifty countries attended the Conference, and the Indigenous Knowledge and Peoples (IKAP) Network on Capacity Building in Mainland Montane South East Asia coordinated a workshop where Indigenous views on bridging epistemologies were presented and discussed with other conference participants.

Measures of progress towards sustainability other than the MA were also available at the Congress – Birdlife International *et al.* (2003) released their proposal for ten headline indicators, and two composite indices, the ecological footprint and the vulnerability index (further information located at indicators@rspb.org.uk). Australia appears quite vulnerable on this measure. When correlations are examined between the Human Development Index (HDI) and the percentages of territory in protected areas, it is the medium HDI nations that are making the biggest contribution to conservation.

Figure 2. Millennium Ecosystem Assessment Conceptual Framework (Source: Alcamo *et al.* and contributing authors Bennett *et al.*).



Future Priorities

Many conservation organisations are engaged in priority-setting exercises around the issue of how to build a truly comprehensive and robust protected area network in terrestrial environments. Similar priority-setting exercises are underway for the marine environment, but results do not yet appear available, although Conservation International Director Mittermeier, in his keynote address, highlighted the urgent need for work in marine conservation, particularly in the "coral triangle" to the north of Australia. In general, coverage of the marine environment by protected areas is abysmally poor, and any action on marine protected areas can be seen as a priority.

Mittermeier presented Conservation International's priority-setting based on "hot spots" – areas with more than 1500 endemic plant species and more than seventy percent cleared – and "wilderness" – areas with more than 1500 endemic plant species and less than thirty percent cleared (Figure 3 and 4; Mittermieir *et al.* 1998). In Australia, there is only currently one "hot spot" recognised, located in southwest Western Australia. However, at a workshop in Atherton, Queensland, on 7 June 2004, Conservation International announced that an eastern Australian rainforest "hot spot" would be recognised, extending from the Wet Tropics of north Queensland south to the Border Ranges on the New South Wales/Queensland border, and that Arnhem Land, the Kimberley and Cape York Peninsula have been consolidated into one "tropical savannas wilderness". On behalf of Conservation International, Rodrigues *et al.* (2003) have now supplemented the "hot spot" and "wilderness" prioritisation, and at the Congress released maps of global distribution of protected and unprotected sites of high urgency for the coverage of mammals, amphibians and threatened birds (see Figure 5). The analysis identifies that most of the priorities for new protected areas are in low-income countries in the tropics. In Australia, two regions currently appear on more than one of these prioritisation maps:

- northern Australia, encompassing the tropical savannas wilderness, and giving priorities within that to Cape York Peninsula, west Kimberley and Arnhem Land for mammals, amphibians and threatened birds; and
- southwest Western Australia, encompassing both a "hot spot" and priority areas for mammals, amphibians and threatened birds.

Other priorities for Australia that emerge from these exercises are:

- east coast rainforests and tall eucalypt forests for mammals, amphibians and threatened birds, and potentially some parts also as a "hot spot";
- Tasmanian wilderness; and
- Australian deserts.

As always, the identification of a single spot in the middle of Australia at Uluru for mammals, amphibians and threatened birds leads to the conclusion that the data underpinning the analysis may be somewhat biased in its coverage! In Australia's immediate region, the places that appear on two priority-setting exercises are:

- New Guinea, both a wilderness and a urgent site for mammals, amphibians and threatened birds; and
- Timor, and much of Indonesia, both a "hot spot" and an urgent site for mammals, amphibians and threatened birds.

The global maps of Endemic Bird Areas again highlight the outstanding importance of northern Australia, southwest Western Australia and New Guinea (Figure 6). The "hot spots" and high biodiversity "wilderness" areas (the tropical areas) together cover 7.5% of the Earth's land surface and contain 62% of all plants and at least 55% of all mammals, birds, reptiles and amphibians as endemics (Mittermeier and da Fonesca 2003).

Vreugdenhil *et al.* (2003) released at the Congress their overview of methods for selecting and monitoring protected areas to ensure a comprehensive system, including tools based on biodiversity pattern, complementarity, rapid assessment and other techniques, but they didn't undertake any global level analysis. The BirdLife Partnership has been identifying Important Bird Areas (IBAs) since the 1970s and have now embarked on a process to extend their analysis and criteria to other wildlife to identify Key Biodiversity Areas (contact leon.bennun@birdlife.org.uk or www.birdlife.org). One in eight of all bird species is now globally threatened. Seven thousand IBAs have been identified as critical to protecting these Globally Threatened Birds (Birdlife 2002).

SECURING PROTECTED AREAS DURING GLOBAL CHANGE

Many protected areas are facing imminent threats from global change. WCPA (2003) is undertaking a special project "Ecosystems, Protected Areas and People", focusing on global change. A preliminary report circulated at the Congress identifies three major strands of global change:

1. biophysical change – climate change, sea level rise, habitat loss and fragmentation, and invasive species;
2. socio-economic change – growing population, intensification of land and resource use, changing values of ecosystem services; and
3. institutional change – globalisation, democratisation, decentralisation.

In response to these changes, the following priority actions are recommended:

- Building a global protected area system, through:
  - larger, rounder with buffers;
  - networks and corridors; and
  - compatible uses nearby core and in the matrix.

- Strengthening communities and equity, four major strands of:
  - strengthen the identity and culture of Indigenous peoples and local communities, particularly regarding Natural Resource Management;
  - secure their rights;
  - ensure crucial legislative and policy backing to Community Conserved and Co-Managed Areas; and
  - support capacity for community conservation and co-management at all levels.

- Building the capacity for management:
  - an enabling environment with legislation, policy, funding, etc.; and
  - human capacity, skills in planning, community relations and more.

- Evaluating management effectiveness:
  - consistent effective evaluation framework.

Figure 3. Global "wilderness" areas according to the Conservation International criteria – Arnhem Land, the Kimberley and Cape York Peninsula have since been consolidated into one "tropical savannas wilderness" (Source: Conservation International).

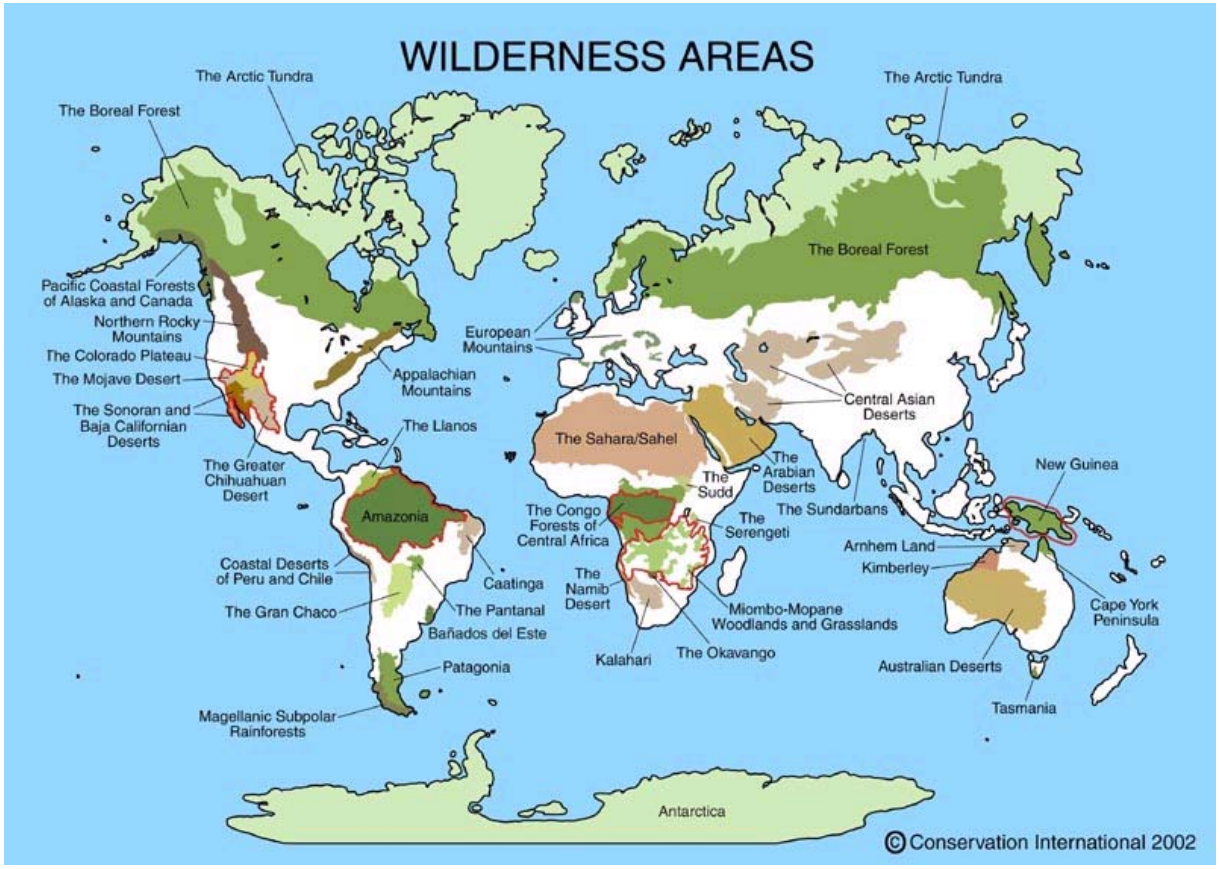


Figure 4. "Hot spots" in orange, and high urgency protected and unprotected sites (see also Figure 5) (Source: Rodrigues *et al.* 2003).

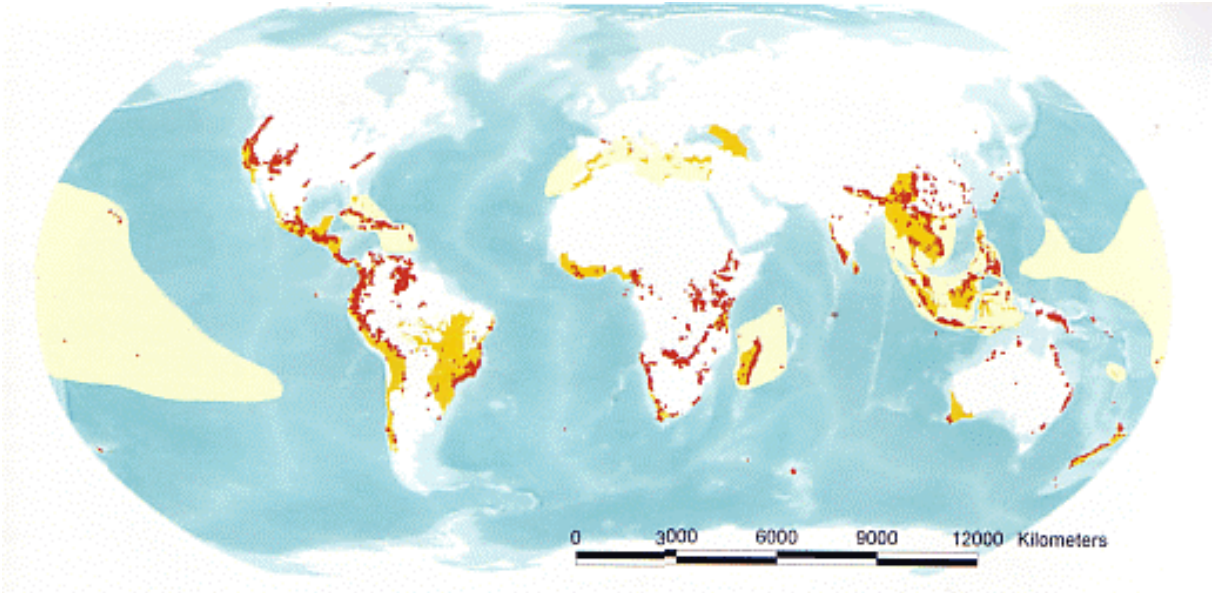


Figure 5. High urgency protected and unprotected sites for mammals, amphibians and threatened birds (Source: Rodrigues *et al.* 2003).

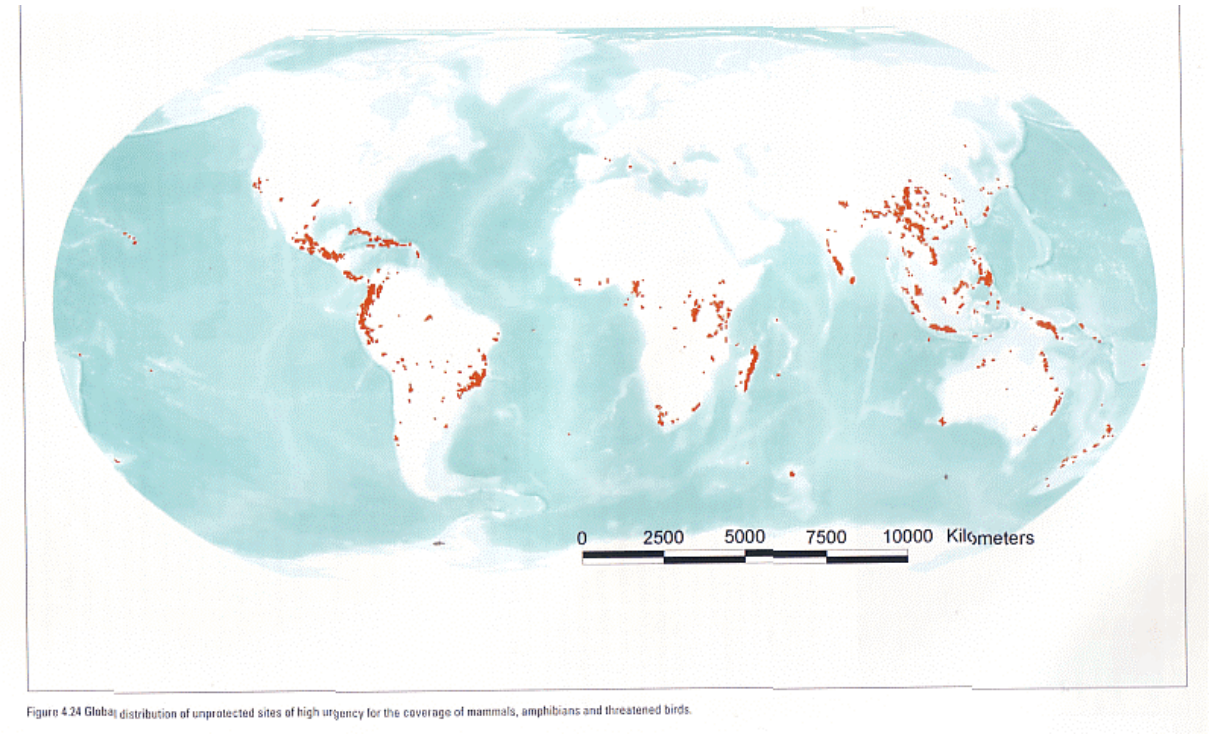
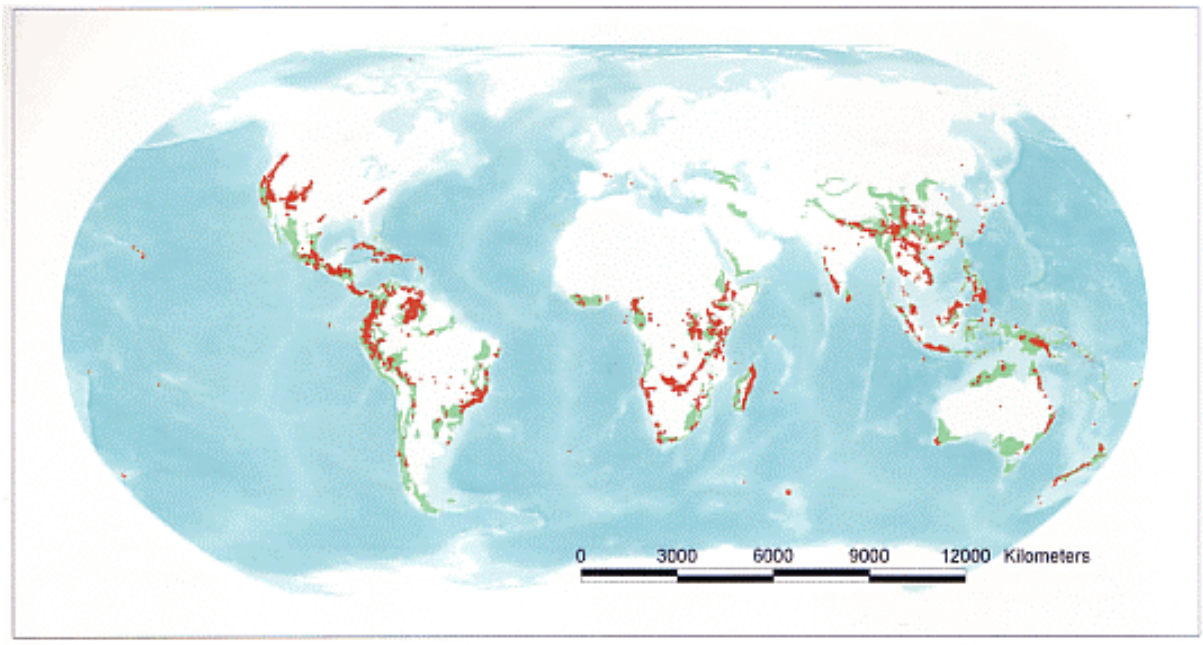


Figure 4.24 Global distribution of unprotected sites of high urgency for the coverage of mammals, amphibians and threatened birds.

Figure 6. The overlap between Endemic Bird Areas (in green) and urgent protected and unprotected sites for mammals, amphibians and threatened birds (Source: Rodrigues *et al.* 2003).



The Climate Change Program of the World Wide Fund for Nature (Dudley 2003) has identified likely impacts of climate change to include the disappearance of, and dramatic temporary and long-term changes to habitats and ecosystems, and changes to species and local food webs. Their strategies focus on preventing, managing, planning for and learning about climate change.

Dudley *et al.* (2003), on behalf of IUCN, have also considered a number of options for systems to guarantee or strengthen the ability of protected areas to withstand threats – options considered include:

- Danger list (similar to World Heritage In-Danger);
- Self reporting – various methods for standardising assessment;
- Independent assessment – various options for certification; and
- Accreditation of assessment systems.

Thorsell's (2003) report on the effectiveness of the World Heritage Convention has highlighted the success of "in-danger" listing in alleviating threats, as well as the actual assessment and nomination process, and in particular the reliance on the advice of independent expert bodies. Ervin (2003) has developed a "Rapid Assessment and Prioritisation of Protected Area Management (RAPPAM) Methodology", which gives a good initial handle on how well a protected area national system is succeeding in ensuring conservation. A Draft Report on the State of the World's Protected Areas was posted on the web during the conference (http://sea.unep-wcmc.org/wdbpa/sowpr). Many Non-Government Organisations at the Congress emphasised the effectiveness of "paper parks" in securing nature against land clearing (Mittermeier and da Fonesca 2003; Bruner *et al.* 2001).

McNeely and Schutyser (2003) undertook a future scenarios activity for the Congress. Their interesting report identifies three possible scenarios:

1. The "triple bottom line", where a new system of world governance provides the conditions for a diversity of protected areas in a connected matrix;
2. The "rainbow", where economic growth falters, conflicts and terrorism have a devastating impact from which the world finally emerges into a fragile regional balance with new civil voice and a rainbow of protected areas determined by national realities; and
3. "Buy your Eden", where the world is polarised into rich and poor, and world parks are a business in which nature has to pay its way.

All three scenarios highlight the importance of issues like promoting social equity, generating conservation finance, understanding biodiversity, ensuring sustainable livelihoods and ecosystems, and expanding international engagement.

DEBATES ABOUT GLOBAL PRIORITIES AND CHANGE AT THE WORLD PARKS CONGRESS

Different approaches to site selection and prioritisation are still receiving a lot of attention. In terms of designing protected areas to form the core within the matrix, the key tension is between proponents of "gap analysis" based on biodiversity pattern as the basis of site selection, versus recognition that ongoing ecological and evolutionary processes require protected areas to be bigger, better buffered at their boundaries, with improved connectivity, and that off-reserve management in the surrounding landscape matrix be integrated into conservation goals (WTF 2003).

TARGETS AND RECOMMENDATIONS ABOUT GLOBAL PRIORITIES AND CHANGE

Most of the Congress work in this area was within the workshop stream "Building Comprehensive Protected Area Systems". One of the ten key outcomes identified for priority over the next decade is:

- A global system of protected areas linked to the surrounding landscapes achieved, with two related key targets:
  - a system of protected areas representing all of the world's ecosystems completed by 2010; and
  - all protected areas linked into wider ecological environmental systems on land and at sea by 2015.

Specific actions in the Convention of Biological Diversity and the World Heritage Convention to strengthen global protected areas are also targeted. The specific Recommendation 5.4 regarding expansion of the system recognised both the need for a CAR (comprehensive, adequate and representative) system, and for protecting all large intact ecosystems ("wilderness" areas). Recommendation 5.5 focuses attention on actions on climate change and other global change.

Recommendation 5.23 highlights the need for greatly expanding the system of marine protected areas (MPAs), and highlights a number of important initiatives underway in relation to MPAs, including the "Ten Year Strategy to Promote Development of a Global Representative System of High Seas Marine Protected Area Networks", and actions through the Convention on Biological Diversity. The special needs of freshwater and river protected areas were also recognised in Recommendation 5.31, which calls on all sectors to vigorously pursue expansion of protection for freshwater ecosystems within the framework of integrated catchment/watershed/river basin management.

CONTINENTAL CONSERVATION

WHAT IS CONTINENTAL CONSERVATION?

Continental-scale conservation initiatives were prominent in many examples at the World Parks Congress, and are gaining significance as an essential mean of providing for long-term biodiversity and nature conservation. These initiatives manifest in different forms in different parts of the world and build to an extent on previous processes. Although continental-scale initiatives demonstrate great diversity in their origins, geography and details, there are also common features, including:

- promotion of a conservation matrix, including a mixture of strongly protected areas, inhabited and other lands;
- a connectivity network to ensure linkages between all parts of the conservation matrix;
- compatible land uses adjacent to the strongly protected area and connectivity network (varies with situation, best guide ecologically is the requirements of the most vulnerable species; Sanderson *et al.* 2003); and
- similar elements in the process of initiation and implementation.

CONTINENTAL CONSERVATION EXAMPLES, INITIATIVES AND ISSUES

Protected Areas within a Matrix of Land Uses

Continental-scale initiatives recognise that conservation realities mandate a broader focus (Sanderson *et al.* 2003). Even very large protected areas are not able to ensure long-term biodiversity conservation, primarily because of human-induced threats from outside the protected areas, including global climate change and alterations to ecological processes such as hydrology and fire regimes (Soulé and Terborgh 1999). Trans-boundary conservation areas recognise that many animals, including rhinoceros, elephants, birds and butterflies, range over habitat that is dissected by international or intra-national boundaries. In addition, many of these boundaries dissect the homelands of cultural groups who have been arbitrarily divided by colonial governments. Trans-boundary protected area initiatives are increasing rapidly in Africa (Braack *et al.* 2003). The Great Limpopo Transfrontier Park, linking the Limpopo National Park in Mozambique, the Kruger National Park in South Africa, the Gonarezhou National Park, Manjinji Pan Sanctuary and Malipati Safari Area in Zimbabwe, the Sengwe communal land in Zimbabwe and the Malueke region of South Africa, was highlighted at the Congress.

Examples of initiatives that can be generally grouped as “continental-scale” include:

- trans-boundary conservation areas and Peace Parks (van der Linde *et al.* 2001 from Africa, Sandwith *et al.* 2003 internationally);
- Biodiversity Conservation Corridors in South America (fostered by Conservation International, Sanderson *et al.* 2003);
- Nature 2000 Ecological Networks in Europe (following a directive of the European Parliament, Boitani *et al.* 2003);
- regional networks of marine reserves and protected areas around continents or in particular oceans (WCPA-SEA Marine 2003);
- Ecoregion Protected Area Complexes (fostered by World Wide Fund for Nature, including in South America and southwest Australia, WWF Guianas 2003); and

- Living Landscapes in Africa and South America (fostered by the Wildlife Conservation Society, WCS 2003).

Continental-scale initiatives differ from the earlier "Integrated Conservation and Development Project" (ICDP) approach primarily in the scale at which integration is attempted. While ICDPs attempt to achieve two apparently conflicting objectives (economic development and conservation) at the local scale, continental-scale approaches aim to:

- address proximate factors at the site scale; and
- undertake comprehensive planning at the continental or regional scale for both economic development and conservation, recognising that not all parts of the landscape have the same economic potential (core-network-compatible use zones).

Roles, Nested Levels and Agreements in Continental Conservation

Continental conservation always involves partnerships between a large number of stakeholders. Clearly there is often duplication, overlap, and conflict as well as cooperation in these partnerships. Van der Linde *et al.* (2003) suggest clarification of roles between the partners (which are not fixed) as being useful:

- **Leaders…** hold the vision for what the conservation initiative is trying to achieve, they show the way and anticipate progress;
- **Facilitators…** make things flow more easily through coordination, neutral brokering, mediation, conflict resolution and providing links to useful resources;
- **Drivers…** provide resources or exert pressure to promote the conservation initiative;
- **Champions…** promote a cause, advocate and support it using their profile, charisma, influence, respect and ability to see the big picture; and
- **Implementers…** carry out the detailed work of the various steps of the process including collecting and analysing data, monitoring and evaluation, etc.

There are many different possible levels in continental conservation initiatives (van der Linde *et al.* 2003). Although experiences reveal there is no single, optimal, pre-determined range of levels at which to work, the general rules are to work at the lowest levels possible to achieve the goals, and to always bring discussions down to the lowest level as soon as possible.

Agreements are necessary where one party cannot achieve the goal without the other's participation (van der Linde *et al.* 2003). Agreements can take many forms, which should reflect their purpose, which needs to be clear before the outset. Important constraints that can jeopardise continental conservation initiatives include:

- overly centralised planning and decision making;
- weak community organisations;
- precarious tenure systems; and
- mistrust between local and central governments.

DEBATES ABOUT CONTINENTAL CONSERVATION AT THE WORLD PARKS CONGRESS

Continental-scale initiatives recognise that the conservation effort must move beyond the boundary of the core protected area into the matrix in which it is embedded, and where there are other land uses and human inhabitation (Sanderson *et al.* 2003). However, this shift of effort also runs the risk of enabling other land uses to move into the protected area or areas which are currently in near-natural condition. Conflict around this issue of how to broaden the focus whilst at the same time strengthening, not diluting, the conservation effort was very visible at the Congress:

- Mining – Mining companies were very active in using the workshop streams to promote their agendas for development within and adjacent to existing protected areas, and unprotected areas of high nature conservation value;
- Wilderness – Proponents of wilderness were strongly arguing the need for large areas of unspoilt nature as the foundation of conservation, in response to wide-spread recognition that most near-natural areas are the homelands of Indigenous peoples and cannot be regarded as "wilderness" in the sense of "untouched by human hands"; and
- Integrating conservation and development – Although the concept of integration is central to the continental scale approach, the debates are around whether the entire landscape is required to generate directly to development, or only some parts of the matrix.

TARGETS AND RECOMMENDATIONS ABOUT CONTINENTAL CONSERVATION AT THE WORLD PARKS CONGRESS

Although there was no articulated focus on continental conservation at the Congress, two workshop streams considered this topic – "Linkages in the Landscape" and "Building Comprehensive Protected Area Systems". The specific target mentioned above (Global Change section) highlighted the role of linkages, and Recommendation 5.9 "Integrated Landscape Management to Support Protected Areas" made further general commendations about management of the matrix within which protected areas are embedded. The Wilderness Task Force (WTF), established by the World Commission on Protected Areas in March 2003, sponsored a program of presentations in the latter stream, and the stream on "Building Broader Support for Protected Areas". The WTF launched the Wild Planet Project, a two-year initiative to promote, integrate and build on wilderness conservation globally.

The IUCN publication "Linkages in the Landscape" (Bennett 1999) was relaunched at the Congress. This book focuses primarily on the biology of corridors and connectivity, and the practice of restoring linkages in highly fragmented landscapes. Greater attention was paid in the Congress to addressing how this matrix of linkages is itself to be managed.

GOVERNANCE, INDIGENOUS PEOPLES AND COMMUNITY CONSERVATION

WHAT LINKS GOVERNANCE AND COMMUNITY CONSERVATION?

"Governance" refers to the process of holding management authority, responsibility and accountability for a protected area, which may be derived from legal, customary or otherwise legitimate rights. Governance is about power, relationships and accountability. The Congress focused on two aspects of governance: good governance of protected areas; and governance types for protected areas. Good governance is recognised as the single most important factor in eradicating poverty and ensuring sustainable development. Recognition of a diversity of governance types in protected areas leads into the concept of "community conservation".

"Community conservation" is a broad term that is used to refer generally to the human dimension of conservation. According to the Community Conservation Coalition (2003), while the immediate causes of environmental degradation are visibly habitat alteration and loss, over-harvesting, introduction of species and diseases, pollution and climate change, these proximate causes of biodiversity loss can only be understood in their social, economic, political and cultural contexts. To achieve conservation outcomes, it is necessary to understand and ultimately influence human behaviour. Generally, understanding and application has focused traditionally on the scale of local communities in or around protected areas, and often Indigenous peoples' issues have come to the fore. However, newer modes of thinking and acting at larger geographic scales consider a broader social and institutional understanding of conservation. In general, community conservation operates more at the local level than the policy and legislative nation-state level.

GOVERNANCE ISSUES

Good Governance

A set of five key principles for sound governance for protected areas, based on the work of the United Nations Development Program, includes: legitimacy and voice; direction; performance; accountability; and fairness (Thorsell 2003). Governance issues, including building institutional and collaborative competence, are recognised as central to capacity building for protected area management (Carabias and Rao 2003). Collaboration and institutional strengthening are also critical in maintaining protected area function during times of armed conflict (Shambaugh *et al.* 2001).

Janis Alcorn from the Centre for Cultural Understanding and Change in the United States pointed out the trends in governance towards globalisation and democratisation. Globalisation is leading to new global norms, including aspects like the recognition of Indigenous peoples rights, of public access to information and decision making, of rising power for Non-Government Organisations and Indigenous federations, and at the same time for neoliberal markets and increased labour migration. Moves for democracy can be seen to be see-sawing with autocracy – while decentralisation, transparency, participation and social movements are driving change, at the same time there is social unrest and armed conflict accelerating in many parts of the world. Overall, the picture is of increased co-existence between global and local governance, and increased opportunities for both collaboration and conflict.

The Sustainable Livelihoods for South Africa team (SLSA team 2003a) points out that much of the move for decentralisation is highly ideologically driven from the west, and identifies three main strands:

- democratic decentralisation;
- decentralisation for efficient service delivery; and
- project/sector committees.

SLSA (2003a) identify several key tasks to be addressed when advancing local governance or decentralisation:

- avoid the creation of parallel structures and forms of authority;
- "get to grips" with underlying political dynamics, and the potential capture of processes and resources by local elites;
- appreciate social differentiation – people drawing on identities and associates;
- offer real power and real resources; and
- improve capacity beyond the council.

Diversity of Governance Types for Protected Areas

Four governance types were recognised by the Congress, and presented by Borrini-Feyerabend (2003, Table 1).

Table 1. Diversity of governance types (Source: Borrini-Feyerabend 2003).

MANAGEMENT CATEGORY	GOVERNANCE TYPE			
	Government	Co-managed	Community	Private
1. Strict Nature Conservation				
2. National Park for Conservation and Recreation				
3. National Monuments/ Natural Features Protection				
4. Conservation Park/ Wildlife Protection				
5. Protected Landscape/Seascape				
6. Protected Area, Multiple Use				

The critical point from this matrix is that the level of protection is not dependent on the type of governance – communities can achieve the highest level of protection, Category 1 Strict Nature Protection.

In a plenary discussion, Ashish Kothari presented the concept of "Community Conserved Areas" as a key opportunity to building the protected area system globally by the recognition of a large diversity of local and traditional communities' protection regimes (see also Whande *et al.* 2003). A definition of "Community Conserved Areas" (CCAs) was adopted at the Congress:

"CCAs are natural and modified ecosystems, including significant biodiversity, ecological services and cultural values, voluntarily conserved by indigenous and local communities through customary law or other effective means. The term as used here is meant to connote a broad and open approach to categorising such community initiatives, and is not intended to constrain the ability of communities to conserve their areas in the way they feel appropriate." (WPC 2003, Rec 5.26)

CCAs tend to be based on traditional common-property regimes, and are multi-objective, combining livelihood, ecological function, self-empowerment, religious/cultural values, protection from industrialisation and concern for wildlife. Kothari also recognised that the traditional systems often have limitations such as inequities of gender, class, age, and inability to cope with external forces. Multi-level systems that combine the strengths of customary law with governance at other levels can be effective. Some 400-800 million hectare of forests globally are under community ownership. Problems with CCAs lie around the erosion of common property systems, loss of traditional knowledge, alienation of the young and industrialisation. The goal is for policies aimed at the restitution of lands, participatory management, and community tenure or management or both.

COMMUNITY CONSERVATION

Community Conserved Areas (CCAs) in Practice

Although there was a tendency to include local and Indigenous communities together in discussions of CCAs at the Congress, many of the Indigenous people with whom I spoke thought this entirely inappropriate. The examples below therefore focus primarily on local peoples who may or may not be Indigenous – specific Indigenous examples are discussed in the next section.

Examples of CCAs were presented in workshops at the Congress. Tofa Devajo presented the experience of a CCA in Mendha-Lakha Village, Maharashrta in India. The Indian government had planned to construct two dams in this region that were successfully opposed by the local villagers. Subsequent to the mobilisation around the dams, villagers took back control of their forests and were able to establish a Joint Forest Management program with the State, who had been extracting timber and other forest products. All villagers were allowed to extract products, but under a set of rules decided by the village committee, which was structured to ensure almost-equal participation by women (Pathak and Gour-Broome 2001). Their most interesting rule was "no bribes without a receipt"! Marked reductions in threats to the forest from fires, bamboo and timber extraction has been achieved.

Kalpavrikish Pune presented information about CCAs in India more broadly, presenting a map showing many CCAs, and examples such as the Bishnoi people protecting Blackbuck, and the Great Indian Bustard surviving in village fields. The Khonoma-a tribal village has demarked seventy square kilometres for the protection of Blyth's Tragopan. The Khaildevi Wildlife Sanctuary has been protected by a group of twelve villages (see also Kothari and Broome 2003).

A special edition of "Policy Matters", the journal of the IUCN Commission on Environmental, Economic and Social Policy, released at the Congress, contains many articles about CCAs and co-managed protected areas throughout the world, including examples from West Africa (Maretti 2003), Indonesia (Eghenter and Labo 2003), Colombia (Luque 2003), and Pakistan (Ali and Butz 2003).

Community conserved areas have been particularly effective in restoring endangered and important wildlife in places where previous management regimes have proved ineffective. In

Namibia, communities can govern their own protected areas by forming "communal conservancies" that meet the requirements of clear boundaries, a legal constitution, a representative management committee, and registered members. In the Kunene region, the establishment of communal conservancies has led to the recovery of populations of desert-dwelling elephants and black rhinoceros (Jones 1999). In Jardhargaon in Uttar Pradesh state, India, the Chipko movement, the famous Himalayan struggle to protect natural forests again contractors, mobilised the local community to take more formal action towards establishing a protected area. A village Forest Protection Committee was established with a set of strict rules governing the use of forests, including a completely closed season for part of the year. After eighteen years, wild boar, deer, tiger, leopard and bear species have recovered, and a previously degraded slope has regenerated to a diverse mixed forest (Suryanarayanan *et al.* 1999).

Community Conserved Areas (CCAs) are also proving very effective as mechanisms that communities will support for protection of important ecosystems that are currently in very good condition, but facing increasing threats from development. The Matavén Forest is one of the largest ecologically intact areas of tropical rainforest in the transition zone between the Amazonian and Orinoquian ecosystems in South America. After many years of negotiation, on 22 July 2003, the Colombian government approved the creation of the Matavén Forest Indigenous Territory, bringing together lands previously held by sixteen different Indigenous groups, together with other lands totalling 1.8 million hectare, into management as a strict conservation area by the Indigenous peoples based on authority powers granted to them by the Columbian constitution. The option for a CCA was preferred over national park because of concerns about limitations to management and autonomy (Luque 2003). Similarly, the Shimshal community in the Karakoram Mountains of northern Pakistan established the Shimshal Nature Trust in 1997 and has succeeded in generating community support for strong conservation measures, including prohibition of hunting in some areas, and a zoning program including wilderness and wildlife core zones. The community strongly preferred to achieve conservation through a CCA arrangement (Ali and Butz 2003).

In Oaxaea, Mexico, communities hold nearly eighty percent of the land, and a number of "Community Protected Natural Areas" have been developed:

- Santa Maria Huatulco – Communal Protected Areas system of 8,825 hectare;
- Santa Catarina Ixtepeji – Communal Protected Areas of 4,225 hectare; and
- Union of Zapotko-Chineku – communal forest management with extraction of mushrooms, truffles, epiphytes, orchid propagation, education and research, carbon capture.

Co-management in Practice

Workshops at the Congress highlighted a number of co-management initiatives. The Indonesian government promoted their efforts in "Collaborative Management", involving the Dayak people at Kayan Mentarang National Park in East Kalimantan, Bunaken National Park in North Sulawesi and elsewhere, although it is difficult to assess how well developed these initiatives are.

In South Africa, the process of democratisation has brought with it a large number of land claims over parks, many of which have been resolved through a variety of arrangements. Land claims are also being settled in Provincial Parks under a variety of arrangements, for example where ten percent of the gate fees goes to local communities, with local boards established to manage the funds.

Makuleke people were forcibly removed from parts of the Kruger National Park in 1969, including the land between the Limpopo and Luvhuvhu Rivers (they displaced the San people from this area several hundred years ago). Land in the Park has now been formally returned under the restitution laws with conditions that include:

- no living areas;
- no planting of crops; and
- can develop economic activities compatible with conservation.

The Makuleke introduced trophy hunting, with much opposition, including from SAN Parks, but it was strongly supported by the local people. The Makuleke have merged traditional and local structures in governance, and have emphasised features like a rights-based approach, partnerships with private sector, open transparent bidding, technical support, skills development, conflict mediation and adaptability as critical to their success. A joint Management Board has been established together with SANParks managers of Kruger (Koch undated).

INDIGENOUS PEOPLES' ISSUES

Progress with Recognition of Indigenous Rights and Interests

Indigenous peoples' issues were prominent at the Congress and a number of preparatory meetings were held to bring forward issues of relevance (e.g. Alcorn 2001, Whande *et al*. 2003, IUCN-India National Committee 2003). Progress on Indigenous peoples' role in protected areas is linked to the issues of recognition of Indigenous rights overall. Luce Maria Delatoria presented the Declaration of Indigenous People to the Congress at a plenary session (see http://www.iucn.org/wpc2003). The declaration draws attention to Indigenous peoples as rights-holders, not stake-holders, and focuses attention on Indigenous knowledge systems and practices, the need for prior informed consent before new protected areas are declared, the need for full participation in management, and the recognition of traditional systems of protection. Delatoria also spoke strongly on behalf of Indigenous people against the mining agenda at the Congress, and for the control of tourism.

The need to address the legacy of past wrongs through restitution and other means was highlighted at the Congress (McKay 2002), culminating in the call for the establishment of a high level, independent Commission on Truth and Reconciliation on Indigenous Peoples and Protected Areas as part of the final Recommendation 5.24.

The exclusionary model of protected areas still remains the most prevalent (Forest Peoples Program 2003), although there are some examples of more progressive approaches emerging. Indigenous peoples in Africa face enormous hurdles in being recognised in competition with larger tribal groups who displaced them in pre-colonial or colonial times. The Indigenous Peoples of Africa Coordinating Committee have released publications explaining their associations and current status (IPACC 2003). Nelson (2003) examined the application of the IUCN, WCPA and WWF (2000) "Guidelines on Indigenous Peoples and Protected Areas" through eight case studies in Africa. In general, the protected areas continued to be established and managed in violation of Indigenous peoples' rights and in ignorance of the new standards, even by the organisations that developed them. Key barriers to progress on respecting Indigenous rights include:

- entrenched discrimination at the national level;
- absence of reform of government laws and policies;
- land-related laws that deny Indigenous rights;

- conservation policies and laws based on the old exclusionary model; and
- conservation agencies and Non-Government Organisations that lack training and capacity.

WCPA (2003) have extended the Guidelines referred to above into four key areas for action to address the issues of community and equity in protected area futures:

1. Strengthen the identity and culture of Indigenous peoples and local communities, in particular regarding natural resource management and conservation;
2. Secure the rights of Indigenous and local communities;
3. Ensure crucial legislative and policy backing to Community Conserved Areas and Co-managed Protected Areas; and
4. Support capacity for community conservation and co-management at all levels.

Examples of Indigenous People and Protected Areas at the World Parks Congress

Khomani San have had their land claim over Kgalagadi Transfrontier Park "settled" through an arrangement that includes:

- rights over 36,900 hectare of farmland adjacent to the Kgalagadi Transfrontier Park;
- rights over 25,000 hectare of land in the Kgalagadi Transfrontier Park, to be managed as a Contractual Park with the following conditions:
  - no living in the Park;
  - cultural practices allowed, including hunting and collection; and
  - all reasonable non-commercial uses allowed (Grossman and Holden 2003).

From the Khomani San viewpoint, although their cultural mapping project resulted in a formal agreement to recognise some of their rights, they are still struggling for proper access to cultural sites and their traditional land in the remainder of the Kgalagadi Park (Dutton and Archer 2003, Nelson 2003). Richtersveld National Park has been proclaimed on the basis of an area of land leased by the community of Nama speaking pastoralists to SANParks to run as a park under co-management arrangements. However, difficulties have been experienced getting real co-management going (Grossman and Holden 2003).

In their workshop presentation, Sebastio Haji Manchinery and Claudio Castellio from CIOCA (Coordination of Indigenous Organisations of the Amazon Basin) in Brazil and Venezuela respectively highlighted the desperate situation for Indigenous peoples on the river. Management plans still do not take account of local peoples. Recently the invasion of timber traffickers in Xesume National Park resulted in the genocide of the Tigira people, yet the Minister for Environment took no action. Indigenous land rights are not respected – recently oil exploration leases were granted over the Huanai people's territory without their consent. For the Amazon basin, a key issue is the demarcation of Indigenous peoples' territories.

Alto Fragua-Indiwasi, Mario Jacanamijoy, Ignacio Giraldo and Juan Riascos presented the concept of Indigenous Protected Areas as part of the National Reserve System in Colombia. The overall approach is for coordinated management through a joint board of a national park and contiguous Indigenous territory, through a special statute. The Board establishes a zoning plan, joint projects and policies, including dialogue between the two systems of knowledge, Indigenous and scientific. Projects include cultural mapping and characterisation of resources, respectful inter-cultural processes, using Indigenous women as guides, and more. There are two Directors for the Park – an Indigenous people's Director and a Park

Director. Agreement is based on the concept of equal sharing – Indigenous people have fifty percent rights and duties, non-Indigenous people have fifty percent rights and duties. Indigenous people, particularly the elders, found that very hard due to distrust, however much effort has been put into sitting down together and building trust.

In Brazil, the PPTAL (Protection of Indigenous People and Their Lands in the Amazon Region) is a program that seeks to take actions to guarantee Indigenous territorial integrity through identification, demarcation, compensation and surveillance, and to ensure non-predatory use of natural resources by Indigenous people. Demarcation of boundaries is seen as central to the preservation of cultural identity (FUNAI and KfW GTZ 2003). Mapping of Indigenous peoples' customary boundaries has been extremely effective in both Malaysia and Indonesia, leading to attempts by those governments to restrict the ability to make maps to government-licensed persons (Alcorn and Royo 2000). Protection of Indigenous knowledge systems was also a focus of interest, with South Africa having just developed an Indigenous Knowledge Systems Draft Bill. Recognition of a separate governance dimension to the IUCN system of protected area categories was seen as a good step forward to enabling a more appropriate level of Indigenous participation.

The idea of "Sacred Places" as an approach to nature conservation seems to be gaining currency. Tribal Chief Emeka Anyaoku in his keynote address highlighted how his people traditionally completely protected a sacred forest and a sacred river, which was not fished. In southwest China, Conservation International, together with The Nature Conservancy, the Center for Biodiversity and Indigenous Knowledge, the Snowland Great Rivers and the Daji Corp have embarked on a conservation project based on renewing the Tibetan cultural values and cultural approaches to conservation, through a Tibetan Sacred Land Protection initiative (contact cichina@conservation.org.au). In the United States, a new film "In the Light of Reverence" highlights attacks on Native American sacred lands (see "The Sacred Land Reader" at www.sacredland.org/reader.html).

EVALUATIONS OF LOCAL COMMUNITY CONSERVATION: THE LESSONS

Community-based wildlife management (CWM) is one strand of community conservation, defined as the regulated use of wildlife populations and ecosystems by local stakeholders. The International Institute for Environment and Development (IIED) undertook a major study to evaluate CWM, called "Evaluating Eden" (Roe 2001, Roe *et al.* 2000). They examined numerous case studies from around the world, including from Australia, and highlighted these conclusions at the Congress:

- Under the right conditions, CWM can make a significant contribution to both conservation and economy, but is often burdened with unrealistic expectations and condemned as a failure before it has a chance to succeed;
- CWM is a complement to, not a substitute for, protected area approaches; and
- There are few cases where financial benefits unequivocally exceed costs, but communities in some cases see the other benefits (livelihood security, employment, etc.) as being worth the costs (labour, time, resource use restrictions, etc.).

The Biodiversity Support Program (BSP) operated from 1998 to 2001 as a consortium of the World Wide Fund for Nature, The Nature Conservency and the World Resources Institute, funded by the United States Agency for International Development. BSP's mission was to promote global biodiversity conservation, which it did through supporting projects that combined conservation with social and economic development. BSP operated projects in four regions: Africa and Madagascar; Asia and the Pacific; Eastern Europe; and Latin

America and the Caribbean. In addition, BSP undertook Analysis and Adaptive Management across all programs, and produced some very interesting findings, all available on a CD distributed at the Congress. Their evaluation of community-based conservation efforts through devolution for local empowerment in conservation work (see also previous section for some discussion of devolution in relation to more general governance issues) found that:

- the meaning of local empowerment depends on the local balance of power – local elites, loyalties, and marginalisation; and
- local empowerment may increase conservation when it encounters a local movement for sustainability (Wyckoff-Baird *et al.* 2001).

Meaningful local participation emerged as a critically necessary, but not sufficient, condition for achieving conservation, although the tension in multi-level coordination, involving local as well as other actors, generally increases accountability. Some key principles identify by Wyckoff-Baird *et al.* (2001) for Non-Government Organisations to assist local community conservation included:

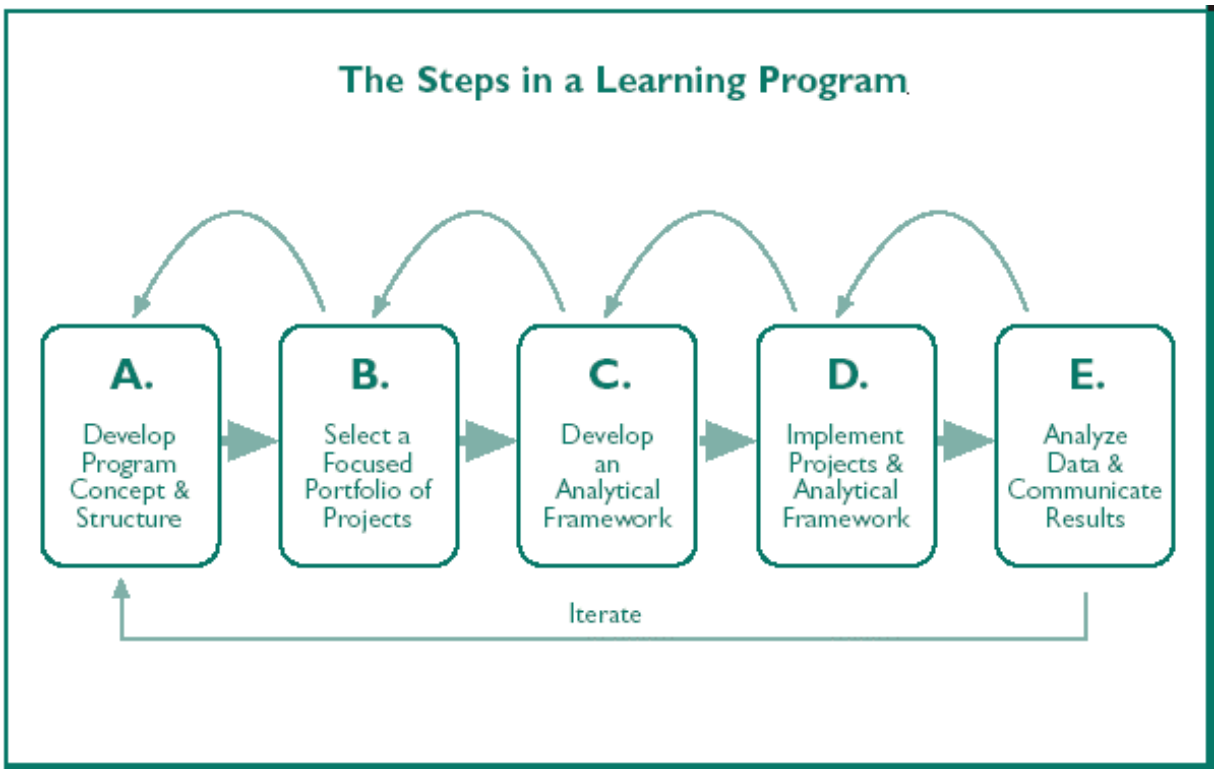
- knowing the local distribution of ownership and rights;
- identifying the local non-conservation goals and their relationship to the conservation goals;
- encouraging local-national links;
- paying attention to the local position of conservation allies;
- working with institutional partners with authority, legitimacy and capacity; and
- researching and addressing underlying social factors.

BSP's evaluation of conservation alliances found that simple alliances, with few member organisations, a single strong leader, clear goals and a good working relationship with the funder, are the most effective (Margoluis *et al.* 2000). In developing their community conservation work, BSP strongly focused on the concept of a Learning Program with two types of goals:

- specific conservation and development objectives; and
- systematically learning from your actions to determine what works, what does not work and why.

They presented a Learning Program Model (see Figure 7, Salafsky and Margoluis 1999). A simple Threat Reduction approach was adopted for measuring project level success (Margoluis and Salafsky 2001). Links between health and conservation were made at both conceptual and operational levels in some project designs (Margoluis *et al.* 2001).

Figure 7. Model for a Learning Program (Source: Salafsky and Margoluis 1999).



The Community Conservation Coalition brings together people from a diverse range of conservation organisations that are interested in the linkages among conservation, population dynamics, health, education, and the economy. Their CD of "Social Science Tools for Conservation Practitioners" provides wonderful resources including a five stage "program cycle":

- define the strategy;
- develop work plans;
- implement actions;
- monitor results and progress; and
- analyse and adjust the project.

Social science tools are presented in themes:

- Participatory approaches to conservation;
- Population and environment dynamics;
- Gender issues;
- Communication and education approaches;
- Adaptive management approaches;
- Socio-economic assessments and alternative livelihoods;
- Governance and conflict management; and
- Capacity building and organisation development.

Much of the assessment and evaluation work of the BSP is also included in this CD. The Community Conservation Coalition, unlike the BSP, is an ongoing forum with a large number of member organisations.

DEBATES ABOUT GOVERNANCE, COMMUNITY CONSERVATION AND INDIGENOUS PEOPLES

Indigenous peoples' issues gained a lot of recognition and support at the Congress. Nevertheless, concerns about the relationship between Indigenous peoples' issues and conservation were raised, and were an undercurrent in many discussions. Richard Leakey in a plenary session emphasised the reality that "colonialism happened" and many of the outcomes cannot be reversed. The concept of Indigenous people in Africa is difficult – all except the Europeans have some claim to Indigenous-ness. Some conflicts between Indigenous peoples and protected areas are about conservation – there is a reality of people destroying nature, both Indigenous and non-Indigenous. Other speakers argued that local people do not always have the concept of sustainability, and that compensation for loss of rights is essential in some cases.

TARGETS AND RECOMMENDATIONS ABOUT GOVERNANCE, INDIGENOUS PEOPLES AND COMMUNITY CONSERVATION

Several important targets were developed for the recognition of the rights of Indigenous peoples, including:

- All existing and future protected areas shall be managed and established in full compliance with the rights of Indigenous peoples, mobile peoples and local communities;
- Protected areas shall have representatives chosen by Indigenous peoples and local communities in their management proportionate to their rights and interests; and
- Participatory mechanisms for the restitution of Indigenous peoples' traditional lands and territories that were incorporated in protected areas without their free and informed consent established and implemented by 2010.

A more general target was adopted in relation to governance, simply that effective systems of governance be implemented by all countries. However, Recommendation 5.17 specifically called for recognition and support for a diversity of governance types, including CCAs and co-managed areas. Recommendation 5.26 on Community Conserved Areas further developed that concept. Recommendation 5.24 on Indigenous Peoples and Protected Areas included many specific clauses regarding the concept of free and informed consent, and called for the establishment of a Truth and Reconciliation Commission.

NATURE CONSERVATION ECONOMIES

WHAT ARE CONSERVATION ECONOMIES?

The term "conservation economy" is used here in a broad sense to encapsulate the type of economic activity that provides for ongoing conservation of nature, including, for example, economic activity to fund protected areas, to enable people to sustain livelihoods adjacent to or within protected areas, or to build economic activity far-away from protected areas that depends on the ongoing existence of the protected area.

The World Parks Congress highlighted many examples of the links between nature conservation and economic activity, pitched for example in activities such as:

- "There's another way that works", including enterprises like fine paper production, tea from local forests (IUCN South Africa 2003);
- Conservation Finance Guide (Conservation Finance Alliance, CFA, 2003);
- Renewable resource use (tourism, hunting, live game removal, grass harvesting, bioprospecting; Davies 2003); and
- "Mainstreaming Biodiversity in Development", with many examples of tourism, game ranching, sport hunting (a big deal in parts of the world), flower farming for export to Europe (Pierce *et al.* 2002.)

A key emerging concept is that of developing an institutional brand for those in nature conservation – a recognition of the selling of goods and services, even where there is no market (Davies 2003).

Work on giving a "market" value to the ecosystem services provided by protected areas, and nature in general, is still continuing although the focus has shifted to direct revenue generation. Royal Society for the Protection of Birds (RSPB) (see www.rsbp.org.uk) have concluded that the irreplaceable value of wild nature is about $20 trillion a year, and that an investment of $50 billion a year could protect environmental services worth $5 trillion a year.

Perverse subsidies were highlighted – agricultural subsidies in Europe run to about $100 billion annually, more than twice the flow of donor money to less developed nations. Young (2003) presented an interesting overview of perverse subsidies and incentives around the world.

CONSERVATION FINANCE GUIDE

The Conservation Finance Alliance (CFA) is a large group of organisations1 who have been focusing on the challenge of providing sufficient long-term sustainable funds for conservation work and protected areas. At the Congress Opening Ceremony, Ian Johnson, Vice-President for Sustainable Development at the World Bank, cited $1US per hectare to establish, and $1US per hectare, per annum for ongoing management, as the minimum costs of a protected area (the United States' average expenditure in 1996 was $26US per hectare, see Financing Protected Areas Task Force of the World Commission on Protected Areas (WCPA) of IUCN, in collaboration with the Economics Unit of IUCN 2000).

1 Members include The Nature Conservancy, World Conservation Society, Conservation International, World Wide Fund for Nature, United States Agency for International Development, The World Conservation Union, United Nations Development Programme, and others (see http://www.conservationfinance.org/ for full list of members).

The "Conservation Finance Guide", distributed by CFA at the Congress on CD, is an excellent resource for helping to understand how to finance conservation work. The Guide is part of a larger "Conservation Finance Capacity Building Strategy" that includes a website, training opportunities and more. The overall goal is to provide practical tools to support the rapid expansion of sustainable finance mechanisms that generate long-term funding for biodiversity conservation.

The specific objectives of the Guide are:

- To increase awareness and understanding of the range of conservation finance mechanisms available;
- To provide practical, user-friendly tools to methodically assess which conservation finance mechanisms are most viable in specific settings, and to efficiently and successfully implement these mechanisms; and
- To expand significantly the pool of practitioners able to develop and implement sustainable conservation finance mechanisms.

The Guide is designed for protected areas, and is suitable for protected areas in the broader sense – that is, including compatible use areas and land acquisitions, and a large component of environmental education. The critical starting point for financing is the "Business Plan" which follows from the overall management plan for the protected area. The Business Plan identifies what money is needed and for what purposes, usually at three levels (essential, desirable, ideal), developed by a whole set of spreadsheets (provided), together with suggestions of where the funds may come from. From this basic information a report in narrative form is prepared, including sections of: program and financial strategy, historical activities, expenditure, revenue and long-term strategy.

In terms of sources of revenue, the Guide provides detailed advice on the options outlined below.

Bilaterial and multilateral donor: provides detailed advice on the guiding principles donor agencies are following currently, including material on how to write a good proposal; recognises it is difficult to obtain money just for the environment, tends to need to be integrated and sector-wide. Oleas and Barragán (2003) provide an overview of the experience since the 1990s of specialist Environmental Funds providing finances for protected area and other sustainable development projects in Latin America and the Caribbean, primarily as a conduit for international donor funds. Norris (2003) has produced a handbook of resources about establishing and running such funds, legally, operationally and to ensure a strategic focus.

Biodiversity Enterprise Funds: "are highly flexible investment funds that provide long-term capital, as well as business and environmental technical advice to Biodiversity Enterprises (BEs). BEs are small-and-medium-scale enterprises (SMEs) engaged in site-based compatible economic development (CED) that contributes significantly to biodiversity conservation". Examples are provided on the CD – the "Ecotrust Fund" from Canada is one example of a Biodiversity Enterprise Fund. The key focus of Biodiversity Enterprise Funds (BEFs) is on compatible economic development – like organic cocoa growing in the shade. The CD provides advice on how to establish and run a BEF. The Global Environment Facility also released a CD at the Congress of the Operational Manual for Protected Area Trust Funds (GEF Coordination Team 2003).

Bioprospecting: the systematic search for biochemical and genetic information in natural sources that can be developed into commercially-valuable products for pharmaceutical, agricultural and other applications. Financial returns depend on benefit-sharing agreements

between the holder of the natural resources and the partner with the technical expertise and capital for development to market. Many hurdles involved including commitment of partner (long-term, very expensive), issue of intellectual property rights, perceived equity, etc.

Carbon offsets: carbon projects can generate financing for conservation by selling certified carbon credits to greenhouse gas (GHG) emitters. The Kyoto Protocol provides several market-based mechanisms to enable GHG emitters to achieve their assigned reductions. Currently, however, offsets are limited to afforestation and reforestation – project activities based solely on the protection of existing forest are excluded until the year 2012.

Debt swaps: debt-for-nature swaps (DfNS) are a method by which debt owed by a developing country or commercial/private company debtor can be renegotiated with the creditor to fund biodiversity conservation.

Environmental funds: also known as conservation trust funds. Most environmental funds that finance conservation take the form of a legally independent institution (i.e. set up outside of government) and are managed by an independent board of directors. Many environmental funds have a permanent endowment that has been capitalised by grants from the national government and international donor agencies. Environmental funds may also manage sinking funds created through debt-for-nature swaps or revolving funds financed through specially designated "user fees" or taxes that are “earmarked” for conservation.

Taxes and levies: A range of examples are provided of specialist taxes and tax mechanisms including: taxes for watershed protection in Costa Rica; a lottery fund for environment in the United Kingdom; and a scheme in Hungary where taxpayers can divert one percent of their taxes to an environmental fund.

Foundations: various philanthropic organisations, who tend to only fund projects, not operation or recurrent costs – guidance is provided in applying for these grants.

Global Environment Facility: a group of 173 member governments, multilateral banks and institutions, the scientific community, and a wide spectrum of private sector and non-governmental organisations who aim to articulate, achieve and fund a common global environmental agenda. Global Environment Facilities provide partial grant funding to eligible countries for projects that address threats to the global environment in four "focal areas": biodiversity loss, climate change, ozone depletion, and degradation of international waters. Projects are funded in developing countries only.

Payment for watershed services: self-explanatory, being pioneered in a few cases around the world by cities and companies dependent on the maintenance of vegetative cover in key catchments.

Resource extraction fees: this section of the conservation finance guide is devoted to mining, oil and gas and does not discuss renewable resource extraction – presumably there are opportunities here for non-timber forest products and the like as part of “compatible uses” in protected areas at the continental-scale.

Tourism fees: entry fees, concession fees, licences, and tourism-based taxes such as the bed tax; worksheets provided to help develop these.

EXAMPLES OF CONSERVATION ECONOMY ENTERPRISES

The Equator Prize

The United Nations Development Programme Equator Prize examples were the most interesting that I saw at the Congress in terms of conservation economies. The Equator Prize each year recognises six local initiatives that exemplify extraordinary achievement in reducing poverty through the conservation and sustainable use of biodiversity in the equatorial belt.

The Teledo Institute for Environment and Development in Belize won a prize for their work in transitioning people from unsustainable commercial fishing to managed tourism sport fly-fishing enterprises, tripling the fishers' incomes from about $4,000 to $12-14,000 per annum. The Toledo Institute's role was in connecting the local fisher people with organisations in the United States such as The Nature Conservancy, with major tourism businesses, and in assisting people to develop their skills and product, including a tourism training and development office. An exchange program whereby an icebox was given for a gill-net has encouraged people to take up handline fishing. A scholarship fund enhances access to schooling. Four-stroke motors have replaced two-strokes on the boats. Fisher people have been trained in kayaking, and have now become kayak guides. One problem remains in that the powerful people in the community receive most of the resources – Toledo Institute started their training with the poorest of the poor.

A group of villages in Fiji won a prize for their management of Pio Radihediki, an area of some 95 square kilometres with 2,500 people who have taken over local management of their reef and marine environment. Their approach involved ceasing the issuing of commercial fishing licences and establishing a network of fifteen tabu sites, within which resource recovery has been remarkable, demonstrated through monitoring of key indicator species. They established a Trust Fund Mechanism between the eight villages, with a constitution and an approach of investing fifty percent of all money, and spending the rest on initiatives such as electrification of all houses, and sponsorship schemes for children to attend school. Money has been generated through a bioprospecting agreement with the University of the South Pacific. They believe the key to success lies in the Community Controlled Trust Fund.

The Misquito people from Rio Platano Biosphere Reserve won a prize for their work in establishing ecotourism. The reserve comprises 830,000 hectare with five different Indigenous languages, 35 sub-groups and forty thousand people. Main problems have included lack of participation and basic services, extreme poverty and limitations on employment. The Ecotourism venture started through training and work with local leaders, surveying and mapping, producing a guide, developing restaurants and handicrafts. An Ecotourism Committee coordinated all the various enterprises needed for tourism, such as handicraft production by women, small business management, guides, and activities at the primary school. Today, one hundred families receive income as river guides, six are involved in room/board, six in transporting goods along the river – income levels rose from $500 to $12,000 per annum. Challenges remain in ensuring broad community involvement in the management, in ensuring infrastructure, mitigating the impacts of tourism as visitors demand more services, and in resisting the expanding agricultural frontier.

People in the Maya Biosphere Reserve in Guatemala also won a prize. In this case, sport hunting provided a sustainable livelihood. A bird valued at $5.00 for meat was now worth $1,500 if hunted for sport. The group has worked with the World Conservation Society in developing tourism as an integrated enterprise with handicrafts, low-impact visitation, sport hunting and non-timber forest products, as well as zoning a small area for timber harvesting. However, management issues in the local community remain a problem – the $30,000 prize

money wasn't properly invested through a Trust Fund and most of the community missed out on the benefits.

Other Examples of Conservation Economies

Some very interesting examples of all the mechanisms for financing conservation were presented in the workshop sessions at the World Parks Congress, and in literature distributed.

Dr Fanny N'Golo presented an example of establishing a Foundation to take over funding the management of community-based wildlife and natural resource management in Cote d'Ivoire. The government of Cote d'Ivoire has embarked on a reform process that included the establishment of a "Management Program for Protected Areas" with the objectives of ensuring protection and valorisation, sustainable finance, representativeness, and a network of corridors. The Foundation, under a Board of Directors, brought together government and non-government organisation participants, and was established with specific objectives of raising funds and developing long-term financial security. Initial capital came from both the Global Environment Facility and other donors, and a policy of not using the capital was adopted. Previously funds had to be channelled through the Ministry of Finance, which created many problems. The region is adjacent to an important National Park (Burkina Faso Comoe), includes 66 villages and 65,000 rural people. The funds are available for local development, education and community-based natural resource management. A zoning plan was developed to provide for a conservation area, as well as an area for mixed agro-silvicultural-pastoral use.

Ukwakhisana is an organisation working with some of the 800,000 families, including 2.5 million children, who live in poverty on the South African side of the Kruger National Park. Ukwakhisana initiatives over the last five years have resulted in the establishment of small factories, vegetable farms, dams, crèches, community water and sanitation programs, tourism developments, schools, clinics, AIDS orphanages, communications networks, electricity supplies and centres for disabled people. The key to their success is a strong management Board and a foundation where the work in the community is based on the following:

1. Communities must have democratically elected and truly representative structures that unanimously appoint Ukwakhisana to work in that community;
2. This appointment must be supported in writing by a least eighty percent of the adults who reside in that community; and
3. The communities must be prepared to invest a high level of their own resources in the program.

Sometimes it has taken between two and three years to get the necessary support. Ukwakhisana follows a very intensive community-based engagement process in planning for economic development (de Bruyn 2003).

The German government presented examples of how biodiversity conservation assistance has been integrated into their development cooperation programs (Federal Ministry for Economic Cooperation and Development 2002). Local projects of interest included assistance to Game Management in the Selous Game Reserve in Tanzania, support for resolving land tenure in Nicaragua, and support to participatory activities in Xishuangbanna, Yunnan Province of China, aimed at facilitating ten cultural minorities to cooperate in forest management.

Mathonsi Simunye is an organisation in Kwa-Zulu which was formed to bring together uncompromising youth factions in the Mathonsi Tribal Area; they developed a focus on arts, craft and culture through the production of beadwork and agricultural projects. Beadwork production in Kwa-Zulu is very large; the work requires little capital and can be completed by people suffering AIDS (see www.zulu.org.za).

Utilisation of natural resources is still a common theme in many economic development projects associated with protected areas – the United Nations Development Programme project to allow grazing in Sudan's Dinder National Park is a typical example (Kidani 2003). In Nepal, utilisation is zoned to occur in "community forest" areas next door to protected areas (Jayaswal and Oli 2003).

Tourism

Ecotourism is still the most important economic activity associated with nature conservation. According to The Nature Conservancy (TNC 2003), tourism is the world's largest industry, supporting two hundred million jobs and generating $475 billion revenue in 2000, which continues to grow at a rate of 7.4%. The Nature Conservancy promotes tourism management plans and model enterprises, such as a local farmers' cooperative tourism enterprise in Talamanca-Caribbean Corridor.

There were some interesting workshop presentations about local and Indigenous people developing tourism. A speaker from Fiji emphasised that tourism can work for local Indigenous communities, but commercial concepts like saving and banking need to be developed – the concept of business is alien to Pacific/Fijian culture. The key is working with local people to determine how they would like to develop tourism, and undertaking participatory rural appraisal to understand the assets that are available. The Fijian approach is to try to entice tourists to visit the villages, so the leakages from competition in the market place are minimised. All of the enterprises highlighted in the Equator Prize involved tourism of some sort.

Many brochures attracting people to visit important nature reserves throughout the world were featured including:

- Visitor's Guide to the Río Plátano Biosphere Reserve (Macomber *et al.* undated)
- Odzala National Park Republic of Congo (ECOFAC undated).

At the workshop on Tourism and Communities, the International Support Centre for Sustainable Tourism (contact sustour@axionet.com) argues that four major issues require addressing if the negative impacts on Indigenous Peoples are to be reversed:

- International law… sustainable tourism will respect the full body of international law regarding tourism;
- Tenure… recognition of Indigenous tenure;
- Customary laws… compliance with customary law; and
- Protocol… strengthening, not undermining, cultural protocols.

Tourism was the focus of a special panel plenary discussion, where the Australian Conservation Foundation Vic-President Penny Figgis made an important contribution. Many reservations were expressed about the relationship between tourism and conservation, both on the economic side (where tourism needs to be part of a broad range of economic activities), and on the conservation front, where tourism can have a substantial impact. The global environmental footprint of the tourism industry involves some dramatic statistics –

eighty percent of Japan's energy; all the water in Lake Superior three times over; all the waste of a European country…

DEBATES ABOUT CONSERVATION ECONOMIES

The SLSA team (2003b, see www.ids.ac.uk/slsa) have highlighted the failure of many market-oriented strategies aimed at building economic development for poor and marginalised people in South Afirca. Their case studies highlighted some very interesting key tensions around the whole approach being developed by major non-government organisations in the Conservation Finance Coalition:

- Political commitments… tenure reform aimed at delivering land back to people is often not carried through and lack of access to assets generally continues to marginalise the poor;
- Market engagement… issues like too many producers and too few buyers producing poor terms of trade for enterprises – markets are affected by patterns of social and economic differentiation as well as political power;
- Level playing field… often re-distributive measures are required to redress the impacts of past inequalities, but local elites are unwilling to allow this to occur;
- Multiple livelihoods… market focus often fails to recognise the current economic importance of activities like wildlife use; and
- Improving capacities… the need to build skills as well as social and commercial networks, basic infrastructure like mobile phones.

SLSA team (2003c) further explored the issue of rights-based approaches to obtaining access to resources for poor and marginalised people, and found that:

- rights-based approaches may open access for resources, but only if relevant support and capacity is there, changing laws is not enough;
- conventional individual approach to rights is often inappropriate, and recognition of collective rights is sometimes important;
- the institutional context for claiming rights is important, as power and politics in institutional design often ensures failure;
- rights contests between the poor and powerful private sector players are not equal – intervention by the State may be required; and
- capacity of both the State and the groups claiming rights must be built.

Again, the mining industry inserted a key tension by trying to promote mining as an appropriate source of funds for protected areas with examples like the establishment of a $13 million EcoTrust Fund by Shell when they put a pipeline through an endemic bird area. Most of the large non-government organisations are involved in projects funded by mining and hydrocarbon companies including Flora and Fauna International, the World Wide Fund for Nature, Conservation International, The Nature Conservancy and others.

TARGETS AND RECOMMENDATIONS ABOUT CONSERVATION ECONOMIES

The target adopted in this area was for secure sufficient resources to identify, establish and meet the recurrent operating costs of a globally representative system of protected areas to 2010. In addition, the target in relation to sustainable development was that protected areas strive to alleviate and in no case exacerbate poverty. Two specific recommendation were adopted regarding financial security overall, and private funding.

INTEGRATION OF APPROACHES AND EVALUATION OF OUTCOMES

The World Parks Congress did not feature many examples of the key challenge of integrating approaches to conservation. Instead the focus was on a multiplicity of approaches to conservation, with diversity in governance types, continental-scale and community based approaches, Indigenous and local settler communities as managers, and many more approaches. Lane *et al.* (2004) recently highlighted the pressing issue in environmental governance in Australia is articulation and integration of the multiple agents of environmental management, across three levels of government.

Jacobsohn (2003) in a report specially prepared for the congress highlighted features in common between continental-scale and community level conservation initiatives including:

- Moving beyond a defensive stance;
- Partnership approach;
- Inclusion of inhabited landscapes; and
- The fact that continental-scale success depends on the smaller units functioning effectively – development initiatives often fail because there are not appropriate local representative social structures to take ownership of the initiatives.

However, Jacobsohn (2003) also recognises a number of dangers that continental-scale action can pose to community-based approaches:

- Governments are generally wary of decentralisation and devolution, so broad-scale initiatives can be an excuse to take back power from communities;
- Obvious pitfall of being externally driven; and
- Time frames are very different in that local initiatives operate slowly, while being faster on a continental scale.

There is key tension around “turning local-scale achievements into large-scale successes” or “using large-scale achievements to foster local-scale initiatives”.

Birdlife International showcased their “Non-government Partnerships for Sustainable Biodiversity Action in Africa” at the Congress. This initiative links a continental-scale focus on Important Bird Areas (IBA), and a National IBA Conservation Strategy with Site Support Groups and local action in the IBAs. Examples include supporting wool spinning and milk marketing to help protect the threatened endemic Sharpe’s Longclaw (Birdlife International 2003). *InWEnt* is Non-Government Organisation, funded by the German government, which implements conservation and development programs across four strands: national legal frameworks; collaborative wildlife managements; trans-boundary protected areas; and land use planning for protected area systems (www.dse.de/zel/landinfo). Their approach is to use integrated land use planning as the link between the first three strands, relying on a high degree of participation to overcome obstacles.

The Conservation Measures Partnership is a group of Non-Government Organisations who have come together to determine (in the great diversity of approaches) what is successful for conservation. Some more insight into how to integrate conservation approaches to maximise success may come out of this work, which is still at a very early stage (contact info@conservation measures.org).

The forum “Bridging Scales and Epistemologies: Linking Local Knowledge and Global Science in Multi-Scale Assessments” held by Millenium Ecosystem Assessment early in 2004 included a large focus on these questions of integration across scales and between local and global efforts. A book of proceedings will be published in 2005, and many of the papers are currently on-line at:
http://www.millenniumassessment.org/en/About.Meetings.Bridging.Proceedings.aspx.

Although many different approaches to the challenge of multi-scale and local/global approaches are discussed, what emerges are a set of key tensions being played out through power-struggles and environmental conflicts in a myriad of projects around the world, from which a consensus is yet to coalesce.

SOME OTHER ISSUES, RESOURCES AND HIGHLIGHTS

TOOLS AND SPECIAL CONSERVATION PROJECTS

A number of organisations made available some very useful CDs of approaches, tried and true or otherwise. The Conservation Finance Guide, the Community Conservation Coalition CD, and the Biodiversity Support Program CDs discussed above are examples. Other governments and groups made special announcements of their efforts for conservation, summarised here.

Eduardo Braga, governor of the State of Amazonas in Brazil, announced new reserves of 3.8 million hectare, bringing their total protection to forty percent of their territory, of which only two percent is currently deforested. The State of Amapá announced the creation of a ten million hectare Biodiversity Corridor that covers 71% of their state, an area that includes the world's largest tropical rainforest park (see Congress web sites for more announcements).

PROARCA/APM (2003) produced a "Tool Box for Protected Area Management", based on the experience in Latin America, and including:

- Brief Institutional Profile tool to assist smaller non-government organisations with developing the critical processes in relation to leadership and management, program planning and management, human and financial resources, and communications;
- Guidelines for participatory planning;
- Guidelines for environmental impact assessment;
- Rapid ecological assessments; and
- Site conservation planning, an interesting approach focused around the biodiversity system, the stresses, the sources of those stresses, strategies to reduce the stresses, measures of success, and the human context with its social, cultural, political and economic opportunities.

RARE is an organisation that has a large number of tools for increasing support for conservation, using proven social marketing techniques (www.rareconservation.org). Their work supports local conservationists across the boundaries between language, culture, nationality, and has a strong foundation on partnerships leading to powerful constituencies for the environment.

Conservation International released a CD explaining their Rapid Assessment Program, and how reports on the rich biodiversity of many areas have led to protected area declarations. The Milne Bay assessment is an example of the RAP methodology (Allen *et al.* 2000). Conservation International also launched a web-based tool "The Towards Best Practice eForum", a resource designed to support and connect people involved in complex interactions between people and nature (www.nbii.gov/datinfo/bestpractices/).

A Conservation Training and Resource Centre has been established in Indonesia through a partnership between the Wildlife Conservation Society, the Center for International Forestry Research, the World Wide Fund for Nature, British Petroleum, The Nature Conservancy, Conservation International and other orgainsations (www.ctrc.or.id).

Global work on protected areas carried out by the World Wide Fund for Nature highlights their continental-scale approach through the Global 200 Ecoregions, their targets, focused on creation of new protected areas, improved management, and reduction of key threats, their

policy level (governance, laws) and community partnership approaches and their assessment of trends through the "Living Planet Index" (declining) and the "World Ecological Footprint" (increasing) (Dudley and Stolton 2003).

The Protected Areas Learning Network, a web based portal with a wealth of resources, was launched by WPC at the Congress, and one of the Congress recommendations focused on its further development.

Ortiz (2001) is an interesting resource on how to work out what percentage overhead a non-government organisation should charge to donor groups.

THREATS TO NATURE AND CONSERVATION

Many threats in addition to global change were highlighted at the Congress, and those encountered are presented here: logging, fire, fishing, clearing of rainforests, marine pests, hunting, mining, transport corridors, and AIDS.

Logging: A coalition of Indigenous groups, government agencies and non-governmental conservation groups announced a pledge to combat illegal logging, highlighted as a major ongoing threat to remaining forests.

Fire: Some useful fire-related threats analyses and recommendations about actions were made available in a special edition of Arbor vitae (Stolton and Dudley 2003). A "Global Fire Partnership" between the World Wide Fund for Nature, The World Conservation Union and The Nature Conservancy (2003), has been established with the long-term goal of restoring ecologically and socially acceptable fire in ecosystems.

Fishing: Ward and Hegerl (2003) released their report on ecosystem-based management of fisheries and marine protected areas.

Clearing of rainforest for oil-palm plantations: The Orang Rimba people of the rainforests of Sumatra issues a plea for help against the ongoing government program of clearing their land and resettling them (see http://www.warsi.or.id/default.htm).

Marine pests: The Global Invasive Species Program presented information on their Global Ballast Water Management Program (http://globallast.imo.org).

Hunting: Unsustainable hunting is occurring in many parts of the world due to changes in the physical, social, cultural and economic environments of hunter-gatherer peoples; strategies to address the problem include protected areas, local community management of extractive forests, controls on logging companies and research (Bennett and Robinson 2000). Friedmann (2003) reports on a crisis of over-hunting in Africa leading to the "empty" forest. Cultural taboos that protected population numbers in the past are being over-ridden by sophisticated hunting methods and the cash economy. Similarly, large amounts of plant and animal material are now entering markets for the traditional medicine trade, and their harvest rates seem likely to be unsustainable (Williams 2003). Wildlife Conservation Society has a program on the Hunting and Wildlife Trade as part of the Bushmeat Crisis Taskforce (see www.wcs.org), and their scientific work is clearly establishing a pattern of local extinctions (Milner-Gulland *et al.* 2003).

Mining: As mentioned elsewhere, the mining industry approached the World Parks Congress with a strongly developed agenda about opening up protected areas to mining, developed through an IUCN-ICMM (International Council on Mining and Metals) project on Mining, Protected Areas and Biodiversity Conservation (IUCN-ICMM 2003). A full plenary was held on mining, at which Christine Milne, IUCN Councillor from Australia, spoke strongly

and lucidly. She argued that the objectives of mining and conservation are not the same, and that mining agenda is effectively taken into account through land use allocation and before the creation of protected areas. Mining does not alleviate poverty, and will entrench the current patterns of consumption and production that are the root cause of the environmental problem. The mining industry agenda is fundamentally about getting access to the protected area. Declining levels of human rights and environmental protection are evident in the actions of mining companies. Legacy issues have not been addressed. The Indigenous spokesperson on the panel picked up on many of these issues, pointing out the mining has the largest environmental footprint on Indigenous lands. Rio Tinto re-iterated their commitment to abandon Jabiluka as a vindication of the worth of the dialogue. The Congress final outcome was re-assertion of the Amman declaration that mining should not occur in Category I to IV protected areas.

Transport corridors: The development of the Transportation Corridor in the "Altai Knot" – the border of China, Mongolia, and Russia and Kazakhstan – threatens an area of immense cultural and natural heritage value in the Altai Mountain region (Badenkov 2003). The United Nations Development Program have recently started a Biodiversity Conservation Program in the Altai-Sayan Montane Ecoregion (contact elena.armand@undp.org), but it was not clear if this is directly related to the transportation corridor development.

AIDS: AIDS is a big threat to conservation in Africa due to the loss of skilled people.

SOME INSPIRING PEOPLE AND EVENTS AT THE WORLD PARKS CONGRESS

Nelson Mandela's appearance at the opening ceremony was electrifying – at the first glimpse of him, all three thousand delegates in the hall rose to their feet, and the outpouring of respect, awe and honour towards him was a deeply spiritual moment. His speech drew attention to the importance of youth in conservation issues, to ideas like junior ranger programs. His comments were along the lines of "I have been asked to speak about the future of Parks. But what would an old man like me have to say about the future. The future is in the hands of youth".

Dr Angela Cropper, CEO of the Cropper Foundation, gave an address at the opening plenary focused on linking the previous Congress in Caracas in 1992 to this one. She highlighted progress in building the system, but also focused on the crises of AIDS; regional wars; deep fractures within the United Nations; and the new era of conquest, colonisation and rapid globalisation as major threats to conservation. Her final comment on the great achievement of designating more than ten percent as Protected Areas was "what about the ninety percent?" Dr Cropper is acknowledged as one of the inspirational forces behind the Millennium Ecosystem Assessment.

Mobile Peoples made a strong appearance at the Congress with a representative of the Iran Kashkai Nomadic Pastoralists Foundation speaking at the open plenary. Mobile peoples are those who move large distances, typically across nation-state boundaries, each year. The Kashkai people are herders and move from summer to winter feeding grounds, taking everything with them. Indigenous Australians were not Mobile People in the same sense, i.e. they moved around in their very clearly demarked territories.

Manuel Rodriguez, the Costa Rican Minister for Environment, championed the benefits that banning gold and oil exploration, and focusing instead on nature, had delivered to his country. From a minimum forest cover of twenty percent in 1987, they have now recovered to 44% and are aiming for 65%. Two initial policy initiatives achieved this: deforestation was made illegal, and mining and oil exploration was banned in forested areas. A third initiative is

the payment of ecosystem services mandated under the Forest Act in 1996 – land holders can be paid for carbon, water, scenic and biodiversity services. The government introduced a 3.5% tax on fuel, which pays for these services. The general rate is about $50.00 per hectare per year. Costa Rica abolished their army seventy years ago and the resultant investment in human resources enabled poverty reduction. Costa Rica sees protected areas as the engine for development in a mature society.

Eulalie Bashige from the Democratic Republic of Congo gave a moving explanation of how determined people had managed to maintain some conservation action through Site Coordination Committees with international support in World Heritage areas and national parks throughout the wars in the Congo. About eighty park rangers were assassinated during the period.

The Indigenous and Traditional Leaders special event on the first evening of the Congress was a bizarre experience – a seemingly endless list of non-Indigenous people appeared on the stage to receive congratulations for their support for Indigenous people. Chief Littlefoot was the sole Indigenous speaker. He is a Lakota person, the fourth chief in line from Chief Bigfoot of Wounded Knee fame. The legacy of dispossession suffered by his and other Indigenous people around the world has not yet been addressed.

We had some interesting discussion sessions between Traditional Owners of the Wet Tropics and local people from the Greater St. Lucia World Heritage Area facilitated by Peter Valentine and Warren Nicholls from Australia. Interesting parallels exist around the issues of forced evictions, compensation, and consent for World Heritage. However, the San traditional owners of the Greater St. Lucia area had been removed by disease and warfare some four hundred years previously.

African Theatre group put on performances throughout the Congress that were inspirational. One play highlighted the key issues of alcohol and domestic violence, and how money by itself does not assist people.

The African Department of Land Affairs program on “Restitution and Redistribution” is inspirationally efficient. It is amazing how different things are when the colonised are running the land business, instead of the colonists. Our National Native Title Tribunal could learn a lot. In the eight years since the Commission on Restitution of Land Rights was established, 36,489 claims have been settled. For example, the Andriesfontein farm land was forcibly removed from black people in 1938. A total of 204,722 hectare of this farm have now been restored to twelve families consisting of fifty beneficiaries. There were many, many inspiring stories of people retrieving houses and land back from which they were forcibly evicted through the zoning of areas as whites-only. The land redistribution program has set a target of thirty percent of commercial farms under black ownership by 2015, through voluntary acquisitions.

FIELD VISIT FROM DURBAN TO UMFOLOZI NATIONAL PARK

Sugar Cane and Eucalypts

Vast fields of sugar cane on undulating hills surround the urban sprawl and slums of Durban. The bus driver had some of the background to the operating conditions of the industry:

- Little mechanisation – cutting by hand, except in areas to the north where the terrain is much flatter;
- Commercial farms are about two hundred hectare;
- “Emerging farmers” in old homelands;

- Labourers getting tenure over the land on which their houses are built;
- Little irrigation;
- Labour still treated poorly by Australian standards – passed passed the Minimum Wage Bill on 1 April 2003, and the Clean Wages Bill (food and lodging cannot be substituted for money);
- Problems with AIDS and alcohol, affecting workers;
- Pesticide and herbicide use not generally controlled;
- Little burning – no diseases linked to cane cutting;
- Transported by truck to the mills; and
- Mills owned by big conglomerates, refinery in Durban.

Beyond the sugar cane, in the drier areas, are endless hectares of Eucalypt plantations – these have become a major weed problem for South Africa, with the "Wood for Water" program of the South African government for their removal sponsoring lots of jobs.

Beyond the Eucalypt plantation is the ex-homeland. We drove through around forty kilometres of absolute poverty, small holdings, few crops, people carrying water, two houses with tanks, concrete "stores" and "schools" similar to infrastructure on Aboriginal reserves, only worse, "emerging farms" with tiny plots of sugar cane in areas obviously too dry.

The Park

The trees start at the National Park boundary. Our first visit was to the wildlife management centre, where we were greeted by armed guards marching and presenting arms. An African theatre group had mimed this very scene at the Congress two days earlier, where I had assumed it was a symbolic mocking of parks as militaristic enclaves, rather than simply a copying of the daily reality. How mistaken I was! A video showed us a gun battle between rangers and poachers that resulted in one of the shoe-less ragged poachers left dead, unremarked by the makers of the video who were instead bemoaning the loss of four rhinos. The enforcement presentation spoke only of the measures (sophisticated clandestine patrols) to combat the poverty stricken desperados who came to hunt for the rhino horns, and were silent on those who buy and sell them, although one of the rangers later assured me that there were vigorous efforts at enforcement higher in the chain. The whole park is fenced, high, wide and electrified for three hundred kilometres, and in reality more like a wildlife farm – all large animals are known, counted, many tagged, culled, moved, nursed as babies in the compound, and generally husbanded throughout their lives.

Six hundred thousand people live on the boundary of the park, and the settlement of their land claims has resulted in a number of measures to ensure they benefit from the park, but also ensured "business as usual". A nursery program is re-establishing medicinal plants in the homeland (desperately needed), funds from the park go to local projects determined by the local people, there are jobs in the park, and harvesting of reeds for local buildings is allowed in parts of the park. A community ecotourism game hunting enterprise has been started by fencing off some land in reasonable condition and stocking it with animals from the park. However, the beautiful bitumen road stops at the park boundary, and we became bogged when we tried to visit the community tourism enterprise, highlighting the need for government provision of infrastructure to support development.

The tourism ventures in the park are owned and run by the government, and make lots of money for them. The lodge I stayed in was beautiful by any standards, and extremely well managed. Wildlife was abundant – in two days I managed to see giraffe, zebra, lions, elephants, rhinoceros, kudu, wildebeest, ngala, impala, bushbuck, monkeys, hornbills, eagles, a paradise fly catcher, blue starling, black stork, black-breasted snake eagle…all

roaming free although not “wild” in any sense meaningful to an Australian. I met a woman who worked with Artisans International, a group who specialise in helping traditional people turn their local crafts into something valued and useful in the global economy.

RECOMMENDATIONS

Scholarly research, combined with practice through pilots and other projects, are essential to find the best means of applying and extending the benefits of global trends in protected areas for Australia and our region. For example, research and development is needed in relation to:

- Creation of new protected areas in the places identified as global priorities including northern Australia (particularly Cape York Peninsula, west Kimberley and Arnhem Land), New Guinea, Timor, south-west Western Australia, Tasmania wilderness and forests, eastern Australian rainforests and tall eucalypt forests, and the Australia deserts;
- Better models for protected area selection: extending the CAR (comprehensive, adequate, representative) approach to take account of ecological and evolutionary process, local and Indigenous knowledge and values, of land use planning processes, and other particular criteria for marine environments;
- A continental-scale conservation approach relevant to tropical Australia by developing a greater understanding of the mixture of core, network and compatible uses. For example, the approach emerging through the Australian Conservation Foundation's northern Australia work is:
  - Network and compatible use zone: underpinned by policies to ensure no broad-scale land clearing, dam construction, commercial logging or introduction of new exotics, and focused on large range of enterprise developments including tourism, bush-tucker harvesting and others; and
  - Strongly protected core: a mixture of national parks and Indigenous protected areas, with visitation and non-visitation, zoned on the basis of both science and Indigenous knowledge systems.
- Community-conservation protected areas: examining how diversity of governance types fits within Australian legislation and practice, including for example recognition of Indigenous peoples and local peoples, and recognition of community-based natural resource management;
- Conservation economies: developing and piloting models suitable for tropical northern Australia to provide finance and sustainable economies in their broader sense, including compatible-use zones; and
- Integration: trialling different approaches to integrating conservation practice across scales and between Indigenous knowledge systems and the best conservation science.

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