

Development of Cultural Indicators for the Management of The Tropical Rainforest World Heritage Area, Australia

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INTRODUCTION

In Australia and elsewhere in the world there is increasing awareness of the need to monitor the effectiveness of protected area management, and the management of the environment generally. This has led to the development of a variety of indicators that can be used to measure the well-being of the values for which the environment is being managed. There is also a growing awareness that human social and cultural values are important components of any environmental system, including protected areas, and hence there is a need to develop social and cultural indicators as part of any monitoring program.

For many years Aboriginal people of north Queensland, Australia, have said that their cultural values associated with their rainforest country should be respected and protected as part of the management of the Tropical Rainforest World Heritage Area. One of the issues that came out a review of Aboriginal involvement in the management of the World Heritage Area (Lawson 1988) was the need to develop ways to find out if Aboriginal cultural values are being looked after in the overall management of the rainforests.

The Wet Tropics Management Authority (WTMA) has developed a set of indicators for use in monitoring the condition of the Wet Tropics World Heritage Area in north Queensland. These indicators focus mainly on the condition of the “natural” environmental values for which the area was listed as World Heritage, but also include one indicator for associated cultural values. This indicator, relating to the area of land under Aboriginal control, is regarded by WTMA and by Aboriginal people whose country lies within the World Heritage Area, as inadequate for monitoring the full range of cultural values associated with rainforest environments.

Research on the development of cultural indicators for the Wet Tropics is therefore being undertaken in response both to the identified needs of rainforest Aboriginal people and management obligations of the Wet Tropics Management Authority. It is also anticipated that the methods and outcomes of this research can contribute to negotiations that have recently commenced to develop agreements on the resolution of Aboriginal interests in the management of the Wet Tropics.

WHAT ARE ENVIRONMENTAL AND CULTURAL INDICATORS?

Environmental indicators are tools to assist environmental managers, owners, interest groups and the general community to judge the condition of a protected area, or environmental region or a whole country. Indicators are used to measure particular aspects of the environment as an indication of general environmental health.

Environmental indicators are physical, chemical, biological or socio-economic measures that best represent the key elements of a complex ecosystem or environmental issue. An indicator is embedded in a well-developed interpretive framework and has meaning beyond the measure it represents. (Pearson et al 1998)

A common approach to designing environmental indicators, and the one adopted by the WTMA, is the “Pressure-Condition-Response” model. This model recognises that some indicators reveal threats or pressures to the environment, some give an indication of the condition or current state of the environment and others reveal the level of response by management agencies to the prevailing pressures or conditions.

Cultural indicators are measurable attributes of culture that provide information on the well-being or rate of change of that culture. As with environmental indicators, cultural indicators can be categorised as pressure, condition or response indicators.

While the focus of this paper is the protection of Aboriginal cultural values through the development and monitoring of appropriate cultural indicators, it is important to acknowledge that many, if not all, of the so-called natural values of the Wet Tropics have associated cultural values. Animals and plants are important for hunting, gathering and other cultural practices, particular places are associated with cultural sites and indeed the entire region is imbued with cultural meaning and Aboriginal history, and can be properly described as an Aboriginal cultural landscape (Review Steering Committee 1998). Natural values, and the indicators that are developed to monitor those values, are therefore of significance to Aboriginal people.

ENVIRONMENTAL INDICATORS IN AUSTRALIA'S TROPICAL RAINFORESTS WORLD HERITAGE AREA

The attributes of the tropical rainforests for which the region has been listed as a World Heritage Area relate only to its “natural values”. The recently adopted environmental indicators, however, set out to monitor a spectrum of values, including cultural values, which extend beyond the requirements of monitoring the condition of World Heritage values.

The initial Wet Tropics indicators, identified as measuring pressure, condition and response, are set out in Table 1.

Pressure	Condition	Response
<ul style="list-style-type: none"> • Clearing • Structural modification • Fragmentation • Changed drainage patterns • Invasion by exotic animals • Invasions by weeds and diseases • Fire 	<ul style="list-style-type: none"> • Conservation status of species • World Heritage value attributes • Extent of Protected areas • Associated cultural values 	<ul style="list-style-type: none"> • Plan provisions • Repair activities • Regulatory mechanisms • Policy implementation • Legislative mechanisms • Rehabilitation of degraded areas • Scenic management

Table 1: Summary of Pressure-Condition-Response indicators adopted by the Wet Tropical Management Authority

In the initial set of World Heritage indicators only one condition indicator relates explicitly to cultural values. None of the pressure indicators appear related to monitoring cultural values. The response indicators are more general and could incorporate responses to some threats to cultural values. However, as is acknowledged by the Wet tropics Management Authority, this initial set of indicators does not address cultural values in any comprehensive way.

Section 2.4 of *State of the Wet Tropics Reporting* (WTMA 2000) presents the single indicator for “associated cultural values” as “The area of land (ha) formally under Indigenous management”. This indicator makes a direct connection between the protection of Aboriginal cultural values and the area of land being managed by Aboriginal people. This is clearly an important connection, but equally clearly this indicator cannot provide a gauge to the condition or wellbeing of the full spectrum of rainforest Aboriginal cultural values. What that spectrum is, and what are the best indicators to monitor it, are the challenges of this research.

An examination of cultural indicators used in environmental monitoring elsewhere in Australia and overseas provided a starting point from which to explore the development of cultural indicators for the Wet Tropics. A selection of these national and international examples of cultural indicators is summarised below. For a more comprehensive review of these national and international examples see Smyth (2000).

State of the Environment Reporting

The Commonwealth State of the Environment Reporting system supports the *National Strategy for Ecologically Sustainable Development* and helps Australia meet its international environmental obligations. Following the publication of Australia’s first *State of the Environment Report* for Australia in 1996, Environment Australia commissioned a report on *Environmental Indicators for Natural and Cultural Heritage* (Pearson et al 1998). The report acknowledges the interrelationship between natural and cultural heritage, but establishes six elements of heritage values, for ease of sourcing, interpreting and applying data. These elements are:

- Natural heritage places
- Indigenous places that inform us about the past and the archaeological record
- Indigenous places important to living cultures
- Indigenous languages
- Historic heritage places
- Heritage objects – natural, Indigenous and historic.

This approach divides Indigenous cultural values into three main components:

1. Places, complexes of sites and cultural landscapes that inform us about the past (places primarily of archaeological significance).
2. Places and complexes of places or cultural landscapes that are part of continuing, living traditions or contemporary cultural practices of Indigenous communities, or have special significance to them.
3. Indigenous languages as a critical factor in the maintenance of good health of heritage values of places, has to be recognised and monitored. (Pearson 1998)

In addition there is recognition that specific objects, in museums and elsewhere, may have Indigenous cultural values. The report stresses, however, that the division of Indigenous cultural value into separate elements is for convenience of developing indicators and does not deny the many overlaps between these elements, and between Indigenous and non-Indigenous values.

Pearson (1998) points out that there are two distinct, yet related aspects of environmental cultural values. These are the condition of the physical (natural) environment of cultural significance, and the condition of the cultural significance held by a cultural group about that environment. The development of cultural indicators for the Wet Tropics seeks to capture both of these aspects of cultural values.

Australian application of the Montreal Process for Sustainable Forest Management

The Montreal Process began when Canada convened an International Seminar of Experts on Sustainable Development of Boreal¹ and Temperate Forests, following the United Nations Conference on Environment and development (UNCED) in 1992. This led to the formation of an international Montreal Process Working Group, and subsequently an Australian Montreal Process Implementation Group (MIG). MIG had the task of developing locally appropriate criteria and indicators for the management of Australia's forests.

In 1998 MIG produced a framework of regional (sub-national) level criteria and indicators of sustainable forest management in Australia (Commonwealth of Australia 1998). One of the seven criteria is "Maintenance and enhancement of long term multiple socio-economic benefits to meet the needs of societies", which includes several sub-criteria of particular relevance to Indigenous cultural values. These sub-criteria include:

¹ Refers to the coniferous forests extending from New England to Alaska in north America

- Cultural, social and spiritual needs and values;
- Employment and community needs;
- Indigenous participation in management.

The application of these criteria and indicators as a mechanism for recognition of Indigenous peoples' rights and interests in Australian forest has been discussed further by Peeler (1998).

Centre for International Forestry Research

The Centre for International Forestry Research (CIFOR) was established in 1993 under the Consultative Group on International Agricultural Research (CGIAR) system in response to global concerns about the social, environmental and economic consequences of loss and degradation of forests.

One of CIFOR's projects has been to develop and test criteria and indicators for the sustainable use of forests. The results of this work have been published in a Phase 1 Final Report (CIFOR 1996) and a Criteria and Indicators Toolbox Series (CIFOR 1999). The CIFOR project is primarily concerned with developing criteria and indicators for forests used for commercial timber production and they are designed to apply at the forest management unit scale. In spite of the commercial focus of forest management, CIFOR's proposed indicators cover a wide spectrum of forest values from biodiversity conservation to economic returns and social and cultural values.

Forest Stewardship Council

The Forest Stewardship Council (FSC) is an international, non-government organisation established to enable third party certification of forest products with respect to the sustainability of the forests from which they are extracted. The FSC provides accreditation to independent certification organisations, which then undertake an evaluation of a particular forestry operation; an equivalent Marine Stewardship Council has been established to certify the sustainability of particular commercial fisheries. The incentive of third party certification as a marketing tool is designed to encourage commercial users of natural resources to establish ecologically sustainable management of those resources.

The FSC has developed 10 principles for sustainable forest management, with several criteria being attached to each principle. Two of these principles focus explicitly on the rights and interests of Indigenous peoples and local communities.

World Conservation Union (IUCN) Commission on Protected Areas

The IUCN Commission on Protected Areas has developed a framework for evaluating management effectiveness of protected areas (Hockings et al 2000). The primary focus of the framework is on monitoring the effectiveness of management of and for the “natural” values for which the protected areas have been established. However, for one category of protected area (IUCN Category V), specific recognition is given to the need to maintain the relationship between human cultures and the protected area. The IUCN framework recommends that participation of local communities, neighbours, NGOs and other stakeholders should apply to the evaluation of management effectiveness. Indigenous community involvement in the process of monitoring the effective management of Indigenous cultural values relating to a particular protected area is clearly essential.

A Pilot Project with Jumbun Community

Jumbun, also known as Murray Upper, is a community of about 100 Girramay, Gulngay and Jirrbal people located on Girramay country within Australia’s Tropical Rainforests World Heritage Area on the coastal plain between the Coral Sea and the Great Dividing Range, about 25km northeast of Cardwell. During 2001 we held a series of discussions with people at Jumbun to discuss the development of indicators to monitor the protection of their cultural values associated with the surrounding rainforest country.

The meetings involved elders and younger people from the three language groups and were held on the riverbank near Jumbun. From these discussions we have developed cultural indicators for a selection of cultural categories and elements that Jumbun people have identified as priorities. It has been recognised that there will be a need to consider additional cultural indicators in the future and to give more thought to how the identified indicators can be monitored.

Table 2 summarises the priority cultural categories and elements, along with the potential indicators and suggested methods to collect the relevant information.

Cultural Value	Indicator
<u>A: Rights to country</u>	
A1: Land ownership	A1.1 Area of Aboriginal-owned land as a percentage of traditional land of a particular group; A1.2 Rate of return or determination of land
A2: Land access, hunting, fishing, gathering & camping	A2.1 Location of all public access roads identified and open A2.2 Number of access roads opened or closed during one year A2.3 Number of formalised agreements allowing access to traditional land on or through private land; A2.4 Acquiring land to allow access; A2.5 Legislation recognising right of access to traditional land; A2.6 Appeal mechanism when access is refused;
A3: Belonging, identity and freedom	A3.1 No permits required for exercising traditional rights; A3.2 Burials on private land recognised and registered; A3.3 Traditional Owners acknowledged as Traditional Owners
<u>B: Looking After Country</u>	
B1: Managing the Wet Tropics WHA	B1.1 Jobs for Aboriginal people under Aboriginal control; B1.2 Aboriginal involvement in revegetation programs; B1.3 Awareness of local Aboriginal people about decisions and plans in the WHA? B1.4 Number, frequency and level of meetings between Jumbun community and Wet Tropics Management Authority and other agencies. B1.5 Number of permanent jobs for Traditional Owners with government agencies e.g. as rangers
B2: Benefiting from Country	B2.1 Number of jobs for Aboriginal people in Aboriginal-controlled tourism enterprises
<u>C: Language</u>	C1.1 Number of language speakers (right through); C1.2 Level of fluency within community and across generations and tracked over time (using historical, current and future data) C1.3 Number and scope of language programs in local schools and local community; C1.4 Incentives to learn language – e.g. in education and tourism C1.5 Use of language names for places, rivers etc on Wet Tropics maps C1.6 Extent of recorded language – is it on tapes and/or written down for future transmission?
<u>D: Understanding History</u>	D1.1 Availability and use of information sources D1.2 Memorials and memorial services for past events (e.g. massacres) D1.3 Community knowledge about local history D1.4 Number of Aboriginal studies programs in schools

Table 2: Cultural values and indicators developed by Jumbun Community.

DISCUSSION

Many of the potential indicators identified by people at Jumbun relate to fundamental underpinnings of culture, such as ownership of land, access to sites and support for language maintenance, rather than direct measures of specific elements of culture, such as culturally based knowledge, beliefs or practices. These priorities represent the current imperatives of Girramay, Jirrbal and Gulngay people, and the degree to which their values, rights and interests are currently recognised in legislation and management arrangements. This underlines the need to review the appropriateness of cultural indicators over time, and the need to develop appropriate indicators with and for particular cultural groups at particular locations.

People of Jumbun have included the category of “Understanding History” in recognition of the need to achieve broad community understanding of the impacts of local colonial and post-colonial events, in order to achieve adequate recognition of other Aboriginal cultural values. This inclusion of a shared understanding of history, between Indigenous and non-Indigenous communities, represents a new category of cultural values not included in any of the national or international suites of cultural indicators reviewed for this study.

Though the current research is a pilot process for the recognition of cultural values across the Wet Tropics, the indicators developed by people at Jumbun cannot be applied automatically to other cultural groups elsewhere in the region. It may be, however, that the methodology applied at Jumbun can be applied elsewhere, and other cultural groups may wish to consider the applicability of the pilot cultural indicators to their own needs.

The next stage of the project is to collect the necessary data for each indicator, negotiate agreement on access and storage of that data and begin the process of applying these indicators to the management of the Wet Tropics World Heritage Area. It is intended to establish mechanisms for ongoing data collection and application of indicators that prove to be useful in the protection of Aboriginal cultural values, and to allow for the further development of indicators as circumstances and aspirations change.

Meanwhile, the process of developing the cultural indicators has already had an impact on the involvement of the Jumbun community in World Heritage Management. The Wet Tropics Management Authority responded to the release of the indicators by requesting a high level meeting between the WTMA Board and representatives of the Community. The meeting took place in August 2002, at which a commitment was made to enter into negotiations for the joint management of a nearby recreational reserve, which is also a very significant cultural site. The development of a management plan for this area will commence shortly.

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Wet Tropics Management Authority 2000 *State of The Wet Tropics Reporting*, WTMA, Cairns.

Web sites

Forest Stewardship Council

www.fscus.org/

International Tropical Timber Organisation

www.itto.or.jp/

Montreal Process Working Group:

www.dpie.gov.au/agfo/forests/montreal/international.html

Wet Tropics Management Authority

www.wettropics.gov.au