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# The Protected Areas Benefits Assessment Tool

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A methodology

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Front Cover: Tourists on Asian Rhino viewing tour in Kaziranga National Park, India

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The material and the geographical designations in this report do not imply the expression of any opinion whatsoever on the part of WWF concerning the legal status of any country, territory or area, or concerning the delimitation of its frontiers or boundaries

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## Glossary

The wording used here is quite precise; the following glossary summarises how some key phrases are used within the Protected Area – Benefits Assessment Tool (PA-BAT).

**Benefit:** refers here to a resource that is being used to provide direct gains (which could be in terms of money earned, or subsistence resources collected or less tangible gains such as spiritual peace or mental well-being) to stakeholders. The resources of the protected area become a *benefit* when they are successfully used to provide such gains.

**Co-managed protected area:** sharing management authority and responsibility among a plurality of (formally and informally) entitled governmental and non-governmental actors. In weak forms of co-management, decision-making authority and responsibility rest with one agency but the agency is required – by law or policy – to inform or consult other stakeholders. In stronger forms, multi-stakeholder bodies are in charge of developing technical proposals for protected area regulation and management, to be ultimately submitted to a decision-making authority for approval. In “joint” management, various actors sit on a management body with decision-making authority and responsibility. The strength of co-management often depends on whether or not decisions require consensus.

**Community Conserved Area:** “*Natural and modified ecosystems including significant biodiversity, ecological services and cultural values voluntarily conserved by indigenous, mobile and local communities through customary laws or other effective means*”. Here authority and responsibility rest with communities through a variety of forms of ethnic governance or locally agreed organisations and rules. Land and/or some resources may be collectively owned and managed, while other resources may be individually managed or managed on a clan-basis. Different communities may be in charge of the same territory at different times, or of different resources within the same territory. Rules generally intertwine with cultural or religious values and practices. Most often, the customary rules and organisations in charge of managing natural resources possess no legal recognition or sanctioning by the government, although there are exceptions to this rule.

**Governance:** the form of management that is in place within a protected area. The IUCN World Commission on Protected Areas recognises four main types of governance, each with several subcategories: state, *co-management*, private and *community conserved areas* (see further definitions of the phrases in italics).

**Iconic:** an area recognised by a significant number of people as being of unusually high importance from a cultural, historical, spiritual or scientific perspective. The World Heritage Convention has attempted to encapsulate this concept through their ‘Outstanding Universal Value’ attribute. Such places are likely to have a special role in national, regional or global consciousness – the natural equivalents of places like the Notre Dame Cathedral and Taj Mahal and could be, for example, the highest mountain or most spectacular waterfall.

**Permitted:** in this context *permitted* means that exploitation of the resource does not break the law. This can include situations where it is legally sanctioned, possibly by a permit or licensing system (e.g. collection of non-timber forest products), or not addressed through the legal system and therefore effectively sanctioned (e.g. recharge of groundwater resources from within the protected area). Although it is recognised that illegal use can and does take place in protected areas, and that in some cases it could be argued that this is ethically justified (for example illegal use by communities that have been forcibly displaced by protected areas) it is not the aim of the current assessment system to measure these illegal uses. If important, reference can be made in the note section of the relevant data sheet.

**Poverty:** definitions of poverty vary in complexity from simple definitions based on economics, such as living on less the US\$1 per day, to more complex definitions of the elements of well-being – the denial of which contributes to poverty and the improvement in which should contribute to poverty reduction. The WWF report *Safety Net: Protected Areas*

and *Poverty Reduction*<sup>1</sup> uses the elements of well-being approach to define the boundaries of poverty based on the framework developed by OECD<sup>2</sup> and DFID/SLA<sup>3</sup>; we interpret five fundamental dimensions of well-being as:

- ✓ *Subsistence*: non-economic benefits that contribute to well-being, i.e. health, nutrition, clean water and shelter
- ✓ *Economic*: benefits that provide the ability to earn an income, to consume and to have assets
- ✓ *Cultural and spiritual*: pride in community, confidence, living culture, spiritual freedom, education
- ✓ *Environmental services*: role in environmental stability and provision of natural resources
- ✓ *Political*: relating to issues of governance and thus influence in decision-making processes

**Protected Area**: defined by IUCN as: “A clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values” and the CBD as: “geographically defined area which is designated or regulated and managed to achieve specific conservation objectives”

**Value**: refers to the resources of the protected area that could be exploited to produce a *benefit* (see definition above). Values are in this context therefore potential benefits.

**Wilderness**: a large area of unmodified or slightly modified land, and/or sea, retaining its natural character and influence, without permanent or significant habitation, which is protected and managed so as to preserve its natural condition<sup>4</sup>.

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<sup>1</sup> Dudley, N, S Mansourian, S Stolton and S Sukuwana (2008); *Safety Net: Protected areas and poverty reduction*, WWF International, Gland, Switzerland

<sup>2</sup> OECD (2001); *The DAC Guidelines Poverty Reduction*, Organisation for Economic Co-operation and Development (OECD), Development Assistance Committee (DAC), Paris, France

<sup>3</sup> DFID (1999); *Sustainable Livelihoods Guidance Sheets*, Department for International Development, UK

<sup>4</sup> <http://www.iucn.org/themes/wcpa/theme/Wilderness/Wilderness.html> (accessed September 2007)

## Introduction

Protected areas of one sort or another cover about 10 per cent of the world's land surface; the large majority were established in the second part of the twentieth century. Although most were originally set up to protect landscape values, wildlife or more recently biodiversity, they are increasingly expected in addition to provide wider benefits to human society.

The *Arguments for Protection* project (see: [www.panda.org/protection/arguments](http://www.panda.org/protection/arguments)) being run by WWF, The World Bank and other partners is investigating and where possible attempting to quantify these wider values, which can include many benefits not traditionally associated with "nature reserves", such as pure drinking water, homelands for fragile human communities, sacred sites and sources of genetic material for agriculture.

It is clear that for WWF the main value of protected areas is that they provide an essential tool in strategies to conserve biodiversity. But by focusing wholly on their role in biodiversity conservation, we risk missing many other important values; these both increase the circle of support for protected areas and also have practical implications for managers. Protected area managers and protected area agencies are increasingly being asked to provide details of the wider social and environmental benefits of the lands and waters under their management: this tool is an attempt to provide a relatively painless way of collecting such information.

The tool was developed first as a means of collecting information for *Safety Net: Protected Areas and Poverty Reduction*, the fourth volume in the *Arguments for Protection* series, looking at links between protected areas and poverty reduction. With the tool we aimed to identify some of the wider benefits that protected areas provide to human well-being and thus their contribution to poverty reduction, when poverty and well-being are defined by a range of elements (as described in the glossary at the beginning of this document). However, field-testing during the research suggested that the tool might have wider application and we have therefore refined and improved it, drawing heavily on comments from users and others who sent us very useful responses and criticism.

We believe that the Protected Area – Benefit Assessment Tool or PA-BAT can fill an important gap in the toolbox of protected area agencies and conservation institutions, to help collate and build information about the overall benefits from protection. As pressures on protected areas continue to develop over time, and demand for land and water, and for management resources, is increasingly stretched, we need to have such arguments in place and backed by a solid body of data collected over time. This need is recognised explicitly in the CBD *Programme of Work on Protected Areas*, for example in paragraph 3.1.2: "Conduct national-level assessments of the contributions of protected areas, considering as appropriate environmental services, to the country's economy and culture, and to the achievement of the Millennium Development Goals at the national level; and integrate the use of economic valuation and natural resource accounting tools into national planning processes in order to identify the hidden and non-hidden economic benefits provided by protected areas and who appropriates these benefits".

It should be noted that, although developed primarily for use in protected areas, the tool could have wider application, for example in assessing wider benefits of forest management units, agricultural landscapes or areas set aside for recreation.

The main audience for this report is protected area managers and authorities, but we hope it will be useful for anyone interested in finding out about the range of benefits that protected areas provide.

## Protected Area Benefit Assessment Tool (PA-BAT) – Overview

The PA-BAT aims to help collate information on the full range of current and potential benefits of individual protected areas. It is a contributory methodology for the overall *Arguments for Protection* series, but is also hopefully a stand-alone tool that will be of wider use to the protected areas community.

✓ *Why use the PA-BAT tool?*

The PA-BAT has been primarily designed for use by protected area managers to work with stakeholders to identify important values and the benefits that they bring to a range of stakeholders, from local to global. The PA-BAT can also be used by local communities to identify values/benefits and by protected area advocates, such as NGOs, to help promote the range of benefits a protected area can bring.

Because the tool has developed a standard typology of values and benefits the results from the tool can be aggregated to provide an overview of a portfolio of protected areas (e.g. regional groups, national systems, biome groups etc). This can be used as a planning tool at system level (e.g. developing policies for specific resource uses) or as an advocacy tool for supporting protected areas.

✓ *The PA-BAT is an assessment tool and not a monitoring tool*

Ideally managers should identify the range of permitted uses of the protected areas, agree indicators and monitor results in relation to benefits as part of their overall assessment of management effectiveness. In which case this monitoring would provide the quantitative information on which to base the assessment made using this tool. But of course this is an ideal and is rarely the current practice in protected areas. The PA-BAT can thus be used, preferably working with stakeholders, as a qualitative assessment of best available knowledge.

✓ *But the PA-BAT can help guide future monitoring and assessment*

It may also help identify key areas for future more detailed monitoring and assessment if resources and capacity allow.

✓ *The PA-BAT considers permitted use only*

The PA-BAT aims to assess legal resource use and the benefits that could accrue from that use, and thus is not a tool for the assessment of overall resource use, which would include illegal use.

✓ *The PA-BAT is not an economic evaluation tool*

Although the PA-BAT includes the option to record economic information (in terms of value and benefit) the primary purpose of the tool is to record the types of benefits provided the protected area and to whom they are provided, and not necessarily to put an economic value on these benefits

✓ *The PA-BAT should not be used to provide a “score”*

The tool is meant to collect information about a wide range of benefits that accrue in protected areas; it is not designed to produce a “score” of how well the protected area is performing in this regard. Summing up all the result will produce a bias towards multi-purpose reserves, so that Category V and VI would be expected to routinely score “higher” than I and II; these reserves are by no means always the best from a conservation perspective and many excellent protected areas focus solely on biodiversity conservation with perhaps some minor role for visitors and research.

One of the challenges in designing such an assessment system is that there are still huge gaps in our understanding of protected area benefits, particularly when it comes to their quantification. It is sometimes difficult to steer a line between something that is either trivial or overly ambitious and we are well aware of the limitations of what follows.

## How to use the PA-BAT

The following tool can be regarded as an *aide memoire* to help think logically about the types of benefits, who benefits and by how much, and the degree to which particular benefits are linked to protection strategies. If repeated over time, it can also help to identify if and by how much these benefits are changing. Some suggestions of how to use the PA-BAT are given in Appendix 1.

✓ *Working with stakeholders*

In an ideal situation, a broad range of stakeholders should be involved in carrying out the assessment, for example in a workshop involving protected area staff, local communities and others with an interest in the site. In this case there may be competing views about various benefits and it is possible that alternative views may have to be represented – for instance positive benefits for some stakeholders may be matched by negative impacts on others which will need to be recorded in the comments section of the report

✓ *How to fill in the PA-BAT*

The PA-BAT has two sections, both of which should be filled in for each protected area assessed.

**1: Background information datasheet:** i.e. name, IUCN category, location etc, along with an opportunity to identify key management objectives and to make a value judgement about how much the protected area contributes to wellbeing

**2: Benefits to protected area stakeholders datasheet:** A set of datasheets which collect basic information about: the types of benefits; who they are important to; and qualitative information about their level of importance, their relationship to the protected area and the times of year in which they are important.

Each datasheet is given below along with introductory text which provides more specific guidance on how each should be completed.

✓ **Protected areas zones and boundaries**

In many protected areas around the world different use agreements can be developed either within the designated area or between the core zone and buffer zone of a protected area. Clearly these restrictions need to be considered when completing the PA-BAT. Notes relating to zones within the protected areas can be made at the end of the background information data sheet.



## Guidance notes on: Background Information Data Sheet

### ✓ **Who took part in the assessment**

The first section should record the main contact person (i.e. the person who led the assessment), when the PA-BAT was completed and by whom. Ideally, as well as marking on the datasheet the range of people involved, a list of who took part should also be attached as an appendix to this datasheet.

### ✓ **Basic PA data**

The next few sections record some basic information about the site, such as name, size and location. Where possible the unique site code given to the protected area in the World Database on Protected Area (WDPA) should also be provided. The WDPA can be accessed via the UNEP-World Conservation Monitoring Centre website at: [www.unep-wcmc.org/wdpa](http://www.unep-wcmc.org/wdpa).

### ✓ **Ownership and governance**

The PA-BAT includes two multiple-choices boxes to record ownership and governance of the protected area. The options provided in relation to governance are linked to the governance matrix developed by IUCN and key terms used here are defined in the glossary above<sup>5</sup>.

### ✓ **Management objective**

This section provides an opportunity to list the two most important management objectives: these might be, for example, maintenance of a particular endangered species or habitat type, or restoration of threatened ecosystem, or maintenance of a particular ecological function such as a migration pathway.

### ✓ **Homeland**

A simple yes/no question about whether the protected area is currently a homeland for local indigenous or traditional people – recorded here because it will have significant implications for much of the rest of the information collected.

### ✓ **Peace Park**

A yes/no question also provides the opportunity to record if the protected area is part of a transfrontier conservation area or peace park.

### ✓ **Population information**

This section records some basic information about national and local people's context by recording average annual national and local income, the number of people who live within and in the immediate environs of the protected area (i.e. buffer zone or local district) and the migration trend, i.e. whether people are moving into or out of the area. The countries position on the Human Development Index (HDI), a tool developed by UNDP to measure development by combining indicators of life expectancy, educational attainment and income into a composite human development index, is also recorded.

### ✓ **Well-being**

The data sheet gives compilers a chance to make an overall judgement (which we realise will often be qualitative) on the extent to which the protected area has contributed to overall well-being (it may be best to fill in this section after the rest of the form has been completed). The assessment of well-being is made against the five aspects of poverty reduction identified by both the UK Department for International Development and the OECD; while these are not word-for-word identical they convey the same message, which we interpret as:

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<sup>5</sup> See: Borrini-Feyerabend, G., A. Kothari and G. Oviedo. (2004); *Indigenous and Local Communities and Protected Areas: Towards equity and enhanced conservation*, Best Practice Protected Area Guidelines Series number 11, Cardiff University and IUCN

- **Subsistence:** non-economic benefits that contribute to well-being, i.e. health, nutrition, clean water and shelter.
- **Economic:** benefits that provide the ability to earn an income, to consume and to have assets.
- **Cultural and spiritual:** pride in community and protected area, confidence, living culture, spiritual freedom, education
- **Environmental services:** role in environmental stability and provision of natural resources.
- **Political:** relating to issues of governance and thus influence in decision-making processes

✓ **Biodiversity value**

The final part of the datasheet records a quick summary of the protected areas importance to overall biodiversity conservation.

## Background Information Data Sheet

|  |  |            |            |                       |                          |            |  |
|--|--|------------|------------|-----------------------|--------------------------|------------|--|
| 1. Name, affiliation and contact details for person responsible for completing the PA-BAT (email etc.)   |  |            |            |                       |                          |            |  |
| 2. Date assessment carried out   |  |            |            |                       |                          |            |  |
| 3. No. of people involved in completing assessment<br>(please put number involved in the box provided against each group of people listed below) |  |            |            |                       |                          |            |  |
| PA management  |  | PA staff   |            | Other PA agency staff |                          | NGO        |  |
| Local community  |  | Donors     |            | External experts      |                          | Other      |  |
| 4. Name of protected area  |  |            |            |                       |                          |            |  |
| 5. Size of protected area (ha)   |  |            |            |                       |                          |            |  |
| 6. WDPA site code (these codes can be found on <a href="http://www.unep-wcmc.org/wdpa/">www.unep-wcmc.org/wdpa/</a> )                            |  |            |            |                       |                          |            |  |
| 7. Country   |  |            |            |                       |                          |            |  |
| 8. Location of protected area (province and if possible map reference)   |  |            |            |                       |                          |            |  |
| 9. Date of establishment   |  |            |            |                       |                          |            |  |
| 10. Ownership details (please mark)  |  | Government | Private    | Community             | Other                    |            |  |
| 11. Governance (please mark)   |  | State      | Co-managed | Private               | Community Conserved Area |            |  |
| 12. List the two primary protected area management objectives  |  |            |            |                       |                          |            |  |
| Management objective 1   |  |            |            |                       |                          |            |  |
| Management objective 2   |  |            |            |                       |                          |            |  |
| 13. Is the protected area currently a homeland for indigenous or traditional people?<br>(please mark)  |  |            |            | Yes                   |                          | No         |  |
| 14. Is the protected area a peace park?<br>(please mark)   |  |            |            | Yes                   |                          | No         |  |
| 15. Average national wage per annum (state currency and year)  |  |            |            |                       |                          |            |  |
| 16. Average local wage per annum (state currency and year)   |  |            |            |                       |                          |            |  |
| 17. Number of people living in the protected area (state year)   |  |            |            |                       |                          |            |  |
| 18. Number of people around the protected area (please define area being included, i.e. buffer zone)   |  |            |            |                       |                          |            |  |
| 19. Overall migration trend for the area influenced by the protected area  |  |            |            | Increasing            |                          | Decreasing |  |
| 20. Human development index rank (see: <a href="http://hdr.undp.org/en/statistics/">hdr.undp.org/en/statistics/</a> )                            |  |            |            |                       |                          |            |  |

|   |                    |                 |                             |                             |                  |
|---|--------------------|-----------------|-----------------------------|-----------------------------|------------------|
| 21. What impact has the protected area had in helping to reduce poverty in local, traditional or indigenous communities in and around the protected area? <i>(Please mark once only for each column.)</i> |                    |                 |                             |                             |                  |
|   | <b>Subsistence</b> | <b>Economic</b> | <b>Cultural / spiritual</b> | <b>Environment services</b> | <b>Political</b> |
| ▪ Has had a negative impact on well-being   |                    |                 |                             |                             |                  |
| ▪ Does not contribute to well-being   |                    |                 |                             |                             |                  |
| ▪ Does not currently contribute to well-being, but has potential to do so   |                    |                 |                             |                             |                  |
| ▪ Makes a minor contribution to well-being  |                    |                 |                             |                             |                  |
| ▪ Makes a major contribution to well-being  |                    |                 |                             |                             |                  |
| 22. Please tick which of the following description of biodiversity value most accurately describe the protected area being assessed   |                    |                 |                             |                             |                  |
| ▪ There has been little survey work carried out so the biodiversity value is currently not fully known  |                    |                 |                             |                             |                  |
| ▪ Biodiversity is of minor importance   |                    |                 |                             |                             |                  |
| ▪ Biodiversity is of minor importance but restoration is being carried out  |                    |                 |                             |                             |                  |
| ▪ Biodiversity includes typical native habitats and species   |                    |                 |                             |                             |                  |
| ▪ Biodiversity includes one of the few examples of a particular habitat or population of an endangered or endemic species   |                    |                 |                             |                             |                  |
| ▪ Biodiversity includes the only example of a particular habitat or the last viable population of an endangered or endemic species  |                    |                 |                             |                             |                  |
| ▪ Other (please specify)  |                    |                 |                             |                             |                  |
| 23. Please add any comments here relating the information given above – in particular in relation to protected area zones with relation to use of resources such as wild food or medical plants etc.      |                    |                 |                             |                             |                  |
|   |                    |                 |                             |                             |                  |

## Guidance notes on: Values and their Benefits to Protected Area Stakeholders Data Sheet

### 1. Identification of values

The datasheets below identifies nine main groups of value (Nature Conservation; Protected Area Management, Food; Water; Culture and Spirit; Health and Recreation; Knowledge; Environmental Benefits; and Materials), with 24 more detailed indicators for these:

#### ✓ **Nature conservation values**

1. Is the protected area valued for its nature conservation?

#### ✓ **Protected area management**

2. Does management of the protected area provide jobs (e.g. for managers or rangers)?

#### ✓ **Values related to food**

3. Is the hunting of wild game permitted in the protected area?
4. Is the use of wild food plants permitted in the protected area?
5. Are fisheries (permissible fishing and/or contribution to fish stocks by protecting spawning area) an important resource in the protected area?
6. Is traditional agriculture (i.e. use of locally adapted crops (landraces) and/or practices) undertaken legally in the protected area?
7. Is livestock grazing and fodder collection permitted in the protected area?

#### ✓ **Values related to water**

8. Is non-commercial water use (e.g. subsistence agriculture, drinking, washing and/or cooking) or commercial water use (e.g. for large-scale irrigation, waterways, bottling plants, hydro-electric power or municipal drinking water source) permitted in the protected area?

#### ✓ **Cultural and Spiritual Values**

9. Does the protected area have cultural and historical values (e.g. archaeology, historic buildings including temples, pilgrimage routes and/or historic/culturally important land use patterns)?
10. Does the protected area include sacred natural sites or landscapes (e.g. sacred groves, waterfalls and/or mountains)?
11. Does the protected area contain wilderness values or other similar iconic values?

#### ✓ **Health and Recreation Values**

12. Is the collection of medicinal resources (e.g. herbs) for local use or for the pharmaceuticals industry permitted from the protected area?
13. Is the protected area important for recreation and tourism?

#### ✓ **Knowledge**

14. Is the protected area an important resource for building knowledge?
15. Does the protected area contribute to education (i.e. formal and informal dissemination of information)?
16. Is the collection of genetic material (e.g. crop wild relatives, tree species) permitted from the protected area?

#### ✓ **Environmental Services**

17. Can the protected area contribute to climate change mitigation (i.e. by providing significant carbon sequestration and / or by ameliorating local climate impacts)?
18. Is the protected area important for soil stabilisation (e.g. avalanche prevention, landslide and erosion)?
19. Is the protected area important for coastal protection (e.g. mangroves, sand dunes, coral reefs)?
20. Is the protected area important for flood prevention (e.g. mitigation in small watersheds, flood plains and wetland protection)?

21. Is the protected area important for water quality and quantity (e.g. filtration, groundwater renewal, maintenance of natural flows)?
22. Is the protected area an important resource for pollination of nearby crops or for pollination products such as honey?

✓ **Materials**

23. Is the management and removal of timber, including for fuelwood, permitted from the protected area?
24. Is the extraction of other materials (e.g. coral, shells, resin, rubber, grass, rattan, minerals, etc) permitted from the protected area?

Together these values attempt to represent the main benefits to a wide range of stakeholders. As the PA-BAT has been designed to use globally, the range of values and the benefits they provide is necessarily generic and not all will apply to every protected area.

## 2. Completing the datasheets

**Step 1:** Each datasheet starts by asking if the value is permissible in the protected area ***For each datasheet the assessment of benefits from each value is only made where the answer is yes.*** There is then space to provide more information on the value as it relates directly to the protected area being assessed.

**Step 2:** For each value, the assessment then generally considers seven issues relating to who benefits and what benefits are supplied:

### 1. The stakeholder group which benefits from the values

The main stakeholders groups are listed along the top row of the assessment form and are divided into seven groups.

- ✓ Indigenous/ traditional people living, either permanently or temporarily, in the protected area
- ✓ Other local people living, either permanently or temporarily, in the protected area
- ✓ Indigenous/ traditional/local people living near the protected area, this can include people living in other countries when the protected area is located near national boundaries; local groupings of people including NGO's and those living downstream of protected areas
- ✓ National population
- ✓ Government
- ✓ Industry, including national and international industries both within the protected area, such as the tourism industry, and those industries which rely on resources from a protected area such as water which then supplies hydro-electric power to the wider population
- ✓ Global community, who, for example, benefits from environmental services such as climate regulation, recreational values, etc. This category includes international organisations who work in protected areas.

This is inevitably a fairly coarse grouping and we recognise that in some cases one of these groups might contain several different sub-groups. We recommend identifying the main groups in each case and if necessary explaining further in the notes section.

### 2. The types of benefits supplies

Multiple choice answers are supplied and assessors are asked to mark relevant answers against particular stakeholder groups. **Note that more than one answer may be applicable for a particular stakeholder (for instance resources may have both subsistence and economic value), so all relevant boxes should be marked. Those boxes which would never be appropriate have been shaded and should not be completed.**

Generally three options for the level of importance are given:

- ✓ Minor: this could either reflect low importance for the stakeholder group or that importance is significant to only a small proportion of the stakeholder group, and thus overall the level of importance is minor

- ✓ Major: this assessment should be made where the benefit is of significance for a large proportion of the stakeholder group.
- ✓ Potential: which identifies potential to increase either the subsistence or economic value; and who could benefit from that increase in potential

This assessment will usually be a matter a judgement, particularly in the wider stakeholder groupings such as national population, industry or global community. At the local level the assessment can be strengthened by completing this section with, wherever possible, the relevant stakeholder groups and by adding (in the box marked notes) supporting research and studies.

***Care should be taken not to provide conflicting answers in this section; i.e. that a benefit is both of minor and major importance to the same stakeholder group.***

**3. Amount of protected area involved and period it is exploited**

Next, assessors identify how much of the protected area is involved in supplying a particular benefit, choosing from three options. In most of the datasheets the assessors are also asked to identify how much of the time the protected area supplies the benefits, once more choosing from three options for each relevant stakeholder group<sup>6</sup>. If the assessors have the relevant information it would be possible to break this information down for each of the relevant stakeholder groups given above.

**4. Economic value**

The next section looks at two economic elements: 1) if the economic value of these benefits has been assessed (and if so asks for the US\$ value and the date the assessment was made) and 2) asks for any information on whether the assessment of cost of managing this value has been made.

**5. Conservation Impact:**

This section provides the opportunity to give details as to whether the activities relating to the values/benefits are consistent with the area's management objectives

**6. Management issues**

Although the PA-BAT's primary aim is to identify the range of values, their associated benefits and their importance to different stakeholder groups, space is also given to suggest both current and future management responses to particular issues that have been identified in the assessment.

**7. Notes**

The assessment form also provides room to add notes, information of the courses used etc

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<sup>6</sup> This section of the BAT draws from: Salafsky, N and E Wollenberg (2000); Linking Livelihoods and Conservation: A Conceptual Framework and Scale for Assessing the Integration of Human Needs and Biodiversity, *World Development*, 28: 8, 1421-1438.

## Values and their Benefits to Protected Area Stakeholders Data Sheet

| Nature Conservation values  |  |                                     |   |  |            |          |                  |
|---|--|-------------------------------------|---|--|------------|----------|------------------|
| 1: Is the protected area valued for its nature conservation?                        |  |                                     |   |  |            |          |                  |
| Please provide details of the nature conservation value:                            |  |                                     |   |  |            |          |                  |
| Value of the resource<br>(please mark all relevant boxes in the matrix below)       | Indigenous / traditional people living in the PA | Other local people living in the PA | Indigenous / traditional local people near the PA | National population                              | Government | Industry | Global community |
| The nature conservation value of the protected area is of minor importance          |  |                                     |   |  |            |          |                  |
| The nature conservation value of the protected area is of major importance          |  |                                     |   |  |            |          |                  |
| There is potential to increase the importance of nature conservation                |  |                                     |   |  |            |          |                  |
| The nature conservation value of the protected area is of minor economic importance |  |                                     |   |  |            |          |                  |
| The nature conservation value of the protected area is of major economic importance |  |                                     |   |  |            |          |                  |
| There is potential to increase the economic importance of nature conservation       |  |                                     |   |  |            |          |                  |
| What management is currently taking place in relation to these values/benefits?     |  |                                     |   | What additional management responses are needed? |            |          |                  |
| Notes: further details, sources, caveats etc  |  |                                     |   |  |            |          |                  |



| Management values  |  |                                     |   |                     |            |          |                  |       |    |
|--|--|-------------------------------------|---|---------------------|------------|----------|------------------|-------|----|
| 2: Does management of the protected area provide employment (e.g. for managers or rangers)?<br>(please mark first if yes or no: if yes complete the assessment below and identify who are the main recipients of jobs) |  |                                     |   |                     |            |          |                  |       |    |
| What sort of jobs are available (e.g. are they mainly skilled or unskilled, are voluntary jobs important, etc)?  |  |                                     |   |                     |            |          |                  |       |    |
| Use of the resource<br>(please mark all relevant boxes in the matrix below)  | Indigenous / traditional people living in the PA | Other local people living in the PA | Indigenous / traditional / local people near the PA | National population | Government | Industry | Global community | Yes   | No |
| Employment is of minor importance  |  |                                     |   |                     |            |          |                  |       |    |
| Employment is of major importance  |  |                                     |   |                     |            |          |                  |       |    |
| There is potential to increase the importance of employment  |  |                                     |   |                     |            |          |                  |       |    |
| Employment is of minor economic importance   |  |                                     |   |                     |            |          |                  |       |    |
| Employment is of major economic importance   |  |                                     |   |                     |            |          |                  |       |    |
| There is potential to increase the economic importance of employment   |  |                                     |   |                     |            |          |                  |       |    |
| <b>Amount of the year that activity currently takes place:</b> i.e. the time that the activity takes place: please mark one option below and provide additional comments if necessary                                  |  |                                     |   |                     |            |          |                  |       |    |
| A: Only occasional work for short periods of time  |  |                                     |   |                     |            |          |                  |       |    |
| B: Regular but not continuous work   |  |                                     |   |                     |            |          |                  |       |    |
| C: Continuous work   |  |                                     |   |                     |            |          |                  |       |    |
| If the economic value of these benefits has been assessed please add here the US\$ value and the date the assessment of value was made   |  |                                     |   |                     |            |          | US\$             | Date: |    |
| Notes: further details, sources, caveats etc   |  |                                     |   |                     |            |          |                  |       |    |

| Values related to food  |  |                                     |   |  |            |               |                  |     |    |
|---|--|-------------------------------------|---|--|------------|---------------|------------------|-----|----|
| 3: Is the hunting of wild game (for subsistence or recreational purposes) permitted in the protected area?<br>(please mark first if yes or no: if yes complete the assessment below)  |  |                                     |   |  |            |               |                  |     |    |
| What sort of hunting takes place?   |  |                                     |   |  |            |               |                  |     |    |
| Are hunted species of sacred value to identified stakeholders?  |  |                                     |   |  |            |               |                  |     |    |
| Use of the resource<br>(please mark all relevant boxes in the matrix below)   | Indigenous / traditional people living in the PA | Other local people living in the PA | Indigenous / traditional local people near the PA | National population  | Government | Industry      | Global community | Yes | No |
| Hunting is of minor importance to subsistence   |  |                                     |   |  |            |               |                  |     |    |
| Hunting is of major importance to subsistence   |  |                                     |   |  |            |               |                  |     |    |
| There is potential to increase the importance of subsistence hunting  |  |                                     |   |  |            |               |                  |     |    |
| Hunting is of minor importance as a source of revenue   |  |                                     |   |  |            |               |                  |     |    |
| Hunting is of major importance as a source of revenue   |  |                                     |   |  |            |               |                  |     |    |
| There is potential to increase the economic importance of hunting   |  |                                     |   |  |            |               |                  |     |    |
| <b>Amount of PA currently involved:</b> i.e. the proportion of the PA involved in hunting: please mark one option below and provide additional comments if necessary                  |  |                                     |   |  |            |               |                  |     |    |
| A: Small section of the site (5-10%)  |  |                                     |   |  |            |               |                  |     |    |
| B: Several areas of the site (11-50%)   |  |                                     |   |  |            |               |                  |     |    |
| C: Most of the site (51-100%)   |  |                                     |   |  |            |               |                  |     |    |
| <b>Amount of the year that activity currently takes place:</b> i.e. the time that the activity takes place: please mark one option below and provide additional comments if necessary |  |                                     |   |  |            |               |                  |     |    |
| A: Only occasional uses for short periods of time   |  |                                     |   |  |            |               |                  |     |    |
| B: Regular but not continuous   |  |                                     |   |  |            |               |                  |     |    |
| C: Continuous use   |  |                                     |   |  |            |               |                  |     |    |
| If the economic value of these benefits has been assessed please add here the US\$ value and the date the assessment of value was made  |  | US\$<br>Date:                       |   | If an assessment of the cost of managing this value has been made please add here the US\$ value and the date the assessment of costs was made |            | US\$<br>Date: |                  |     |    |
| <b>Conservation Impact:</b> Please give details as to whether the activities relating to the above values/benefits are consistent with the area's management objectives               |  |                                     |   |  |            |               |                  |     |    |
| What management is currently taking place in relation to these values/benefits?   |  |                                     |   | What additional management responses are needed?   |            |               |                  |     |    |
| <b>Notes:</b> further details, sources, caveats etc   |  |                                     |   |  |            |               |                  |     |    |

| 4: Is the use of wild food plants permitted in the protected area?<br>(please mark first if yes or no: if yes complete the assessment below)                                   |  |  |   |                     |            |               |                  | Yes | No |
|--|--|--|---|---------------------|------------|---------------|------------------|-----|----|
| Please give details of the wild food plants collected?   |  |  |   |                     |            |               |                  |     |    |
| Use of the resource<br>(please mark all relevant boxes in the matrix below)  | Indigenous / traditional people living in the PA | Other local people living in the PA  | Indigenous / traditional / local people near the PA | National population | Government | Industry      | Global community |     |    |
| Collection is of minor importance to subsistence   |  |  |   |                     |            |               |                  |     |    |
| Collection is of major importance to subsistence   |  |  |   |                     |            |               |                  |     |    |
| There is potential to increase the importance of wild food plant collection  |  |  |   |                     |            |               |                  |     |    |
| Collection is of minor importance as a source of revenue   |  |  |   |                     |            |               |                  |     |    |
| Collection is of major importance as a source of revenue   |  |  |   |                     |            |               |                  |     |    |
| There is potential to increase the economic importance of wild food plant collection   |  |  |   |                     |            |               |                  |     |    |
| Amount of PA currently involved: i.e. the proportion of the PA involved in collection: please mark one option below and provide additional comments if necessary               |  |  |   |                     |            |               |                  |     |    |
| A: Small section of the site (5-10%)   |  |  |   |                     |            |               |                  |     |    |
| B: Several areas of the site (11-50%)  |  |  |   |                     |            |               |                  |     |    |
| C: Most of the site (51-100%)  |  |  |   |                     |            |               |                  |     |    |
| Amount of the year that activity currently takes place: i.e. the time that the activity takes place: please mark one option below and provide additional comments if necessary |  |  |   |                     |            |               |                  |     |    |
| A: Only occasional uses for short periods of time  |  |  |   |                     |            |               |                  |     |    |
| B: Regular but not continuous  |  |  |   |                     |            |               |                  |     |    |
| C: Continuous use  |  |  |   |                     |            |               |                  |     |    |
| If the economic value of these benefits has been assessed please add here the US\$ value and the date the assessment of value was made   | US\$<br>Date:                                    | If an assessment of the cost of managing this value has been made please add here the US\$ value and the date the assessment of costs was made |   |                     |            | US\$<br>Date: |                  |     |    |
| Conservation Impact: Please give details as to whether the activities relating to the above values/benefits are consistent with the area's management objectives               |  |  |   |                     |            |               |                  |     |    |
| What management is currently taking place in relation to these values/benefits?  |  |  | What additional management responses are needed?    |                     |            |               |                  |     |    |
| Notes: further details, sources, caveats etc   |  |  |   |                     |            |               |                  |     |    |

| 5: Are fisheries (permissible fishing and/or contribution to fish stocks by protecting spawning area) an important resource in the protected area?<br>(please mark first if yes or no: if yes complete the assessment below) |  |                                     |   |  |            |               | Yes              | No |
|--|--|-------------------------------------|---|--|------------|---------------|------------------|----|
| Please give details of fisheries and note if the value relates to fishing and/or protection of spawning:   |  |                                     |   |  |            |               |                  |    |
| Use of the resource<br>(please mark all relevant boxes in the matrix below)  | Indigenous / traditional people living in the PA | Other local people living in the PA | Indigenous / traditional / local people near the PA | National population  | Government | Industry      | Global community |    |
| Fisheries are of minor importance to subsistence   |  |                                     |   |  |            |               |                  |    |
| Fisheries are of major importance to subsistence   |  |                                     |   |  |            |               |                  |    |
| There is potential to increase the importance of fisheries   |  |                                     |   |  |            |               |                  |    |
| Fisheries are of minor importance as a source of revenue   |  |                                     |   |  |            |               |                  |    |
| Fisheries are of major importance as a source of revenue   |  |                                     |   |  |            |               |                  |    |
| There is potential to increase the economic importance of fisheries  |  |                                     |   |  |            |               |                  |    |
| <b>Amount of PA currently involved:</b> i.e. the proportion of the PA involved in fishing or protecting the spawning area: please mark one option below and provide additional comments                                      |  |                                     |   |  |            |               |                  |    |
| A: Small section of the site (5-10%)   |  |                                     |   |  |            |               |                  |    |
| B: Several areas of the site (11-50%)  |  |                                     |   |  |            |               |                  |    |
| C: Most of the site (51-100%)  |  |                                     |   |  |            |               |                  |    |
| <b>Amount of the year that activity currently takes place:</b> i.e. the time that the activity takes place: please mark one option below and provide additional comments if necessary  |  |                                     |   |  |            |               |                  |    |
| A: Only occasional uses for short periods of time  |  |                                     |   |  |            |               |                  |    |
| B: Regular but not continuous  |  |                                     |   |  |            |               |                  |    |
| C: Continuous use  |  |                                     |   |  |            |               |                  |    |
| If the economic value of these benefits has been assessed please add here the US\$ value and the date the assessment of value was made   |  | US\$<br>Date:                       |   | If an assessment of the cost of managing this value has been made please add here the US\$ value and the date the assessment of costs was made |            | US\$<br>Date: |                  |    |
| <b>Conservation Impact:</b> Please give details as to whether the activities relating to the above values/benefits are consistent with the area's management objectives  |  |                                     |   |  |            |               |                  |    |
| What management is currently taking place in relation to these values/benefits?  |  |                                     |   | What additional management responses are needed?   |            |               |                  |    |
| Notes: further details, sources, caveats etc   |  |                                     |   |  |            |               |                  |    |

| 6: Is traditional agriculture (i.e. use of locally adapted crops, i.e. landraces and/or practices) undertaken legally in the protected area?<br>(please mark first if yes or no: if yes complete the assessment below) |  |                                     |   |  |            |               | Yes              | No |
|--|--|-------------------------------------|---|--|------------|---------------|------------------|----|
| Please give details of traditional agriculture practices:  |  |                                     |   |  |            |               |                  |    |
| Use of the resource<br>(please mark all relevant boxes in the matrix below)  | Indigenous / traditional people living in the PA | Other local people living in the PA | Indigenous / traditional local people near the PA | National population  | Government | Industry      | Global community |    |
| Traditional agriculture is of minor importance to subsistence  |  |                                     |   |  |            |               |                  |    |
| Traditional agriculture is of major importance to subsistence  |  |                                     |   |  |            |               |                  |    |
| There is potential to increase the importance of traditional agriculture   |  |                                     |   |  |            |               |                  |    |
| Traditional agriculture is of minor importance as a source of revenue  |  |                                     |   |  |            |               |                  |    |
| Traditional agriculture is of major importance as a source of revenue  |  |                                     |   |  |            |               |                  |    |
| There is potential to increase the economic importance of traditional agriculture  |  |                                     |   |  |            |               |                  |    |
| <b>Amount of PA involved</b> i.e. the proportion of the PA used for agriculture: please mark one option below and provide additional comments if necessary   |  |                                     |   |  |            |               |                  |    |
| A: Small section of the site (5-10%)   |  |                                     |   |  |            |               |                  |    |
| B: Several areas of the site (11-50%)  |  |                                     |   |  |            |               |                  |    |
| C: Most of the site (51-100%)  |  |                                     |   |  |            |               |                  |    |
| <b>Amount of the year that activity currently takes place:</b> i.e. the time that the activity takes place: please mark one option below and provide additional comments if necessary                                  |  |                                     |   |  |            |               |                  |    |
| A: Only occasional uses for short periods of time  |  |                                     |   |  |            |               |                  |    |
| B: Regular but not continuous  |  |                                     |   |  |            |               |                  |    |
| C: Continuous use  |  |                                     |   |  |            |               |                  |    |
| If the economic value of these benefits has been assessed please add here the US\$ value and the date the assessment of value was made   |  | US\$<br>Date:                       |   | If an assessment of the cost of managing this value has been made please add here the US\$ value and the date the assessment of costs was made |            | US\$<br>Date: |                  |    |
| <b>Conservation Impact:</b> Please give details as to whether the activities relating to the above values/benefits are consistent with the area's management objectives  |  |                                     |   |  |            |               |                  |    |
| What management is currently taking place in relation to these values/benefits?  |  |                                     |   | What additional management responses are needed?   |            |               |                  |    |
| <b>Notes:</b> further details, sources, caveats etc  |  |                                     |   |  |            |               |                  |    |

| 7: Is livestock grazing and fodder collection permitted in the protected area?<br>(please mark first if yes or no: if yes complete the assessment below)                                     |  |                                     |   |  |            |               | Yes              | No |
|--|--|-------------------------------------|---|--|------------|---------------|------------------|----|
| Please give details of livestock grazing and/or fodder collection activities:  |  |                                     |   |  |            |               |                  |    |
| Use of the resource<br>(please mark all relevant boxes in the matrix below)  | Indigenous / traditional people living in the PA | Other local people living in the PA | Indigenous / traditional local people near the PA | National population  | Government | Industry      | Global community |    |
| Grazing and/or fodder collection is of minor importance to subsistence   |  |                                     |   |  |            |               |                  |    |
| Grazing and/or fodder collection is of major importance to subsistence   |  |                                     |   |  |            |               |                  |    |
| There is potential to increase the importance of grazing and/or fodder collection  |  |                                     |   |  |            |               |                  |    |
| Grazing and/or fodder collection is of minor importance as a source of revenue   |  |                                     |   |  |            |               |                  |    |
| Grazing and/or fodder collection is of major importance as a source of revenue   |  |                                     |   |  |            |               |                  |    |
| There is potential to increase the economic importance of grazing and/or fodder collection   |  |                                     |   |  |            |               |                  |    |
| <b>Amount of PA currently involved:</b> : i.e. the proportion of the PA involved in grazing and fodder collection: please mark one option below and provide additional comments if necessary |  |                                     |   |  |            |               |                  |    |
| A: Small section of the site (5-10%)   |  |                                     |   |  |            |               |                  |    |
| B: Several areas of the site (11-50%)  |  |                                     |   |  |            |               |                  |    |
| C: Most of the site (51-100%)  |  |                                     |   |  |            |               |                  |    |
| <b>Amount of the year that activity currently takes place:</b> i.e. the time that the activity takes place: please mark one option below and provide additional comments if necessary        |  |                                     |   |  |            |               |                  |    |
| A: Only occasional uses for short periods of time  |  |                                     |   |  |            |               |                  |    |
| B: Regular but not continuous  |  |                                     |   |  |            |               |                  |    |
| C: Continuous use  |  |                                     |   |  |            |               |                  |    |
| If the economic value of these benefits has been assessed please add here the US\$ value and the date the assessment of value was made   |  | US\$<br>Date:                       |   | If an assessment of the cost of managing this value has been made please add here the US\$ value and the date the assessment of costs was made |            | US\$<br>Date: |                  |    |
| <b>Conservation Impact:</b> Please give details as to whether the activities relating to the above values/benefits are consistent with the area's management objectives                      |  |                                     |   |  |            |               |                  |    |
| What management is currently taking place in relation to these values/benefits?  |  |                                     |   | What additional management responses are needed?   |            |               |                  |    |
| Notes: further details, sources, caveats etc   |  |                                     |   |  |            |               |                  |    |

| Values related to water   |  |  |   |  |               |          |                  |
|---|--|--|---|--|---------------|----------|------------------|
| 8: Is non-commercial water use (e.g. subsistence agriculture, drinking, washing and/or cooking) or commercial water use (e.g. for large-scale irrigation, waterways, bottling plants, hydro-electric power or municipal drinking water source) permitted in the protected area?<br>(please mark first if yes or no: if yes complete the assessment below) |  |  |   |  |               |          |                  |
| Please give details of water values:  |  |  |   |  |               |          |                  |
| Use of the resource<br>(please mark all relevant boxes in the matrix below)   | Indigenous / traditional people living in the PA | Other local people living in the PA  | Indigenous / traditional / local people near the PA | National population                              | Government    | Industry | Global community |
| Non-commercial water use is of minor importance to subsistence  |  |  |   |  |               |          |                  |
| Non-commercial water use is of major importance to subsistence  |  |  |   |  |               |          |                  |
| There is potential to increase the importance of non-commercial water use   |  |  |   |  |               |          |                  |
| Commercial water use is of minor importance as a source of revenue  |  |  |   |  |               |          |                  |
| Commercial water use is of major importance as a source of revenue  |  |  |   |  |               |          |                  |
| There is potential to increase the economic importance of commercial water use  |  |  |   |  |               |          |                  |
| <b>Amount of PA currently involved:</b> i.e. the proportion of the PA involved in water use: please mark one option below and provide additional comments if necessary  |  |  |   |  |               |          |                  |
| A: Small section of the site (5-10%)  |  |  |   |  |               |          |                  |
| B: Several areas of the site (11-50%)   |  |  |   |  |               |          |                  |
| C: Most of the site (51-100%)   |  |  |   |  |               |          |                  |
| <b>Amount of the year that activity currently takes place:</b> i.e. the time that the activity takes place: please mark one option below and provide additional comments if necessary   |  |  |   |  |               |          |                  |
| A: Only occasional uses for short periods of time   |  |  |   |  |               |          |                  |
| B: Regular but not continuous   |  |  |   |  |               |          |                  |
| C: Continuous use   |  |  |   |  |               |          |                  |
| If the economic value of these benefits has been assessed please add here the US\$ value and the date the assessment of value was made  | US\$<br>Date:                                    | If an assessment of the cost of managing this value has been made please add here the US\$ value and the date the assessment of costs was made |   |  | US\$<br>Date: |          |                  |
| <b>Conservation Impact:</b> Please give details as to whether the activities relating to the above values/benefits are consistent with the area's management objectives   |  |  |   |  |               |          |                  |
| What management is currently taking place in relation to these values/benefits?   |  |  |   | What additional management responses are needed? |               |          |                  |
| <b>Notes:</b> further details, sources, caveats etc   |  |  |   |  |               |          |                  |

| Cultural and Spiritual Values   |  |  |   |  |            |          |                  |
|---|--|--|---|--|------------|----------|------------------|
| 9: Does the protected area have cultural and historical values (e.g. archaeology, historic buildings, pilgrimage routes and/or important land use patterns)? (please mark first if yes or no: if yes complete the assessment below) |  |  |   |  |            |          |                  |
| Please give details of the cultural and historical values:  |  |  |   |  |            |          |                  |
| Use of the resource<br>(please mark all relevant boxes in the matrix below)   | Indigenous / traditional people living in the PA | Other local people living in the PA  | Indigenous / traditional / local people near the PA | National population                              | Government | Industry | Global community |
| Cultural and historical values are of minor non-economic importance   |  |  |   |  |            |          |                  |
| Cultural and historical values are of major non-economic importance   |  |  |   |  |            |          |                  |
| There is potential to increase the non-economic importance of cultural and historical values  |  |  |   |  |            |          |                  |
| Cultural and historical values are of minor importance as a source of revenue   |  |  |   |  |            |          |                  |
| Cultural and historical values are of major importance as a source of revenue   |  |  |   |  |            |          |                  |
| There is potential to increase the economic importance of cultural and historical values  |  |  |   |  |            |          |                  |
| <b>Amount of PA currently involved:</b> i.e. the proportion of the PA containing these values: please mark one option below and provide additional comments if necessary  |  |  |   |  |            |          |                  |
| A: Small section of the site (5-10%)  |  |  |   |  |            |          |                  |
| B: Several areas of the site (11-50%)   |  |  |   |  |            |          |                  |
| C: Most of the site (51-100%)   |  |  |   |  |            |          |                  |
| <b>Amount of the year that activity currently takes place:</b> i.e. the time that the activity takes place (e.g. a pilgrimage): please mark one option below and provide additional comments if necessary                           |  |  |   |  |            |          |                  |
| A: Only occasional uses for short periods of time   |  |  |   |  |            |          |                  |
| B: Regular but not continuous   |  |  |   |  |            |          |                  |
| C: Continuous use   |  |  |   |  |            |          |                  |
| If the economic value of these benefits has been assessed please add here the US\$ value and the date the assessment of value was made  | US\$<br>Date:                                    | If an assessment of the cost of managing this value has been made please add here the US\$ value and the date the assessment of costs was made |   | US\$<br>Date:                                    |            |          |                  |
| <b>Conservation Impact:</b> Please give details as to whether the activities relating to the above values/benefits are consistent with the area's management objectives   |  |  |   |  |            |          |                  |
| What management is currently taking place in relation to these values/benefits?   |  |  |   | What additional management responses are needed? |            |          |                  |
| <b>Notes:</b> further details, sources, caveats etc   |  |  |   |  |            |          |                  |



| 10: Does the protected area include sacred natural sites or landscapes (e.g. sacred groves, waterfalls, mountains)? (please mark first if yes or no: if yes complete the assessment below)  |  |                                     |   |  |            |               |                  | Yes | No |
|---|--|-------------------------------------|---|--|------------|---------------|------------------|-----|----|
| Please give details of the sacred sites and/or landscapes?  |  |                                     |   |  |            |               |                  |     |    |
| Use of the resource<br>(please mark all relevant boxes in the matrix below)   | Indigenous / traditional people living in the PA | Other local people living in the PA | Indigenous / traditional / local people near the PA | National population  | Government | Industry      | Global community |     |    |
| Sacred values are of minor non-economic importance  |  |                                     |   |  |            |               |                  |     |    |
| Sacred values are of major non-economic importance  |  |                                     |   |  |            |               |                  |     |    |
| There is potential to increase the importance of sacred values  |  |                                     |   |  |            |               |                  |     |    |
| Sacred values are of minor importance as source of revenue  |  |                                     |   |  |            |               |                  |     |    |
| Sacred values are of major importance as source of revenue  |  |                                     |   |  |            |               |                  |     |    |
| There is potential to increase the economic importance of sacred values   |  |                                     |   |  |            |               |                  |     |    |
| <b>Amount of PA currently involved:</b> i.e. the proportion of the PA containing these values: please mark one option below and provide additional comments if necessary  |  |                                     |   |  |            |               |                  |     |    |
| A: Small section of the site (5-10%)  |  |                                     |   |  |            |               |                  |     |    |
| B: Several areas of the site (11-50%)   |  |                                     |   |  |            |               |                  |     |    |
| C: Most of the site (51-100%)   |  |                                     |   |  |            |               |                  |     |    |
| <b>Amount of the year that activity currently takes place:</b> i.e. the time that the activity takes place (e.g. if special ceremonies take place in the area): please mark one option below and provide additional comments if necessary |  |                                     |   |  |            |               |                  |     |    |
| A: Only occasional uses for short periods of time   |  |                                     |   |  |            |               |                  |     |    |
| B: Regular but not continuous   |  |                                     |   |  |            |               |                  |     |    |
| C: Continuous use   |  |                                     |   |  |            |               |                  |     |    |
| If the economic value of these benefits has been assessed please add here the US\$ value and the date the assessment of value was made  |  | US\$<br>Date:                       |   | If an assessment of the cost of managing this value has been made please add here the US\$ value and the date the assessment of costs was made |            | US\$<br>Date: |                  |     |    |
| <b>Conservation Impact:</b> Please give details as to whether the activities relating to the above values/benefits are consistent with the area's management objectives   |  |                                     |   |  |            |               |                  |     |    |
| What management is currently taking place in relation to these values/benefits?   |  |                                     |   | What additional management responses are needed?   |            |               |                  |     |    |
| <b>Notes:</b> further details, sources, caveats etc   |  |                                     |   |  |            |               |                  |     |    |

| 11: Does the protected area contain wilderness values or other similar iconic values (i.e. waterfalls, mountains etc)? (please mark first if yes or no: if yes complete the assessment below) |   |   |   |                     |            |               | Yes              | No |
|---|---|---|---|---------------------|------------|---------------|------------------|----|
| Please give details of the values:  |   |   |   |                     |            |               |                  |    |
| Value of the resource<br>(please mark all relevant boxes in the matrix below)   | Indigenous / traditional people living in the PA        | Other local people living in the PA   | Indigenous / traditional local people near the PA | National population | Government | Industry      | Global community |    |
| The wilderness/iconic values are of minor importance  |   |   |   |                     |            |               |                  |    |
| The wilderness/iconic values are of major importance  |   |   |   |                     |            |               |                  |    |
| There is potential to increase the importance of the wilderness/iconic values   |   |   |   |                     |            |               |                  |    |
| <b>Amount of PA currently involved:</b> i.e. the <i>proportion</i> of the PA that has wilderness of iconic values; please mark one option below and provide additional comments if necessary  |   |   |   |                     |            |               |                  |    |
| A. Small section of the site (5-10%)  |   |   |   |                     |            |               |                  |    |
| B. Several areas of the site (11-50%)   |   |   |   |                     |            |               |                  |    |
| C. Most of the site (51-100%)   |   |   |   |                     |            |               |                  |    |
| If the <b>economic value</b> of these benefits has been assessed please add here the US\$ value and the date the assessment of value was made   | US\$<br>Date:   | If an assessment of the <b>cost of managing</b> this value has been made please add here the US\$ value and the date the assessment of costs was made |   |                     |            | US\$<br>Date: |                  |    |
| <b>Conservation Impact:</b> Please give details as to whether the activities relating to the above values/benefits are consistent with the area's management objectives                       |   |   |   |                     |            |               |                  |    |
| What <b>management is currently</b> taking place in relation to these values/benefits?  | What <b>additional management</b> responses are needed? |   |   |                     |            |               |                  |    |
| <b>Notes:</b> further details, sources, caveats etc   |   |   |   |                     |            |               |                  |    |

| Health and Recreation Values  |  |                                     |  |                     |  |          |                  |       |    |
|---|--|-------------------------------------|--|---------------------|--|----------|------------------|-------|----|
| 12: Is the collection of medicinal resources (i.e. herbs) for local use or for the pharmaceuticals industry permitted from the protected area? (please mark first if yes or no: if yes complete the assessment below) |  |                                     |  |                     |  |          |                  |       |    |
| Please provide details of the value:  |  |                                     |  |                     |  |          |                  |       |    |
| Use of the resource<br>(please mark all relevant boxes in the matrix below)   | Indigenous / traditional people living in the PA | Other local people living in the PA | Indigenous / traditional local people near the PA  | National population | Government                                       | Industry | Global community | Yes   | No |
| Local use of medicinal resources is of minor importance to subsistence  |  |                                     |  |                     |  |          |                  |       |    |
| Local use of medicinal resources is of major importance to subsistence  |  |                                     |  |                     |  |          |                  |       |    |
| There is potential to increase the importance of medicinal resources  |  |                                     |  |                     |  |          |                  |       |    |
| Local use of medicinal resources is a minor source of revenue   |  |                                     |  |                     |  |          |                  |       |    |
| Local use of medicinal resources is a major source of revenue   |  |                                     |  |                     |  |          |                  |       |    |
| There is potential to increase the economic importance of medicinal resources   |  |                                     |  |                     |  |          |                  |       |    |
| Resources for the pharmaceuticals industry are a minor source of revenue  |  |                                     |  |                     |  |          |                  |       |    |
| Resources for the pharmaceuticals industry are a major source of revenue  |  |                                     |  |                     |  |          |                  |       |    |
| There is potential to increase the economic importance of resources used by the pharmaceuticals industry  |  |                                     |  |                     |  |          |                  |       |    |
| <b>Amount of PA currently involved:</b> i.e. the proportion of the PA involved in collection: please mark one option below and provide additional comments if necessary   |  |                                     |  |                     |  |          |                  |       |    |
| A: Small section of the site (5-10%)  |  |                                     |  |                     |  |          |                  |       |    |
| B: Several areas of the site (11-50%)   |  |                                     |  |                     |  |          |                  |       |    |
| C: Most of the site (51-100%)   |  |                                     |  |                     |  |          |                  |       |    |
| <b>Amount of the year that activity currently takes place:</b> i.e. the time that the activity takes place: please mark one option below and provide additional comments if necessary                                 |  |                                     |  |                     |  |          |                  |       |    |
| A: Only occasional uses for short periods of time   |  |                                     |  |                     |  |          |                  |       |    |
| B: Regular but not continuous   |  |                                     |  |                     |  |          |                  |       |    |
| C: Continuous use   |  |                                     |  |                     |  |          |                  |       |    |
| If the economic value of these benefits has been assessed please add here the US\$ value and the date the assessment of value was made  | US\$   | Date:                               | If an assessment of the cost of managing this value has been made please add here the US\$ value and the date the assessment of costs was made |                     |  |          | US\$             | Date: |    |
|   |  |                                     |  |                     |  |          |                  |       |    |
| <b>Conservation Impact:</b> Please give details as to whether the activities relating to the above values/benefits are consistent with the area's management objectives   |  |                                     |  |                     |  |          |                  |       |    |
| What management is currently taking place in relation to these values/benefits?   |  |                                     |  |                     | What additional management responses are needed? |          |                  |       |    |
| <b>Notes:</b> further details, sources, caveats etc   |  |                                     |  |                     |  |          |                  |       |    |

| 13: Is the protected area important for recreation and tourism?<br>(please mark first if yes or no: if yes complete the assessment below)  |  |   |   |   |            |          |                  |     |    |
|--|--|---|---|---|------------|----------|------------------|-----|----|
| Please provide details of the value:   |  |   |   |   |            |          |                  |     |    |
| Use of the resource<br>(please mark all relevant boxes in the matrix below)  | Indigenous / traditional people living in the PA | Other local people living in the PA   | Indigenous / traditional local people near the PA | National population                                     | Government | Industry | Global community | Yes | No |
| Recreation and tourism is of minor value to human well-being (i.e. for health and relaxation)  |  |   |   |   |            |          |                  |     |    |
| Recreation and tourism is of major value to human well-being   |  |   |   |   |            |          |                  |     |    |
| There is potential to increase the importance of recreation and tourism  |  |   |   |   |            |          |                  |     |    |
| Recreation and tourism is of minor importance as a source of revenue   |  |   |   |   |            |          |                  |     |    |
| Recreation and tourism is of major importance as a source of revenue   |  |   |   |   |            |          |                  |     |    |
| There is potential to increase the economic importance of recreation and tourism   |  |   |   |   |            |          |                  |     |    |
| <b>Amount of PA currently involved:</b> i.e. the <i>proportion</i> of the PA involved in recreation and tourism: please mark one option below and provide additional comments if necessary             |  |   |   |   |            |          |                  |     |    |
| A: Small section of the site (5-10%)   |  |   |   |   |            |          |                  |     |    |
| B: Several areas of the site (11-50%)  |  |   |   |   |            |          |                  |     |    |
| C: Most of the site (51-100%)  |  |   |   |   |            |          |                  |     |    |
| <b>Amount of the year that activity currently takes place:</b> i.e. the <i>time</i> that recreation and tourism takes place: please mark one option below and provide additional comments if necessary |  |   |   |   |            |          |                  |     |    |
| A: Only occasional uses for short periods of time  |  |   |   |   |            |          |                  |     |    |
| B: Regular but not continuous  |  |   |   |   |            |          |                  |     |    |
| C: Continuous use  |  |   |   |   |            |          |                  |     |    |
| If the <b>economic value</b> of these benefits has been assessed please add here the US\$ value and the date the assessment of value was made  | US\$<br>Date:                                    | If an assessment of the <b>cost of managing</b> this value has been made please add here the US\$ value and the date the assessment of costs was made |   | US\$<br>Date:   |            |          |                  |     |    |
| <b>Conservation Impact:</b> Please give details as to whether the activities relating to the above values/benefits are consistent with the area's management objectives                                |  |   |   |   |            |          |                  |     |    |
| What <b>management is currently</b> taking place in relation to these values/benefits?   |  |   |   | What <b>additional management</b> responses are needed? |            |          |                  |     |    |
| <b>Notes:</b> further details, sources, caveats etc  |  |   |   |   |            |          |                  |     |    |

| Knowledge  |  |  |   |                     |            |          | Yes              | No    |
|--|--|--|---|---------------------|------------|----------|------------------|-------|
| <b>14: Is the protected area an important resource for building knowledge (i.e. formal research, local knowledge development)? (please mark first if yes or no: if yes complete the assessment below)</b><br>Please give information on how the protected area contributes to building knowledge:                        |  |  |   |                     |            |          |                  |       |
| Use of the resource<br>(please mark all relevant boxes in the matrix below)  | Indigenous / traditional people living in the PA | Other local people living in the PA  | Indigenous / traditional / local people near the PA | National population | Government | Industry | Global community |       |
| The PA is of minor importance to building knowledge  |  |  |   |                     |            |          |                  |       |
| The PA is of major importance to building knowledge  |  |  |   |                     |            |          |                  |       |
| There is potential to increase the importance of knowledge building  |  |  |   |                     |            |          |                  |       |
| Knowledge building is a minor source of revenue  |  |  |   |                     |            |          |                  |       |
| Knowledge building is a major source of revenue  |  |  |   |                     |            |          |                  |       |
| There is potential to increase the economic importance of knowledge building   |  |  |   |                     |            |          |                  |       |
| <b>Amount of PA currently involved:</b> i.e. the proportion of the PA involved in knowledge generation: please mark one option below and provide additional comments if necessary<br><b>A:</b> Small section of the site (5-10%)<br><b>B:</b> Several areas of the site (11-50%)<br><b>C:</b> Most of the site (51-100%) |  |  |   |                     |            |          |                  |       |
| <b>Amount of the year that activity currently takes place:</b> i.e. the time that the activity takes place: please mark one option below and provide additional comments if necessary<br><b>A:</b> Only occasional uses for short periods of time<br><b>B:</b> Regular but not continuous<br><b>C:</b> Continuous use    |  |  |   |                     |            |          |                  |       |
| If the economic value of these benefits has been assessed please add here the US\$ value and the date the assessment of value was made   | US\$<br>Date:                                    | If an assessment of the cost of managing this value has been made please add here the US\$ value and the date the assessment of costs was made |   |                     |            |          | US\$             | Date: |
|  |  |  |   |                     |            |          |                  |       |
| <b>Conservation Impact:</b> Please give details as to whether the activities relating to the above values/benefits are consistent with the area's management objectives  |  |  |   |                     |            |          |                  |       |
| What management is currently taking place in relation to these values/benefits?  |  |  | What additional management responses are needed?    |                     |            |          |                  |       |
| <b>Notes:</b> further details, sources, caveats etc  |  |  |   |                     |            |          |                  |       |

| 15. Does the protected area contribute to education (i.e. formal and informal dissemination of information)? (please mark first if yes or no: if yes complete the assessment below)   |  |  |   |  |            |               |                  | Yes | No |
|---|--|--|---|--|------------|---------------|------------------|-----|----|
| Please give information on how the protected area contributes to education:   |  |  |   |  |            |               |                  |     |    |
| Use of the resource<br>(please mark all relevant boxes in the matrix below)   | Indigenous / traditional people living in the PA | Other local people living in the PA  | Indigenous / traditional / local people near the PA | National population                              | Government | Industry      | Global community |     |    |
| The PA is of minor importance to education  |  |  |   |  |            |               |                  |     |    |
| The PA is of major importance to education (i.e. runs education programmes and has staff and facilities)  |  |  |   |  |            |               |                  |     |    |
| There is potential to increase the importance of educational activity   |  |  |   |  |            |               |                  |     |    |
| Educational activity is a minor source of revenue   |  |  |   |  |            |               |                  |     |    |
| Educational activity is a major source of revenue   |  |  |   |  |            |               |                  |     |    |
| There is potential to increase the economic importance of educational activity  |  |  |   |  |            |               |                  |     |    |
| <b>Amount of PA currently involved:</b> i.e. the proportion of the PA involved in educational activities: please mark one option below and provide additional comments if necessary   |  |  |   |  |            |               |                  |     |    |
| A: Small section of the site (5-10%)  |  |  |   |  |            |               |                  |     |    |
| B: Several areas of the site (11-50%)   |  |  |   |  |            |               |                  |     |    |
| C: Most of the site (51-100%)   |  |  |   |  |            |               |                  |     |    |
| <b>Amount of the year that activity currently takes place:</b> i.e. the time that the activity takes place: please mark one option below and provide additional comments if necessary |  |  |   |  |            |               |                  |     |    |
| A: Only occasional uses for short periods of time   |  |  |   |  |            |               |                  |     |    |
| B: Regular but not continuous   |  |  |   |  |            |               |                  |     |    |
| C: Continuous use   |  |  |   |  |            |               |                  |     |    |
| If the economic value of these benefits has been assessed please add here the US\$ value and the date the assessment of value was made  | US\$<br>Date:                                    | If an assessment of the cost of managing this value has been made please add here the US\$ value and the date the assessment of costs was made |   |  |            | US\$<br>Date: |                  |     |    |
| <b>Conservation Impact:</b> Please give details as to whether the activities relating to the above values/benefits are consistent with the area's management objectives               |  |  |   |  |            |               |                  |     |    |
| What management is currently taking place in relation to these values/benefits?   |  |  |   | What additional management responses are needed? |            |               |                  |     |    |
| <b>Notes:</b> further details, sources, caveats etc   |  |  |   |  |            |               |                  |     |    |

| 16. Is the collection of genetic material (e.g. crop wild relatives, tree species) permitted from the protected area? (please mark first if yes or no: if yes complete the assessment below) |  |                                     |   |  |            |               | Yes              | No |
|--|--|-------------------------------------|---|--|------------|---------------|------------------|----|
| Please provide details of the value:   |  |                                     |   |  |            |               |                  |    |
| Use of the resource<br>(please mark all relevant boxes in the matrix below)  | Indigenous / traditional people living in the PA | Other local people living in the PA | Indigenous / traditional / local people near the PA | National population  | Government | Industry      | Global community |    |
| Genetic material is of minor non-economic importance   |  |                                     |   |  |            |               |                  |    |
| Genetic material is of major non-economic importance   |  |                                     |   |  |            |               |                  |    |
| There is potential to increase the non-economic importance of genetic material   |  |                                     |   |  |            |               |                  |    |
| Genetic material is a minor source of revenue  |  |                                     |   |  |            |               |                  |    |
| Genetic material is a major source of revenue  |  |                                     |   |  |            |               |                  |    |
| There is potential to increase the economic importance of genetic material collected from the PA   |  |                                     |   |  |            |               |                  |    |
| <b>Amount of PA currently involved:</b> i.e. the proportion of the PA involved in collection: please mark one option below and provide additional comments if necessary                      |  |                                     |   |  |            |               |                  |    |
| A: Small section of the site (5-10%)   |  |                                     |   |  |            |               |                  |    |
| B: Several areas of the site (11-50%)  |  |                                     |   |  |            |               |                  |    |
| C: Most of the site (51-100%)  |  |                                     |   |  |            |               |                  |    |
| <b>Amount of the year that activity currently takes place:</b> i.e. the time that the activity takes place: please mark one option below and provide additional comments if necessary        |  |                                     |   |  |            |               |                  |    |
| A: Only occasional uses for short periods of time  |  |                                     |   |  |            |               |                  |    |
| B: Regular but not continuous  |  |                                     |   |  |            |               |                  |    |
| C: Continuous use  |  |                                     |   |  |            |               |                  |    |
| If the economic value of these benefits has been assessed please add here the US\$ value and the date the assessment of value was made   |  | US\$<br>Date:                       |   | If an assessment of the cost of managing this value has been made please add here the US\$ value and the date the assessment of costs was made |            | US\$<br>Date: |                  |    |
| <b>Conservation Impact:</b> Please give details as to whether the activities relating to the above values/benefits are consistent with the area's management objectives                      |  |                                     |   |  |            |               |                  |    |
| What management is currently taking place in relation to these values/benefits?  |  |                                     |   | What additional management responses are needed?   |            |               |                  |    |
| <b>Notes:</b> further details, sources, caveats etc  |  |                                     |   |  |            |               |                  |    |

| Environmental Services  |  |   |   |                     |            |   |     |      |                  |
|---|--|---|---|---------------------|------------|---|-----|------|------------------|
| 17. Can the protected area contribute to climate change mitigation (i.e. by providing significant carbon sequestration and / or by ameliorating local climate impacts)?<br>(please mark first if yes or no: if yes complete the assessment below)   |  |   |   |                     |            |   |     |      |                  |
| Please provide details of the value:  |  |   |   |                     |            |   |     |      |                  |
| Use of the resource<br>(please mark all relevant boxes in the matrix below)   | Indigenous / traditional people living in the PA | Other local people living in the PA   | Indigenous / traditional / local people near the PA | National population | Government | Industry  | Yes | No   | Global community |
| The PA provides minor benefits through carbon sequestration/ local climate stabilisation  |  |   |   |                     |            |   |     |      |                  |
| The PA provides major benefits through carbon sequestration/ local climate stabilisation  |  |   |   |                     |            |   |     |      |                  |
| There is potential to increase the importance of carbon sequestration/ local climate stabilisation  |  |   |   |                     |            |   |     |      |                  |
| Carbon sequestration/ local climate stabilisation is a minor source of revenue  |  |   |   |                     |            |   |     |      |                  |
| Carbon sequestration/ local climate stabilisation is a major source of revenue  |  |   |   |                     |            |   |     |      |                  |
| There is potential to increase the economic importance of carbon sequestration/ local climate stabilisation   |  |   |   |                     |            |   |     |      |                  |
| <b>Amount of PA currently involved:</b> i.e. the <i>proportion</i> of the PA involved in significant carbon sequestration: please mark one option below and provide additional comments if necessary<br><b>A:</b> Small section of the site (5-10%)<br><b>B:</b> Several areas of the site (11-50%)<br><b>C:</b> Most of the site (51-100%) |  |   |   |                     |            |   |     |      |                  |
| If the <b>economic value</b> of these benefits has been assessed please add here the US\$ value and the date the assessment of value was made   | US\$<br>Date:                                    | If an assessment of the <b>cost of managing</b> this value has been made please add here the US\$ value and the date the assessment of costs was made |   |                     |            |   |     | US\$ | Date:            |
|   |  |   |   |                     |            |   |     |      |                  |
| <b>Conservation Impact:</b> Please give details as to whether the activities relating to the above values/benefits are consistent with the area's management objectives   |  |   |   |                     |            |   |     |      |                  |
| What <b>management is currently</b> taking place in relation to these values/benefits?  |  |   |   |                     |            | What <b>additional management</b> responses are needed? |     |      |                  |
| <b>Notes:</b> further details, sources, caveats etc   |  |   |   |                     |            |   |     |      |                  |



| 18. Is the protected area important for soil stabilisation (e.g. avalanche prevention, landslide and erosion)?<br>(please mark first if yes or no: if yes complete the assessment below)   |  |  |   |                     |            |               |                  | Yes | No |
|--|--|--|---|---------------------|------------|---------------|------------------|-----|----|
| Please provide details of the value:   |  |  |   |                     |            |               |                  |     |    |
| Use of the resource<br>(please mark all relevant boxes in the matrix below)  | Indigenous / traditional people living in the PA | Other local people living in the PA  | Indigenous / traditional local people near the PA | National population | Government | Industry      | Global community |     |    |
| The role of the PA in soil stabilisation has a minor non-economic benefit  |  |  |   |                     |            |               |                  |     |    |
| The role of the PA in soil stabilisation has a major non-economic benefit  |  |  |   |                     |            |               |                  |     |    |
| There is potential to increase the non-economic importance of soil stabilisation   |  |  |   |                     |            |               |                  |     |    |
| The role of the PA in soil stabilisation has minor economic benefits   |  |  |   |                     |            |               |                  |     |    |
| The role of the PA in soil stabilisation has major economic benefits   |  |  |   |                     |            |               |                  |     |    |
| There is potential to increase the economic importance of soil stabilisation   |  |  |   |                     |            |               |                  |     |    |
| <b>Amount of PA currently involved:</b> i.e. the proportion of the PA which is important for soil stabilisation: please mark one option below and provide additional comments if necessary |  |  |   |                     |            |               |                  |     |    |
| A: Small section of the site (5-10%)   |  |  |   |                     |            |               |                  |     |    |
| B: Several areas of the site (11-50%)  |  |  |   |                     |            |               |                  |     |    |
| C: Most of the site (51-100%)  |  |  |   |                     |            |               |                  |     |    |
| If the economic value of these benefits has been assessed please add here the US\$ value and the date the assessment of value was made   | US\$<br>Date:                                    | If an assessment of the cost of managing this value has been made please add here the US\$ value and the date the assessment of costs was made |   |                     |            | US\$<br>Date: |                  |     |    |
| <b>Conservation Impact:</b> Please give details as to whether the activities relating to the above values/benefits are consistent with the area's management objectives                    |  |  |   |                     |            |               |                  |     |    |
| What management is currently taking place in relation to these values/benefits?  |  | What additional management responses are needed?   |   |                     |            |               |                  |     |    |
| <b>Notes:</b> further details, sources, caveats etc  |  |  |   |                     |            |               |                  |     |    |

| 19. Is the protected area important for coastal protection (e.g. mangroves, sand dunes, coral reefs)?<br>(please mark first if yes or no: if yes complete the assessment below)            |  |  |   |                     |            |               |                  | Yes | No |
|--|--|--|---|---------------------|------------|---------------|------------------|-----|----|
| Please provide details of the value:   |  |  |   |                     |            |               |                  |     |    |
| Use of the resource<br>(please mark all relevant boxes in the matrix below)  | Indigenous / traditional people living in the PA | Other local people living in the PA  | Indigenous / traditional local people near the PA | National population | Government | Industry      | Global community |     |    |
| The role of the PA in coastal protection has a minor non-economic benefit  |  |  |   |                     |            |               |                  |     |    |
| The role of the PA in coastal protection has a major non-economic benefit  |  |  |   |                     |            |               |                  |     |    |
| There is potential to increase the non-economic importance of coastal protection   |  |  |   |                     |            |               |                  |     |    |
| The role of the PA in coastal protection has minor economic benefits   |  |  |   |                     |            |               |                  |     |    |
| The role of the PA in coastal protection has major economic benefits   |  |  |   |                     |            |               |                  |     |    |
| There is potential to increase the economic importance of coastal protection   |  |  |   |                     |            |               |                  |     |    |
| <b>Amount of PA currently involved:</b> i.e. the proportion of the PA which is important for coastal protection: please mark one option below and provide additional comments if necessary |  |  |   |                     |            |               |                  |     |    |
| A: Small section of the site (5-10%)   |  |  |   |                     |            |               |                  |     |    |
| B: Several areas of the site (11-50%)  |  |  |   |                     |            |               |                  |     |    |
| C: Most of the site (51-100%)  |  |  |   |                     |            |               |                  |     |    |
| If the economic value of these benefits has been assessed please add here the US\$ value and the date the assessment of value was made   | US\$<br>Date:                                    | If an assessment of the cost of managing this value has been made please add here the US\$ value and the date the assessment of costs was made |   |                     |            | US\$<br>Date: |                  |     |    |
| <b>Conservation Impact:</b> Please give details as to whether the activities relating to the above values/benefits are consistent with the area's management objectives                    |  |  |   |                     |            |               |                  |     |    |
| What management is currently taking place in relation to these values/benefits?  |  | What additional management responses are needed?   |   |                     |            |               |                  |     |    |
| <b>Notes:</b> further details, sources, caveats etc  |  |  |   |                     |            |               |                  |     |    |

| 20. Is the protected area important for flood prevention (e.g. mitigation in small watersheds, flood plains and wetland protection)? (please mark first if yes or no: if yes complete the assessment below) |  |  |   |                     |            |          | Yes              | No |
|---|--|--|---|---------------------|------------|----------|------------------|----|
| Please provide details of the value:  |  |  |   |                     |            |          |                  |    |
| Use of the resource<br>(please mark all relevant boxes in the matrix below)   | Indigenous / traditional people living in the PA | Other local people living in the PA  | Indigenous / traditional local people near the PA | National population | Government | Industry | Global community |    |
| The role of the PA in flood prevention has a minor non-economic benefit   |  |  |   |                     |            |          |                  |    |
| The role of the PA in flood prevention has a major non-economic benefit   |  |  |   |                     |            |          |                  |    |
| There is potential to increase the non-economic importance of flood prevention  |  |  |   |                     |            |          |                  |    |
| The role of the PA in flood prevention has minor economic benefits  |  |  |   |                     |            |          |                  |    |
| The role of the PA in flood prevention has major economic benefits  |  |  |   |                     |            |          |                  |    |
| There is potential to increase the economic importance of flood prevention  |  |  |   |                     |            |          |                  |    |
| <b>Amount of PA currently involved:</b> i.e. the proportion of the PA involved in flood prevention: please mark one option below and provide additional comments if necessary                               |  |  |   |                     |            |          |                  |    |
| A: Small section of the site (5-10%)  |  |  |   |                     |            |          |                  |    |
| B: Several areas of the site (11-50%)   |  |  |   |                     |            |          |                  |    |
| C: Most of the site (51-100%)   |  |  |   |                     |            |          |                  |    |
| If the economic value of these benefits has been assessed please add here the US\$ value and the date the assessment of value was made  | US\$<br>Date:                                    | If an assessment of the cost of managing this value has been made please add here the US\$ value and the date the assessment of costs was made |   | US\$<br>Date:       |            |          |                  |    |
| <b>Conservation Impact:</b> Please give details as to whether the activities relating to the above values/benefits are consistent with the area's management objectives                                     |  |  |   |                     |            |          |                  |    |
| What management is currently taking place in relation to these values/benefits?   | What additional management responses are needed? |  |   |                     |            |          |                  |    |
| <b>Notes:</b> further details, sources, caveats etc   |  |  |   |                     |            |          |                  |    |

| 21. Is the protected area important for water quality and quantity (e.g. filtration, groundwater renewal, maintenance of natural flows)? (please mark first if yes or no: if yes complete the assessment below) |  |                                     |  |                     |               |          |                  |     |    |
|---|--|-------------------------------------|--|---------------------|---------------|----------|------------------|-----|----|
| Please provide details of the value:  |  |                                     |  |                     |               |          |                  |     |    |
| Use of the resource<br>(please mark all relevant boxes in the matrix below)   | Indigenous / traditional people living in the PA | Other local people living in the PA | Indigenous / traditional / local people near the PA  | National population | Government    | Industry | Global community | Yes | No |
| The role of the PA in water quality and quantity has a minor non-economic benefit   |  |                                     |  |                     |               |          |                  |     |    |
| The role of the PA in water quality and quantity has a major non-economic benefit   |  |                                     |  |                     |               |          |                  |     |    |
| There is potential to increase the non-economic importance of water quality and quantity  |  |                                     |  |                     |               |          |                  |     |    |
| The role of the PA in water quality and quantity has minor economic benefits  |  |                                     |  |                     |               |          |                  |     |    |
| The role of the PA in water quality and quantity has major economic benefits  |  |                                     |  |                     |               |          |                  |     |    |
| There is potential to increase the economic importance of water quality and quantity  |  |                                     |  |                     |               |          |                  |     |    |
| <b>Amount of PA currently involved:</b> i.e. the proportion of the PA which contributes to water quality; please mark one option below and provide additional comments if necessary                             |  |                                     |  |                     |               |          |                  |     |    |
| A: Small section of the site (5-10%)  |  |                                     |  |                     |               |          |                  |     |    |
| B: Several areas of the site (11-50%)   |  |                                     |  |                     |               |          |                  |     |    |
| C: Most of the site (51-100%)   |  |                                     |  |                     |               |          |                  |     |    |
| If the economic value of these benefits has been assessed please add here the US\$ value and the date the assessment of value was made  | US\$<br>Date:                                    |                                     | If an assessment of the cost of managing this value has been made please add here the US\$ value and the date the assessment of costs was made |                     | US\$<br>Date: |          |                  |     |    |
| <b>Conservation Impact:</b> Please give details as to whether the activities relating to the above values/benefits are consistent with the area's management objectives   |  |                                     |  |                     |               |          |                  |     |    |
| What management is currently taking place in relation to these values/benefits?   |  |                                     | What additional management responses are needed?   |                     |               |          |                  |     |    |
| <b>Notes:</b> further details, sources, caveats etc   |  |                                     |  |                     |               |          |                  |     |    |

| 22: Is the protected area an important resource for pollination of nearby crops or for pollination products such as honey? (please mark first if yes or no: if yes complete the assessment below) |  |                                     |   |  |            |          |                  | Yes  | No    |
|---|--|-------------------------------------|---|--|------------|----------|------------------|------|-------|
| Please provide details of this value and in particular if bee-keeping is an important activity in the area:   |  |                                     |   |  |            |          |                  |      |       |
| Use of the resource<br>(please mark all relevant boxes in the matrix below)   | Indigenous / traditional people living in the PA | Other local people living in the PA | Indigenous / traditional / local people near the PA | National population                              | Government | Industry | Global community |      |       |
| Pollination services are of minor importance to subsistence   |  |                                     |   |  |            |          |                  |      |       |
| Pollination services are of major importance to subsistence   |  |                                     |   |  |            |          |                  |      |       |
| There is potential to increase the importance of pollination services   |  |                                     |   |  |            |          |                  |      |       |
| Pollination services are of minor importance as a source of revenue   |  |                                     |   |  |            |          |                  |      |       |
| Pollination services are of major importance as a source of revenue   |  |                                     |   |  |            |          |                  |      |       |
| There is potential to increase the economic importance of pollination services  |  |                                     |   |  |            |          |                  |      |       |
| Amount of PA currently involved: i.e. the proportion of the PA which contributes to water quality: please mark one option below and provide additional comments if necessary                      |  |                                     |   |  |            |          |                  |      |       |
| A: Small section of the site (5-10%)  |  |                                     |   |  |            |          |                  |      |       |
| B: Several areas of the site (11-50%)   |  |                                     |   |  |            |          |                  |      |       |
| C: Most of the site (51-100%)   |  |                                     |   |  |            |          |                  |      |       |
| Amount of the year that activity currently takes place: i.e. the time that the activity takes place: please mark one option below and provide additional comments if necessary                    |  |                                     |   |  |            |          |                  |      |       |
| A: Only occasional role for short periods of time   |  |                                     |   |  |            |          |                  |      |       |
| B: Regular but not continuous   |  |                                     |   |  |            |          |                  |      |       |
| C: Continuous role  |  |                                     |   |  |            |          |                  |      |       |
| If the economic value of these benefits has been assessed please add here the US\$ value and the date the assessment of value was made  |  |                                     |   | US\$   |            | Date:    |                  | US\$ | Date: |
| Conservation Impact: Please give details as to whether the activities relating to the above values/benefits are consistent with the area's management objectives                                  |  |                                     |   |  |            |          |                  |      |       |
| What management is currently taking place in relation to these values/benefits?   |  |                                     |   | What additional management responses are needed? |            |          |                  |      |       |
| Notes: further details, sources, caveats etc  |  |                                     |   |  |            |          |                  |      |       |

| Materials   |  |                                     |   |  |            |               |     |    |                  |
|---|--|-------------------------------------|---|--|------------|---------------|-----|----|------------------|
| 23. Is the collection of non-wood products (e.g. coral, shells, grass, resin, rubber, rattan, minerals etc) permitted from the protected area? (please mark first if yes or no: if yes complete the assessment below) |  |                                     |   |  |            |               |     |    |                  |
| Please specify which materials are important:   |  |                                     |   |  |            |               |     |    |                  |
| Use of the resource<br>(please mark all relevant boxes in the matrix below)   | Indigenous / traditional people living in the PA | Other local people living in the PA | Indigenous / traditional local people near the PA | National population  | Government | Industry      | Yes | No | Global community |
| Non-wood products are of minor importance to subsistence  |  |                                     |   |  |            |               |     |    |                  |
| Non-wood products are of major importance to subsistence  |  |                                     |   |  |            |               |     |    |                  |
| There is potential to increase the importance of non-wood products  |  |                                     |   |  |            |               |     |    |                  |
| Non-wood products are of minor importance as a source of revenue  |  |                                     |   |  |            |               |     |    |                  |
| Non-wood products are of major importance as a source of revenue  |  |                                     |   |  |            |               |     |    |                  |
| There is potential to increase the economic importance of non-wood products   |  |                                     |   |  |            |               |     |    |                  |
| <b>Amount of PA currently involved:</b> i.e. the proportion of the PA involved in collection: please mark one option below and provide additional comments if necessary   |  |                                     |   |  |            |               |     |    |                  |
| A: Small section of the site (5-10%)  |  |                                     |   |  |            |               |     |    |                  |
| B: Several areas of the site (11-50%)   |  |                                     |   |  |            |               |     |    |                  |
| C: Most of the site (51-100%)   |  |                                     |   |  |            |               |     |    |                  |
| <b>Amount of the year that activity currently takes place:</b> i.e. the time that the activity takes place: please mark one option below and provide additional comments if necessary                                 |  |                                     |   |  |            |               |     |    |                  |
| A: Only occasional uses for short periods of time   |  |                                     |   |  |            |               |     |    |                  |
| B: Regular but not continuous   |  |                                     |   |  |            |               |     |    |                  |
| C: Continuous use   |  |                                     |   |  |            |               |     |    |                  |
| If the economic value of these benefits has been assessed please add here the US\$ value and the date the assessment of value was made  |  | US\$<br>Date:                       |   | If an assessment of the cost of managing this value has been made please add here the US\$ value and the date the assessment of costs was made |            | US\$<br>Date: |     |    |                  |
| <b>Conservation Impact:</b> Please give details as to whether the activities relating to the above values/benefits are consistent with the area's management objectives   |  |                                     |   |  |            |               |     |    |                  |
| What management is currently taking place in relation to these values/benefits?   |  |                                     |   | What additional management responses are needed?   |            |               |     |    |                  |
| <b>Notes:</b> further details, sources, caveats etc   |  |                                     |   |  |            |               |     |    |                  |

| 24. Is the management and removal of timber, including fuelwood, permitted from the protected area?<br>(please mark first if yes or no: if yes complete the assessment below)         |  |                                     |   |  |            |               |                  |  |  | Yes | No |
|---|--|-------------------------------------|---|--|------------|---------------|------------------|--|--|-----|----|
| Please provide details of the value:  |  |                                     |   |  |            |               |                  |  |  |     |    |
| Use of the resource<br>(please mark all relevant boxes in the matrix below)   | Indigenous / traditional people living in the PA | Other local people living in the PA | Indigenous / traditional local people near the PA | National population  | Government | Industry      | Global community |  |  |     |    |
| Timber removal is of minor importance to subsistence  |  |                                     |   |  |            |               |                  |  |  |     |    |
| Timber removal is of major importance to subsistence  |  |                                     |   |  |            |               |                  |  |  |     |    |
| There is potential to increase the importance of timber removal   |  |                                     |   |  |            |               |                  |  |  |     |    |
| Timber removal is of minor importance as a source of revenue  |  |                                     |   |  |            |               |                  |  |  |     |    |
| Timber removal is of major importance as a source of revenue  |  |                                     |   |  |            |               |                  |  |  |     |    |
| There is potential to increase the economic importance of timber removal  |  |                                     |   |  |            |               |                  |  |  |     |    |
| <b>Amount of PA currently involved:</b> i.e. the proportion of the PA involved in timber removal: please mark one option below and provide additional comments if necessary           |  |                                     |   |  |            |               |                  |  |  |     |    |
| A: Small section of the site (5-10%)  |  |                                     |   |  |            |               |                  |  |  |     |    |
| B: Several areas of the site (11-50%)   |  |                                     |   |  |            |               |                  |  |  |     |    |
| C: Most of the site (51-100%)   |  |                                     |   |  |            |               |                  |  |  |     |    |
| <b>Amount of the year that activity currently takes place:</b> i.e. the time that the activity takes place: please mark one option below and provide additional comments if necessary |  |                                     |   |  |            |               |                  |  |  |     |    |
| A: Only occasional uses for short periods of time   |  |                                     |   |  |            |               |                  |  |  |     |    |
| B: Regular but not continuous   |  |                                     |   |  |            |               |                  |  |  |     |    |
| C: Continuous use   |  |                                     |   |  |            |               |                  |  |  |     |    |
| If the economic value of these benefits has been assessed please add here the US\$ value and the date the assessment of value was made  |  | US\$<br>Date:                       |   | If an assessment of the cost of managing this value has been made please add here the US\$ value and the date the assessment of costs was made |            | US\$<br>Date: |                  |  |  |     |    |
| <b>Conservation Impact:</b> Please give details as to whether the activities relating to the above values/benefits are consistent with the area's management objectives               |  |                                     |   |  |            |               |                  |  |  |     |    |
| What management is currently taking place in relation to these values/benefits?   |  |                                     |   | What additional management responses are needed?   |            |               |                  |  |  |     |    |
| <b>Notes:</b> further details, sources, caveats etc   |  |                                     |   |  |            |               |                  |  |  |     |    |

## Appendix 1: Trainers guide to using the PA-BAT

These notes are supplementary to the introductory notes in the PA-BAT, which should be read prior to planning any training. The PowerPoint's (PPTs) noted below can be obtained from Liza Higgins-Zogib at [lhiggins-zogib@wwfint.org](mailto:lhiggins-zogib@wwfint.org); Alexander Belokurov at [abelokurov@wwfint.org](mailto:abelokurov@wwfint.org); or Sue Stolton at [equilibrium@compuserve.com](mailto:equilibrium@compuserve.com)

### Adaptation

The PA-BAT has been developed for use in all protected area types (i.e. in all IUCN management categories) and in any biome. The PA-BAT can be adapted and edited before use to make it more relevant to a specific site or particular system of protected areas. For instance there is no need to include the datasheet relating to marine protected areas in terrestrial sites and additional site-specific wording or advice related to values can be added to aid comprehension and discussion. However, ideally the basic structure of the tool should remain the same so that WWF can undertake global analyses of benefits.

### Completing the PA-BAT

There are currently two options for completing the PA-BAT

- 1) A facilitator completes the PA-BAT assessment forms during group discussions with, for example, protected area managers, NGO staff etc
- 2) A facilitator works with individuals or small groups (e.g. protected area staff, local communities etc) to complete a simplified version of the PA-BAT in their local language, and then summarises the results onto the English version of the PA-BAT

Training materials for this second option have been developed and are outlined below. If the PA-BAT proves successful, it will be translated into more languages.

### Preparation

The PA-BAT is currently only available in English; however training materials have been developed which require minimal translation into local languages. Preparation should include:

- ✓ Nominating a facilitator who is familiar with the site, its management, local language(s) and the PA-BAT to work with park staff, protected area professionals and local communities
- ✓ Translation of three PPTs (see key documents box)
- ✓ Identify the values from the PA-BAT that are relevant (i.e. legal)
- ✓ Identify if all stakeholder groups in the assessment PPTs are applicable at the site
- ✓ Identify if assessments will differ between management zones within the protected area or between a core and buffer zone if both areas are being assessed

#### Key documents

- 1) The PA-BAT
- 2) Introduction PPT
- 3) Values PPT
- 4) Assessments PPT

### Introducing the PA-BAT

Meetings with park staff and local communities can provide important insights into understanding the values and benefits associated with the protected area.

- ✓ When holding discussions with local stakeholders, only those values and benefits which are legally permissible in the protected area should be assessed
- ✓ The meeting should introduce the PA-BAT (using the Introduction PPT – which should be edited for local relevance) and discuss the purposes and proposed outcomes of the assessment and how the results will be used
- ✓ Discussion of the values and benefits can be structured around Values PPT; for each value the facilitator should discuss the type of benefits which are associated with the specific value (e.g. non-commercial water use could be important for agriculture, drinking, washing and/or cooking; or cultural and historical values could be related to archaeology, historic buildings, pilgrimage routes, historic/culturally important land use patterns etc) and whether this value has important non-economic, economic or potential benefits.



## Assessing benefits

For each value identified as relevant by the facilitator, the benefits should be assessed using the forms provided in the Assessment PPT (this can be done individually, in a group or in several groups if many values are being assessed). There are three forms in the PPT, which relate to the values datasheets in the PA-BAT document.

- 1) The first assessment form is related to the use of resources. The benefits for each value can be assessed in three ways for each stakeholder group outlined in the form:
  - Potential value
  - Importance of the value - other than its economic value - (minor or major)
  - The economic importance of the value (minor or major)

The assessment forms can be completed using a simple legend such as:

P = potential value (or whatever word is used in the local language)

+ = minor value; ++ = major value

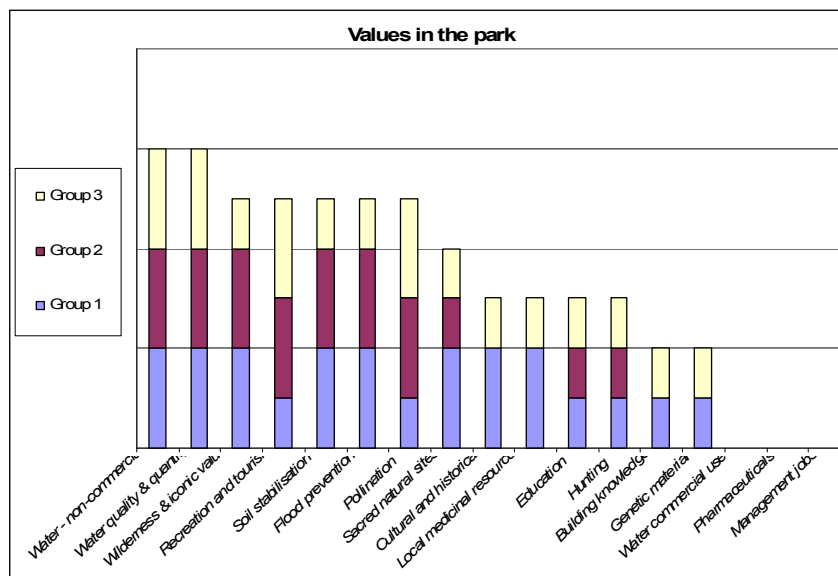
\$ = minor economic value; \$\$ = major economic value

Depending on the time available and/or the size of the stakeholder group meeting this may be the only assessment completed. However if time allows two further assessment sheets could be used:

- 2) The second assessment form concerns the proportion of the protected area that the resource is found in, when the value is used (e.g. seasonality, or link with specific cultural/spiritual celebration) and notes if the economic value of the resource is known
- 3) The third assessment form allows for notes to be taken regarding conservation impact of resource use, management needs and any additional points

## Putting it all together

Where several groups have been asked to make an assessment of the value of the protected area the results will need to be consolidated, ideally with the protected area staff or project staff who have led the assessment. All view points are valid and it is important to identify where differences in opinions between stakeholders exists. However having an overall picture of an assessment can be useful. Thus a simple graph can be developed (see example below) which assigns the value of 0 where no benefit is perceived; 1 = minor benefit and 2 = major benefit. The same kind of graph can be developed for economic value.



The results can be used in several ways, for example:

- ✓ Developing community relationships and use agreements in relation to the values and benefits of the protected area
- ✓ Informing research and monitoring activities in relation to resource use
- ✓ Informing the development of management plans/systems in relation to managing the wider range of values and benefits of the protected area



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WWF is one of the world's largest and most experienced independent conservation organizations, with almost 5 million supporters and a global network active in more than 100 countries.

WWF's mission is to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature, by:

- conserving the world's biological diversity
- ensuring that the use of renewable natural resources is sustainable
- promoting the reduction of pollution and wasteful consumption.

