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Errata

- p.104 3 lines from the top: 'decision making' should read 'decision-making'
- p.111 8 lines from the top: 'antisystemic' should read 'anti-systemic'
- p.112 6 lines from the top: 'post materialist' should read 'post-materialist'
- p.134 1st line: 'human centred' should read 'human-centred'
- p.143 5 lines from the top: 'microorganism' should read 'micro-organism'
- p.166 2 lines from the top: 'decision making' should read 'decision-making'
- p.170 8 lines from the top: insert 'of' between 'process' and 'development'
- p.183 12 lines from the top: 'small holdings' should read 'small-holdings'
- p.185 last line: 'these' should read 'These'
- p.187 17 lines from the top: 'small scale' should read 'small-scale'
- p.191 10 lines from the top: 'small holdings' should read 'small-holdings'
- p.191 last line: 'land owners' should read 'landowners'
- p.200 19 lines from the top: 'self reliance' should read 'self-reliance'
- p.220 19 lines from the top: 'transdiscplinary' should read 'transdisciplinarity'
- p.233 13 lines from the top: 'birdwatching' should read 'bird watching'
- p.272 2 lines from the top: 'birdlife' should read 'bird life'
- p.293 8 lines from the top: 'n.d' should read 'nd'
- p.297 8 lines from the top: 'fuelwood' should read 'fuel wood'
- p.299 5 lines from the top: 'clearfelling' should read 'clear felling'
- p.303 21 lines from the top: 'Gujjars' should read 'Gujars'
- p.304 6 lines from the top: 'Gujjars' should read 'Gujars'
- p.305 6 lines from the top: 'Himachel' should read 'Himachal'
- p.314 5 lines from the top: 'Kumoan' should read 'Kumaon'
- p. 321 1st line: 'ownership' should read 'ownership'

**PROTECTED AREAS
AND SOCIO-ENVIRONMENTAL JUSTICE:
THE CASE FOR PARTICIPATORY PROTECTED
AREA MANAGEMENT**

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LIST OF ACRONYMS

ADB	Asia Development Bank
CTR	Corbett Tiger Reserve
DNPWC	Department of National Parks and Wildlife Conservation (Nepal)
DSPWD	Dominant Social Paradigm of World Development
GEF	Global Environment Facility
GoI	Government of India
HRMS	Hill Resource Management Society
HYV	High Yield Variety
ICDP	Integrated Conservation and Development Project
IUCN	World Conservation Union
JFM	Joint Forest Management
MAB	Man and the Biosphere
NDBR	Nanda Devi Biosphere Reserve
NGO	Non-Government Organisation
NR	Nepalese Rupee
NRM	Natural Resource Management
PAR	Participatory Action Research
PPAM	Participatory Protected Area Management
PRA	Participatory Rural Appraisal
PAM	Protected Area Management
RBNP	Royal Bardia National Park
RM	Resource Management

RRA	Rapid Rural Appraisal
SD	Sustainable Development
TBR	Trans-boundary Biosphere Reserve
TERI	Tata Energy Research Institute
UN	United Nations
UNCED	United Nations Conference on Environment and Development
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
WCFSD	World Commission on Forests and Sustainable Development
WCED	World Commission on Environment and Development
WRI	World Resources Institute
WWF	Worldwide Fund for Nature

ABSTRACT

This work examines the role protected areas can play in the integration of biodiversity conservation with what needs to be a reconstituted notion of 'development'. It provides a discussion of the potential and reality of facilitating a development pathway based on participatory ideals and which is integrated with biodiversity conservation. To achieve this, the thesis argues, will require an integration of environmental and social justice. The framework for the analysis contained within the thesis is derived from the social sciences, because, overwhelmingly, environmental problems are problems of socio-economic and political power and are the results of the contested relationship between humanity and the rest of the natural world.

Drawing on a discussion of the legacies of environmentalist and developmentalist thinking and practice (themselves often contested), the study argues that conservation and development issues are social issues. Inherent in them are social, economic and political conflicts and cultural contradictions. An important component of the new environmentalist discourse consists of 'the local': local people being involved; local development being a goal; and local community action being the means (to name a few ways in which 'local' has been appropriated and integrated into this discourse). But how has this 'local' been conceptualised within the practice of protected area management and how is it

incorporated into environmental management? The study seeks to answer this. It is specifically a social, economic and political exploration of implications associated with protected areas articulating more fully with local and global development approaches.

Case studies are used to provide 'actually existing' examples of, and contexts to the issues raised. The case studies themselves draw together a number of secondary sources as well as my own, field-based research. The fieldwork, which in many ways represents a minor part of the thesis, was conducted as part of multidisciplinary teams working at a number of locations within the Himalayan range of India and Nepal.

The study focuses on assumptions within orthodox approaches to protected area management and highlights limitations. It then uses this critique to elaborate a different way of thinking and acting, that of what I have called participatory protected area management or PPAM. It is thus the overall purpose of this work to provide a conceptually and theoretically informed analysis and justification of the PPAM model as an important and new contribution to environmentalist and developmentalist discourse.

STATEMENT OF AUTHORSHIP

This thesis contains no material accepted for the award of any other degree or diploma in any other university or institution. To the best of my knowledge this thesis contains no material previously published or written by another person, except where due reference is made in the text.



Brian James Furze

June 2002

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Obviously a task such as writing a thesis isn't carried out in a social or intellectual vacuum. Neither is it a solo effort in the sense that advice and sources of information and inspiration come from a variety of quarters. There are, therefore, a number of people who deserve special acknowledgment.

Firstly, I owe a great deal of gratitude to my supervisors Dr Harry Ballis and Dr Parimal Roy. They have been friends, colleagues and debating partners as the thesis has unfolded.

This study has been partly undertaken in a variety of fieldwork locations both in Australia and in India. I need, therefore, to acknowledge my debt to colleagues in these locations, who discussed and debated issues with me.

A further mention needs to be made of the local people in each of these locations who assisted by answering questions, talking about their 'lived realities' and allowed me to understand more about the ways in which conservation and development approaches are and are not serving them well.

Protected area managers themselves, both in the locations where the cases have been undertaken and elsewhere, have been able to provide me with much information, and their contributions need to be acknowledged.

Finally, this study has been written in five different houses in four different cities whilst I have been working in four different universities. It has seen the expansion of my immediate family with the birth of two children, and a great deal of ageing on my behalf. To Lynn, Anders and Gena, a special thanks for putting up with this.

Chapter 1

INTRODUCTION

Wolfgang Sachs has written:

After nearly everybody - heads of states and heads of corporations, believers in technology and believers in growth - has turned environmentalist, the conflicts in the future will not centre on who is or who is not an environmentalist, but on who stands for what kind of environmentalism. For a long time it was sufficient to raise a voice denouncing politics as environmentally 'too little too late', but now it is necessary to focus on the political, social and cultural implications involved in different environmentalist designs. Though it is a considerable step forward that in these years the discussion on global ecology has become institutionalised in ministries, agencies, research centres, conferences and newspaper columns, it is nevertheless overdue to probe critically the new language which is put forth by the rising breed of environmental professionals. Political conflicts and cultural contradictions loom large behind the official discourse on global ecology ... (Sachs 1993: xvi).

This work examines the role protected areas, founded in one kind of environmentalist discourse, can play in the integration of biodiversity conservation with what needs to be a reconstituted notion of 'development' (itself another, often contradictory, form of discourse on the environment). It seeks to provide a discussion of the potential and reality of facilitating a development pathway based on participatory ideals and which is integrated with biodiversity conservation. To achieve this, the thesis will argue, will require an integration of environmental and social justice. The framework for the analysis contained within the thesis is derived from the social sciences, because, overwhelmingly,

environmental problems are problems of socio-economic and political power and are the results of the contested relationship between humanity and the rest of the natural world.

Drawing on a discussion of the legacies of environmentalist and developmentalist thinking and practice (themselves often contested), the study argues that conservation and development issues are social issues. Inherent in them are the types of political conflict and cultural contradictions which Sachs highlights in the above quote.

An important component of the new environmentalist discourse consists of 'the local': local people being involved; local development being a goal; and local community action being the means (to name a few ways in which 'local' has been appropriated and integrated into environmental discourse). But how has this 'local' been conceptualised and how is it incorporated into environmental discourse?

More importantly, how do the various uses of the term 'local' impact on conservation ideals, particularly the practice of protected area management, which now incorporates a development agenda in management aims? If it is important to probe critically the language of the new breed of environmental professionals, it is essential to understand how this language is converted into practice. As will be discussed, this is especially so given the contradictions and tensions inherent

within local approaches emanating out of global conservation, development and policy fora.

We must acknowledge the social, economic and political bases for the formation, use and management of protected areas. Without this fundamental recognition, it is difficult to see that they will be able to achieve their potential as institutionalised mechanisms for biodiversity conservation. There is much to be gained conceptually, ethically and practically by understanding 'local' within this context. But it is important to provide this within a critical framework, one focusing on the contested domain of new environmental discourses.

This study seeks to do this. It is specifically a social, economic and political exploration of implications associated with protected areas articulating more fully with local and global development approaches.

It is also one which is founded in both theory and practice. Theoretical debate only sheds some light on a relatively new and not greatly understood approach to overcoming one of the great issues for the third millennium - that of the integration of development and conservation ideals. There is a variety of experience, drawn especially from anthropological, sociological and rural development approaches, which provides important theoretical and applied insights into this issue. There is, equally, an important range of experience in other literature (including a variety of protected area management regimes) which

is also tapped.

The study takes as its starting point the words (though not more fully the intellectual legacy) of Foucault, who suggested we must learn 'to what extent the effort to think one's own history can free thought from what it silently thinks, and so enable it to think critically' (1985: 9). This study focuses on assumptions related to ways of thinking, themselves framing ways of acting within protected area management. It then uses this to elaborate a different way of thinking and acting, that of what I have called participatory protected area management or PPAM. *It is thus the overall purpose of this work to provide a conceptually and theoretically informed analysis and justification of the PPAM model as an important and new contribution to environmentalist and developmentalist discourse.*

To achieve this, the thesis:

- i. Provides a critical evaluation of the ways in which the integration of local level development within protected area management is problematic and contested. It particularly emphasises the contested nature of conservation, development and sustainability to highlight the problematic relationship between locally focused social and environmental justice and global processes of conservation and development.

- ii. Uses this critique to evaluate key protected area management strategies and approaches which are currently part of the global conservation and development agenda (and therefore part of the local conservation and development problematique). The specific strategies are the facilitation of rural development, the development of ecotourism, the management of protected areas using the biosphere reserve model and social/community forestry approaches.

- iii. Uses the results of the above to call for an alternative approach to protected area management which I have called participatory protected area management or PPAM. A PPAM approach seeks to integrate environmental and social justice by using a redefined model of development and through that, a redefined relationship between humanity and nature.

Case studies are used to provide 'actually existing' examples of, and contexts to the issues raised. The case studies themselves draw together a number of secondary sources as well as my own, field-based research. The fieldwork, which in many ways represents a minor part of the thesis, was conducted as part of multidisciplinary teams working at a number of locations within the Himalayan range of India and the Terai of Nepal. My work in these projects involved evaluating the experience of integrated approaches to protected area management as well as project development in areas such as rural development, ecotourism and

protected area management. What I do in the following pages is draw on this experience to develop my own contribution to protected area management discourse (the PPAM model) and contextualise this within specific case studies. There is a further source of application and experience tapped here as well - that of secondary sources. Throughout, I have used my experience undertaking the analysis of secondary sources (Furze *et al* 1996) as well as my field experience in locations not forming part of this thesis (Australia, China, Indonesia and other parts of India and Nepal) to further apply and contextualise the conceptual issues raised.

LOCATING THE FIELDWORK: HIMALAYAN CONSERVATION AND DEVELOPMENT IN INDIA AND NEPAL

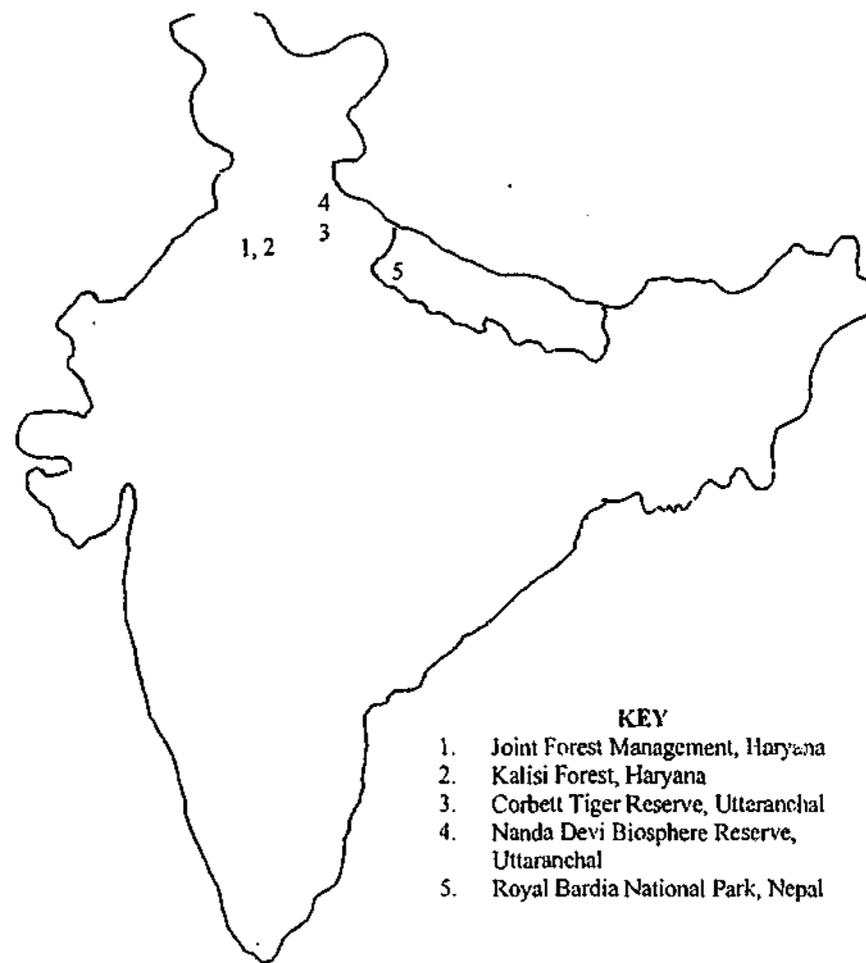
Various locations within the Himalayan range have been identified as conservation 'hot spots' requiring urgent changes to the processes of development and human activity occurring (see, for a good discussion, Zurick and Karan 1999).

Given that the Himalayas occupy such a significant position in Western consciousness, and given that one of the key components of this study is the examination of relationships between global and local socio-economic and political processes, these mountains provide an important location for fieldwork.

The study seeks to avoid the generalising tendencies of some explanations of Himalayan conservation and development which tend to see the range in

homogenous terms, whilst not fully fitting within the alternative approach which has a tendency to reduce explanations to individual cases/locations and thereby not look for commonality and difference (see for example, Thompson *et al* 1986; Ives and Messerli 1989; Chapman and Thompson 1995; Forsyth 1998).

Map 1.1: Location of Fieldwork and Case Studies in India and Nepal



The thesis uses case studies from locations within the Himalayan region of India (Garwhal and Kumoan, and the foothills of Haryana and Uttarakhand) and Nepal (the lower western Himalayan region) to provide an examination of commonality and difference in the grounding of broader-based discussions. The cases which form the substantive part of the field-based research are: Nanda Devi Biosphere

Reserve (Uttaranchal); Corbett Tiger Reserve (Uttaranchal); key Joint Forest Management villages (Haryana); the Kalisi Forest (Haryana); and Royal Bardia National Park (Nepal). Further descriptions of the cases are found in the methodology chapter (chapter three).

STRUCTURE OF THE STUDY

The study consists of five sections. The first section introduces the approach to the study and its methodology. It highlights the fact that the study uses fieldwork not as a primary focus, but as a context to conceptual matters relating to tensions between global and local conservation agendas.

Section two discusses the global conservation/development problematique. The focus is on highlighting the contradictions found within the mode of articulation of local and global conservation and development agendas, within the specific context of key protected area management agendas (local level development, biodiversity conservation and sustainable development).

Section three evaluates key strategies within the protected area management approach – rural development, ecotourism, biosphere reserve management and community/social forestry. These are evaluated on the basis of the critique of the global conservation/development problematique and are further discussed in the context of what, if anything, has changed.

Section four goes on to use this critique to call for an altered approach to protected area management, one which integrates social and environmental justice through a participatory framework. It is this I have called participatory protected area management or PPAM. Section five concludes the study.

A PERSONAL ASIDE: REFLECTIONS ON THE THESIS

Social research is a process which involves both the researcher and those who s/he tries to understand. It is not, at least for me and for the participatory approach, a process whereby the researcher maintains some 'antiseptic distance' from that which is being understood. As social researchers we are intrinsically entwined in that which we study, and therefore our interests and motivations are important to the research process itself.

The thesis concerns itself with matters of development, with humanistic traditions, with people attempting to implement alternative strategies able to be used to overcome inequalities, unequal power relations and environmental degradation. It is therefore concerned with a search for social, economic and political alternatives leading to an altered relationship between people and nature.

This search for alternatives is important, as it reflects my own interests and concerns, and the belief that, in Oscar Wilde's words, a map of the world without

utopia is a map not worth looking at. After all, it was Weber who said humankind 'would not have attained the possible unless, time and again, (it) reached out for the impossible' (quoted in Gerth and Mills 1958: 128).

Whilst it is easy, and perhaps important, to say 'but the reality is', if 'reality' is not understood as contested and socially constructed, then change becomes impossible. So too does a critical assessment of the ways in which social and environmental inequalities occur, and, especially, an appreciation of how these can be overcome. Perhaps I am a bit too harsh here, but it is a useful starting point for a discussion of not only my research approach, but for an analysis related to these continuing, unresolved questions of conservation and development.

So here is an early indication of my leanings - support for the utopian quest, for the ways in which human beings, as active, knowledgeable social actors, can and do 'make history'. And concerns for the type of history which is being made - concerns for sustainability as a catch cry which leaves little fundamentally altered; concerns for the uses of technico-scientific approaches to protected area management on the assumptions that local people have few rights to this process and this knowledge; and concerns for the ways in which development, as it is currently conceptualised through the dominant social paradigm of world development, is practised. But within these concerns, there is a belief that protected area management has a great potential for integrating conservation with participatory development.

This study, and its approach, is an attempt to add to the search for alternatives, by taking the PPAM approach and saying 'here is an option for protected area management, let us try it'. I am taking sides, and 'shall not try to sham objectivity', as Kruijer (1987: 1) puts it. But having said that, I am also aware of the limitations of this study and what it tries to achieve, limitations which are discussed throughout the thesis.

CONCLUSION

This then is the focus of the study. It is the analysis of the implications of the integration of local people into the global conservation agenda of protected area management. This analysis is derived within a critical social science framework, one which is founded within a belief that environmental problems are social problems, and that protected area management has a great deal to offer in overcoming these. But to achieve this potential will require protected area management being more concerned with matters of social justice and equity than before, and especially socio-economic and political dimensions to power. It will be argued that PPAM provides a mechanism for this to occur.

SECTION ONE

RESEARCH FOCUS

This section introduces the study and provides a justification for its approach. Chapter two ('People and parks') discusses the role of protected areas in conservation and highlights the trend internationally for protected areas to form part of the global conservation agenda, especially that focused on biodiversity conservation. Of course, a significant part of this conservation agenda has now incorporated a development function with the emergence of a new orthodoxy seeking an integrated approach to conservation and development. This chapter therefore sets the scene for the study and highlights pertinent points of contradiction and contestation which will provide the basis for the discussions throughout the thesis.

Chapter three ('The approach to the study') provides a discussion of how the study has been undertaken, its strengths and its limitations. It highlights what the study sets out to do, and why it has taken this approach.

Chapter 2

PEOPLE AND PARKS: PROTECTED AREAS, NATURAL RESOURCE MANAGEMENT AND LOCAL DEVELOPMENT

The problem is the people. We give them work building tracks, we give them money. And still they call meetings complaining about what we do (Protected area manager, India).

How can they do this to us? Doesn't the (forest department) know they are ruining us? (Villager, Haryana).

INTRODUCTION

Protected areas are internationally recognised as playing a crucial role in global efforts for biodiversity conservation. They provide a legally-ratified national and international mechanism within which this conservation effort can be focused, and represent attempts at preserving the earth's biodiversity and a range of ecological systems.

Protected areas also represent important symbols for people, including those signifying humanity's concern with, and relationship to, nature. Concerns over humanity's position in, and impact on, the natural world are also relevant to protected areas. The emergence of sustainability as an orthodoxy for development

approaches, the use of technical scientific models to understand and protect nature, and the growing levels of recreation and tourism occurring in 'natural' areas are also reflected in the management and uses of protected areas.

Biodiversity loss and conservation, economic and social development and protected area management represent the confluence of human values, institutions, ethics and 'lived realities' impacting on the ways in which nature is perceived and used. Given this, it follows the cultural, social, political and economic processes influencing biodiversity protection and loss are also issues of power, or the capacities of some individuals or groups to influence the behaviours of others. Inherent in this is the capacity for values and ideologies underlying such concepts as development, sustainable development, resource management, protected area management, local knowledge and the like to be contested within the practice of protected area management.

As protected area management becomes more involved in integrating conservation and development, the importance of its role in the generation of ideologies becomes much more explicitly a political act. This is because development is a contested concept, and the process of integrating local people into the conservation/development approach is a contested process. Increasingly protected area managers are, or should be, dealing with issues of equity, of rural development, and social change. If protected area management has a history of viewing conservation in technical terms, the new, locally-focused approach

provides the potential for overturning a number of existing orthodoxies as 'local' and 'community' get added to the professional lexicon, to sit beside 'biodiversity conservation', 'natural resources', and 'ecosystem management'.

Further, protected areas are seen by international conservation and development agencies such as IUCN, the World Bank, UNESCO, UNDP and UNEP (as well as many non-government organisations) as crucial components in the global conservation agenda. Their biodiversity conservation function, and their institutionalisation within legally-defined land-use and natural resource management policies within nation-states (as well as those which are trans-national) means they are often seen as one of the key ways to protect the earth's environment. The emergent orthodoxy seeking to integrate conservation and local level development through the management of protected areas now means protected areas are at the forefront of a variety of attempts at implementing sustainable development.

The current study is concerned with analysing the implications of this locally-focused approach. To begin this task, it is important to set the scene. Consequently, this chapter overviews relevant contemporary issues within the protected area management approach to biodiversity conservation. In particular, the chapter raises a number of potential problems and contradictions within the protected area management paradigm, based on the often-contested ways in which nature is viewed, how natural resources are understood, and how management is

attempted.

Of particular interest are the potential contradictions found between the protective function, the resource management function, and the development function. At one level, the contradictions between preservation of nature, managed use of nature and integrating nature into a development function are fairly obvious. These competing views are regularly encountered in fieldwork. Comments such as

We must have stricter restrictions in these forests. If local people are to be allowed in, they will poach, they will light fires and they will burn the forest

made by a protected area manager not only demonise local people but emphasise the centrality of the preservation of nature. Other comments, such as

Villagers are able to use babaar for their rope making. They are all given access rights and are able to auction their rights to others. We monitor this to make sure villagers don't overuse the grass

made by a protected area manager in the same area as the previous commentator, reflects the 'managed use' approach, moves the management paradigm to integrate a local development function, and highlights the sometimes contradictory nature of management.

These contradictions, it will be argued, exemplify the often-contested nature of protected area management, the ways in which problematical assumptions relating

to socio-economic and political processes, nature, and development may be treated as givens, and the often-contradictory outcomes generated by this. To begin though, it is important to provide a context to the arguments this thesis is concerned with.

PROTECTED AREAS AND THEIR ROLE IN CONSERVATION

In 1989 Jeffrey McNeely wrote:

How many national parks will there be in the year 2100? I probably will not be around to find out, but my best guess is none. What a defeatist attitude, you might protest in alarm. Quite the contrary, I would respond. By the year 2100 nature may well be conserved reasonably well *without* national parks as we know them today, just as nature was conserved without national parks in most parts of the world just a generation or two ago (1989: 150).

McNeely's optimistic assessment of protected areas and conservation in the early part of the third millennium is instructive for three reasons. First, it recognises the dynamic nature of protected area formation, use and management. Protected areas are formed and managed according to orthodoxies surrounding environmental management, scientific knowledge and so on. For example, one of the key reasons for the existence of protected areas is biodiversity conservation, and they are managed with this purpose. However, they are also managed in a location where local and global social, economic, political and historical processes occur. These processes impact, or have impacted upon, both the environment itself and the ways in which it is perceived and used. Therefore, the idea of protection,

protected areas and their management is a social, an economic and a political matter, not just an ecological or natural resource management one.

Further, protected area management deals in social, economic and political power.

These power dimensions may include the capacity of local people to use the area, the power of managers to stop local people from using non-timber forest products and so on. Protected area management is thus contested. So too is the concept of nature, what constitutes a natural resource and who should benefit from these.

Second, McNeely's comments emphasise the very important role that protected areas and their management have in conservation. They also imply the role of protected areas is seen by some as being permanent and fixed. That is, protected areas are important in their own right, and must continue to exist for conservation to occur.

Third, however, McNeely goes on to argue that protected areas are best viewed as transient phenomena, to be gazetted when protection is necessary, and, ultimately, to cease to exist when protection is no longer needed. That is, when biodiversity does not need to be protected through such legislation, (for example, when people protect the area on their own volition), there will be no longer a need for the existence of a protected area.

McNeely's comments strike at the very heart of protected area management, what

it is, and what it should be. These comments are therefore instructive for the future of protected area management, as well as the ways it may achieve its potential to integrate social and environmental justice.

PROTECTED AREAS AND THEIR MANAGEMENT: AN OVERVIEW OF CONTEMPORARY ISSUES

The very idea of conservation emerged out of historical processes, and has come to be equated with a particular set of ideologies which focus on preservation, protection, scientific rationality and the like (see, for example, Patterson and Williams 1998; Merchant [ed] 1996; Worster 1995; Pepper 1983). But not all share this world, or this approach (see, for example, Gadgil, Berkes and Folke 1993, Kellert *et al* 2000).

Consequently, the realm of protected areas is contested, and because of this, the act of protected area management is a political act. That is, their management is concerned with using contested ideas and assumptions about conservation, causes of environmental degradation and, increasingly, development, to achieve what is seen by some as desirable outcomes.

It is clear then that protected area management, and protected areas themselves, represent a point where the social, political, economic, ecological, conservation and resource management dimensions to biodiversity conservation intersect. Therefore, examining the ways in which these contradictory processes intersect,

and the implications of these contradictions for conservation and development, is crucial.

One of the main concerns within protected area management is with the 'protection for/from what' conundrum (Furze, *et al* 1996). This occurs as a result of the dual and often antagonistic functions of protection and human use. McNeely (1994) for example, suggests protected areas have four crucial functions: safeguarding many of the world's areas of living richness; maintaining the diversity of ecosystems, species, genetic varieties and ecological processes; protecting genetic varieties which are vital to human needs; and providing homes to communities of people with traditional cultures and irreplaceable knowledge of nature. All of these functions have socio-economic components to them, and the conundrum exists precisely because they do.

Ultimately, the conundrum exists because of the very contested natures of development, local use of natural resources, and biodiversity conservation. Historically development, particularly local level development, has been excluded from the role of protected areas. As a result, the fences and fines approach (and, importantly the assumptions which are found within it) have become influential in protected area management, with the result that conservation and development issues tend to be treated as separate, and in some instances, antagonistic, issues.

The scientific and ecological integrity model coming out of the broader resource

management paradigm is also used (Brechtin *et al* 2002; Wilshusen *et al* 2002). Here, management issues and approaches have been (and still are) supported by scientific integrity, by the cult of the expert, and the separation of ecological and biological diversity considerations from issues of social development (see, for example, Colby 1990).

Child (1990), in an interesting article, takes up this point. He argues the concept of protected areas is vital, but its application has left something to be desired. He makes the point that:

devotion to the introverted, over-purist purposes for which the majority of formal protected areas have been created has often distorted broader environmental perspectives and underlying socio-economic realities. As a consequence, protected area managers become over-defensive of entrenched dogma that is often based on cultural value judgements that have been shipped uncritically around the world (1990: 459).

The contested priorities generated by this approach will be discussed in the following chapters, but it's important to raise some preliminary observations here.

Historically, within the protected area management paradigm conservation problems are seen as technical ones requiring technical solutions (see Hausler 1993 for an interesting discussion; also Wilshusen *et al* 2002 for their discussion of this model's resurgence).

However, this approach, which is generated out of the western tradition, is not the only way to view conservation issues. Peter Knudtson and David Suzuki (1992)

have explored the protective function of culture (as distinct from outside managers) using a comparative perspective. Whilst they may be criticised for recreating the 'noble savage' in a green guise, they at least focus on indigenous wisdom and its value for conservation. Others (for example, Sharma *et al* 1999; Cordell 1993; De Lacy 1992; McNeely 1992; Williams and Baines [eds] 1993) serve to highlight the fact that, for millennia, humanity has had a social and cultural basis for protecting nature.

Protected area systems are therefore conservation mechanisms incorporating social, economic, political and cultural values alongside legal and policy mechanisms and ecological insights. Increasingly, protected areas are becoming sites of development. They can also be understood, however, as a contested domain through which dominant knowledge paradigms, especially related to the ways in which conservation issues are framed, subvert the legitimacy of others (see also Birckhead *et al* [eds] 1993; Colby 1990; Child 1994; Davis 1993; Hausler 1993; Kempf [ed] 1993; Brechin *et al* 2002).

Given that protected areas emerged out of western value and knowledge bases, it is not surprising that scientific management approaches predominate. Furze *et al* take up this point in greater detail:

With the 20th century being one of western and especially American domination of ideas, culture and economics, it is not surprising that the American national parks concept spread internationally. It has only recently been realised that this model, which builds a metaphorical fence around

parks excluding the activities of adjoining communities, can become a prison for those in the park. The park can become a prison not only for the animals, which may need to be able to wander more widely, but most importantly for the managers who become prisoners of the mind, unaccustomed to linking out to their surrounding communities culturally, economically, politically and intellectually (1996: 25).

Currently the protected area concept, as reflected in *Parks for life: the report of the fourth world congress on national parks and protected areas* (IUCN 1993), and which reflects many current approaches, involves an integration of biodiversity conservation and sustainable development for local and regional communities (see also Kellert *et al* 2000).

As will be seen in the following chapters, this is not without its problems. Key issues here relate to the relationship between conservation and development, what development actually means, how sustainable development is defined and how the integrative approach is operationalised.

Later discussions will deal with the problematical nature of sustainable development as a concept and a practice, as well as the environmentalist and preservationist heritage of the protected area management paradigms. An assessment of the implications of all this will provide a basis for understanding the very real potential for conflict over land uses, between competing ideas of what biodiversity conservation is and should be, and what sustainable development is and should be.

The protected area management function, in order to achieve conservation and development goals, must understand and act within these contested domains. If it fails to recognise these, or fails to ensure that local level approaches don't merely globalise the local, protected area management would have failed in its conservation role.

Whilst protected areas protect and thereby preserve biodiversity, many local and indigenous people need the so-called natural resources in these areas for their livelihood and cultural survival. Therein lies a potential dilemma needing to be addressed. How can the rights of local populations be reconciled with the protective function of protected areas?

Protected areas play an important role in the conservation of biodiversity. Whilst their creation, use and development has not always had an overriding principle of biodiversity conservation (see, for example, Hales 1989), they have, nevertheless, resulted in a system of conservation entities which have been categorised (by IUCN's CNPPA for example) and managed according to their categorisation. Further, this categorisation has been developed to provide for a wide variety of land uses and protective functions of lands falling under the 'protected area' label.

The important thing to note about this is that protected areas are institutionalised mechanisms for conservation. 'Institutionalised', in this sense, means they are supported by a global, regional, nationstate and/or local system of regulation over

formation, use and management. They also have a set of legitimating ideologies stemming from scientific knowledge and assumptions relating to nature and natural resources. Therefore, this particular conservation mechanism, at least potentially, plays an important role precisely because it is institutionalised.

But how this translates into reality, and why the experience has been as it is, are important questions. The fact that protected area management is institutionalised does not, in itself, mean they are achieving their potential. On the contrary, the process of institutionalisation may contribute to processes of local and global conservation or it may contribute to the maintenance of local and global inequalities. As with all processes of institutionalisation, there is a double edge, a set of contradictory realities.

This is particularly important given that protected areas are moving to incorporate local people into their management approach. This is a significant change as it moves management away from having a protective function, to one more explicitly locating management in a broader milieu characterised by processes of social, economic and political power. The nature of the articulation of management to this milieu is of crucial importance and forms the basis of this thesis.

A brief example: a joint forest management village in Haryana

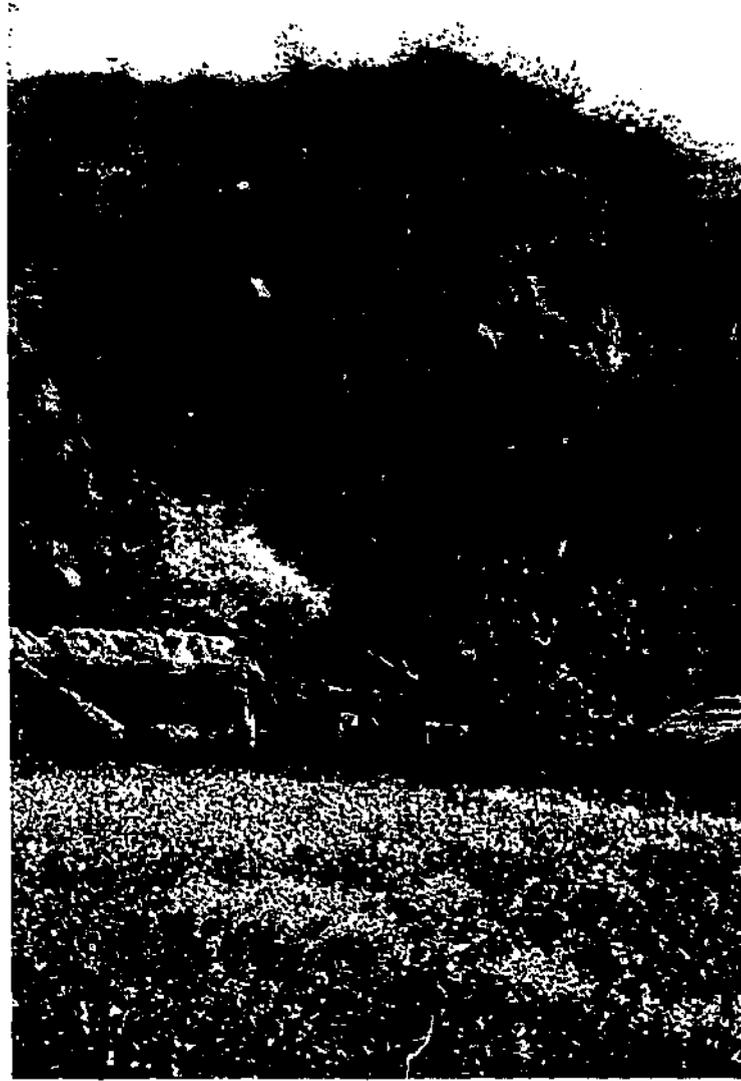
A village in Haryana had successfully implemented joint forest management

(JFM) arrangements over a period of some fifteen years. It was seen within the local JFM area as one of the more successful villages in that there had been considerable revegetation and the forest around the village was now home to increasing amounts of wildlife. Whilst this resulted in some disadvantages to some villagers (for example, crop damage by wildlife), the view of the majority of the villagers was based on protecting the forest and ensuring its survival. In any case, villagers felt the access to non-timber forest products (especially *babaar* grass for rope making) under the JFM arrangement more than compensated for wildlife damage. The Forest Department took a different view of the forest and its management. The Department reclassified the forest to a protected area which meant the local villagers had no rights to any forest products. This was done without consultation or warning and villages found out about it through media reports. It also meant a substantial portion of the village economy (the income generated by *babaar* and its products) has been decimated.

As one of the village elders explained it:

We have done what was asked. We have protected the forest. We have worked to make JFM work in our village – all of us. And now we have nothing. We have no food, no money. Please, when you talk to the officials, please tell them what they have done to us.

Illustration 2.1: JFM village showing regeneration of forest



Forest regeneration has begun at this village in Haryana

Not surprisingly, given the earlier discussions, the view from the Forest Department was different:

You see, there is one thing the local people don't understand. JFM has an (environmental) purpose. Now that the animals are back in the forests, we will be able to attract tourists and the villagers will benefit from this.

Whilst I will discuss JFM in greater detail later in the thesis, the example of this

village highlights the ways in which the integration of conservation and development does/doesn't occur as a contested process.

THE FOUNDATION OF PROTECTED AREA MANAGEMENT

The history of protected areas, from Yellowstone National Park on, highlights the ways in which they have been part of, and influenced by, a set of assumptions based in scientific rationality and an instrumentalist/preservationist view of nature (see for example, Furze *et al* 1996). In fact, the discourse surrounding this broad range of approaches contains terms such as 'management', 'planning', and 'natural resources'. The tendency for many protected area issues to be couched in these terms suggests protected area management reflects this view, at least in its more common forms as discussed by Childs (1994) for example.

Two of the great challenges facing protected area management, I would argue, are critically understanding the assumptions found within its approach and shifting the concept of 'management' to one which is more concerned with the facilitation of a set of social, economic and political relations which are more integrated with nature (no matter what we might call this new model of development). A way of achieving this, I will argue later in the thesis, is through what I have called participatory protected area management or PPAM.

To achieve this will require an understanding of the causes and implications of the

contradictions found between protected area and resource management approaches and the rights of local people. Further, as I will argue, the rights of local people can only be integrated with the rights of nature when local people themselves are empowered, and when the concept of 'development' is redefined to reflect socio-environmental justice priorities and characteristics.

This however is a big task, especially given the assumptions found within the concept of protected area management. For example, *Parks for life* (IUCN 1993) addresses threats to protected areas by setting out a definitive action plan. This acts as a framework for implementing strategies to ensure protected areas can continue to be an important vehicle for conserving biodiversity, while at the same time becoming a model for sustainable development. The strategies concern economics and financing, broad policy frameworks, integration of protected areas into local and regional planning and development, and specific system wide and individual protected area management issues. The overwhelming focus is on management (preservation and resource) including the 'management' of local development and community processes.

These strategies, and much of the local approach which is epitomised in *Parks for life* (IUCN 1993), assume a certain relationship with local people, either implicitly or explicitly. They also imply certain value assumptions about biodiversity, about technico-scientific management applications and about what sustainable development is. The imperative is defined as integrating social, economic and

political dimensions to protected area management with the ecological and thereby facilitating change toward sustainable development.

This creates significant tensions. The ways in which protected area management articulates with the local (and global) socio-economic and political milieu is going to be crucial for its success. There are essentially two broad possibilities. The articulation can reinforce the socio-economic and political processes leading to environmental degradation, or it can facilitate a change to these processes and thus be instrumental in fostering new socio-economic and political forms which are less exploitative of nature and which integrate social and environmental justice. This latter direction is epitomised by PPAM, and is the concern of this thesis.

THREATS TO PROTECTED AREAS

Given the management of protected areas are contested, it is hardly surprising that a number of threats to their conservation role have been identified. For example, Bridgewater (1992) highlights five threats: conflicts with local people; lack of policy commitment at nation state level to adequately protect systems; ineffective management by trained staff of individual protected areas; funding is insufficient or unsure; and inadequate public support. The identification of these threats often reflects significant components and assumptions found within the orthodox approach to protected area management. A brief discussion of this will serve to highlight some of the issues and contradictions to be discussed throughout this

thesis.

It is obvious that the threats identified by Bridgewater are social in origin, and therefore need to be resolved within an explanatory framework derived from the social sciences. However, having said that, the ways in which these threats are conceptualised and understood is important. If these threats are to be resolved, then explanatory frameworks are also important. Understanding the assumptions found within these explanatory frameworks is crucial in assessing the role protected areas have in both biodiversity conservation and development (setting aside problems of definition for the moment).

Conflicts with local people

Why the conflicts occur and how they are understood are important, for they tell us a lot about the ways in which the protected area is perceived by those who are often directly affected by it - those living close to or within the area. They also tell us a lot about the ways in which global agreements, state and international conservation policies, and protected area management view the rights of local people.

What can be done about conflicts is also important. Whilst the protected area management paradigm is currently evolving towards one which is to integrate management objectives with local development ones (partly as a way to resolve these conflicts) the results are, at best, patchy. As will be discussed throughout

this study, the assumptions of management, the ways in which participation and local people are defined, and the ways in which development is implemented (including how development is perceived) are crucial questions in the search for sustainability.

A particularly interesting approach to conflict resolution has just begun in the Nanda Devi Biosphere Reserve. A workshop was organised by the Grand Sabha of Lata (Chamoli district) in late October 2001 to discuss management issues within the reserve. This was in response to the Nanda Devi Sanctuary being opened to tourists, and the workshop was organised to try and ensure the management of the area, and that of the tourist activities, reflected local villager's priorities. In this case, the villagers themselves acted to resolve potential conflicts originating from a top-down approach to management and as a result are in the process of renegotiating the power relations inherent within such a protected area management paradigm.

Lack of policy commitment at nation state level to adequately protect systems

The operation of a global social, economic and political system obviously has impacts on the ways in which nation-states protect, or fail to protect, their conservation areas. Whilst Bridgewater highlights this issue, we should not forget that policy commitment is generated out of a complex myriad of inter-nation-state and intra-nation-state power relations.

For example, the policy commitment of a nation-state may be affected by such things as the need for cash crops, for foreign exchange or for agricultural development along the lines of the industrialised agricultural systems. These dynamics are framed by relations between nation-states, whether loans have to be repaid, and whether in fact, the nations have to 'structurally adjust'. In short, a policy commitment to conservation may be subsumed by economic dictates coming from the operation of a global political economy. It may be much too simplistic to talk about 'lack of policy commitment' without understanding the context within which nation-states frame their policies.

The current situation in the Indian state of Uttaranchal is an interesting case in point and will be discussed in more detail throughout the thesis. However, in brief, the state is currently framing its conservation and development policies and at this stage has incorporated a particular emphasis on religious and nature based tourism. Currently the revenue generated through tourism is appropriated by the state's tourism bodies but the costs of managing the tourists' activities are being borne by the Forest Department, due to the amount of tourism occurring in protected areas. This has led to a great deal of concern being expressed by protected area managers about the ultimate cost of tourism and, more importantly, the ways in which funding will be delivered to individual protected areas. As one manager put it:

We have so many people coming on pilgrimages, and we have no money to build them tracks.

Ineffective management by trained staff of individual protected areas

Whilst there is no doubt ineffective management impacts on biodiversity conservation, the issue remains though what is management? Also, how is 'ineffective' defined? The concept of management may imply, or be framed by, a technico-scientific approach to conservation issues which, it will be discussed in later chapters, is not always the best approach. Further, the question of training is a value laden one, at least potentially. Is training defined in technico-scientific terms? If so, does this mean that managers need to be 'educated' in the science of protected area management? Where does this leave local people and their knowledge? Because it is not 'scientific' does this mean it is not legitimate? Does education in these terms mean that 'training' becomes equated with a neo-colonialist education system (see, for example, Escobar 1992)? These questions, which represent contested domains, help us frame a greater understanding of problems associated with this issue.

Whilst this thesis discusses issues of protected area management in more detail, two different approaches in Haryana illustrate the problems associated with management ideas. On the one hand there is a JFM approach which facilitates joint management between the Forest Department and local villagers. On the other, and in the same location, a management approach operates which treats local people as causes of problems rather than solutions to problems, and embraces the orthodox 'fences and fines' approach. When managers were asked

during interviews if they thought the approach was working both said yes, but for different reasons. The JFM manager emphasised the partnership approach and the ways in which JFM attempted to integrate socio-environmental justice. The manager who implemented the top-down approach said his approach was successful management because it ensured the forest was protected by legal arrangements, resulting in villagers knowing what would happen to them if they acted against the law, and also acting as a revenue source for the Forest department. Which management approach is 'ineffective'? This question, and the two cases, will be further discussed later in the thesis.

Funding is insufficient or unsure

It is not uncommon to hear the suggestion that conservation is a luxury which has emanated from the countries of the north (see, for example, Ghmire 1992; Martinez-Alier 1995). Yes, funding is insufficient or unsure in many areas, and this may be fundamental to problems in protected areas fulfilling their roles. However, it may be argued that technico-scientific solutions may require higher levels of funding than alternative solutions which are founded within the local community. Whilst there are a number of cases where increased funding is essential, there are also many cases which have operated within limited budgets (see for example, Berkes 1989).

When considering the issue of funding, therefore, it is important to not only look at budgets, but the whole management approach. This is on top of analysing the

root causes of funding problems. For example, during one of my field trips to Royal Bardia National Park in Nepal, I was met by the warden in one of the local tourist hotel's jeeps. The DNPWC jeep could not be used because there was insufficient funding to purchase new drums for fuel storage. As a result, the fuel was stored in rusting drums which meant the fuel would take bits of rusted metal through the engine and cause mechanical problems. Obviously this is a funding issue, but it is also a political one, not only because the Nepalese Army takes so much of the Department of National Parks and Wildlife Conservation's budget in order to 'protect' the park from local people, but because Nepal as a nation is so poor. So, whilst funding may be an issue, problems are also associated with management practices, management priorities and political, economic and social dimensions to power and influence, locally, regionally, nationally and globally.

A further example, this time from India, is pertinent. Kerdanath Musk Deer Sanctuary just north of the Nanda Devi Biosphere Reserve in Uttaranchal is under threat because of poaching. Unfortunately the area is little patrolled during winter as rangers are supplied with few warm clothes, inadequate sleeping bags and no snow-proof boots. As one of the managers puts it

Who cares about the musk deer? We know poaching occurs because villagers and pilgrims tell us. Just last month two pilgrims were robbed by poachers. But we can't do anything until we have equipment, and we can't get equipment until a bureaucrat thinks we should have it. While we are waiting for some rupees we have tried to get the villagers to tell us when they see something, but they don't always. The musk deer are just as endangered as tigers, but nobody seems to care.

The point about this inadequate and unsure funding is related to the ways in which conservation policy in Uttaranchal is implemented. Cases need to be made for funding and decisions are made bureaucratically and often well away from the protected area.

The problem of insufficient funding was often commented upon throughout the fieldwork. Yet it was seen to be one of the very positive outcomes of joint forest management approaches which generated funding at a village level. For example,

When JFM began, the most important thing we could say to the Forest Department was that there would be no extra cost. If the Forest Department had to spend more money, or lose money they were already getting because of the sale of babaar, we would not have been able to have JFM (JFM facilitator, Haryana).

The JFM example, as will be discussed later in the thesis, provides some options for the future, and highlights the importance of looking for alternative funding arrangements. In other words, whilst it may be easy to say that funding is unsure or inadequate, this may be the case because the approach to protected area management tends to focus on technico-scientific approaches rather than alternative ones. One of the aims of this thesis is to examine what alternative approaches may look like.

Inadequate public support

The question of public support raises issues relating to worldviews, perceptions of nature and protection, and, most importantly, inter-nation-state relations. Who are the public? The local people who live next to the park? The foreign tourists who

seek out ecotourism experiences? Conservationists in the north who make decisions on behalf of local people in the south? If there is inadequate public support, why is this so? And how can this be changed?

Whilst the above discussion is by no means exhaustive, it highlights a number of the social, economic and political dimensions to protected area management issues. It is not within the focus of this study to examine all of these questions in greater detail, but to understand more about the ways in which these issues may move closer to resolution by facilitating a PPAM approach.

GLOBALISING THE LOCAL OR PROVIDING A MECHANISM FOR CHANGE?

The search for integrating conservation and development occurs within a specific ideological context. This is founded in political philosophies related to assumptions about humanity, about whether the market can provide, about if development as it is currently practised is positive or negative, if nature/human relations are best understood as separate or integrated and so on.

Obviously, if a protected area approach which wants to integrate conservation with development ideals is based on one type of political philosophy, it will have different outcomes to another. For example, an approach which favours some form of green consumerism occurring within a patriarchal society has assumptions

about development in general, and about gender relations within its explanatory framework. These may not always be made explicit, but will certainly be there. The likely outcome of an integrated conservation and development programme which is implemented with these assumptions is going to be quite different to one which is implemented using ecofeminist principles, or radical socialist perspectives. Hence, the search for alternative development models is framed by the assumptions implicit (sometimes explicit) in the explanatory frameworks used.

The main point about all this is protected area management has, in the past, come from what could be classified as an environmentalist approach. What it is being encouraged now is to integrate socio-economic notions of development within that paradigm, along with an emphasis on local people's involvement in what is generally called 'community-conservation' (see also Singh and Gera 1995; Kellert *et al* 2000).

Yet the idea of a globalised local, as expressed by writers such as Shiva (1993) and Pieterse (1998) is particularly relevant. The central question in understanding this process, as well as its likely outcomes, is framed by the need for a paradigm shift for protected area management away from a preservationist approach to one which has, as a starting point, the facilitation of socio-environmental justice outcomes. Such an outcome, it will be argued within this thesis, is dependent on protected area management approaches embracing a political economy/political ecology approach which reflects an understanding of the often contested

relationship between locally based approaches to conservation and development.

As will also be argued later in the thesis, protected area management approaches which tend to focus more fully on the market solutions of global capitalism and/or the dictates of a global approach to conservation/development problems are at best problematic and at worst embrace an approach which further institutionalises many of the causes of environmental degradation and biodiversity loss – the global system of political economy/political ecology. As a result of this, I argue within the thesis, there is a tendency for protected area management to fit within the political, social and economic orthodoxies of global capitalism rather than search for and/or implement an alternative paradigm which is based on socio-environmental justice ideals. A paradigm shift within protected area management is needed to move towards socio-environmental justice position.

If there is no paradigm shift, if these integrated approaches are merely reflections of preservationist or green traditions, together with models of development reflecting the dominant social paradigm of world development, then the question remains - what has changed? Does protected area management fulfil its potential as a change agent? The answer, I would suggest, is no to both questions. To enable protected area management to take on this new role, it must incorporate a critical appreciation of the contested nature of both conservation and development, as well as reinvent itself as a facilitator of socio-environmental justice.

Protected area managers have choices to make, but these choices are framed by assumptions related to conservation and development issues and processes. These are related to how development is perceived and altered, how environmental conflicts are perceived and resolved, and how the ethic of local participation is perceived and implemented. Understanding the assumptions inherent in these choices is critical to protected area management and its search for alternative development models for a number of reasons. Each of these are explored in greater detail throughout this study.

Firstly, protected area management has an intellectual heritage, and this reflects how problems of conservation, and indeed, of development, are conceptualised (see for an example of this, Szaro *et al* 1998; Lackey 1998; Wilshusen *et al* 2002). Secondly, protected area management is concerned with development, or at least it should be. To be concerned about development, it needs to understand the implications of various development practices. Development is a political act, and therefore protected area management is a political act, because it is involved in the economic, political and social dimensions of development of local populations, especially rural populations. It is therefore especially concerned with rural development and therefore power and its dynamics.

Thirdly, protected areas operate within a global system of environmentalism. Policies and the like emanate from international approaches such as UNESCO's MAB program and, as will be discussed in later chapters, the UNCED process.

These operate within the confines and constraints of the dominant social paradigm of world development. An understanding of the political philosophies found within environmentalist and radical approaches to development (and therefore to conservation issues) allows for a more informed and critical praxis when protected area management takes place.

Fourthly, protected areas have to be managed within social, economic and political structures often reflecting various components of the dominant social paradigm of world development. Therefore, protected area management takes place within a multi-layered series of power relations, assumptions and ideologies relating to conservation and development, and social, economic and political relations between and within nationstates.

Fifthly, protected area management must search for alternatives. The social and political ecology traditions are important, as are radical development approaches. But including these within a protected area management praxis means a paradigm shift, a movement in explanatory frameworks to ones being located much more fully in the radical development and conservation paradigms, especially those reflecting critical approaches.

Management therefore is a matter of renegotiating these things, some of which are easier than others. Working through this complexity is difficult, and represents something of a protected area management dilemma. These complexities are

important to acknowledge, however, if protected area management is to take on its role as a mechanism to overcome the global problematique of conservation and development. Central components of protected area management orthodoxies like biodiversity conservation, like sustainability, like management itself, must be looked at within this critical context. If not, there is a very real possibility that protected area management will tend to integrate local people more fully into global socio-economic and political requirements, rather than achieve what is needed – a renegotiated relationship between humans, nature and global conservation/development agendas.

CONTESTED ARENAS

There are therefore a number of contested dimensions to protected area management and an understanding of these is crucial if protected area management is to integrate social and environmental justice. If it is to integrate environmental and social justice, protected area management needs to become increasingly involved in the implementation of alternative development strategies.

The interest in integrated approaches can be understood as an interest in renegotiating the development process itself. This is because, as I will discuss later in the thesis, the existing social paradigm of development is problematical for environmental management. Consequently, protected area management should become involved in renegotiating the development agenda at a global and especially a local level, as it attempts to alleviate the environmental consequences of the ways in which people live their lives, lives which are mediated through

socio-political institutions derived from specific historical processes.

The ethics of alternative development models

According to Engel (1992) there are at least five practical reasons for the new interest in the morality and ethics of sustainable development. Whilst these particularly refer to values and ethics in a philosophical sense, they offer important insights into alternative development strategies in general, and sustainable development in particular.

Firstly, there is a new awareness of the role of values in human activity. Values can be understood as mediating the relationship between nature and human activity. We value something (something has value for us) as a result of cultural, economic, social, historical and political forces and processes. Therefore, 'nature' is contested on the basis of values, and differing values about nature which different groups hold. Note, however, that not all groups get their values heard in the same way, as some are more powerful than others.

For the protected area management approach, the idea that nature is contested is an important one. Not only does an awareness of the roles of values in human activity provide important insights into the contested basis of 'nature conservation', it also provides an understanding of the implications of ethnocentrism and resulting practices reflecting this. It also highlights the fact that values are more than economic.

Secondly, there is a new appreciation of the ways in which moral ideals motivate people to take care of the environment around them. In other words, people act on values and perceptions of nature. The facilitation of an alteration to the current morality of development being equated with economic growth to a broader morality which places humanity and nature in a more holistic relationship may well result in human activity becoming more integrated with the ideals of biodiversity conservation. Equally, a morality which understands our exploitative relationship with nature as a result of a social and economic system which is in itself exploitative, will search for a conservation solution and a social justice solution (see, for example, the social ecology of Murray Bookchin [1982; 1999]).

As will be discussed within this study, values attached to ideas relating to development have had a major impact on the environment. As protected area management moves more towards the incorporation of the local into its practices, it is attempting to put into place a new morality. However, for this to be achieved, this new morality must include an understanding of the rights of local populations as well as those of nature. It will not be enough merely to include the local into old morality. In other words, it will be problematic to merely incorporate the local approach into existing socio-economic institutions and cultural milieu.

Thirdly, ethics clarify the values at stake in policy decisions and give reasons for alternative courses of action. This understanding allows us to more fully

appreciate the assumptions which are inherent in various policy decisions or, indeed, in current orthodoxies of conservation and development. It also allows us to debate, on moral and/or ethical grounds, the need for an alternative to the dominant social paradigm of world development, one which emphasises alternatives to the political and economic orthodoxies which currently govern much development thinking. As will be argued in the following chapters, protected area management has a crucial role to play in the establishment of these new ethics and new social models.

Fourthly, ethics is helping to resolve some of the outstanding value conflicts that thwart conservation and development. Obviously, development and conservation ideals are often in conflict. Understanding assumptions and ideals provides ways in which conflict resolution can occur.

Protected area management has to be involved in the resolution of conflicts which are occurring as a result of conservation and development crises. Not only does this involve an understanding of development, it includes critically appraising the values and assumptions found within its own management paradigm and the results of the practises which these govern. This is the essence of being self-reflective and self-critical, the basis of participatory approaches.

Finally, ethics are important in defining a new social paradigm. Social sciences in general, and those social sciences which critically analyse the current orthodoxies

in particular, are important in ensuring searches for alternatives to the dominant social paradigm of world development embrace redefined values and institutions which are capable of integrating humanity and nature. But the institutionalisation of alternative social arrangements have an ethical basis to them.

Protected area management is creating a new orthodoxy through the locally – focused approach. However, is it currently generating new values, new ethics and new institutions which reflect this new approach? Or is it maintaining many of the old values, ideologies and worldviews but packaging them in a different way?

The insights gained from seeking answers to these questions will provide insights into likely outcomes of this new protected area management practice, and the directions of change along the continuum towards a reconstituted social relationship with nature.

Sustainable development

The above discussion provides a basis for critically understanding current orthodoxies and a broad range of so-called alternative development approaches. One of the more influential approaches which is currently on the public agenda as both a model and a practice is sustainable development. A better understanding of the concept, and the ways in which it is being promoted and applied, gives insights into the state of play within contemporary resource and protected area management paradigms. UNESCO and other UN agencies such as UNDP and UNEP are concerned with sustainable development, as is the World Bank, the

Asian Development Bank, as well as a myriad of NGOs, conservation and development agencies in various nation-states and activists. But do they all share common meanings of the term? Do they all share common practices which fit under the sustainable development rubric? When UNESCO's MAB program pronounces biosphere reserves are to implement sustainable development, what does this mean to the protected area manager?

The protected area manager must work through these issues. Sustainability and sustainable development are well and truly on the protected area management agenda. But for protected areas to fulfil their potential in integrating conservation and development, management cannot take sustainable development as a given. It is a contested term in its own right, and for local level development to occur, sustainable development must not be a reinforcement of the status quo with a tinge of green to make it socially acceptable (to who is another matter).

The epistemological and ethical bases for local participation and development

There is an obvious move within protected area management approaches to incorporate local people into the conservation and development equation. This very important change is exemplified in research by for example, Wells and Brandon (1992), West and Brechin (1991), and Furze *et al* (1996). Inherent in this approach is an ethic incorporating dimensions to social justice, the rights of local people and definitions of participation. Social science not only gives

insights into these issues, but also on how these approaches are applied in specific contexts (see, for a broader discussion of the role of social science Buttell 2002; Dunlap and Catton 2002; Field *et al* 2002).

Understanding social change

Social science knowledge provides insights into processes of, and likely outcomes to, social change. This is particularly important when integrated approaches to conservation and development in general, and PPAM approaches in particular, are interventions into existing social, economic and political relations within communities, nation-states, regions and, ultimately, globally.

This raises the very important question of how change occurs, and indeed how best to facilitate the changes necessary for a renegotiated model of development. When this is discussed, it raises the issue of the relationship between the active social actor and social structures.

Are social actors active agents in shaping their futures, or are they passive recipients of existing institutional arrangements? Are they faced with constraints to action based on power and structural inequalities? If so, can they overcome these constraints and become active 'makers of history'? Or must they be 'developed' by outside experts who provide technical solutions? Answers to these and other similar questions provide insight into the ways in which the relationship between the individual as a social actor and his/her social milieu are understood

and acted upon (see, for a good discussion, Sunderlin 1994).

The search for altered relations with nature

In the social sciences, the idea of people 'making their own history' as active social agents has been problematic. So too, in a more general sense, has been an examination of the relationship between society and nature.

We are both social and biological animals. We have the capacity to reinvent our futures and, through our interactions, we continually reinvent our social systems. That these social systems are not compatible with sustainable living becomes a crucial matter, not because human nature is somehow exploitative and competitive, but because these are profoundly social issues. As Pepper (1993) rightly suggests, the question about what the often discussed 'human nature' is 'really' like is not the crucial one, compared to the question which asks if it can feasibly be changed.

Pepper's point raises two important issues. Firstly, it highlights the social authorship of environmental problems, not on the basis of some biologically determined 'human nature' but on the basis of socially constructed values, norms etc. This in turn leads to an area which is of general concern to this study - understanding the social basis for perceptions and use of nature and understanding ways in which a more socially and ecologically just society can emerge from this understanding. It also points to a basis for a sociologically informed

understanding of integrated conservation and development approaches through protected area management.

Secondly, it hints at the importance of deriving our understanding from an analytical tradition where social change and its facilitation constitutes social science's *raison detre*. Whilst there are obviously varieties of worldview which this encapsulates, what is of specific interest to this work is that raft of approaches which see local and/or community groups having intrinsic rights to equity, social justice and decision making which affects their lives.

Nature has to be 'brought back in' to the social equation (to use Canan's [1996] phrase). Redclift and Woodgate (1994) suggest that Giddens' conceptualisation of structuration provides an important insight. It begins by conceptualising the environment as a structure. If this is the case, then, like all structures, it:

- i. both constrains and enables action
- ii. can be changed by action.

These two deceptively simple points reinforce the potential for action, and action related to humanity's use of nature. The statements begin the process of incorporating nature into the field of social analysis, not in any positivistic, universalistic, monolithic way, but in such a way which can reflect a diversity of

experience founded in historical, social, cultural, political and economic life (Buttel and Field 2002; Buttel 2002; *et al* 2002). It also points the way toward remembering that, as Murphy reminds us, 'human activity finds in the natural world not only external limits but also external possibilities' (1995: 702). These don't always have to be negative, where the 'possibilities' found within nature are resources for the continued economic growth of nations. Rather, they can be couched in terms of spirituality, equity, social justice and any number of other possibilities which are suggested by a variety of other thought.

Both these points highlight another key component of this work - that of social action and the facilitation of social change. This important theme is also picked up by Callinicos. He draws on the work of Perry Anderson, distinguishing between three ways in which human beings are able to 'make history'. First is what is described as routine conduct, where people pursue 'private goals' in their everyday lives (such things as exercising skill, work and leisure and so on). Second is what can be called 'public initiatives' where life is conducted within existing frameworks of public goals (for example, political struggle). The final way in which humans can make history is through 'self-determination' where humans are involved in the 'pursuit of global transformation' (1989: 9-10).

The importance of this stems from an acknowledgment that human beings are social actors, who act within and outside the existing institutional arrangements within society (what we can call social, economic and political organisation, or

social organisation for short). The relationship between the social actor and social structure is central to the task at hand.

It also suggests that the making of history is an ongoing process which occurs at a number of levels: the maintenance of the status quo or the institutionalisation of a new status quo through the everyday life of the first of Anderson's categories mentioned above; the use of existing institutional arrangements as pointed out in the second; and the transformation of existing social formations of the third. As will be seen throughout the study, this has implications for our understanding of social change, and the ways in which it might be facilitated.

As will be suggested in this work, an approach to protected area formation, use and management wherein conservation and development goals are integrated actually implies social intervention in a development process. If this is the case, protected area managers attempt to alter existing institutional arrangements in order to, as it were, alter the course of history: to stop people, in their everyday life, undertaking practices which lead to species decline; to implement new arrangements to ensure that protected area management conserves and protects, using policies and the like; to transform existing institutions to ensure that protection of nature results. Protected area managers may operate within a variety of levels of history making in this sense. As will be argued, they must also become active agents in the facilitation of social change and the development of socio-environmental justice.

Protected area management is therefore becoming involved with the facilitation of social change. The integration of conservation with development is the facilitation of altered social, economic and political structures as well as cultural values, ethics and practices. It may be the institutionalisation of new or altered practices of the everyday life, the alterations to existing social structures, or fundamental change to the ways in which groups exert power and influence. It may be all of the above. No matter which way, the protected area manager is a social change agent.

This, then, is the world of human agency and existing social structures, of attempts to strengthen or transform existing structures, and of individuals attempting to 'make history'. Sociologically, it is the realm of agency and structure. Practically, it is the world of striking delicate balances between development aspirations, power relations and conservation goals.

What is meant by development?

One of the things social science can provide is a greater understanding of what is called in this thesis the 'dominant social paradigm of world development' (DSPWD) (after Engel 1990), and this is elaborated in chapter four. We will see that the dominant social paradigm of world development has certain assumptions inherent in both its formulation and articulation: economic growth; capitalism in a variety of guises; individualism; consumerism and so on (see also Pieterse

1998).

Nature has a very specific role in this paradigm - it is a resource to be used in the quest for the narrowly (economically) defined model of development which we are familiar with and which has become a global phenomenon. Nature is commodified as both a resource (used in production of surplus) and as something to be purchased (as a component of goods we consume).

Development is also a political act. It is an ideologically charged term (Shanin 1988) in whatever sense it is used, or however it is defined. It implies certain values and assumptions not only about nature and its possible uses, but also about the causes of poverty, inequality and the human condition (are we all self-seeking individuals for example, in which case the state must continue to govern our behaviours, or are we inherently cooperative, in which case the state has little or no role to play in 'governing' through restrictions of freedoms?).

The conflicts which occur over competing notions of development represent conflicts over power relations, over ideology and over models of social change. For example, the development models which are equated with market capitalism differ significantly to those which are founded in state intervention, which in turn are different to those using development in terms of civil society and social development. As Seitz (1995) suggests, the important issue is getting the balance right between these often antagonistic approaches.

This can be taken a step further. Inherent in any model of development is an assumption about nature. These assumptions will provide the framework for action, for human uses of nature, and for the ways in which people perceive nature. They will also set solutions within a conceptual and practical frame of reference. For example, the current orthodoxies within resource management and protected area management is at least partly derived from the project of modernity (see, for a good discussion, Worster 1995; Colby 1990; Pepper 1984), and will be discussed throughout this thesis

The issue here is that protected area management is moving toward integrating local level development into its practice (see for example, Brosius *et al* 1998). The question which is explored is what type of 'development' will achieve biodiversity conservation.

CONCLUSION

Protected areas represent institutionalised global conservation mechanisms, a protective function being part of their *raison d'etre*. Currently, within the protected area management orthodoxy, there is an increasing recognition of the needs to integrate local people within management approaches. However, what is less understood is highly contested nature of (and the potential of their role in) development. The discussions above highlight potential points of conflict over

development, sustainability, and biodiversity conservation. Taking this further, points of conflict are likely within any number of protected area management strategies attempting to integrate conservation and local people through development.

This then is the fundamental focus to the study. It is an examination of the worlds of social continuity and social change, of existing and changed institutional arrangements, of individuals making, or attempting to make, history through renegotiating development models in general, and implementing PPAM in particular. It is, above all, about the experience of addressing one of the world's most pressing conservation issues - integrating social and environmental justice.

Protected area formation, use and management is not a peripheral issue to this, it is central. However, first it must incorporate a critical understanding of what development is and should be, how biodiversity conservation fits or does not fit with development, and how this impacts on the very idea of sustainable development. It is with these crucial questions this thesis concerns itself.

Chapter 3

APPROACH TO THE STUDY: FOCUS, JUSTIFICATION AND METHODOLOGY

And the best thing JFM has done for us is to make us understand that we can do things ourselves (Villager, JFM village, Haryana).

INTRODUCTION

As previously mentioned, this study is concerned with an analysis of the ways in which social and environmental justice can be integrated through protected area management. This chapter details my approach and the methodology I have employed. It also highlights the aims of the study, and the ways in which its fieldwork component is used.

THE STUDY'S PROBLEM: PROTECTED AREAS, LOCAL PEOPLE AND DEVELOPMENT

The recognition of the rights of local people within the conservation equation has, over the last few years, brought a flurry of publications, approaches and experiences to the fore. Integrated conservation and development projects

(ICDPs) have been studied through, for example, Wells and Brandon (1992) and Wells (1989), buffer zone management continues to be an important dimension to protected area management (see for example, Sayer 1991; Wind 1991a and 1991b) the zoning of project areas is being revisited (Caldecott 1992) and interest in biosphere reserves has also increased (as exemplified by the Seville vision coming out of the conference on biosphere reserves, Seville, 1995 and the synthetic report of MAB (2000).

In addition to these resource management and protected area management models, various strategies have also been suggested for the integration of local people, development and protected area management. These have included mechanisms such as ecotourism (see, for example, Brandon 1996; Ceballos-Lascurain 1995), rural development (Furze *et al* 1996) property rights (Berkes [ed] 1992) and variations of joint forest management and community/social forestry (for example, Singh and Varalakshmi [eds] 1998).

So, there is much happening, especially in the protected area management context, which is centred on integrating local development and conservation, as well as questioning the ways in which protected areas can take a more proactive role in local and global conservation. Four major questions related to this were identified at the IVth World Congress on National Parks and Protected Areas held in Caracas in 1992, and they only begin to look at the issue:

1. What can protected areas contribute to overall strategies for sustainable

development?

2. How can protected areas command broader support from society?
3. How can protected area management be made more effective under current and expected economic conditions
4. How can more effective international support be mobilised? (in McNeely 1994).

These four questions are worthy of discussion and analysis, not the least because they have set the agenda for the last ten years of protected area management practice, and contain contested assumptions about what development is and should be, the need for societal and community support and the most appropriate ways to achieve desired outcomes. This thesis goes some way to provide this analysis.

THE FOCUS OF THE STUDY

A review of the protected area management experience so far has indicated that some very important questions remain unanswered. The central, obvious question is what, if anything, has changed? Does this plethora of attempts to integrate local people into the conservation/development equation indicate a way forward? If so, how and if not, why not? Should we embrace these approaches uncritically, or not? If not, how can we critically understand the processes as they are occurring?

In this study, these questions are compressed into one central question:

How can protected areas integrate social and environmental justice?

Within this thesis I argue for an approach to protected area management which I have called participatory protected area management or PPAM. Throughout, I argue that PPAM requires a fundamental shift in thinking – a movement away from a view that the management of protected areas is essentially a technical problem requiring technical solutions, to a more radical view derived from critical social sciences and which views the solutions to conservation problems intrinsically entwined with socio-economic and political processes founded in social justice frameworks. Consequently, therefore, protected area management should not be focused on managing natural resources, but on facilitating socio-environmental justice.

There are three components to this argument requiring analysis.

1 *How is development a conservation issue and conservation a development issue?*

Conservation and development are not only technical problems requiring technical solutions. They are issues of people living their daily lives, within a historical, social, economic and political framework which influences their views on, and use of, nature.

What Engel (1992) has called the ‘dominant social paradigm of world development’ has had a profound effect on the environment, and human use of nature. We can understand a great deal about environmental problems by

understanding how people have defined development and how dominant definitions carry assumptions about both nature and social, economic and political relationships within it. This analysis is critical if the way development is used and practiced even under a green guise, is to avoid reinforcing the socio-economic and political processes which have led to environmental degradation and socio-economic inequalities in the first place.

Therefore, if we are to understand the essence of development and conservation issues, the social sciences have a major role to play. Just what this role is justifies the approach taken in this work. It will be argued throughout the thesis the role of the social sciences is not merely to play a support role to environmental management solutions but to actively question the assumptions inherent in these approaches as a way of moving towards socio-environmental justice.

2 *How is protected area management located within the conceptual and ideological frameworks of the conservation/development agenda, and what are the implications of this?*

Central to the argument that development issues are conservation issues and vice versa is the need for a shift - a movement away from the assumptions found historically within environmental management approaches (for example, resource management and protected area management) to ones encompassing a qualitatively different notion of development. You cannot on the one hand say that we must manage the environment through integrating conservation and development, and on the other reinforce the processes of development generating

environmental degradation.

What is needed therefore is an assessment of the ways in which protected area management incorporates orthodox approaches to managing environmental problems and to what extent this impinges on its capacity to act as a mechanism for socio-environmental justice.

Protected areas are institutionalised mechanisms for global conservation. As such, they represent a unique opportunity for the facilitation of integrated conservation and development approaches within a socio-environmental justice framework. However, having said this, the potential of protected area management can only be converted into a reality with a fundamental alteration to the protected area management approach to conservation. This has enormous implications for international conservation.

Part of the paradigm shift needed to incorporate PPAM principles involves moving away from the idea that management provides technical solutions to technical problems. Whilst technical knowledge has contributions to make, the discourse of management and the practices which spring from it can be significant and little understood contributors to protected area management problems. This is particularly true when it is remembered that biodiversity conservation is as much a social, economic and political issue as it is an ecological or 'scientific' one. The facilitation of PPAM must acknowledge these processes and factors, and provide a

means by which these problems can be overcome.

3 *What are the implications of protected area management becoming more fully concerned with the integration of social and environmental justice?*

PPAM does not evolve out of existing social arrangements. It requires intervention in community life, in power relations and in a wide arena of social, economic and political processes. If PPAM is to become an important protected area management strategy, which this thesis argues it must, then protected area managers themselves must become outside change agents. That is, protected area managers move away from being technical experts to being facilitators of social, economic and political change within a PPAM ethic. In short, protected area management becomes increasingly politicised (though it has always been a political act) within a framework which focuses on poverty alleviation, local and participatory approaches to change, and the legitimation of local and/or indigenous rights.

Whilst there is a new conservation orthodoxy emerging internationally, does it represent the much needed shift? Or is the current interest in integrated conservation and development projects, the renewed interest in biosphere reserves and the continuing interest in sustainable development merely a matter of putting old wine into new bottles?

ORGANISATION OF THE ARGUMENT WITHIN THE THESIS

The issues discussed above are integrated into this thesis. The beginning point of this thesis is that protected areas must integrate social and environmental justice. To understand how and why this is the case, it is crucial to develop a conceptual framework which both critically recognises how development is a conservation issue and conservation is a development issue, and locates protected area management within the conceptual/ideological frameworks of the conservation/development agenda so as to be able to consider the implications of this.

This framework, which highlights points of conflict and contested meanings between conservation and development agendas, can then be grounded in case studies and the implications for the integration of social and environmental justice drawn out. In this thesis, the implications are framed by a call for the implementation of an approach to protected area management I have called participatory protected area management or PPAM.

The substantive argument within the thesis follows this chapter in sections two, three and four, with section five concluding the study. Sections two and three focus on a critique of protected area management orthodoxies. Section two specifically discusses three underlying components of protected area management – conservation/development, biodiversity conservation and sustainable development, whilst section three critically assesses key protected area

management strategies (biosphere reserves, ecotourism, community/social forestry and rural development).

Section four uses the critiques of the previous sections to justify the need for an altered approach to protected area management and highlights what a PPAM approach would entail. The final section, section five, reflects on the tensions between a PPAM potential and existing realities.

THE WORK AS AN ORIGINAL CONTRIBUTION TO THE FIELD

The idea for this study partly emerged out of the research and writing of *Culture, Conservation and Biodiversity* (Furze *et al* 1996) and partly from my own field experience. As I reflected on my own experience within projects dealing with the facilitation of local level conservation initiatives I was struck by how frequently the key concepts of 'protected area manager', 'protected area management' 'conservation', 'development' and 'sustainability' were treated unproblematically.

Partly, I think, this is indicative of the institutionalisation of the traditional resource management and protected area management paradigms, particularly as protected area management, for example, has historically embraced the 'fences and fines' approach. As will be discussed, it is also overwhelmingly framed within an approach founded on technico-scientific solutions to matters of nature protection and preservation.

Partly though, it may also be the result of an historical lack of critical anthropological and sociological applications in the field. Whilst this may be changing as the 'local level' gains more legitimacy, it remains to be seen how 'local' is treated, and certainly how 'local development' and 'local conservation' is defined and put into practice. This is especially the case in respect to specific contradictions and tensions found within the mode of articulation between local and global socio-economic and political processes (for example, the 'globalised local' of Shiva [1993]). This more critical approach to dominant paradigms moves social science understanding away from that which supports the resource management approach to one which questions its assumptions and applications.

As I further reflected on my field-based experience, and continued my research for *Culture, Conservation and Biodiversity*, the need for an approach to protected area management which was derived from the social sciences and which problematised those key concepts emerged as critical. The integration of local development and protected area management was fast becoming a practice in search of a theory. At worst, it was becoming a practice which was assumed didn't need a theory because key concepts were uncritically treated as given.

This thesis therefore goes well beyond work which I and others have previously published (especially *Culture, Conservation and Biodiversity* [Furze et al 1996]) in a number of significant ways:

1. it synthesises theoretical and conceptual issues in a more sustained way.

Culture, Conservation and Biodiversity introduces concepts such as development, participation and community and highlights their importance for protected area management. But this thesis argues protected area management is a political act in which local and global conservation and development agendas are contested, and where issues of social power are at the heart of management attempts. Further, it highlights the importance of participation to this, and central to participation are issues of empowerment and social justice.

2. it uses a critical framework to call for PPAM. The thesis raises questions relating to protected area management embracing an approach incorporating local people. It asks if this approach represents a shift in orthodoxy to one which empowers local people and therefore facilitates (redefined) sustainable development or if it merely acts to reinforce global conservation and development agendas through globalising the local level.
3. the elaboration of the PPAM approach itself is an original contribution to the field, and has not been undertaken elsewhere.
4. this study provides a more sustained critique of the contradictions found within the local/global nexus. Central to the thesis are the contradictions, tensions and problems inherent within a PPAM approach to protected area management and its facilitation. These tensions are the result of the conflicts inherent within 'local' and the means of its articulation with

global conservation and development agendas.

5. the work is grounded in case studies where I have undertaken fieldwork and consequently provides new insights into natural resource management at these sites.

It is for these reasons the current work represents an original contribution to the field theoretically, conceptually and, through the uses of case studies derived from primary and secondary sources, empirically.

THE CASE STUDY APPROACH TO RESEARCH

This research uses five case studies drawn from the Himalayan region of India and Nepal. In this thesis, the cases:

1. provide an empirical grounding of the contested nature of protected area management. Cases have been chosen to represent a diversity of conservation and development issues incorporated within protected area management frameworks.
2. provide diversity in protected area management strategies. The cases provide analysis of the diverse emphases in management strategies for the integration of conservation and development outcomes.
3. are used to highlight local people's experiences of protected area

management and give voice to their views.

In this way, the cases are partly used as a grounding of theoretical and conceptual discussion and debate (moving toward a positivistic use) and partly as a more reflexive method within which local people's voices are integrated into analysis and discussion (see also Gasper 2000).

The significance of location: Himalayan conservation and development

The Himalayan region has been chosen as the site of the case studies for a number of reasons:

1. the Himalayas represent some of the key conservation/development issues of our time. Across the range nation-states are dealing with issues related to the protection of fragile mountain environments and the alleviation of poverty.
2. within the range are found examples of key conservation issues and problems. Within this thesis, the issues of biodiversity loss, forest loss, endangered species protection and the implementation of sustainable development policies are represented.
3. key protected area management approaches have been implemented in attempts at protecting the Himalayan environment. Within this thesis, ecotourism, biosphere reserves, rural development and social/community forestry have been included.

It is however important to note that this thesis is not concerned specifically with Himalayan development and conservation. The Himalayas represent a location for the case studies themselves, but the analysis of the cases does not represent an analysis of Himalayan conservation and development issues. This thesis is concerned with the enunciation of a model of PPAM rather than the analysis of Himalayan conservation and development issues.

The significance of the cases

Research conducted by Furze *et al* (1996), Wells and Brandon (1992) and West and Brechin (eds 1991) has consistently highlighted both a need for protected area management to embrace its role as a development agency and the need to facilitate this within a framework of devolved management practices and institutions where local people play an important (central) part. These findings have held even though the research within the above studies have tended to see the issues differently or employed differing analytical frameworks.

The research of Furze *et al* (1996) has highlighted central issues related to a diversity of joint or locally initiated management models and mechanisms for biodiversity conservation which are specifically development strategies. These have included, for example, a variety of property rights regimes, joint management of forests, rural development approaches, and ecotourism. In their conclusion, the authors write:

Existing protected area systems represent institutionalised systems of conservation (albeit with limitations) and consequently provide a vehicle for global conservation. New protected areas, new models of management and

the critical appraisal of biosphere reserves provide potential for the further use of participatory approaches to conservation and development, where creative relationships between local people, protected area management, non-government organisations and/or state and international agencies can be facilitated ... The experience of the cases within this book, and social science insights in general, have much to offer the search for sustainability. The task is to ensure that the potential is translated into action and reality (Furze *et al* 1996: 247).

The cases in my study have been chosen to exemplify some of these issues. They represent examples of this movement towards an orthodoxy of local level development, and their critical analysis represents an opportunity to continue the task of translating a set of orthodoxies found within a protectionist and management based approach into a participatory one. It will be argued that only in achieving this shift can the potential of protected area management be translated into action and reality.

A number of approaches to protected area management have attempted this task. Firstly, the biosphere reserve management model has been held up as an answer to integrating conservation and development ideals. Thus a biosphere reserve has been included in this study (Nanda Devi Biosphere Reserve).

However, not all biosphere reserves are managed as such, and not all protected areas have the luxury of being able to develop zones of transition, because the conservation and development issues are geographically immediate. Therefore, I have included Joint Forest Management villages in the foothills of the Himalayan range in Haryana, India as an example of the 'actually existing reality' of trying to protect biodiversity with intense land-use and development issues surrounding

them. Community and social forestry approaches provide important dimensions to protected area management principles, and the example of the Kalisi forest in Haryana has been included.

The protection of biodiversity, especially endangered species, represents one of the key foci of protected areas. Because of this, I have included Corbett Tiger Reserve, in Uttaranchal, India as a case study.

Finally, I have included Royal Bardia National Park in Nepal. This represents a case where the biodiversity conservation function of protected area management and issues of rural development exist side-by-side. Because of this, the need for poverty alleviation and the need for forest protection are both pressing needs, and the case highlights some of the tensions and conflicts in this situation.

These case studies represent both a commonality and a diversity. Their commonality is that they are all protected areas which are attempting to both conserve biodiversity and provide a mechanism for local people's development (however we define it). They represent a diversity through the different management regimes (including levels of funding) which they use. This commonality and diversity provides a great many insights into the ways in which integrated conservation and development, particularly PPAM, may be achieved under a variety of circumstances.

BRIEF OVERVIEW OF THE CASE STUDIES

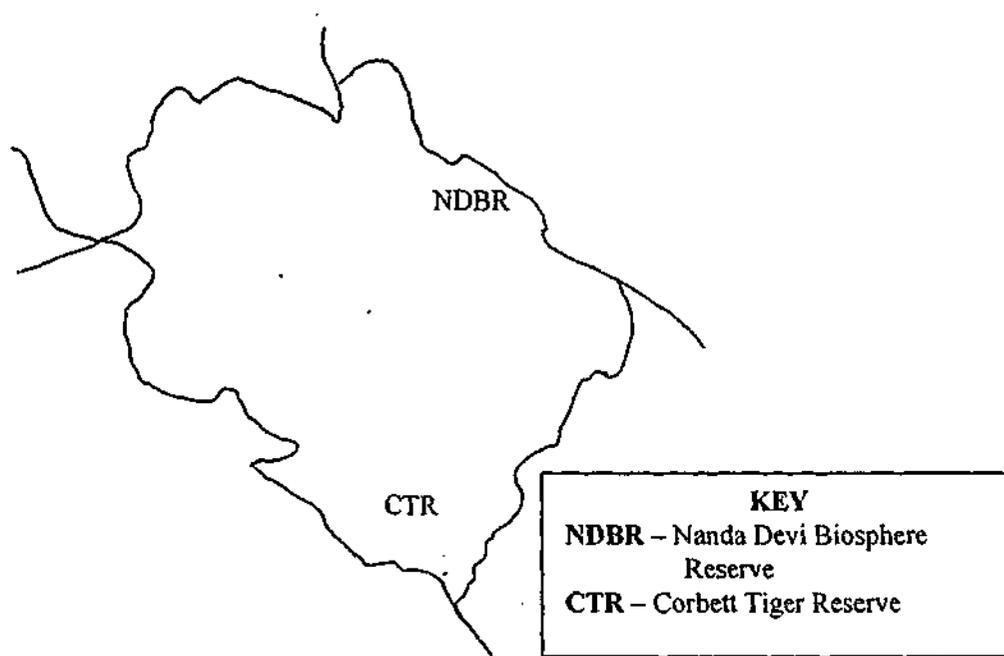
Nanda Devi Biosphere Reserve

Nanda Devi Biosphere Reserve (NDBR) is located in the Garwhal and Kumaon regions of the Western Himalayas in Uttaranchal, India. NDBR is a significant site of biodiversity protection, including the protection of rare and endangered species such as the snow leopard, brown bear and musk deer. Local conservation/development issues are related to poverty alleviation of the inhabitants of Garwhal and Kumaon, local concerns about the extent of religious pilgrimages and eco-tourism and a generalised mistrust of decisions emanating from state-level political processes.

Corbett Tiger reserve

Corbett Tiger Reserve (CTR) is located in the Himalayan foothills of Garwhal, Uttaranchal, India. CTR is a significant site for the protection of tigers as well as, more generally, for the protection of *sal* forests. Local conservation/development issues are related to the management of ecotourism and access to non-timber forest products such as medicinal plants and thatch grass.

Map 3.1: Map of Uttaranchal showing location of case studies



Kalisi Forest

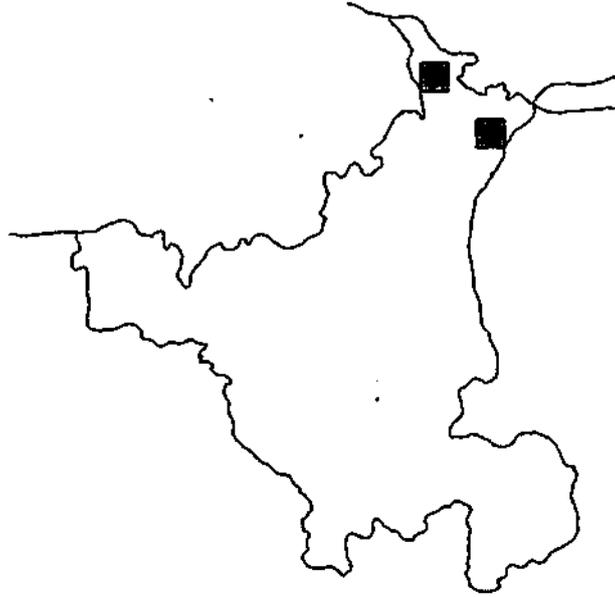
Kalisi Forest Reserve is located in north-eastern Haryana and abuts the state of Himachal Pradesh. It has conservation significance locally as it represents one of the few remaining pockets of forest in the state and it has been identified by the Forest Department to become a wildlife reserve. Local conservation/development issues are related to the impact of the forest being designated a national park, especially local people's loss of economic opportunity through exclusion of the use of thatch grass for rope making.

Joint Forest Management Villages

The Joint Forest Management (JFM) area which forms this study is in northern Haryana. Villages are located within blocs near to Chandigarh and Yamunanagar. Local conservation issues are related to regeneration of the Siwilik Hills, whilst

local development issues are related to poverty alleviation through access rights to forest resources.

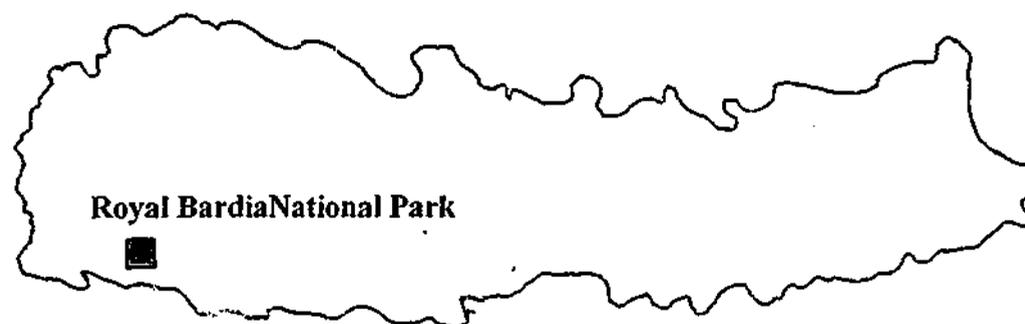
Map 3.2: Map of Haryana showing location of case studies



Royal Bardia National Park, Nepal

Royal Bardia National park (RBNP) is located in the western part of Nepal, north of Nepalganj. Conservation significance is related to protection of remaining Terai forests, including the habitat of rhinoceros and tiger. Local development issues are related to the alleviation of extreme poverty through rural development and use of forest resources.

Map 3.3: Map of Nepal showing location of Royal Bardia National Park



THE RESEARCH MODEL USED IN THIS STUDY

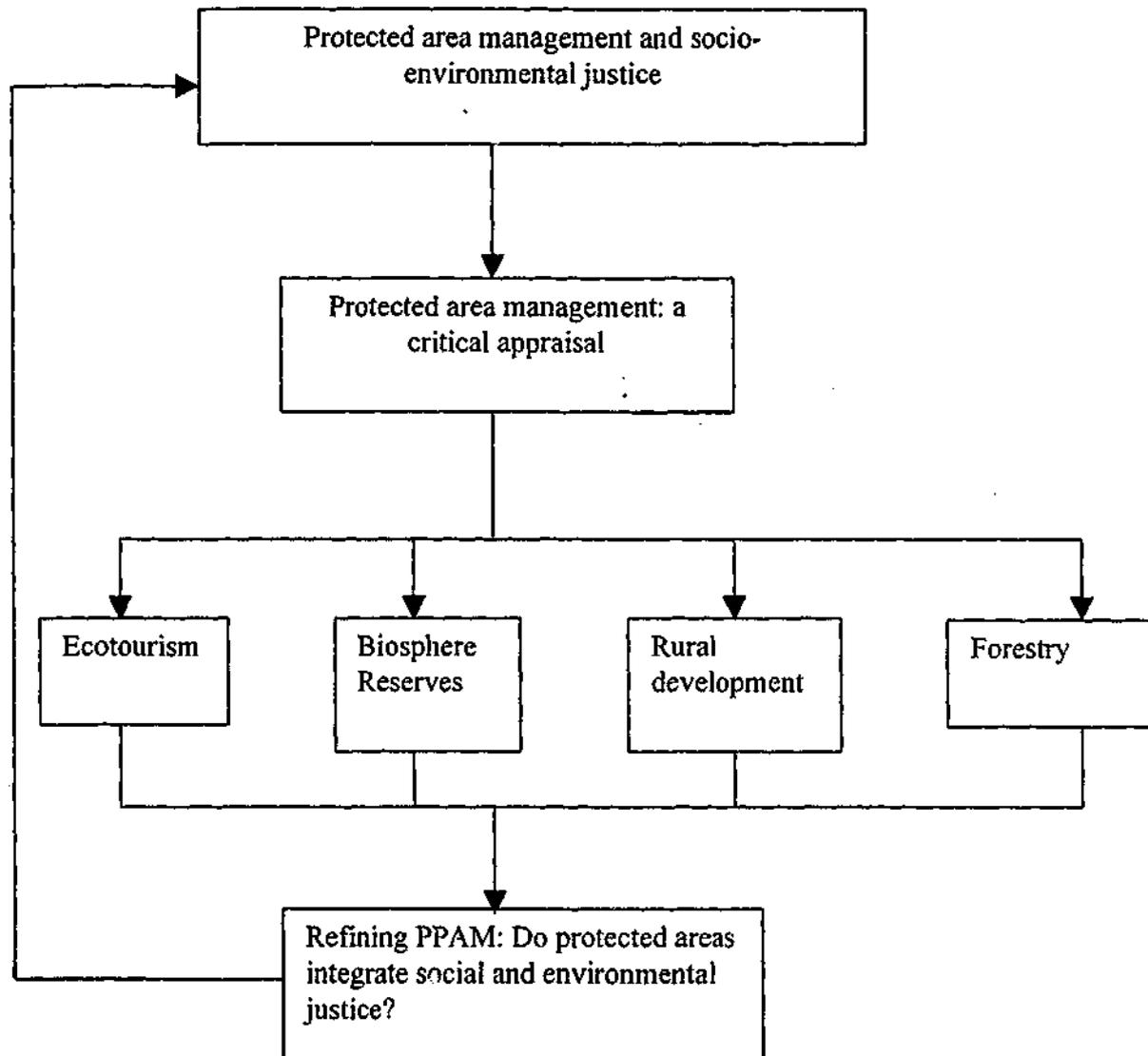
As I mentioned earlier in this chapter, the focus of this study is the elaboration of a model for change - PPAM. The study's focus on this consequently allocates a somewhat secondary role to fieldwork *per se*. My concern with the cases I have used has less been with analysis of them and more with their use to develop a PPAM model. The fieldwork, then, provides context and grounding to the major aim of this thesis

This study is undertaken using rapid and participatory rural appraisal (RRA/PRA) approaches to fieldwork within a PPAM explanatory framework. This forms an overall research process designed to be reflective and, as far as this thesis is concerned, focussed on the elaboration of PPAM as a model of change.

Diagram 3.1 provides a flowchart of the research process. The first level of analysis is an argument for protected area management to become involved in

social and environmental justice as it is the only way conservation ideals can be integrated with

Diagram 3.1: The Approach to the Study



the rights of local people to social and environmental justice. The second level provides a critique of protected area management and its approaches to local level conservation and development. The third level uses the critiques and call for an altered epistemology of protected area management to assess the contested ways which key management strategies do or do not integrate social and environmental justice. The fourth level assesses the process and its findings and forms the basis

of a continuation of the cycle.

Because of the reflective and self-critical nature of the research approach, the process is an ongoing one with continual monitoring and evaluation. The final level therefore feeds back into the top level to ensure theoretical and conceptual understandings of development and conservation are founded in practice, and protected area management practice is located within the theoretical and conceptual. Further, the process incorporates local people's experiences within it and consequently is grounded in both the conceptual/theoretical and the 'lived realities' of local populations. It thus theorises realities and realises theories.

Methodology employed in this thesis

An important point needs to be made here in relation to my methodology. As mentioned earlier, my main focus has been the conceptualisation of a PPAM approach to various protected area management strategies. The methodology developed, therefore had to allowed me to evaluate strategies rather than facilitate change toward PPAM outcomes. This tension between a model which has, as a central component, the facilitation of change, and a methodology which tends to leave the change work undone, is a reflection of both time constraints within the research process and a belief that there still needed to be a critical assessment of the ways in which 'the local' has been incorporated into dominant ideologies surrounding protected area and natural resource management.

For this thesis, then, the PPAM model is important. For protected area

management strategies, and work I am currently involved with (and which does not form part of this thesis) the facilitation of change, and consequently, PRA and PAR approaches becomes important.

Table 3.1: Research methods used in this study

Site location	Visits	Methods
Nanda Devi Biosphere Reserve, Uttarakhand, India	November 2000 May, 2001 November 2001	1. Semi-structured interviews with key informants 2. Workshops in local villages 3. Observation 4. Secondary sources including management plans and related documents
Corbett Tiger Reserve and National Park, Uttarakhand, India	November 2000 November 2001	1. Semi-structured interviews with key informants 2. Unstructured interviews with tourists 3. Observation 4. Secondary sources including management plans and related documents
Kalisi Forest, Haryana, India	January 2001 November 2001	1. Key informants 2. Unstructured interviews with villagers 3. Observation 4. Secondary sources
Joint Forest Management villages, Haryana, India	January 2000, November 2000 January 2001 November 2001	1. Semi-structured interviews with key informants 2. Workshops in selected villages 3. Unstructured interviews with villagers 4. Observation 5. Secondary sources including project documents
Royal Bardia National Park, Nepal	November 1994, December 1996, November 1996	1. Semi-structured interviews with key informants 2. Unstructured interviews with villagers 3. Observation 4. Secondary sources such as project documents

The field-based methodology for the thesis has consisted of semi-structured and unstructured interviews, village workshops and meetings, secondary sources such as management plans and project research documents and field-based observations. Gaining access to informants was facilitated by the use of in-country partners who had been, or still are, working in the case study locations.

Unstructured and semi-structured interviews

Unstructured interviews play an important role in this methodology, across all sites where fieldwork took place. Unstructured and semi-structured interviews were conducted. Semi-structured interviews tended to be with key informants, especially when talking with protected area managers, Government officials and project managers. Semi-structured interviews tended to consist of seven to ten questions designed to find out:

- i. what informants thought of the move to integrating local level development within their conservation projects
- ii. how this move was being implemented
- iii. problems they had with this approach
- iv. what local people thought of the approach
- v. what happens when conservation and development goals do not coincide.

Unstructured interviews were used when talking to local people. The unstructured format was preferred as it allowed villagers to discuss their own issues and so generate data regarding the everyday life. When necessary and appropriate, I provided prompts regarding how the environment, their life and the village has changed in the last decade, and what can and should be done in the future. This approach was designed to generate data on local views and experience of conservation and development. Where possible, I also asked individuals to recount their experiences of protected area management to ascertain local stories

of life 'before the park' and 'after the park came'.

The importance of key informants

Key informants were used extensively to provide an overview of the project, its history and some of the issues they identified as important. Predominantly the key informants were project managers, government officials and villagers identified by in-country partners.

Interviews with villagers

Interviews with villagers occurred informally, often after workshops or village meetings. Often they were opportunistic in the sense that nothing had been arranged and a villager would take the opportunity to talk to me. Commonly, informal discussions took place whilst I was being shown around a village after a workshop.

Village workshops

All workshops were organised through the in-country partners and provided the chance to access a range of views as well as to gain an awareness of the diversity of viewpoints found within a village. The workshop played an important role in access to local people's views both within the workshop itself and, more informally, after it was completed.

Illustration 3.1: Village Workshop, Haryana.



The leader of the Hill Resource Management Society is the woman on the left

Observations

Observations played an important part in that they allowed a 'ground testing' of the locality and the information secondary sources such as management plans and project documents provided. It also allowed me the opportunity to inspect what changes had occurred and to ascertain the nature of the terrain and infrastructure in locations.

Management Plans and Research Documents

The secondary sources played an important role in this research. They provide an overview of the projects and management issues, as well as, importantly, an understanding of the priorities of management within these areas. As the management plan is the blueprint of planning for the respective projects, these played another important role in that they provided an insight into the conservation local development issues which management identifies.

Limitations of the methodology

Even though this thesis is not field-based to any large degree, there are still some limitations to its field-based component:

- i. The use of interpreters has been necessary for all case studies (though not all interviews required interpreters). Consequently questions and answers have been mediated through a third party.
- ii. My access to the field has been mediated by in-country partners. With all case studies my work was a collaboration with other organisations (in Nepal the RBNP management and in India the Tata Energy Research Institute [TERI]). Consequently, my fieldwork consisted of priorities identified by myself and others, and it is possible the partners took on gatekeeper roles, however inadvertently.
- iii. Another issue related to the collaborative nature of the research concerns the ways informants interpreted my motivations. As I was in collaboration with RBNP and TERI, I was seen to be aligned with them, and therefore this would have influenced local people's perceptions of what I was doing and why. This has the potential to be both an advantage and a disadvantage.
- iv. The fieldwork itself consisted of fairly short excursions to locations and thus reflected characteristics of the rapid rural appraisal approach. This can lead to impressionistic research, though I have used triangulation wherever possible.

- v. My methodology could not be described as inclusive. It was, for example, very difficult to discuss issues with women, especially poor women. However, these limitations have been partially overcome because of the collaborative nature of the research as in-country research colleagues filled in missing pieces.

The uses of people's voices throughout the thesis

People's voices, experiences and views are throughout the thesis. These have been used to highlight the issues being raised or discussed, and to also put issues on the agenda. They thus form an important component of the analysis and argument contained in the following pages. These voices are incorporated as direct quotations, as paraphrased comments and as part of my interpretations. The socio-economic characteristics of those incorporated are included where necessary. However, they remain anonymous.

CONCLUSION

The research methodology has been eclectic, and the field-based findings have been used to contextualise conceptual and theoretical discussions of the implications of a changing protected area management paradigm. The field is therefore infused throughout the thesis.

The following chapter begins the task of calling for a protected area management model which is concerned with socio-environmental justice.

SECTION TWO

CONSERVATION, DEVELOPMENT AND PROTECTED AREA MANAGEMENT: ORTHODOX VIEWS

The previous section has provided a context to the thesis and its approach. This section deals with the global and local problematique of integrating conservation and development, and examines implications for protected area management emerging from this.

The section provides a critical analysis of key issues which protected area management is involved with - the integration of conservation and development goals, the integration of the local into the global conservation agenda, the social basis of biodiversity conservation and the problematical and contested nature of sustainable development. These issues have specifically been chosen because they represent key components of protected area management discourse and practice. As will be argued, they also represent points of conflict between the global conservation/development agenda and the capacity for protected area management to facilitate socio-environmental justice.

The issue of development, discussed in chapter four, is important because protected area management is now explicitly being charged with integrating

conservation and development ideals. However, conceptually and within my own field experience, the ways in which this could occur appears to be problematical. Conceptually, development is contested because of its global and local reach, as too are our understanding of the implications of this. As will be discussed in the following chapters, this has particular implications for those who question to what extent the current interest in local approaches to conservation and development is facilitating the implementation of socio-environmental justice and to what extent notions of participation and empowerment have been assimilated into existing approaches, being defined as new, but without anything substantially changing. Practically, and generated out of my own field experience, development is important because it frames people's lives, their access to life chances, and their uses of nature. A critical understanding of development is thus crucial to protected area management.

The same is true of biodiversity conservation (chapter five). Whilst orthodoxy tells us that biodiversity conservation is inherently good and is a technico/scientific matter, it is very much contested, especially in tensions inherent within local approaches emanating out of the global conservation agenda. One of the key components of protected area management is biodiversity conservation, so a critical understanding of the politics of biodiversity conservation is crucial for protected area management to integrate socio-environmental justice

Lastly, sustainable development needs to be understood within this context.

Sustainable development forms part of the emergent protected area management orthodoxy through its focus on local level development. But sustainability is a contested term. On the one hand, it is the new catchphrase in the conservation and development business, and on the other it is not at all clear what it should and does mean. Chapter six discusses these issues.

Each of these substantive protected area management issues are treated as social issues with contested meanings. Each issue is explored in a separate chapter, not to reinforce a distinction between issues (for each are entwined) but to emphasise the specific implications for protected area management in its role of integrating local people into the global protected area conservation agenda.

Chapter 4

CONSERVATION AND DEVELOPMENT: PROBLEMS OF INTEGRATION

What we need is development. We need roads and water and we need electricity. You can do this for us (Landowner, near Royal Bardia National Park, Nepal).

All I said was the animals were here first, and villagers should leave them alone (Forest guard, near Corbett Tiger Reserve, India).

We have spent so long protecting the forest – every one of us. And now, the department takes it away from us (Villager, near Kalisi Forest, Haryana).

INTRODUCTION

Protected areas are now explicitly involved in issues of development. The orthodox view that development and environmental sustainability can be brought together through the management of nature represents one of the influential assumptions found within the global conservation and development agendas within which protected area management operates.

A critical question related to this process remains unanswered: to what extent can conservation outcomes be integrated with models of development as they are

currently understood? It is this question which is at the heart of conservation/development initiatives as it places on centre stage a critically informed understanding of the socio-economic and political aspects to development. This chapter considers the implications of this for a protected area management model aiming to integrate conservation and development.

The integration of conservation and development agendas represent a global problematique. Increasingly, the problematique is also a local one, as the concept of 'local' becomes part of the global conservation/development orthodoxy (for example, management lexicon such as 'local conservation initiatives', 'local development options' [see, for example, Pieterse 1998]).

Scholars, activists and others have spoken of a crisis in development, an impasse in development theory and an environmental crisis though all don't agree on the relationships between development and environment and how to overcome these crises. There is, however, a widespread recognition that the process of development as it is currently practised and the assumptions which go with it have to be reconceptualised, both theoretically and in practice (for example, Schuurman [ed] 1993; Munck and O'Hearn [eds] 1999; O'Connor [ed] 1994; Biel 2000).

Development is a conservation issue, therefore, just as conservation is a development issue. However, there has been an historical tendency to view these issues as separate. This separation is indicative of an approach to development and

a socially constructed perception of nature generated out of the ways in which society and culture are constituted and replicated.

Protected area management is increasingly being placed in the position to foster models of development. For example, biosphere reserves explicitly have a development function, integrated conservation - development projects (ICDPs) obviously do, as do, in a more general sense, the current interest in local level approaches to management. Understanding development is therefore important to a critical review of this experience. Further, as will be discussed throughout the rest of the thesis, within the context of the facilitation of a PPAM approach, it is crucial.

This chapter looks at the twin concepts of development and environment. The first section explores what 'development' has come to be associated with not only in popular lexicon but also by various development practitioners, government and non-government organisations and funding agencies such as the World Bank. This Engel (1992) calls the 'dominant social paradigm of world development' (DSPWD) and others such as Munck and O'Hearn (eds 1999) and Biel (2000) critically discuss. This phrase is particularly apt in that it places on centre stage the globalisation processes inherent in the ways in which development is practiced.

This is not in any way to suggest that development is an all consuming monolithic entity which is absorbed and understood in the same way by all people and organisations, but to highlight the global reach of a very influential set of

assumptions about progress, humanity and nature itself.

The concept of the DSPWD is a useful one, because it highlights the social nature of development and the globalised results of this. It implies the ways in which people and groups define development is a product of social, economic, political and cultural processes. That is, it is a product of people and their historical interactions both with themselves and with socio-economic and political institutions. It also highlights the fact that development, in its current global form, has specific social impacts. Therefore the dominant social paradigm of world development affects people, the ways in which they live their lives, the ways in which they hunger or don't, and the ways in which they value and use their natural environment.

The concept is also important because it emphasises the global nature of development. By this, the concept not only means the development model has been exported globally, but that there is a global political, economic and social system arising out of development (Chase-Dunn 1991; Spybey 1992; Sachs [ed] 1993; Sklair 1994; Sachs 1999). There is consequently a global set of power relations deriving from this, and the ways in which movements to local level or community conservation agendas are articulated with these global power relations are crucial to understand. These issues are therefore central to protected area management.

The predominant associations of meanings attached to development in its dominant form can be traced back to specific cultural and economic forces. These have implications for our own present-day struggles between the often competing notions of environment and development. It is important, then, to briefly discuss the concept of development.

THE CONCEPT OF DEVELOPMENT

Development is a concept which has passed into popular lexicon, especially post-second world war. The emergence of a contemporary set of meanings can be associated with those of the modernisation and the underdevelopment schools of the late 1960s and 1970s and their contemporary advocates.

The modernisationists equate development with economic growth and modernisation, thereby equating 'undevelopment' with a lack of modernising tendencies (for example, Smelser 1959; Moore 1974; Rostow 1978). Another, oppositional, set of meanings see development in terms of maldevelopment or underdevelopment, where development and economic growth is what countries of the north do at the expense of the countries of the south, who are doomed to remain in a state of poverty because of the transfer of economic surplus from the periphery to the core (for example, Amin 1974 and 1975; Frank 1979 and 1981; Wallerstein 1979).

These competing approaches provide an understanding of the ways in which development is a contested notion, not the least because it is ideologically charged.

Shanin, for example, draws attention to the teleological assumptions which equate development with 'a unilinear rise from barbarity to modernity or, vice versa as a descent to hell'. Further, the question of development 'is decisive when the material wellbeing of humanity is concerned (and it presents) a fundamental dimension of social inequality and of struggles for social justice' (1988: ix). This is obviously a different position, with different outcomes, to that of the modernisationists or of neo-liberal thinkers.

Development has been predominantly equated with capitalist social, economic and political relations and often with the modernisation/industrialisation paradigm. Currently, much development debate, especially that emanating from some of the global development players (for example the World Bank, the IMF, the Asia Development Bank) uses a broadly neo-liberalist approach which is emphasising the role of the free market and consequently limiting the role of the state (Schuurman [ed] 1993; SD dimensions n.d).

As the assumptions of this model have been exported globally, there have been some very specific consequences, as the underdevelopment theorists have argued. For Escobar (1992) development 'functioned as an all-powerful mechanism for the production and management of the Third World in the post - World War II period' (pg 24). The appropriation of the term development by the north therefore

'provides a particularly privileged space for exploring the interconnection of practices and symbols of reason, the economy, representation, society and modernity' (pg 23).

This global perspective is an important one. Sklair (1994), for example, uses it to discuss how green challenges to global environmental problems have, in themselves, been globalised through the emergence of what he calls transnational environmental elites (green bureaucrats, transnational environmental organisations, green media and green merchants). Chatterjee and Finger (1994) argue that the global conservation agenda is replicating core/periphery relations between nation-states, and class relations within nation-states. Shiva (1993) goes further to argue that the move towards local development and conservation is disempowering local populations, who are not able to get their voices heard on the technologically and scientifically dominated global stage. In other words, the global conservation agenda has replicated at least some of the exploitative structures found within the global development agenda (see also Brechin *et al* 2002).

The important question that this raises is where does the current search for local initiatives fit into this global structure, an issue developed in this thesis and by other writers (the contributors to Sachs [ed 1993] for example).

There is much debate as to whether this process of globalisation is indeed as monolithic or as negative as some theorists would suggest. S.D. Dimensions (n.d)

for example argues that few countries now have to act alone to reach growth with equity aims and the World Bank and IMF have continued to develop structural adjustment packages facilitating reduced government intervention, financial restructuring, fiscal reform, targeted infrastructure investment and the stimulation of the private sector. Thus the global imperative is equated with market economics as a mechanism for overcoming poverty and environmental degradation. Simon (1994) suggests a direct correlation between wealth and a clean environment, arguing that degraded environments are found in the poor and socialist parts of the world. Therefore the way out of environmental problems is found in economic growth.

But this view is not shared by all. Rist for example highlights the current interest in the socio-cultural aspects to development, describing the new orthodoxy in the following way:

in order to take root in the 'Third World', 'development' must be adapted to the various cultures which are supposed to receive it. Without compromising essentials, new approaches must be conceived *within* the culture concerned. Economic growth is considered to be at the centre of 'development' - a kernel which can be given a 'culture-specific' packaging. This 'dimension' is said to be necessary in order to command the blessings promised by 'development' (1991: 10).

Rist is here highlighting the current movement towards adapting development to a specific cultural milieu whilst maintaining its global growth imperative. Cultural values and institutions are important only to the extent that they facilitate this growth imperative. Whilst expressions of development are now supposedly being

more locally receptive (however we define this term 'local') it is only occurring to the extent that 'local' can be integrated into the global development agenda (in the context of a 'tendency towards integration' at the very least).

Hence, we come back to the global growth imperative, one which is at the heart of it will be argued, contemporary environmental and development issues. We also come back to the very real question of socio-economic and political power on a global scale.

As will be discussed within this study, the search for sustainable development and the movement towards 'local' being part of the development agenda means that we are in grave danger of reinforcing the global inequalities which are characteristic of the DSPWD. We may well be globalising the local, incorporating the diversity of local institutions and lived realities found at the so-called 'local' into both the global conservation and development processes (Shiva 1994).

THE DOMINANT SOCIAL PARADIGM OF WORLD DEVELOPMENT

Development is obviously a global phenomenon, and indeed a global business. Ideas and assumptions underpin not only global markets, but foreign policy, media, conservation and aid, so this is important to highlight.

It is also possible to characterise a number of tendencies found within the

dominant social paradigm of world development, and to highlight their implications for the environment, protected area management and the integration of local populations. Note however that these are tendencies, and the process is not monolithic.

The globalisation of the growth imperative

Both the neo-liberalist and the critical development approaches focus on economic growth and globalised markets, though for different reasons. From the neo-liberal perspective, this focus is reflected through structural adjustment in nations of the south in order to provide a political and economic framework for the market to generate economic growth. From the critical development approaches, the concern is expressed through the assumptions which underpin the neo-liberalist approach - markets, economic growth and its social consequences, and the transfer of surplus value from the poor nations to the rich.

This raises some issues for the current interest in sustainable development, and especially the role protected area management is supposed to play in its facilitation. For development to be sustainable, it is problematic if it reflects a market process where nature is commodified in order to obtain economic growth (see for example, Pepper 1993; O'Connor [ed] 1994; Munck and O'Hearn [eds] 1999; Sarkar 1999; Biel 2000). This then raises the question of to what extent local conservation/development initiatives integrate social and environmental justice and to what extent they disempower local populations by integrating them

further into the global conservation/development agenda. Further, and specifically for this thesis, how are these potential contradictions and tensions played out and resolved through protected area management?

A specific example discussed in more detail later in the thesis is ecotourism. The concept of ecotourism represents the articulation of the global with the local (for example, Bandy 1996). Tourism occurring in Nanda Devi Biosphere Reserve is articulated with a global economic system, a global cultural system and a national political system framed by global processes. The Nanda Devi Declaration, framed by local people within the biosphere reserve's villages to try and control the way this articulation occurs, represents a compelling example of the agency/structure relationship. This will be discussed in further detail later in the thesis.

A further example can be found in some of the joint forest management villages in Haryana. Villagers dependent on the use of *babaar* grass for rope making have to now compete with synthetic rope available in villages, towns and cities. According to some informants, this rope, imported from China, is already exerting a downward pressure on the prices rope-makers are able to get locally for their products. This is putting further pressure on the already near subsistence level of the rope-makers themselves and, through that, forest products. As one rope maker put it:

We want a fair price for our rope. But now it is very difficult. We go into the towns ourselves and see the (synthetic rope) and wonder how we can

sell.

This dilemma is also recognised by the JFM facilitator and other members of the Hill Resource Management Society. As one leader put it

We know it will be very difficult for these people in the future. We are already thinking about how they can make other things (such as) wall hangings, and (beds).

The globalisation of western cultural values and practices

This is also focussed on by both neo-liberalists and the critical development perspectives. The neo-liberalists see western values and practices as important (as part of the modernisationist assumptions of its previous incarnation) and the critical approaches see results in terms of neo-imperialism and the impacts of the globalisation of science, technology and rational instrumentality. These assumptions and processes, which underpin some of the current interest in making development 'culturally aware' (though still dependent on the market and hence consumption), are explored by, for example, various contributors in Rahnema and Hawtree (eds, 1997), Rist (1991) Shiva (1993) and Dwivedi (1990).

This issue is a major one for protected area management. The epistemological foundation for management stems from technico-scientific rationality and a belief in the capacity to manage nature for human good. It is grounded firmly therefore in the western tradition. Yet many writers (for example Guha and Martinez-Alier 1997; various contributors to Sachs ed 1993) argue that it is this very tradition

which is leading to environmental degradation because of the ways in which nature is viewed (for example, in instrumental terms, as separate to human beings).

For example, during one of my field trips in Uttaranchal I had a discussion with a protected area manager about local development initiatives. His view was encapsulated in his comment that:

Everyone wants to make money.

This view was partially contradicted by views coming from a workshop in which serious debate occurred about what local level development initiatives should mean. Whilst there was a strong recognition that income needed to be generated to overcome poverty within the village, the emphasis was on ensuring all in the village gained equal benefit from income generation. The local perspective was less about 'everyone wanting to make money' and more about ways of generating income to ensure *all* (not *some*) would benefit.

Hence, there are contradictions and tensions between an approach to protected area management which stems from a western tradition and incorporates principles of scientific rationality and an alternative view seeking to question these principles in the search for the integration of social and environmental justice. An examination of these contradictions forms an important part of this study.

The globalisation of environmental problems and perceived solutions through 'management'

Related to the above point is the globalised resource management and protected area management orthodoxies. In the context of protected area management, I have already discussed how the technico-scientific paradigm has been exported and how this exemplifies the western tradition. I have also introduced the potential tensions inherent within a preservationist and an instrumentalist view on nature. This process is of direct relevance to protected area management and its incorporation of the local, and also forms an important part of this study.

A pertinent example of this can be found through the study of the JFM approach. The Haryana experience of JFM is one of the cases within this thesis. As will be discussed, the Haryana programme has, in some villages, been a 25 year process. However, the successes of some of these villages has contributed to a JFM model (instead of a process) which is now a community forestry orthodoxy throughout India, to the extent that international funding agencies have provided some \$30 million for the development of 300 functioning JFM villages in targeted states within three years. Hence a locally focused, organic process essentially funded locally and based on the facilitation of partnerships between local people and the Forest Department has been altered to become a technical process with targets and timeframes and which is reliant on large amounts of funding from global conservation/development agencies.

A loss of self-reliance at the nationstate and local levels

As nationstates become further integrated into the global economic, environmental and social systems, their capacity for self-reliance is diminished. In the direct context of conservation, this has some important implications, especially given the point made directly above. There may well be some contradictions, at least potentially, between a globalised dependence and a search for a localised self-reliance.

It is specifically this which Shiva (1993) discusses. The operation of the global conservation/development agenda occurs within the global socio-economic and political system. Hence, local involvement in conservation agendas may well further integrate local people into the inequalities found within the global system as conservation agendas ultimately reflect these unequal power relations. This 'globalised local' is a key issue in the protected area management agenda and is looked at in greater detail throughout this study.

One of the relevant issues to this which is discussed in more detail within this thesis is that of ecotourism. As international ecotourism movements increase, and as ecotourism becomes more fully part of conservation and development agendas, those issues surrounding self-reliance and dependency become very pertinent. The issue of ecotourism is discussed in more detail in chapter nine, using the example of Uttaranchal as a case in point.

A loss of participatory capacities by local people in decisions affecting their lives

The centralisation of decision making (either within the nationstate or somehow through the global market) means some local people are increasingly powerless. Note though that all local people do not experience these outcomes the same, as 'local' is not a homogenous group. These dimensions of power cut across class, caste, gender, ethnicity, age as well as geographic location. One of the real dilemmas therefore is how to foster participatory approaches within a globalised system of inequality both within and between nation-states.

The responses of local villagers at Nanda Devi Biosphere Reserve, and local people's experiences of JFM at some locations in Haryana serve to illustrate ways local people attempt to regain participatory capacities. These cases are discussed in further detail throughout the thesis.

HUMANITY, NATURE AND DEVELOPMENT

The global growth imperative has historically been dependent on the transformation of nature to that of a raw material. Therefore, it is dependent on nature. However, this has not always been emphasised in much social thought, both critical and otherwise. For example, Benton (1989) writes:

Marx is prevented from adequately theorising both the necessary dependence of all forms of economic life upon naturally given preconditions *and* the

particularly striking and politically important form that this dependence takes with respect to specifically capitalist accumulation (Benton 1989: 64-65).

There is currently much being written which seeks to reintegrate environment back into theoretical discussion of development, in an attempt to move development thinking beyond the impasse of a few years ago. As a result, we have seen discussions of Marx and ecosocialism (for example, Pepper 1993; Hughes 2000), green development (Adams 1993), ecodevelopment as well as providing an environmental perspective using global perspectives (Sklair 1994 and Chatterjee and Finger 1994).

Littered in these debates are assumptions relating to what constitutes 'good' development and what constitutes 'bad' development, what constitutes 'green' development and if 'red' development can be green (or, for that matter, *vice versa*). All are concerned with development as a series of assumptions which mediate humanity and nature.

Recognising this mediation role is important for a number of reasons. Firstly, it puts onto centre stage the social, economic and political context within which development operates, and within which searches for reconstituted definitions of development take place. That is, we can focus on an understanding of the logic of accumulation (and industrialisation) in its many guises (centrally planned, free market and so on). Taken a step further, development is understood as a socio-economic model of relations with the natural world.

Secondly, it reinforces an important belief that there is nothing inherently destructive about the human race. Therefore it is possible to implement less exploitative social, cultural, political and economic arrangements.

Thirdly, and moving away from the more structuralist positions mentioned, discussions also point to the necessity of placing the human agent into our understanding. Human beings do impact on nature, but their activities are mediated by the structural context within which they operate. This structural context is not all consuming, nor is it unchangeable. It is a product of the historical forces of which the globalised growth imperative is part, but so to are other institutions (which may reflect a variety of social, cultural, political and economic situations) and the human agent's interactions with them.

Competing groups (for example, classes, indigenous groups, women, social movements, those involved in the development process) jockey for position in attempts to, at one end, entrench the existing state of affairs and, at the other end, implement alternative development agendas. In a sense, these competing groups are attempting to control what Alain Touraine (1977; 1981) has called 'historicity' or conflict around a form of social organisation. This conflict ultimately determines 'history' (used in this sense to mean the development of cultural, social, economic and political characteristics).

The playing out of attempts to control historicity via the development process and the protected area management process thus becomes central to analysis. Historically, models of development have been key components in the process of social, economic and political formation. Further, whilst the process of capitalist industrialisation has been very significant in the development of social, economic and political formations globally, one must be careful not to reduce the complexity of this process to a simplistic, monolithic one. Whilst the term 'development' is ideologically charged, it is so precisely because its uses and abuses are socially constructed. Intrinsic to this process is social, economic and political power.

Alternative development agendas can and do get explored by social actors such as policy makers, activists, protected area management professionals and so on. This exploration can ultimately represent a paradigm shift (a renegotiated set of power relations), where ideas about what constitutes development gets reconceptualised, along with the ways of 'doing development'. These changes can alter the organisation of social institutions, the face of social structures, and environmental perception of, and use by, individuals.

An important outcome of this analytical approach is the integration of understandings related to both agency and structure. The structural analysis provides fertile ground for a critique of the outcomes of globalisation and the ways in which local people are articulated with these processes. From an agency perspective, we can understand that a variety of social agents attempt to facilitate

alternative development agendas (historicity) which are socio-environmentally just. The agency approach also places on centre stage an understanding of the role of the outside change agent in the search for alternative development agendas. For example, one of the facilitators involved in the Joint Forest Management programme in Haryana explained the importance of his role:

It is the people who have the skills and the knowledge, even though they are not educated in the normal sense of the word. They have the ability to change their circumstances, and they do regularly. This is why JFM has been so successful here.

The importance of human agency in the protection of nature is thus central, as are a set of assumptions based in the creativity of human beings. These issues are explored throughout this thesis, especially in the context of protected area management becoming an outside change agent through a PPAM approach.

This is specifically relevant to protected area management in two key ways. First, protected area management operates within a development agenda (particularly now with the incorporation of the local development focus). As will be argued, the incorporation of the local into management is a political act which may or may not renegotiate development as it has historically been understood. A protected area management approach implementing development models reflecting those of the Dominant Social Paradigm of World Development is merely reinforcing the very causes of environmental and social degradation it should overcome.

Secondly, though, to some degree, protected area management reflects the assumptions and outcomes of the development agenda as it has historically been applied. That is, protected area management reflects a managerialist, technoscientific preservationist and/or resource management approach discussed earlier, as well as in, for example, Western and Pearl (eds 1992), Adams (1993a) and Child (1994).

Environmentalism and Developmentalism

In the context of changing the existing relationship between humanity and nature, it is possible to differentiate between green or environmentalist perspectives and those drawn from perspectives on, and approaches to, development. Discussing this schism, Adams has suggested that

... the fields of developmental and environmental studies are far from unified, often being remote from each other both conceptually and practically ... the two fields have their own separate cadres and culture, their own self-contained arenas of education and theory formation, their own technical language, research agendas and - above all - their own literature. Although the two cultures overlap a great deal ... there is rarely if ever any integration.

It is indeed only rarely and recently that environment and development have been linked theoretically with any kind of success. This has now been done by arguing the need to set environmental resources and resource use in a social and political, as well as economic, context. Radical political economy in particular offers a powerful way of doing this. (Adams 1993a: 8).

Adams (1993a) goes to the very essence of the conservation and development dilemma by focussing on the differences inherent within the conservationist and the developmentalist approaches to understanding human/nature relations.

Not all green commentators agree with Adams' conclusions regarding political economy (though they serve to highlight what Adams is talking about in his discussion of the schism between developmentalists and environmentalists). For example, Porrit and Winner are quoted in Pepper (1993:1) as describing a Marxist or political economy explanatory position as 'just so much angry spluttering from worn-out ideologues who have lost touch with the real world'.

Pepper's discussion of political theories forming the environmentalist approach takes in a rather diverse range of assumptions and models. For Pepper, environmentalist approaches encompass both a range of biological determinist positions which define humans as biological beings rather than social ones (neo-Malthusians, deep ecologists, ecologists and so on) through to various shades of green thought which sees technocentrism and managerialism as answers to environmental problems (resource managers, protected area managers, environmental economists for example).

On the other hand, the more radical orientations of ecofeminists, ecosocialists and the like tend to share political economy frameworks with the more critical writers on development. However, not all development writing shares this radical orientation.

Friberg and Hettne (1985: 31) have described mainstream or orthodox

developmentalist thinking and practice as 'a common corporate culture based on the values of individualism, rationality, growth, efficiency, specialisation, centralisation and big scale'. These recurring themes can be found in what is referred to above as the dominant social paradigm of world development.

Whilst these characteristics have come to be equated with what is commonly called 'development', Friberg and Hettne (1985) and the other contributors to Addo *et al* (1985) remind us that development is supposed to be social transformation. It must be antisystemic, to ensure that developmentalist thinking and practice is not seen as the inevitable (or natural) outcome of the operations of the world system (see also Chase-Dunn [1991]; Spybey [1992] Wallerstein [1979, 1983, 1984]). Therefore, it is antisystemic in the sense that it must incorporate a search for both a socially just world order and an equitable relationship between humanity and nature.

In the specific context of the greening of development thinking, the likes of Adams (1993b), Pepper (1993), O'Connor (ed 1994), O'Connor (1998) and Benton (1998) have highlighted three themes which represent radical approaches to thinking on development: those advocating a green alternative; those who extend radical socialist thinking; and ecofeminism.

Advocating the green alternative

The search for the green alternative discussed above has found its way into

development thinking, which is not surprising because development practice has ideological dimensions to it. It is also worthwhile noting that Friberg and Hettne (1985) suggest the green alternative incorporates what they call 'traditionalist (those resisting the penetration of capitalism and industrialisation), 'marginalised people' (those marginalised by the operations of the capitalist world economy) and 'post-materialists' (those committed to post materialist values). It is worthwhile to note that the green alternative in development thinking represents a mixture of reactionary, radical and romantic values.

The extension of radical socialism

Rather than ignoring the politics of the left and the right, as many greens suggest, it could be argued that the intellectual heritage of much green thought is in fact found in Marx's conception of communism. Much of the emphasis on 'local', 'small communities', 'local democracy' and the like have their precedents in village communism and utopian socialism. As such, green politics have an intellectual heritage which is very much based *within* the politics of the left and the right, of class, and of socialism (Pepper 1993).

There are a number of important themes running through green extensions of radical socialism beyond the intellectual tradition of village communism and utopian socialism. Adams (1993b) highlights three specific areas in relation to the critique of developmentalist thinking. Firstly, and at a more general level, there is the movement to incorporate nature and the environment within radical

development theory. Whilst this is now starting to happen, it is important that both the theorising of radical development theory and its application incorporates this dimension (for example, see Blaikie and Brookfield 1987; Adams 1993a; Ohlsson 1995).

Secondly, and following the first point, there is a need to refine specific approaches and concepts through theory and practice. Redclift's work on sustainable development (1984 and 1989; Redclift and Benton 1994) and Pepper's ecosocialism (1994) represent examples of this, as are a number of other works which will be discussed in the following chapters. Thirdly, the traditions of utopian socialism and anarchism are being revisited through, for example, those advocating the work of Murray Bookchin (1982; 1999).

Ecofeminism

Ecofeminism suggests nature and women are subjugated by patriarchal capitalism and industrialism. As science is reductionist and masculine, any attempt to use it to 'manage' human/nature relations will perpetuate the very process it attempts to change. Therefore, antisystemic approaches to development must by necessity involve the overthrow of both science and patriarchy (see, for example, Shiva 1989; Mies and Shiva 1993; Mies 1986; Harcourt [ed] 1994; Braidotti *et al* 1994).

The ecofeminist perspective has been important both theoretically and practically. It serves to theorise the dynamics of patriarchy in general, and patriarchal

capitalism in particular, and therefore provides a more complete understanding than that which is possible from only concentrating on the economic basis of exploitation.

In practice too ecofeminism has been important. It serves to place women explicitly within the development and environment equation, not only in terms of environmental use, but in implications for project development and evaluation (for example, protected area management). Whilst sometimes women have merely been 'added on' to project developments (see, for a startling example, Himalayan Power Consultants 1989 and 1992) this is not always the case (see, for example, Rodda 1991; Karl 1994; Rose 1992).

Green shades of economics

Economics has been particularly active in the development/environment debates. Contributions range across a variety of perspectives based in the neo-classical traditions to those advocating a more radical orientation such as ecological economics.

Jacobs (1991) highlights the orthodox green economics approach as being characterised by the self-interested and rational profit maximising individual; taxes and subsidies for products with particular environmental impacts; by costing the environment consumer behaviour will be changed; optimal social use of resources is achieved when the benefits of those participating in the market exceed the costs

by the maximum possible amount (see also Pearce, Markandya and Barbier 1989; Goodland and Ledec 1987; Den Butter and Verbruggen 1994; Dodds 1994; Bhagwati 1993).

For example, Brown *et al* (1993) conclude that land based biodiversity loss is caused by under-investment and niche competition. Under-investment is the result of, for example, failure of the market to account for the results of land conversion. Niche competition relates to the expansion of human numbers placing pressure on available unconverted land. Statistical analysis tends to support the significant role of population density as a factor explaining conversion.

However, Jacobs (1991) argues the neoclassical tradition, as epitomised through the approaches above, is flawed in a number of areas. Firstly, the ethical objectivity of the neoclassical school is misleading. Environmental decisions affect people who can make their decisions felt in the market but also others who cannot, including non-human living things. Even those participating in the market do not do so under conditions of equality.

Further, whilst some behaviour may be characterised as self interested and rational in an economic sense, not all is, particularly in relation to the environment. Also, the fundamental assumptions about human beings are questioned - the self interested, rational individual may not be 'biologically' so. Finally, we need to understand the social dimension to how the market creates (as opposed to reflects)

people's tastes, choices and uses of the environment (Jacobs 1991).

Further problems arise out of too great a dependence on the market for overcoming environmental problems. This is especially true when considering externalities such as common resources, public goods and future generations. Under the market system, according to Jacobs

resources are allocated where demand for them is greatest. Economic agents with greater income and wealth will always be able to outbid those with less. This means that many more of the world's resources, regardless of their geographical origin, go to richer nations and groups than to poorer ones. The 26% of the world's population who live in the industrialised countries consume, for example, 80% of the world's commercial energy, 79% of its steel, 86% of its other metals and 85% of its paper. And they generate 92% of all industrial carbon dioxide emissions (1991: 34).

Whilst these issues are looked at in greater detail in the following chapters, it is important to note the potential failure of market economics in explaining the causes of (and therefore offering solutions to) the environmental crisis. The implications of this for protected area management, which operates within a dominant framework of assumptions and values related to a variety of orthodoxies, is also explored in more detail throughout the study.

PROBLEMS STILL

Green thought and radical development approaches have insights to contribute to the quest for altered nature/society relationships. From the environmentalist camp,

for example, we have a recognition that humans are not separate to nature, that there are biophysical limits on how we use nature and how we live on the earth. Whilst it is obviously important that nature is at the forefront of these perspectives, there are a number of problems found within the environmentalist approach, ones which a radical development approach can help overcome. These are: a rejection (at least partially) of the politics of the left and the right; the emphasis on the individual and her/his action; the rejection of industrialism; the romantic view of nature; and an absence of a political economy approach.

The rejection (at least partially) of the politics of the left and the right

The rejection of left and right politics runs the very real risk of ignoring power relations. The results of development, especially the dominant social paradigm of world development, has resulted in inequalities of power in its political, economic and social forms. The politics of the left and the right provide a means by which power can be understood, and the causes of conservation and development problems conceptualised. If you like, it provides a way in which the 'unhappy present' can be understood, and through this, changes made. An outright rejection of these politics may result in an apolitical understanding where causes of environmental degradation are simplistically reduced to individual behaviours rather than structures of poverty, inequality and unequal access to resources. This theme is followed up throughout this thesis.

The emphasis on the individual and her/his action

As I mentioned above, if the politics of the left and the right are ignored, the structural constraints on action (as well as the potential to facilitate change), the institutional organisation of economic production and its ideological manifestations, and the mechanisms of globalisation may well be ignored, or at least their importance downplayed. The emphasis on the individual and his/her actions may well be at the expense of an understanding of how structural and institutional constraints impact on potential for action (see also Bookchin 1999).

The rejection of industrialism

The rejection of industrialism is often accompanied by a harking back to some Arcadian time when humans lived happily in small, dispersed communities epitomising Tonnies' *gemeinschaft* ideal. The project of modernity is a double-edged sword.

Technology, science and industrialisation should not be rejected *per se*. Rather, we need to be more circumspect with how they occur and are used. We also need to consider the implications of the ways in which industrialisation, science and technology has been used to enslave both nature and humanity. But this doesn't mean we should reject them outright and look to a romanticised, new age influenced view of social life.

The romantic view of nature

Nature is often romanticised. The idea that the earth mother will provide, that Gaia will reach balance and the like serves to obscure the reality of social, economic and political processes leading to perceptions and uses of nature. It can also serve to recreate the noble savage in a different, green guise. Indigenous cultures are recreated and romanticised on the basis of their supposed closeness to nature. Whilst this may be an interesting conception for the tourist whose experience of this is via a packaged visit which is labelled 'ecotourism', it does little to deflect the very real inequalities and power relations which are causing environmental and development problems on a global scale.

The absence of a political economy approach

The apolitical stance taken means that a political economy approach is ignored. From the radical developmentalist camp comes a well-developed recognition of power, inequality on a local and global scale, and the social, economic, political and historical bases of the ways in which human beings perceive and use nature. This is an understanding of the DSPWD.

This perspective enables the human agent to be placed into the equation, because individual actions are recognised to be a component of, and limited by or facilitated by, broader social complexes which themselves relate to the ways in which society is organised. Crucially, development is seen to be a matter of civil society, not just economic growth.

Therefore, it is possible to discern quests for social justice, and understand the ways in which inequalities impact on natural resource use and abuse, as well as the ways in which social, economic and political power is distributed. Finally, using a more critical structuralist perspective, we are able to discern the need for alternatives, and locate our search within a broader historical and epistemological framework within which people attempt to change society.

TENSIONS AND CONTRADICTIONS

We can see, therefore, tensions within critical assumptions about development and its environmental costs, ways in which these costs should and could be mitigated, and contested notions over what constitutes (or should constitute) development itself. We find these contested ideas are derived out of the differing, often opposing but sometimes complementary, worldviews in relation to both environmentalist approaches to development and developmentalist approaches to humanity's relationship with its natural environment.

However, as Benton suggests:

The question is not solely one of identifying the ecological crisis-tendencies of specific modes of social and economic life. It is the further, and almost unimaginably complex one of interpreting the combined ... interactions of ... diverse mechanisms at the level of the ecosphere itself. More, even, than this, 'the point is to change it' (1989: 86).

The search for change is a crucial use of our understanding.

Implications of a 'globalised local'

Shiva rightly suggests that

The reversal of ecological decline involves strengthening local rights. *Every local community equipped with rights and obligations, constitutes a new global order for environmental care* (1993: 155[emphasis in original]).

There are, however, significant implications for an approach to the problematic of conservation and development which merely integrates local populations more fully into the existing global conservation and development agendas. Whilst these are dealt with in more detail throughout the thesis, it is important to provide some context to these discussions.

Shiva (1993) and others (for example, Sklair 1994; various contributors to O'Connor [ed] 1994 and Sklair [ed] 1994) have explained how processes of globalisation have generated inequalities within and between nationstates and how the global conservation agenda replicates these. Of particular importance within this process is how the north is able to influence the global conservation agenda and how, by doing so, the 'locals', especially in the south, become more receptive to the intrusion of the global reach.

The problems resulting from this process can be great, not only in the sense of adequately conceptualising the genesis of the conservation/development

problematique, but, importantly, how to overcome it. The rest of this thesis concerns itself with the further exploration of the tensions and contradictions found within local approaches to conservation and development through protected area management.

ENABLING CONTEXTS FOR ALTERNATIVE APPROACHES

The above discussions give us insights into the complexity surrounding, and tensions within, various approaches to the integration of conservation and development (however defined). It also provides us with insights into what new models need to incorporate, and how they can be conceptualised.

The critiques of the environmentalist paradigm which have come from the radical development approaches are crucial in this. But so too are other approaches which can be adapted using the insights derived from radical development theory. Useful additional contributions come from a variety of sources, including human ecology (for example, Steiner and Nauser [eds] 1993), social ecology (for example, Bookchin 1982) and political ecology (for example, Atkinson 1991).

It is possible to identify six key components of an approach to conservation and development based on socio-environmental justice. I have called these components 'enabling contexts' and understanding their existence is crucial to searches for alternative environmental and development outcomes to the DSPWD

and, more specifically, to the focus of this thesis. These enabling contexts can also be used as a heuristic device to provide a framework for analysis of conservation/development issues and cases.

The key components of the enabling context model are: an enabling sustainable development model; enabling conservation and development policy; an enabling natural resource management approach; an active civil society; an enabling biodiversity context; and an enabling community.

An enabling sustainable development model

As previously discussed, the idea of the DSPWD actually facilitating socio-environmental justice can be problematic. This can lead to the concept of sustainable development being oxymoronic in that the concept of sustainability is not possible within a development paradigm which is driven by global market priorities. Thus, a concept of development needs to incorporate at least a critical analysis and understanding of the ways in which the DSPWD operates and the socio-environmental justice dimensions to this. Further, to analyse the facilitation of socio-environmental justice 'on the ground' requires an understanding of the ways in which macro and micro conservation and development assumptions, processes and practicalities play out within localities.

An enabling conservation/development policy

The nation-state has an important role to play in the facilitation of socio-

environmental justice. Consequently, understanding the policy process as well as its outcomes is crucial in assessing the extent of movements to integrating social and environmental justice.

However, it is not only the nation-state which is important. Both global and local conservation and development agendas are framed by, and also frame, policies and so the incorporation of these multi-levels is important.

An enabling natural resource management approach

Natural resource management can represent an orthodox approach to conservation and the management of nature. The facilitation of socio-environmental justice requires a model of natural resource management incorporating an awareness of the complex relationship between conservation and development agendas, as well as the assumptions within various natural resource management orthodoxies and the affects these have on conservation and development outcomes. It is therefore necessary to understand how natural resource and protected area management is understood in localities/cases, as well as the ways in which a more critically-informed model of protected area management can be instigated.

An active civil society

The empowerment of people and the facilitation of their capacities to overcome inequalities is an important component in the facilitation of socio-environmental justice. The capacities of individuals to influence their 'historicity' consequently

is an important dimension to searches for social and environmental justice.

An enabling community

Individuals are able to influence their historicity within an enabling community.

The community, as location of people's lives and the scene of their participation, is thus an important dimension to the integration of social and environmental justice.

An enabling biodiversity context

The protection of biodiversity provides the environmental context within which humans live their lives and experience processes of development and conservation.

Biodiversity thus enables and constrains socio-political action, and acts as a non-human location for attempts at integrating socio-economic justice.

The importance of enabling contexts

The use of an enabling context model provides a holistic approach to understanding processes and outcomes of integrating conservation and development. The six key components of the enabling context model show the extent of integration and the likely outcomes of various approaches to socio-environmental justice. They also provide a means by which the implications are drawn out, both for the empowerment of local people and also for positive environmental outcomes.

IMPLICATIONS FOR PROTECTED AREA MANAGEMENT

Protected area management is occurring within a context framed by orthodoxies relating to both conservation and development. The use of nature as a commodity and as a raw material within the DSPWD means that approaches to conservation reflecting the DSPWD are doomed to replicate the very processes causing environmental degradation. Particularly important in this is the preservationist/scientific management framework which protected area management applies, and the use of the notion of development as a simile for economic growth and market solutions to environmental problems.

For protected areas to achieve their role in nature conservation, they must reassess these assumptions. They must move away from merely reinforcing the status quo, because if they do, they are likely to merely reinforce the very processes of environmental destruction they are attempting to overcome. The fact that protected areas are now seen as legitimate sites for development activities only serves to add urgency to the task.

CONCLUSION

This chapter has provided an overview of the dominant social paradigm of world development and how the intellectual traditions of environmentalism and more radical approaches have conceptualised the causes of the environmental crisis.

One of the things which emerge through this discussion is the need to recognise that ecological issues are social issues. That is, something like biodiversity conservation is a socially and culturally constructed notion. The implications of this are further developed in the following chapter.

Chapter 5

BIODIVERSITY CONSERVATION AS A SOCIAL ISSUE

We have been protecting the forests for generations. We don't need experts to tell us what to do (Villager, near Nanda Devi Biosphere Reserve, Uttaranchal).

The forest guards tell us what to do – they tell us how we can use the forests and what we can do in them. But if they don't let us use the forests the way we have been, we will burn them. Then there will be no forests. There is nothing else we can do (Villager, near Kalisi Forest, Haryana).

INTRODUCTION

In the previous chapters I have suggested that development is a social, economic and political process which has been globalised and which contains assumptions about nature, about environmental protection and about economic growth. This was discussed in the context of the dominant social paradigm of world development and the contradictions and tensions between environmentalist approaches and developmentalist approaches to overcoming the problematique of conservation and development.

Further, with the move of protected area management to more explicitly take on a role of integrating conservation and development, the contested domains of the

global and the local are now very much part of its sphere of influence. Thus, protected area management is explicitly concerned with issues of social, economic and political power emerging out of the contested domains of global and local life.

Given that protected area management is seen to have a major role in biodiversity conservation, an understanding of biodiversity's contested domains is an important dimension to understanding the ways in which protected area management may or may not be achieving its goal.

This is crucial for two reasons. Firstly, how do biodiversity conservation orthodoxies reflect the dominant processes of the DSPWD? Important here is analysing the implications of biodiversity conservation being seen as a technical and scientific endeavour. Is this all it is? Or does the conservation of biodiversity have within it the imposition of a westernised view of nature and humanity's relation to it? And further, what role do the assumptions within the DSPWD that nature is a commodity have in biodiversity conservation? In other words, why is it important to be conserved?

Biodiversity conservation is central to protected area management. As will be seen, key reports which frame much activity within the global conservation agenda, such as those of the WCED, WRI, UNDP and UNEP all call on protected areas to have a major role in biodiversity conservation.

Therefore, the search for a new protected area management praxis facilitating an

altered development and environment ethic must critically examine what biodiversity conservation is and what it should be. Such praxis should also include an understanding of the socio-economic and political processes involved in biodiversity conservation, and the ways in which biodiversity conservation can be integrated with socio-environmental justice (see also Brechin *et al* 2002). As will be argued within this chapter, it is not as straightforward as a protected area merely protecting biodiversity.

McNeely *et al* (1990) suggest the earth's biodiversity provides a foundation for the people of the world to develop in a sustainable way. In turn, we as humans need to reciprocate by establishing sustainable ways of living, in order to maintain that foundation. The basis of McNeely *et al's* approach is very much in the preservationist and environmentalist paradigm. In fact, they suggest that:

in order to compete for the attention of government and commercial decision-makers in today's world, policies regarding biological diversity first need to demonstrate in economic terms the contribution biological resources make to the country's social and economic development (McNeely *et al* 1990: 11).

The suggestion here is that, for biodiversity conservation to be seen as a legitimate concern, it must first be given an economic value. In other words, if the market system places so much emphasis on economic valuation, then it makes sense to rationalise the protection of biodiversity in these terms. But, as was suggested in earlier chapters, this approach has the very real possibility of further institutionalising the causes of biodiversity loss, partly because of the emphasis on

the market mechanism as a redistributive process (see, for example, various contributors in Becker and Jahn [eds] 1999; Gowdy 1999; Jacobs 1991; Guha and Martinez-Alier 1997; O'Connor ed 1994; O'Connor 1998; Benton [ed] 1996). As the previous chapters discussed, markets fixated with economic growth contribute to environmental decline because nature is commodified.

There are, therefore, two important questions arising here. What type of social and economic concept is biodiversity? And who stands to benefit from its conservation?

Does everyone benefit from biodiversity conservation? In one sense yes they do. Biodiversity conservation is important to all life on earth. But, as will be discussed in this chapter, some benefit more than others (and some bear the costs of its conservation more than others). This then raises the important question of whether the approaches to biodiversity conservation already taken through, for example, the global conservation and development agenda, are the best or most appropriate.

It is not surprising, then, that biodiversity and its conservation are such contested concepts. Ultimately, they reflect important dimensions of social, economic and political power which need to be understood. Biodiversity conservation therefore cannot, and should not, be seen as a technical problem requiring technical solutions. Both biodiversity loss and biodiversity conservation are the outcomes

of multifaceted and complex social, economic and political processes. The conservation of biodiversity is a crucial component to the facilitation of socio-environmental justice, but only to the extent that it provides a mechanism for empowering local populations and is not commodified.

The quotes at the beginning of this chapter provide some insights into how biodiversity conservation is a contested conservation mechanism. Both these comments are in response to an approach to the management of biodiversity conservation, in this instance through forest protection. The first, commenting on management at Nanda Devi Biosphere Reserve, highlights the tradition of biodiversity conservation found in the villages of the area. The idea that outside experts would come and tell local people what to do was treated with a degree of humour in that villagers themselves knew how to 'manage' the managers – that is, how to play the management game and continue to protect the biodiversity of the area despite the management rather than because of it. In this case, the relationship between management and local people was seen in paternalistic ways by the senior managers. Yet, on the other hand, villagers saw their role in maintaining the protection of biodiversity by ensuring the managers didn't do anything to harm the villages conservation mechanisms.

The second comment is a plea for help from a leader of a village which has had access to the Kalisi Forest restricted. This comment is not about managing the managers but a plea for management to recognise the role the villagers have

played in the conservation of the forest.

This chapter introduces the importance of biodiversity conservation and the roles protected areas have in this task. It begins by looking at what could be called the orthodox view of biodiversity conservation (that is, the view which is reflected in the global environmentalist perspective). The chapter then goes on to introduce a more critical perspective to biodiversity conservation and draws out implications for protected area management in general, and the development of a PPAM approach in particular.

CONSERVING BIODIVERSITY

The orthodox approach to biodiversity is basically framed by a number of key questions: Why is biodiversity important? What are the major threats to its maintenance? What strategies are best put in place to conserve it? (Furze *et al* 1996).

Why is biodiversity important?

Orthodoxy tells us that biodiversity represents the basis for human and non-human life on the planet. From within an instrumentalist, human centred framework, biodiversity is valuable in three main ways: providing ecosystem services; biological resources; and social benefits.

As will be seen from the following discussion, the human centred perspective which is generated out of the global conservation agenda contains a number of social, economic and political issues which are at the heart of both protected area management and development. They are also at the heart of the ways in which local people are being absorbed into this agenda in a way which is doing little to renegotiate the conservation/development problematique.

Ecosystem services

Ecosystem services are broad natural systems and functions. They provide and regulate water resources, the soil, nutrient storage and cycling, pollution breakdown and absorption, and other functions such as climate stability and recovery from unpredictable events. Ecosystems and the habitats that form them are also extremely important in providing the setting for the existence of species that humans use (Furze *et al* 1996).

Note here that the social dimension is incorporated in two specific ways. The first relates to how humans degrade ecosystem services, through, for example, the degradation of catchment areas, or polluting soils. Concerns are thus expressed about preserving ecosystem services. We preserve catchment areas, preserve rainforest and the like with ecosystem service conservation and preservation in mind.

The other social dimension is more instrumentalist and less preservationist -

ecosystems provide the basis for humans using nature. Just how humans use nature, and whether the ways in which we do reflects the maintenance of ecosystem services, however, is the crux of the matter. If ecosystem services are to be preserved, then obviously we need to be able to alter our (that is, human) perceptions and uses of nature to ensure that our activities are more in keeping with ecosystem service maintenance. So this is then a matter of development. Further, when 'we' and 'our' are used, who is being referred to? This question is at the heart of integrating conservation and development. It is also at the heart of protected area management, because of its concern for ecosystem services.

Biological resources

Individual species provide the raw materials for many human uses (Furze *et al* 1996). Whilst obviously the recognition of social, economic and political dimensions occurs within this as it does in ecosystem services (the preservationist and the instrumentalist arguments) its use in this context highlights a major issue. Biodiversity conservation is about social, economic and political power found within the globalisation processes of the dominant social paradigm of world development.

As will be discussed later in the chapter, it is so for at least three reasons. Firstly, the north has degraded its biodiversity, therefore biodiversity conservation is about what the south does. Secondly, many of the benefits of biodiversity conservation are likely to be accrued by the north, whether this be for things such as ecotourism,

or more specifically for medicinal plants via the operation of the global economic system. This means the conservation of species diversity for instrumentalist reasons favours the countries of the north, given the operation of the dominant social paradigm of world development. Thirdly, the transfer of knowledge is implied, as is the appropriation of traditional knowledge by the countries of the north.

Whilst obviously biodiversity conservation has benefits to humanity in a more general sense, we must be aware these are tendencies which are generated out of the operation of the global political economy. Biodiversity conservation *per se*, therefore, has potentially negative effects on some groups.

Social benefits

The social dimensions of biodiversity are also very important, ranging from cultural attachments to place to wildlife photography and spiritual and aesthetic importance (Furze *et al* 1996). But this is not as self explanatory as may first appear.

Firstly, strong cultural attachments occur, but we need to remember that there are competing values related to these (for example, the appropriation of biodiversity conservation by the countries of the north, which is discussed in more detail later).

The maintenance of cultural values is a complex process which involves not only appropriating biodiversity conservation, but also processes of modernisation and

westernisation, lack of recognition of indigenous knowledge and values and the like.

Secondly, the ethical dimension is important. But this ethic competes with instrumentalist views on nature, and, in a sense, the managerialist, natural resource management based approaches. The ethical position therefore must compete for attention, and legitimacy on a world stage which has actors with competing views.

Thirdly, existence values are problematical. Whilst some people, some of the time support the maintenance of some biodiversity many questions are unanswered. What people? When is support for biodiversity generated? And what biodiversity? It is easy to support the notion of existence values, but it is perhaps more difficult to see them put into practice in a sustained way, away from the so-called 'charismatic megafauna' which reflect western senses of the aesthetic.

Threats to biodiversity

The *Global Biodiversity Strategy* (WRI 1992) has identified six fundamental causes of biodiversity loss. These are: the unsustainably high rate of human population growth and natural resource consumption; the steadily narrowing spectrum of traded products from agriculture, forestry and fisheries; economic systems that fail to value the environment and its resources; inequity in the ownership, management and flow of benefits from both the use and conservation of biological resources; deficiencies in knowledge and its application and; legal

and institutional systems that promote unsustainable exploitation.

These have been elaborated elsewhere (Furze *et al* 1996) and so will not be expanded here. What is important to note, however, is that these points represent both an acknowledgment of the socio-economic complexities of biodiversity on the one hand, yet on the other an emphasis of the importance of technico-scientific approaches to management (emanating out of the north) in overcoming them. The implications of this contradiction will be discussed later in this chapter.

WRI *et al* (1992) have highlighted seven priority areas of action to conserve biodiversity: the establishment of national policy frameworks; the creation of an international policy environment supporting national approaches; the creation of incentives for local biodiversity conservation initiatives; the management of biodiversity through the human environment; the national and international strengthening of protected areas; the conservation of species, populations and genetic diversity; the expansion of human capacities to conserve biodiversity.

That these points represent contested approaches to social, economic, political and environmental tensions is obvious and is important to recognise. Further, though, it is equally important to recognise the ways in which these global approaches (both in their scope and in the genesis of their management frameworks) may or may not provide a way in which conservation can truly occur as a result of local development. As will be argued, there may well be a strong tendency to simply

integrate various 'locals' into the power relations of the global conservation agenda.

Of course, the above discussion, and indeed, the whole integrated approach, assumes three important things: that the conservation of biodiversity is important; that protected areas can and should have a biodiversity conservation role; and that an integrated approach is a good way of enhancing this protective function.

Whilst these points may be thought of as self-explanatory, they perhaps are not as unproblematic as they seem. This is because there are tensions inherent within the approaches which attempt to preserve on the one hand and use nature on the other.

On the one hand, biodiversity conservation is seen to be necessary because it protects and preserves (ecosystem services and species for example). On the other hand, it is seen to be important in that it preserves for human use (the so-called natural resources). I have suggested in the above discussion that these two assumptions highlight tensions within biodiversity conservation.

How these tensions are resolved are matters of social, economic and political power. This in turn is indicative of the operation and influence of both the DSPWD and the global conservation agenda.

Importantly, protected area management is now being asked to resolve these

tensions and conflicts. As will be discussed later in this chapter, protected area management represents an approach to global conservation, global preservation of biodiversity, and global development (at a micro or local level). It is implicitly and explicitly involved, then, in matters relating to these issues.

Nelson and Serafin have suggested that:

Conserving biodiversity over the long run requires understanding past and present human land use and effects in a holistic way. Biodiversity in an area is a product of the history of interaction between human use and the environment. This legacy or heritage encompasses not only changes in climate, hydrology, geology and other biophysical factors but also changes in human activities, cultural perceptions, attitudes and values, technology, and institutions. Indeed, what are often called natural patterns are frequently strongly influenced, if they are not the result of patterns of land and resource use associated with particular ways of life over a long time (1992: 213).

Biodiversity, then, is a product of human history, of cultural practice and of human interaction with the rest of the natural world (see also McNeely 1996). Therefore, conserving biodiversity is unlikely to be successful if the focus is on ecological indicator species only.

Biodiversity conservation is not only a social construct, but also a socio-economic and political issue. These human impacts are mediated by cultural values, social norms, institutions and interactions which represent the confluence of social change over time (see, for example, Stein and Nauser [eds] 1993; Brechin *et al* 2002; Wilhusen 2002). To ignore this is to risk naively viewing biodiversity conservation as a technical problem requiring technical solutions.

Yet, in the name of biodiversity conservation, protected area management approaches are often associated with restricting human activity. This being the case, the potential is great for a conflict over dominant assumptions related to biodiversity which are founded in the protected area management orthodoxy (we must protect it) and the human activity that may or may not conserve or degrade it. Taking this further, there is the potential for the use and abuse of power founded in one particular set of knowledge (technico-scientific knowledge and a managerialist ethic supported by globalised conservation organisations) to be used over less powerful local people whose activities are restricted in the name of 'biodiversity conservation'. Conservation for who is particularly important here.

Further, understanding biodiversity conservation in this way highlights the potential for conflict over both ways in which it can be conserved and, indeed, if it should be conserved. It also highlights just how much the agenda of biodiversity conservation is being set outside the sphere of the local level, and the ways in which local is being integrated into the power relations of the global conservation agenda. Part of this is reflected in protected area management's role as an internationally institutionalised biodiversity conservation mechanism. In short, biodiversity conservation is contested.

THE CONTESTED NOTION OF 'BIODIVERSITY CONSERVATION'

Weizsacker (1993: 120) has suggested:

It makes sense to defend the richness and variety of living beings on this earth. It makes sense that it is defended by a rich diversity of men and women. It makes sense that they form an alliance for their common goals. But have they really undertaken the difficult task of identifying what these common goals are? This task would include recognising and accepting the large differences among them in values, experiences, aims and hopes, and, on the basis of this knowledge, defining areas of fair co-operation. Urgency does not favour analysis and fairness. Globality does not favour non-scientists and non-economists. Our biodiversity problem is clearly urgent and global. This suggests that there may be an inherent serious imbalance of power in this alliance for biodiversity, an imbalance which gives undue implicit advantages to certain of the policies and value-judgements.

The concern with imbalances within processes of biodiversity conservation is an important one. Taking the perspectives derived from the global conservation agenda is instructive as it is here we can find influential views founded in environmental ideologies and assumptions as well as those found within the dominant social paradigm of world development. The Brundtland Commission's views and the convention on biodiversity, representing as they do an important foundation of biodiversity conservation orthodoxies, give some insights into this.

The World Commission on Environment and Development essentially sees biodiversity as an economic resource to be used for further development, defined in terms of economic growth. Already, the inherent inequalities resulting from the globalisation process are recognisable:

For the Commission, the 'first priority is to establish the problem of disappearing species and threatened ecosystems on political agendas as a major economic resource (sic) issue'. In other words, the priority is to reframe environmental destruction in terms of national economic development policies. Thus plants, animals, microorganisms, and the non-living elements of the environment on which they depend become 'living natural resources', which are, moreover, crucial for development'. (Chatterjee and Finger 1994:19-20).

What this means is species are to be managed like other natural resources, with the added possibility of using new technologies, such as bioengineering. The commission even goes as far as to propose 'gene revolution' to succeed the Green Revolution, which has had problematical results, not the least because of the tendency to reinforce existing inequalities (see, for example, Shiva 1991; Furze 1989).

The influence by organisations such as WWF and IUCN is also seen in the approach to biodiversity conservation. Within the specific protected area management framework, parks are seen as being part of the development and biodiversity conservation processes themselves. More parks are proposed, specifically with the dual function of preservation and development (WCED 1987).

However, development is equated with the management of natural resources to foster economic growth. As a result, we end up with technico-scientific and managerialist solutions within a framework of a slightly greener DSPWD.

The convention on biodiversity is also problematical. Its emphasis on scientific and technological management is striking. The arguments put forward in favour of the bio-technological approach to biodiversity conservation essentially are that it protects biodiversity and that it improves productivity. That is, once again the dual roles of biodiversity mentioned earlier in this chapter are reinvented - the preservationist and the instrumentalist.

For example, the International Biodiversity Forum says that genetically manipulated organisms are 'natural' while at the same time claiming that they are improvements upon nature due to 'increased efficiency'. Biotechnology, then, will help maintain biodiversity and provide extensive benefits for sustainable growth (Chaterjee and Finger 1994).

However, and in relation to the earlier chapter dealing with DSPWD, the main issue related to the convention is that of control - control of nature, control of biodiversity and control of biotechnology. A secondary issue relates to the globalisation of western cultural values, of which the technico-scientific approach is a prime example.

Important issues of control surfaced within a framework of exploitation of nature, rather than within an altered model of development itself. In the case of the North the major concern was protecting the pharmaceutical and emerging biotechnology industries, which get their raw material from forests. However, within the South,

the concern was mostly ensuring that governments and industries could continue to exploit their own natural resources (Chaterjee and Finger 1994). The issue of control was thus central – the control of nature and the control of the economic development agenda operating as a result of the global political economy. It was not the implementation or the facilitation of a fundamentally altered model of development.

The main debate between the North and the South was over patent rights, redistribution of profits from biotechnological production, access rights and control over genetic banks, as well as debates about the safety of biotechnology. Yet the crucial issues of both the causes of the destruction of biodiversity and the impacts that this globalisation process will have on local communities was either forgotten or ignored (Chaterjee and Finger 1994; see also Shiva *et al* 1991; Perlas 1994; Avramovic 1996).

Biodiversity conservation thus epitomises the socio-economic and political arrangements found within the global conservation agenda. Biodiversity conservation has been defined as a global problem which will require global approaches. How local people themselves fit within this global equation is an important issue.

BIODIVERSITY, LOCAL PEOPLE AND GLOBAL CONSERVATION

Hildyard argues that the process of designating biodiversity as 'global commons' has resulted in local people being excluded from their traditional rights to nature (for example, medicinal plants, thatch grass and other non-timber forest products) as well as their traditional livelihoods (for example, hunting, fishing). He goes on to suggest that, as a consequence, local concerns and traditions are marginalised and 'the local environment is sized up for its potential benefit to the North and its allies in the South' (1993: 34).

This process may well have some direct economic benefits to local people, or to individual nationstates. However the point remains that 'local' is not an equal player in the global economic or conservation systems, particularly when the market is seen as the mechanism for distribution (Jacobs 1991; Adger 2001). Further, global environmental problems (in this case biodiversity conservation) are framed in such a way that local communities are either excluded from decision making or are further integrated in the operations of the global economy and/or conservation agenda. This globalised 'local' becomes a political tool (and/or a simplistic catch-cry in the search for local development) resulting in a loss of control by local people over their environments (Shiva 1993). It continues the economic process of integration found within the DSPWD and adds a green ideological base. As a result, in the search for the resolution of global environmental problems, the 'local' is demonised (local people destroying forests)

and integrated (local level development where development is defined in terms of economic growth). Rarely does 'local' participate fully with any sense of influence.

The key policy frameworks and practices associated with biodiversity conservation are examples of this integrative process and shift in control from 'local' in the South to the North (and its allies in the South [Adger 2001]). Biodiversity loss has occurred because of habitat destruction in diversity rich areas, by dams, mines and highways financed by the World Bank for the benefit of transnational corporations, and by replacing diversity-based agricultural and forest systems with mono-cultures of 'green revolution' wheat and rice and eucalyptus plantations (Shiva 1993). Yet the ways in which biodiversity loss is conceptualised within the global environmental paradigm means these causes are overlooked in favour of an approach using technico-scientific and market-driven solutions generated out of the North.

But biodiversity is a resource over which local communities and nations do and should have rights. The globalisation of the conservation agenda may well become a political means to erode these rights, and a means to shift control over and access to biological resources from the gene-rich South to the gene-poor North. Consequently 'the South can *only* exist locally while *only* the North exists globally' (Shiva 1994).

PROTECTED AREAS AND BIODIVERSITY CONSERVATION

Protected areas provide an institutionalised global means of conservation. Because of this, they have a potentially great role to play in biodiversity conservation. However, the reality is that they are not always managed on this basis, nor, historically, have they been gazetted on the basis of biodiversity protection. Therefore, social, economic and political factors can and do impinge on their conservation potential.

Further, however, using an integrated development/protection approach may actually highlight conflict between biodiversity conservation aims and the development aspirations of local people. Hunting by indigenous people, sustainable harvesting of forest products and so on may well be legitimate uses of protected areas, but what happens when this conflicts with the biodiversity conservation role? And, as an important follow on question, who is biodiversity conservation for? If it is to be for everyone, then everyone should benefit from biodiversity conservation and have equal say in the ways it is and is not used.

If protected area management is to achieve its goal as an important agent in the integration of conservation and local level development, it not only has to meet the ecological challenges of biodiversity conservation, but the social, economic and political ones as well. I have mentioned earlier the problems associated with biodiversity conservation when it is seen as a social, economic and political

problem. These points linked the protection of biodiversity into the dynamics of DSPWD, arguing that biodiversity conservation is not unproblematical, but a matter of power. It is, therefore, a major social challenge.

Where does all this leave protected area management? In a difficult situation.

Lohmann (1993) argues that local practices in the south are broken down to balance a system whose imbalances are generated out of the north. Biodiversity conservation is necessary to balance the earth's ecological systems, yet biodiversity loss is caused by the destructive process of the DSPWD whose control rests in the north. Under the global conservation banner, the basis of this relationship between the north and the south is not only raw materials and access to cheap labour, but also to supply 'system repairs'. Thus, trees are planted in fields to absorb carbon dioxide emanating from the north's industrialisation, tropical forests and the knowledge of their inhabitants are to provide services to Northern industry, researchers and tourists, and local commons are to be taken apart and reassembled into a fictitious 'global commons'.

Protected areas are sites where these processes occur. They are managed for biodiversity protection. Yet, the ways in which this management takes place on a global scale may disproportionately benefit the countries, or at least some in the countries of, the north. It does little to alter the dominant social paradigm of world development because global conservation mechanisms such as the convention on

biodiversity are actually replicating economic power relations between nationstates under a green biodiversity conservation guise.

There is then a real conflict. The need for biodiversity conservation is great. Yet the way it is occurring on the global conservation agenda is resulting in the reinforcement of power relations between the north and the south, and those found within nation-states. Once again, the north exploits the environment and the south bears the costs.

Protected area management must somehow navigate these power relations. The protected area management orthodoxy, constrained as it has been by preservationist and managerialist approaches emanating from the countries of the north, may not be able to achieve this without a fundamental shift in the epistemology of management.

A beginning point for this is an approach which provides alternatives based on local power, local knowledge, a plurality of strategies and approaches which are not generated and defined by the powerful international conservation/development agencies of the north, the interest of capital, and the interests of the technico-scientific solution. Rather, they are generated by the needs of local people, the poorer or less powerful of the many 'locals' which exist. A protected area management approach which moves towards this gives options to renegotiate the social, economic and political meanings of biodiversity conservation.

**CASE STUDY: CORBETT NATIONAL PARK AND TIGER RESERVE,
INDIA**

Corbett Tiger Reserve (CTR) has been included in the cases as it represents a site of intense efforts at biodiversity conservation, in this case the Bengal tiger. The reserve itself is India's first national park and historically has been closely associated with the life and legend of Jim Corbett.

CTR represents a site for contested meanings associated with biodiversity conservation for a number of reasons:

1. as part of Project Tiger it represents a location of a global conservation effort in tiger protection.
2. tiger protection itself epitomises the tendency to protection of 'charismatic megafauna'.
3. the history of CTR is representative of the ways in which biodiversity conservation is socially constructed. For example, the reserve is closely associated with the legend of Jim Corbett, who went from tiger hunter (albeit for 'man eaters') to conservationist. His story is also a story of contested meanings and concerns over nature.

The use of Corbett Tiger reserve as a case study throughout the thesis highlights these contested meanings to biodiversity conservation.

CONCLUSION

The insights which ecology and other natural sciences provide our understanding of biodiversity conservation are important. They are able to be used to define threats, monitor biodiversity loss and contribute to strategies which overcome it. But there are a great many social challenges which we must face. There is the problem of action. How do the activities of humans impact on the planet? Then there is the problem of solutions. What are the most appropriate approaches to take? Finally there is the needed for a critical understanding of the two points above.

This chapter discussed the social dimensions to biodiversity conservation within the context of the reinforcement of existing power relations, which ultimately have a tendency to wrest control of 'local commons' from local people and placed it in the hands of global economic and conservation institutions.

Protected areas are operating within this social, economic, political and ecological milieu. For them to achieve their goals as institutionalised mechanisms of biodiversity conservation, they must address these issues, as they move towards

their aim of integrating the conservation role with a model of sustainable development.

But, if development as it is currently practised is 'globalising the local', can sustainable development provide an alternative? And what is the relevance of this to protected areas and their management? This is looked at in the following chapter.

Chapter 6

SUSTAINABLE DEVELOPMENT

For years we have shown the (Forest) department we can protect the forests and use the fodder. But now they have taken the forests back. (Villager, near Kalisi Forest, Haryana)

These people don't know how to use the forests sustainably. This is why we have taken the responsibility from them (Forest Department official, Haryana).

INTRODUCTION

The previous chapters have critiqued dominant models of development, and have analysed the question of biodiversity conservation within a framework drawn from an approach which questions the ways in which the local is being drawn into the global conservation/development problematique. Questions have been raised within them about not only development, but the process of biodiversity conservation as it is occurring.

One of the orthodox pathways to integrating development with biodiversity conservation is sustainable development. Given the discussions of the previous chapters, how can we understand sustainable development? And does it really provide an alternative as it is currently being conceptualised?

Sustainable development has become, according to Conroy (1988: xi), the 'new jargon phrase in the development business'. As with many such phrases, it takes on a life of its own, with the term being bandied about on the assumption that both everyone knows what it means and agree that it's a good thing. After hearing various pronouncements related to sustainable development's revolutionary potential (for example, WCED 1987; Simon 1994; SD Dimensions 1996) one could be excused for thinking that fundamental change has, at last, arrived.

Given the influence of the term, it is important to take a closer look at what it actually means, what assumptions are built into the term and its uses, and if it does, in fact, provide the basis for overcoming the global environment and development problematique. For example, the two comments at the beginning of this chapter exemplify some of the ways the notion of sustainability is contested. The first comment, by a local villager during a workshop, incorporates a concept of sustainability which is based on local user rights for non-timber forest products, in this case, *babaar* grass. According to the villager, and to others at the workshop, the villagers have been using the grass for generations and have harvested it in a sustainable way. However, according to the forest department official, local people should not be entrusted with forest protection, and especially use of forest products. Both talk about sustainability, however the term is contested, with very significant socio-environmental justice results.

In his discussion of the uses of sustainable development as concept and praxis,

Adams raises an important point:

Has there really been a 'greening' of development? ... At a time when there is such visible enthusiasm about new perspectives and new alliances over the environment, this is a hard and unpopular question, but it is an important one. The answer turns on the extent to which 'sustainable development' or 'green development' or 'ecodevelopment' are words backed up by logical theoretical concepts rather than simply convenient rhetorical flags under which ships of very different kinds can sail. (1993: 3)

This chapter explores Adams' points in more detail, drawing out implications for protected area management.

WHAT IS MEANT BY SUSTAINABLE DEVELOPMENT?

If we accept that sustainable development is the new jargon phrase of the development business, we must also accept that it is a catch-all term which means different things to different people. Perhaps the most influential (and often quoted) definition is that of the Brundtland Commission: 'development which meets the needs of the present without compromising the ability of future generations to meet their own needs' (WCED 1987: 43).

One of the problems associated with this definition is that its apparent simplicity masks some very important social, economic and political questions. For example, what is meant by the term 'development' in the definition? Or, for that matter, whose 'needs' are we looking out for - those of the more powerful western nations, the landless labourers, the landholders, women, men, etc.

Providing some kind of answers to questions such as these, place, on centre stage, issues of power, control of resources (natural or otherwise) and inequality. To not incorporate these concerns into our understanding of sustainable development fails to see development itself as a political act. These issues, and their importance to the task at hand, are worthy of more exploration. To begin, it's useful to look at the emergence of the concept and gain a greater understanding of its intellectual roots.

THE EMERGENCE OF THE CONCEPT.

It is generally accepted that the term emerged (at least as a global environmental and development ethic) out of the United Nations Conference on the Human Environment at Stockholm in 1972. In truth, however, various concerns over the relationship between the ways humans live and their impact on nature have been around for much longer (Adams 1993a and 1993b; Biswas and Biswas 1984; Caldwell 1984). It was the Brundtland report (WCED 1987), however, that provided the concept with an impetus which it had not earlier had. It should be noted, however, that the term emerged very specifically out of an environmentalist and orthodox development intellectual heritage, a point which has very specific implications when considering its shortcomings, and in the light of what has been discussed in previous chapters.

SHORTCOMINGS OF THE CONCEPT

Donald Worster has suggested that:

The first thing to know when starting to climb a hill is where the summit is, and the second is that there are no completely painless ways to get there. Failing to know these things may lead one to take a deceptively easy path that never reaches the top but meanders off into a dead-end, frustrating the climber and wasting energy. The popular environmentalist slogan of 'sustainable development' threatens to become such a path. Though attractive at first view, it appeals particularly to people who are dismayed by the long arduous hike they see ahead of them or who don't really have a clear notion of what the principal goal of environmentalism ought to be. After much milling about in a confused and contentious mood, they have discovered what looks like a broad, easy path where all kinds of folk can walk together, and they hurry toward it, unaware that it may be going in the wrong direction (1993: 132).

There are a number of specific problems associated with the concept and its application which are of direct interest here: its environmentalist heritage; a lack of an approach incorporating political economy; the lack of definition to the term; and a lack of a radical theoretical inheritance

The environmentalist heritage of sustainable development

The term sustainable development is commonly associated with the goal of resource conservation (Engel 1992) or resource management (Adams 1993a). One of the problems with this stems from a resultant difficulty in establishing a more fully enunciated and conceptualised definition which includes social dimensions to ecological issues, particularly those which deal with an approach founded within political economy. If we accept Colby's (1990) insights on the dialectical nature of paradigm shifts, then sustainable development as it is predominantly practised

does not represent such a shift. In fact, it may well mean that the term, which is held out to offer so much to both development and the environment, will fail miserably to deliver the goods.

The lack of definition to the term

There are obviously a number of implications associated with a term which has such a widespread currency of use but which lacks specific meaning. Kothari (1992) distinguishes between two dominant uses. One is associated with a movement towards a reconstituted definition of development. This usage locates the term sustainable development within a framework which is founded in an ethic related to equity, social justice and environmental holism. The other usage of the term is essentially one which reinforces the belief in the existing socio-economic processes, the very ones which have significantly contributed to the crisis in the first place.

Whilst Kothari (1992) argues that it is essential to distinguish between the two usages of the term, and it obviously is, it is perhaps important to look towards developing a new concept, one with an intellectual heritage and praxis grounded in a more critical view of the conservation/development problematique.

The lack of a critical theoretical inheritance which conceptualises the relationship between the individual, society and social change

The idea of sustainable development must have an emphasis on change - to

existing social, political and economic relations, to current use of the environment and to relations of power. As Engel and Engel suggest:

What would it mean to elevate sustainable development to a global ethic? What kind of 'ethic' is this? In what ways is it 'new'? What kind of 'environmental protection' is meant? What kind of 'economic growth' is intended? Are steady state economies precluded? Before we accept 'sustainable development' as a new morality as well as a new economic strategy, we need to know what ecological, social, political and personal values it serves, and how it reconciles the moral claims of human freedom, equality and community with our obligations to individual animals and plants, species, and ecosystems. Most important, if we are morally serious, we must know on what grounds it may be said that sustainable development is a *true* ethic for human beings on planet earth (Engel 1992: 1 [emphasis in original]).

Whilst the WCED report includes some emphases on change, and, through that, a recognition of social, economic, political and economic issues surrounding biodiversity conservation and development, the views are not always widely held.

As Engel and Engel suggest:

Brundtland's assertion that ethics, as much as technics, is essential to progress in the protection of the environment and the elimination of poverty is not necessarily shared by other world leaders. Indeed, to all appearances, the prevailing opinion among professional specialists, business, and political leaders alike is that the economic, managerial, technical and scientific dimensions of conservation and development, mixed with a good dose of *Realpolitik*, are sufficient to cope with the problems of providing adequate resources for human consumption and material progress. It is assumed that once people understand the harmful consequences of environmental mismanagement, their behaviour will change (Engel 1992: 5).

Leaders of movements for social transformation have always understood that in order to change a situation one must appeal, sooner or later, explicitly or

implicitly, to moral as well as material considerations (Engel 1992). To do this is to deal in the currency of social, economic and political power.

But has sustainable development achieved this? Does it overturn existing power structures which are inherent in the DSPWD? Or is it merely reinforcing the status quo, but under a different, greener guise? Obviously it is not possible to say 'all sustainable development does this' because of the diversity of uses of the term. However, it is possible to highlight the ways in which it is being understood amongst some of the key players in international conservation (that is, to look at the implications of the term being used as a managerialist approach to overcoming environmental problems such as mentioned by Kothari [1992]). This will then give us some insights into the ways in which the term has been appropriated. Perhaps some of the most useful insights can be gained by looking briefly at the UNCED process.

THE UNCED PROCESS AND THE EARTH SUMMIT

The UNCED process and the Earth Summit provide an interesting case study. It is instructive to look at it in terms of one central question: does the UNCED process and the Earth Summit provide an alternative vision for the future, one which is founded on an integration of nature with a newly defined development?

Chatterjee and Finger (1994) have suggested that both the Brundtland commission and the UNCED secretariat were instrumental in the 'overall transformation of the

global ecological crisis into global environmental management' (page 169). The environmental crisis was understood in terms of both security and what Chaterjee and Finger describe as 'new age politics':

Environmental degradation, together with problems of development such as poverty, are said to be a threat to the security of humanity, so humanity has to combat this threat by mobilising all available means to exterminate it. This analogy automatically leads to a resource, a risk and, ultimately to a crisis management approach, where the most efficient way to deal with the crisis will be a militaristic one, based on high-tech and hierarchy (Chaterjee and Finger 1994: 169)

Further, the

new age model of politics says that since we are all faced with an unprecedented threat and are equally endangered, we must all join hands as humans in order to overcome the threat. We have to, it is argued, work together for a common purpose. The more powerful among us will, logically, have to take the upper hand to lead the process (Chaterjee and Finger 1994: 169).

Chaterjee and Finger go on to discuss the UNCED process in terms of the political philosophies discussed in the previous chapter, by looking at the assumptions related to development which the UNCED process epitomised. They point out that the Rio process failed to question the central assumptions found within dominant social paradigm of world development such as free trade, economic growth and industrial development. Rather, the agreements concentrated on developing biotechnology, conventions on climate change without concrete deadlines and a variety of 'lofty and toothless' aims and objectives.

For example, the Global Environment Facility (GEF) will distribute money to

specific projects related to the conventions. However, this is under the auspices of UNDP, which in itself exemplifies an ecoefficiency approach. It is likely, then, that

these will be development projects in the very tradition of Northern development aid. The GEF is indeed the vehicle for of the new global managers, who believe in global technocratic solutions, see environmental problems as a threat to human security, and seek to solve them with either a resource or a risk management approach. On the other hand, the Commission on Sustainable Development, the other institutional outcome of the summit, will be a body of politicians and turn into yet another UN talking shop with no decision-making power. NGOs will be allowed to lobby both, but their influence is likely to be as limited as it was in the general UNCED process (Chaterjee and Finger 1994: 171 - 171).

According to Chaterjee and Finger (1994) the major lesson to be drawn from UNCED is that the global approach, whilst perhaps raising awareness, has tended to reproduce the old approaches and solutions which stem from approaches inherent within the global conservation/development problematique. UNCED has succeeded in raising the promotion of economic growth to a global imperative, rather than providing a forum for the discussion and implementation of alternative strategies. Technology and efficiency (defined in economic terms) have been central to these outcomes (see also Shiva 1993; Colby 1990).

Perhaps more worryingly, the UNCED shift to the global approach has actually reinforced the globalisation process occurring within DSPWD. More economic growth, better technologies, more efficiency and increasing management, the very things which UNCED helped to reinforce and implement will at best help us buy some more time (Chaterjee and Finger 1994; see also the previous chapter).

UNCED does not critically review the dynamic global conservation and development approaches, does not search for alternatives, and does not move the human/nature relationship away from the technico-scientific solution approach of the market paradigms discussed in previous chapters. There is, therefore, little change as a result of the UNCED process with the possible exception of a globalised local.

Chaterjee and Finger conclude:

We think that the only way out of this crisis is to question this development process in its entirety. Given that the biosphere is a closed system, we must come to admit that the system cannot grow to a point when it will develop sustainably. We must acknowledge that industrial development has induced global cultural and ecological changes of an unprecedented nature which will further restrict, not increase, our possibilities within that system. And we must accept that further industrial development will only lead to further destruction. Instead, we must think and collectively behave in terms of sustainability of a closed and finite system of local and regional resources, as well as of socially and culturally rooted users (Chaterjee and Finger 1994: 173).

The UNCED process has achieved little in the context of the need for an alternative paradigm to the current orthodoxies. If anything, it has reinforced and globalised the technico-scientific approach to environmental management under a 'sustainable development' catchcry, and has been part of the globalisation of this expertise and framework. As with other globalisation processes, this has very specific impacts on the nations of the so-called 'underdeveloped' world, especially given that there is every chance that the process will see solutions in the context of aid to the south, from the north, though couched in green sustainability jargon.

If Chatterjee and Finger (1994) are right, and there is much to suggest that they are making important points, (as discussed in earlier chapters, see also: Sachs [ed] 1993), there are some obvious implications for the research which this study is dealing with.

Does this critique of sustainable development play out on the ground through the case studies? The points relating to the UNCED process are important but, as often happens, the more generalised comments may not always reflect the ways in which human agents, in the form of protected area managers for example, do their work, interpret problems and act on these interpretations.

That is not to deny the real insights which Chatterjee and Finger (1994) provide. Nor does it deny the importance of the broader critical perspective (which my study also takes). Rather, it is an acknowledgment of the need to locate the broader perspective in the 'lived reality' of people undertaking action (or making history, to use a phrase introduced in an earlier chapter).

Secondly, some of the cases I have included in my study represent a transfer of knowledge between the north and the south. Is this negative *per se*? Or do the criticisms of Chatterjee and Finger (1994) not hold within the context of the cases studies?

Thirdly, Shiva (1993) has discussed how the globalisation of conservation has resulted in the further integration of the south into the decision making and explanatory frameworks generated out of the North. According to Chatterjee and Finger (1994), the UNCED process exemplifies this. But, once again, is this reflected at the level of people (like protected area managers) making history? What do the cases tell us about this?

Whilst these specific questions will be discussed in further detail in the later chapters, we are left with the very real need for an alternative to the ways in which sustainable development have been used and implemented. Chatterjee and Finger (1994), Shiva (1993) and others are right to discuss the integrative tendencies of global conservation. They are right to critique the UNCED process within this framework. Importantly, they are right to highlight the ways in which the UNCED process has influenced a global sustainable development strategy and orthodoxy. Consequently, sustainable development, as it is currently conceptualised may not be addressing the real causes of the global conservation and development impasse.

Recognising these issues is fundamental to our search for alternatives. It is also fundamental to understanding the ways in which protected area managers, local people and their everyday lives and community institutions are being incorporated into the global environmental agenda. They are crucial to our understanding of the complex relationships between the macro, structural world of global conservation and the micro, agency-oriented world of local people and protected area managers.

THE CONTINUING NEED TO ADDRESS CONSERVATION AND DEVELOPMENT

Many authors show legitimate concern over the use of the term 'sustainable development'. Neither the World Conservation Strategy nor the report of the World Commission on Environment and Development go far enough in disassociating their use of the term from the predominant western or northern worldview associated both with development itself, and the environmentalist heritage of resource and protected area management. It is therefore not surprising that a variety of alternative concepts and terms have been suggested. Goulet (1992), for example, talks about 'authentic, integral development', Trainer (1995) uses 'conserving society', Colby (1992), Panwar (1992) and Raval (1992) use 'ecodevelopment', Crocker (1992) uses 'just, participatory ecodevelopment'.

This search for alternative terms goes well beyond a sustained interest in neologisms. It represents concerns from a variety of quarters about the need for an alternative notion of development, and a recognition that sustainable development, as it is currently practised, fails to deliver this.

Having said this, however, it's important to recognise that

there is also agreement that, at least in principle, there is nothing inherent in the term 'sustainable development' to keep it from becoming the name for

an alternative post-modern social paradigm and a new moral conception of world order. 'Sustainable', by definition, means not only indefinitely prolonged, but nourishing, as the Earth is nourishing to life, and as a healthy natural environments nourishing for the self-actualising of persons and communities. The word 'development' need not be restricted to economic activity, much less to the kind of economic activity that now dominates the world, but can mean the evolution, unfolding, growth and fulfilment of any and all aspects of life. Thus 'sustainable development', in the broadest sense, may be defined as *the kind of human activity that nourishes and perpetuates the historical fulfilment of the whole community of life on earth* (Engel 1992: 10-11 [emphasis in original]).

Out of these discussions come a number of points which serve to address what is needed for an alternative to current development/environment orthodoxies, including sustainable development as it is currently conceptualised and practised. We can say that alternatives must incorporate a number of assumptions and ethics, and reject others. We see that it is based in certain kinds of knowledge, and not others. We see that it has certain ethics and not others. The search for an alternative paradigm, therefore, should start with the following, points which are further elaborated throughout the following chapters.

A rejection of the dominant social paradigm of world development

As discussed in previous chapters, the dominant social paradigm of world development estranges people from nature, commodifying and reifying it in the process. Therefore it is crucial that alternatives do not merely reflect these principles with a green tinge. They must fundamentally address the nature of development, they must look for alternatives to the economic growth model and they must look at ways in which the social, economic, political and ecological results of the dominant social paradigm of world development are mitigated.

Finally, they must acknowledge the problems found within the globalised conservation approach which the UNCED process epitomises, especially in relation to Shiva's (1993) globalised local. Only then is there a possibility for global change which is what we could call green.

A rejection of the unswerving belief in techno-scientific solutions

Technology and science are important for sure, but environmental problems are not only technical ones requiring technical solutions. Therefore, we must look again at the unquestioned belief in science and technology which is so much a part of the dominant social paradigm of world development and the solutions to environmental problems which reflect this. Solutions are to be found in a critical review of scientific and technological knowledge and applications, together with a plurality of insights gained from disciplinary understandings as well as those of non-academics, non-technicians and non-scientists.

The implementation of social development focusing on the rights of communities, local people, the poor and the powerless

If the inequalities inherent within the dominant social paradigm of world development are to be overcome, there needs to be an emphasis on social development as well as a redefined economic development. The trickle down approach of much development activity, and the estrangement of local people from the development process itself needs to be overcome. Development must be reconstituted to an approach which seeks specifically to alleviate the plight of the

poor, but praxis must occur within a critical framework. This framework must be derived from a critique of the assumptions found within the dominant social paradigm of world development (including those related to nature), and must see development itself as a political act which deals in the currency of power (see also Sengupta 2000).

The recognition of local and indigenous knowledge

Part of this process is a recognition the rights of local and indigenous people to be involved in the process development. Not only is this an ethical statement related to the rights of participation, it is a statement which highlights the legitimacy of local knowledge. If development, and indeed environmental management, is reconceptualised to avoid the idea that it is a technical problem requiring technical solutions, then knowledge is redefined. No longer are experts the owners of knowledge, but local people's knowledge is recognised for what it is - real to them and us.

An ethic which sees nature as coevolving with human activity

Perhaps co-evolving is the wrong word. However, we need to understand that nature is not outside human existence. Nature is perceived by humans in different ways. These reflect different social, and cultural values which are effected by economic, political and historical forces. In a sense then, our perception of, and consequent use of nature is a reflection of certain values which are current within cultures, communities and 'lived realities' of people. The ethic which this

supports recognises this, and consequently sees development and environment in terms of the nexus between them, rather than in either/or terms (Norgaard 1995).

PROBLEMS OF IMPLEMENTATION

The problem of implementation needs to be addressed. The implementation of altered paradigms and approaches is not an easy one, especially given that we need to be looking at rejecting certain values and assumptions within the dominant social paradigm of world development. This is especially so given the discussion in the earlier chapters relating to the dialectical nature of change, and the differences between that which is reformist, that which is revolutionary, and the hard questions discussed in this chapter related to what, if anything, has changed.

It is possible to highlight a number of key issues surrounding the problem of getting from here to there, and these directly relate to the use of the 'enabling contexts' approach I have formulated in earlier chapters.

The facilitation of a creative relationship between the state and the local level

Some of the points made above relate to the legitimacy of the local level, of the rights local people have to be heard, and to have their knowledge recognised. This needs to be fostered. However, this is not to say that the best way of achieving this is to move towards a loose confederation of dispersed communities, as some environmentalists would argue. Rather, it is about recognising the legitimacy of

local structures, people and knowledge and, through that, fostering a creative relationship between the state and these local levels.

The state is an important player in reintegrating humanity with nature. We must not blind ourselves with the romance of the past Arcadian vision of dispersed communities where everyone lives in harmony. Whilst it might be a fine ideal, the state still has an important role to play in such matters as distribution of goods and service and the like.

This is not to say that the ways in which the state would operate the same as it is today. However, it is essential that the state and the local level are integrated in a way which benefits all local peoples, not just some. An enabling state, with enabling policies facilitating and recognising local rights and responsibilities, is crucial.

The uses of technico-scientific solutions

Technico-scientific solutions are important, but in the context of my discussions previously, they are not a solution in their own right. In the context of getting from here to there, at the very least they can be used to buy time. But at best, they can form an important part of a plurality of understanding and a diversity of action.

However, they should not be used in terms of crisis management continually, as this view will foster a dependence on them, rather than seeing them as important tools. An approach therefore is required which moves beyond orthodox protected

area management and incorporates socio-environmental justice ideals.

Facilitation of local institutions which reflect redefined development

Local institutions need to reflect the reconstituted nature of development. As local institutions are reflections of social, economic, political, historical and ecological processes, it is fair to say that many existing institutions will reflect the values of exploitation found within the dominant social paradigm of world development. Therefore, institution building will be important, as will the strengthening of existing institutions which reflect less exploitative values. However, in order to achieve these outcomes, institutional change is required. Therefore, it is likely an outside change agent is going to be necessary to achieve these outcomes. Further, if these outcomes are not achieved, there is little hope that the renewed interest in local approaches will achieve what it should - provide a foundation for overcoming the global problematique of conservation and development. An enabling community will thus enable socio-environmental justice.

Using protected area management approaches as an interim step in the development of alternatives

This is a vexed question. As has been discussed, protected area management approaches reflect parts of the predominant approach to conservation - that things need to be 'managed' and preserved via technico-scientific methods. Whilst this is undergoing some changes, just how these work out on the ground through praxis is another matter. However, it would seem that at least potentially, protected area

management would provide an interim step if integrated with an active change strategy which attempts to overcome the exploitative processes of development as it is currently defined. If it fails to address these issues, which are essentially issues of power, it will have failed in its potential and merely serve the status quo under a slightly greener guise.

PROTECTED AREA MANAGEMENT IMPLICATIONS

Once again the protected area management approach generates a number of dilemmas. On the one hand, it is part of the broad sweep of approaches under which sustainable development falls. Its heritage has been with 'management', seeking technic-scientific solutions to problems of 'conservation'. Further, and related to this, it is also caught up with the sustainable development movement. The protected area management profession is abuzz with sustainable development. Some protected area regimes are explicitly aligned with the UNCED process, some with UNESCO (for example, biosphere reserves) while others will jockey with each other for GEF funding. Sustainability is predominantly the goal.

On the other hand, however, in order to fulfil its potential within an integrated conservation and development framework, it must move well beyond catchcries. The previous chapters have discussed the problems associated with development and the environment as well as biodiversity conservation. This chapter has suggested that sustainable development does not provide a real answer to problems

of development. Where does this leave the protected area management paradigm?

It must search for an altered epistemology. It must move from the preservationist, environmentalist base of 'management' of natural resources (either through sustainable use or preservationist approaches) to one which will incorporate an altered model of development. In order to achieve this integrated conservation and development function with which it is now involved, it must reject many of its old assumptions. It must search for a new epistemology and a new praxis. What this praxis is, and how it can be achieved, is what the rest of this thesis is concerned with.

CONCLUSION

This chapter has critiqued the model of sustainable development as it is currently conceptualised. It has highlighted the problems associated with the term, especially given that it has international significance and is equated with real development and conservation options and changes. What this chapter has highlighted is that the term has often come to mean a reinforcement of the assumptions found within the global processes of conservation and development rather than questioning them. It has frequently failed to fundamentally reconstitute development, and its environmental consequences, because of this.

The chapter has also highlighted the need for alternatives to this, alternatives

which include participation, which understand and try to change the bases of power, and through that try to implement a reconstituted definition of development. The following chapters assess how key protected area management strategies epitomise these problems and how an alternative set of socio-environmental arrangements may be instituted through protected area management.

SECTION THREE

CASE STUDIES AND THEIR ANALYSIS – IMPLICATIONS FOR SOCIO-ENVIRONMENTAL JUSTICE

This section discusses protected area management strategies representing key approaches to biodiversity conservation and local level development through protected area management. A critical discussion of these will be instructive in that it will facilitate a critically informed basis for evaluating to what extent protected area management is currently able to integrate socio-environmental justice and to what extent it needs to incorporate an altered approach to biodiversity conservation. In other words, the section seeks to answer the question: To what extent do current protected area management orthodoxies act to facilitate socio-environmental justice?

The section also utilises insights from the case studies to provide field and experientially based context to the discussions. The cases are used to highlight discussions and to provide some recognition to the field experience of protected area management.

Chapter seven looks at the issue of rural development and protected area management. Given that so many protected areas are located in rural regions

throughout the world, issues surrounding rural populations and factors affecting their livelihood are particularly important. Royal Bardia National Park in Nepal provides a field-based context for these discussions.

Chapter eight evaluates the biosphere reserve approach to integrating protected area management with locally focused development options. The biosphere reserve approach itself will be discussed in the context of its environmentalist heritage and possible management implications because of this. The Nanda Devi Biosphere Reserve in India will provide field-based analysis of management issues.

Chapter nine looks at ecotourism, a strategy which has gained widespread legitimacy and which carries significant issues related to the ways in which the global conservation and development agendas globalise the local. Ecotourism in the state of Uttaranchal is looked at, as well as issues located at Nanda Devi Biosphere Reserve and Corbett Tiger Reserve.

Chapter 10 introduces social and community forestry approaches as a means by which protected area management incorporates locally focused conservation and development. Issues surrounding the approach to community forestry, the extent to which it incorporates socio-environmental justice outcomes and the implications of the tensions between a management focused social forestry approach and a locally-focused approach will be discussed. Evidence from joint

forest management and the Kalisi Forest management in Haryana will be used.

Chapter 7

RURAL DEVELOPMENT

Please tell them in the department we have nothing – we must be able to use the forest (Village elder, Nepal).

Before JFM we had nothing. Now, we are able to educate our children, now we have drinking water, now we have respect (Villager, Haryana).

INTRODUCTION

Rural development is central to protected area management integrating socio-environmental justice. Given that many protected areas occur in rural locations, and that there is a distinct relationship between environmental degradation and rural poverty (though we need to be aware that the poor are not necessarily to blame - see for example, Boyce 1994) rural development issues, which are issues of power, poverty and resource use, are therefore protected area management issues (at least, they should be, given the important role protected area management has in facilitating socio-environmental justice). But rural development is also a practice, one which has a long history of attempts to induce change to local people on the basis of certain assumptions about agrarian production and about local people themselves. Therefore, rural development as a

practice (rather than merely an issue) becomes a crucial mechanism for the facilitation of an alternative protected area management praxis. This chapter looks at rural development both as an issue of underdevelopment and as a practice which can facilitate socio-environmental justice outcomes.

WHAT IS RURAL DEVELOPMENT?

The idea of rural development has, over recent years, become one of those 'catch all' phrases which can mean different things to different people. At its simplest, it can mean induced change to existing rural social, political and economic processes, as well as alterations to existing agrarian practices. But this has certain assumptions attached to it, relating to understanding the nature of rural poverty and rural inequality, how it can be overcome and who should be attempting to overcome it.

Rural development is also both a means and an end. It is a means because induced change implies trying to achieve specific goals, therefore, rural change occurs as a result of rural development. It is an end because it is often viewed as the culmination of specific economic, technological and political processes (see, for example, Harriss 1984; Chambers 1986; Burkey 1993; Furze *et al* 1996).

Furze *et al* (1996) point out that rural development plays an important part in an integrated approach to protected area management for three reasons: it draws on a

theoretical heritage which has concerned itself with understanding the nature of rural society and rural social change; it is a practice (people 'do' rural development); and it is at the heart of issues of access to social and economic equity. These three points are important as they provide insights into rural development as a multifaceted enterprise which consists of certain values, assumptions and approaches to development. In the context of this work, recognising these three points sets the scene for a more specific understanding of how protected area management strategies may or may not be leading to socio-environmental justice outcomes.

UNDERSTANDING RURAL SOCIETY AND RURAL SOCIAL CHANGE

The theoretical and experiential heritage of rural development should provide a means by which protected area managers and others involved in local conservation initiatives are able to understand and work within rural development frameworks. If rural development is viewed as an approach to the development of the economy as a whole (Harriss 1984), then it specifically should deal with the social organisation of agrarian production. Viewed in this way, then, rural development becomes specifically concerned with understanding, and inducing change in, agrarian societies, rural communities and so on.

Broadly speaking, the different interpretations of rural development can be understood to share a common aim: to intervene in existing social, economic and

political agrarian formations to bring about some form of change. It is fairly obvious that different approaches will use different assumptions about the nature of the problem, how it can best be managed and what values are important within this approach. For example, some approaches to rural development have emphasised a top-down, policy orientation where the individual farmers and community members are merely the recipients of some form of development action. Others have emphasised a need for local people to be an integral part of the process. Some have emphasised the benefits of the free market system as a means of development, whilst others have emphasised the need for a more centralist state run approach. Some have wanted change to occur rapidly through the industrialisation of agriculture, others believe that the best approach is to emphasise the primacy of small holdings so that land ownership is widespread (Furze *et al* 1996).

In recent times there have been a number of compelling contributions to an approach to rural development which 'puts people first' (Cernea [ed] 1991) or 'puts the last first' (Chambers 1983, see also Kruijer 1987; Burkey 1993). The emphasis of these and other approaches has been to facilitate a process of agrarian change leading to self-reliant participatory rural development. This approach, which goes under a number of names (for example the participatory rural development of Chambers [1994a; 1994b; 1994c] and others, the village communism of Bideleux [1985]) have an ethical position on the rights of local people to participation as well as an emphasis on issues of redistributive justice.

Given discussions in previous chapters, it is crucial that protected area management incorporate rural development strategies exemplifying the participatory approaches of Chambers and others (Chambers 1994a,b,c; see also Havercourt and Hiemstra [eds] 1999).

RURAL DEVELOPMENT AND SOCIO-ECONOMIC EQUITY: BIAS IN EXPLANATION AND ANALYSIS

Rural development has long been associated with attempts at alleviating poverty and with matters of socio-economic equity. Of course, how practitioners and policy developers went about this, and how they defined terms such as equity, how they thought this could be best achieved and so on was not always self evident. Once again, it reflected prevailing orthodoxies relating to the nature of rural poverty, the nature of agrarian production and what is 'best' for the development of rural people.

As mentioned above, rural development is a means by which poverty and inequality can be overcome. This, however, is not an easy task, not the least because it is so difficult to understand the root causes of poverty.

According to Burkey (1993: 6-11), there have been a variety of explanations put forward to understand rural development problems. These have included:

- i. a lack of modernising tendencies
- ii. physical limitations
- iii. bureaucratic stifling of development
- iv. dependency of nations
- v. exploitation of the poor

The above categories of explanation highlight the contested and contradictory ways rural poverty has been explained. For example, if rural poverty is seen to be the result of a lack of modernising tendencies, rural development as a practice may attempt to 'modernise' agriculture through, for example, green revolution or biotechnological approaches. Yet these approaches epitomise those emanating from the operation of the dominant social paradigm of world development as well as the globalising tendencies of sustainable development (both discussed in previous chapters). Taken to its logical conclusion then, rural development based on an assumption that rural poverty is caused by a lack of modern agricultural practices, or the lack of a modern worldview may result in the further institutionalisation of inequalities and poverty.

Seeking explanations for causes is one thing, observing the nature of rural poverty within the contexts of these causal explanations is another. Chambers (1983: 13-23) has highlighted a number of biases which may result in poverty being unobserved. these include spatial biases, project biases, person biases, dry season

biases, diplomatic biases and professional biases. In other words, the identification of causes of rural poverty is contested.

So, at this stage, we have a number of often competing explanations for the causes of rural poverty. We also have a number of biases which may potentially impact on our understanding of the characteristics of rural poverty which may be within our immediate region. Further, we need to understand this within the framework of participatory local level development and conservation discussed in previous chapters. What, then, can be done, and how can it be done?

PARK/PEOPLE RELATIONS AT ROYAL BARDIA NATIONAL PARK, NEPAL

Rural development issues at Royal Bardia National Park in Nepal provide important insights into the potential and difficulties for PPAM in agrarian societies. Issues facing the rural populace surrounding RBNP are characteristic of broader rural development issues within the Terai, and those in other nation states.

The central issue can be understood as that of landlessness and near-landlessness (L/NL).

The Nepalese context

Background

Approximately 90% of Nepal's population are directly dependent on agricultural

production but approximately 20% of Nepal's land is cultivated (Shukla 1991; Shestra 1990). Since the fifth five-year plan (1975-80) agriculture has become the highest priority for various Nepalese governments as economic growth was increasingly seen as dependent on increasing productivity of existing crops and diversifying Nepal's agrarian base using industrial inputs (Shukla 1991).

The often conflicting goals of producing cash crops for food as well as industrial inputs, however, has been problematic. Not only have there been problems associated with the distribution of inputs, but more general problems which are well documented elsewhere and not specific to Nepal (Furze 1989; Shiva 1991). Currently, Nepalese rural areas are some of the poorest in the world.

Issues

In understanding the experience of rural development in Nepal, Thomas-Slayer and Bhatt (1994) argue for the analysis of social relations within a political ecology framework which has three main components. The first relates to the globalisation processes discussed in earlier chapters. As the global market penetrates agriculture, a number of key questions are generated. What are the conditions under which small scale farmers engage effectively with the market economy? Are there simultaneously processes of land concentration and land fragmentation? Are the richer and larger farmers capturing the benefits?

Secondly, ethnicity is important in Nepal, and, along with caste, is the most

important variable around which households and communities aggregate for common action (see also Gellner and Quigly [eds] 1995). Ethnicity is a political as well as cultural phenomenon and ethnic groups have a significant role in advancing the material and other interests of their members. This is usually through the patron-client nexus.

The third component is the nexus between gender, ecology and resources. Gender is central to the positioning of men and women *vis-a-vis* institutions that determine access to land, to other resources and to the wider economy. According to Thomas-Slayter and Bhatt (1994) incorporating gender helps clarify the household and family dimensions of socio-economic life and the complex ways in which family, household, community and ecosystem are linked. In Nepal, the layers of gender, caste and ethnicity are embedded within one another and constitute the social fabric within which ecological and economic transformations occur (Thomas-Slayter and Bhatt 1994).

Thomas-Slayter and Bhatt (1994) are correct in drawing our attention to the importance of these three dimensions in understanding the social relations of Nepalese agriculture and rural development. Within the context of this chapter, and my work at RBNP, land ownership, landlessness and near landlessness have been crucial. These act as a framework within which it is possible to understand more fully the relationships discussed by Thomas-Slayter and Bhatt (1994).

The focus of this discussion is the first component mentioned above. Its central question is what are the ways in which L/NL is likely to impact on the management of RBNP. This is not to discount the very real importance of the other two components mentioned above. Rather, it reflects my own work and the fact that this is work in process. Gender and caste are important considerations which I have not researched to date.

For Shrestha (1990), the population, embodied in labour, is the basis as well as the subject of production and development. Labour is the most dynamic source of economic surplus. The question of how productive the population becomes, how much economic surplus is generated in society, how this surplus is appropriated and how it is utilised, according to Shrestha (1990), are all dependent on the characteristics of the social distribution of resources. Consequently, an understanding of the ways in which small scale farmers produce (Thomas-Slayter and Bhatt) and the way in which the social relations of production occur within the context of L/NL (Shrestha 1990) are crucial to understanding rural development issues.

Land ownership, landlessness and near landlessness

In Nepal, the issue of poverty is intrinsically linked with the relations of production in which land ownership and land occupy a central position. Land is the primary productive asset as well as being a source of economic and political power. Therefore patterns of land ownership shape (and are shaped by) the

patterns of poverty which are generated out of the social relations of agricultural production. As a general rule, the greater the landholding, the greater the economic viability and power base (Shrestha 1990).

This is particularly important when using Thomas-Slayter and Bhatt's (1994) political ecology approach. The questions which they raise related to land ownership and who captures the benefits of agrarian production are especially relevant.

According to Shrestha (1990), under circumstance of rapid population growth and emerging land scarcity, several agrarian relations could evolve:

- i. as population increase, land prices go up and competition stiffens. Transformed into more than a means of production, but a means of social and social as well as labour control because it is increasingly commodified. It also acquires an exchange value. When competition for land increases, agrarian class structure becomes increasingly rigid - therefore the well off win, as the expense of the poor or dispossessed. As a result, the social monopoly over land tends to harden and the poor (landless or near landless) are increasingly forced to sell their labour to sustain their social reproduction. This means they have even less time to manage their small holdings efficiently, improve the quality of their holdings and consequently increase productivity. This situation may

lead to land degradation along with productivity declines (see also Blaikie and Brookfield 1987, Ives and Messerli 1989).

- ii. as agrarian systems experiences diminishing per capita land availability peasant families work harder for small increments in production, intensifying the process of self.exploitation. This happens particularly in an agrarian economy when off farm employment is limited.
- iii. population growth tends to increase the probability of family separation because of increased intra-family frictions and tensions stemming from large family size. On the other hand, it will fragment and reduce already small holdings - both spatially and socially. Consequently peasants become increasingly near landless.
- iv. population growth can also undercut agrarian patron-client relations and the associated social obligations which go with them. Patron-client relations usually reflect a shortage of labour to work patron's lands. Under conditions of increasing population, labour becomes in surplus, therefore patrons no longer need to maintain client relations. Labour becomes an economic rather than a socio-economic act. (Shrestra 1990)

In the Terai, these issues are fundamental, as the region not only has a high concentration of land owners (Ghmire 1992) but a rapidly increasing population

(Shrestha 1990).

Rural development and protected area management at RBNP

Discussions of landlessness and near landlessness are important to understanding rural development issues surrounding RBNP. Not only does it act as a dimension of socio-economic inequality but it also has very specific conservation/protected area management implications.

During interviews a variety of local people highlighted land ownership as a problem. Questions asked during interviews and workshops related to what problems local people had with the existence of the park and its management. A major issue identified at workshops conducted with L/NL villagers was crop loss caused by animals (discussed below).

Issues related to land ownership also surfaced when discussing development options for the future. Workshops and interviews conducted with larger landholders identified irrigation, better access to HYV and access to latest agricultural technologies and chemicals (with state support to ensure the 'successful adoption of these') and ecotourism infrastructure. Interviews and workshops conducted with L/NL suggested strategies such as small increases in land holdings, less crop loss through animals by fence building and, in a minority of cases, state or park generated support for small lodge development to cater for tourists. Small lodge development was equivalent to support for the building of a

room to accommodate perhaps two or three independent tourists.

In short then, the ways in which local people saw park management issues tended to reflect their class location. Larger landholders tended to reflect values associated with modernisation and adoption of market and green revolution approaches to agrarian production. Smaller entrepreneurs tended to focus on potential ecotourism developments whilst L/NL classes focussed on use of park products for subsistence. Whilst all interviewees did not fit neatly into these categories, a definite pattern was discernible.

Other rural development issues at RBNP

Land ownership is an important dimension to rural development issues at RBNP, but there are other, related, issues as well. Two which have emerged as a result of the analysis of data collected during my visits are crop loss and tourism.

These issues are related to land ownership, but they are also related to the more general issues surrounding rural development in the Terai, those of the social relationships of power and influence found in and around RBNP.

A case study - the socio-economic dynamics of crop loss

Strudsord and Wegge (1995) have suggested the extent of crop loss around RBNP to range from NRs 8339 per household in the worst effected zone to NRs 2000 in the far zone. It is therefore a significant issue, especially when it is considered

that high levels of N/NL occur in the region.

A number of methods have been used to prevent crop loss. These have included digging trenches, planting hedgerows, and installing sound systems to scare animals away. *Marchans* (lookout towers) have been built in fields close to the park and actively guarding against animal intrusions into crops has become a year-round activity in some locations. Residents also want park management to take measures, with suggestions such as electric fences, park management becoming more active in killing pest animals and changing regulations to allow hunting by villagers being some suggestions which have emerged from my fieldwork (see also Strudsord and Wegge 1995). The following example is a pertinent one to this.

One of my visits coincided with an accident where an elderly peasant was injured when his *marchan* was knocked over by an elephant trampling field of maize. The man was seriously injured and taken to the nearest hospital in a DNPWC jeep.

This man's hospitalisation exemplifies a number of key issues concerning people/park relations:

- i. the man was in the *marchan* trying to scare away animals who live in the park and feed off crops in the surrounding lands. Biodiversity conservation is important, but so too is people's livelihood

- ii. the *marchan* was fragile because local people were not able to collect timber of sufficient strength and width to build a strong *marchan*. They were not able to cut down any of the strong trees in the park due to park regulations, and there were no other strong trees in the area because of intensive agriculture and population growth.
- iii. crop loss to animals increased because of the protection the park provides. What is one person's biodiversity conservation is another's pest control.
- iv. the L/NL are particularly prone to crop loss. Loss of crops in fields owned or rented by L/NL has a disproportionate impact on their economic livelihood than on someone with greater landholdings who are able to distribute the risk and the impact across more land.

At the time of my visit, monetary compensation to villagers had not been developed at RBNP. Alternative forms of contributions forest resources can make occur however. Even though these are not specifically in the form of compensation for crop losses, the regulated use of non-timber forest products provides a means by which park management attempts to encourage some forms of economic benefits to local people

Tourism and ecotourism issues at Royal Bardia National Park

Ecotourism is dealt with more fully later in this study. However, it has some important implications in the context of rural development strategies around RBNP.

Respondents mentioned that tourist numbers were increasing at RBNP. This would seem to fit in with interviews I did with tourists who were visiting as well as management at the Tiger Tops lodge at the park itself and park wardens. A number of the tourists I spoke with had come to RBNP in preference to the more well known and popular Chitwan National Park. RBNP was considered a better option for viewing animals, especially tiger and rhinoceros.

In preparation for the expected influx of tourists into the region a dance group had been formed at one of the villages in order to cater for some form of cultural tourism. This dance troupe was initiated by local people after discussions with Tiger Tops Lodge management and was to be employed by the Lodge.

In addition to this, the DNPWC had initiated a series of guiding courses at the park. Local people would enrol and learn how to identify plants and animals and how to guide tourists through the park. The local people who enrolled tended to be Tharu, as well as L/NL peasants. Whilst this is important to the extent that it provides a means by which the economic base of this group can be diversified, it has other implications related to the further institutionalisation of existing class-

based social relations especially if ecotourist developments are undertaken by the elite.

An assessment of rural development and protected area management at Royal Bardia National Park

Rural development features large in the management issues surrounding RBNP. Rural poverty, land ownership and tenure and a protected area management context within which the DNPWS faces economic difficulties in management of its parks are all important components of this.

In a similar way to many agrarian societies, development has failed Nepal. Its position in the south, its dependence on foreign aid and foreign tourists and its reliance on global conservation/development agencies have all contributed to the current situation. It is against this backdrop we look at RBNP.

If social transformation is defined in terms of poverty alleviation, the overcoming of inequalities and the institutionalisation of access to such things as education, health and health care and other social resources, then there is little evidence of this occurring at and around RBNP. Discussions with local social and community workers, L/NL peasants, landholders and national parks officers would suggest that the marked maldistribution of land, and consequently income, is still evident. There is also further evidence to suggest that one of the ways in which management at RBNP has tried to provide benefits to local people may well be

further institutionalising these inequalities. Interviews tended to suggest that access to irrigation water, whilst providing some benefits to a variety of peasants, has benefited larger landholders disproportionately, as a result of both their larger landholding and their status in the local community (their 'connections' as one person put it).

However, having said that, thatch grass collection does represent an important form of non-cash benefit to residents surrounding the park, the opening of a health clinic which is partially funded by park fees provides important health services to local people and the provision of 30-50% of park income to be returned to local people for buffer zone management provides indicators of a movement towards poverty alleviation.

The main concern remains, however. For social transformation to occur, land tenure and land ownership represents a fundamental issue to be resolved. It is impossible for the DNPWC to undertake this on its own (even if it saw itself as having a role to play in land redistribution) and therefore a much broader approach to management needs to occur - one which incorporates a capacity to look and act on issues of land tenure and distribution, rural poverty and local power.

Another concern is with the ways in which the proportion of park income is used for local development activities. It is of the utmost importance to ensure that this process does not merely reinforce the inequalities of the land distribution system,

nor those of caste, class, gender and ethnicity. If money is to be used for local initiatives, it must be done in such a way as to ensure that social transformation takes place, through such things as access to education, and a more equitable distribution of other local social and economic resources.

It is crucial therefore, for further research to be undertaken in and around RBNP within a radical rural development framework to ensure that a picture is built up of the nature of rural poverty and inequalities. These can then begin to be addressed.

It is not just a matter of implementing economic growth and hoping for the benefits to trickle down to the lowest castes and classes. Even though by last field visit was in 1996, there is little to suggest that things have fundamentally changed.

In fact, the situation is far from clear, especially as it is unknown how the effects of the Maoist insurgencies have affected the area and its people. The situation is likely to remain unclear for some time.

The question of participation

The issue of participation is unresolved at RBNP. Whilst the park management is using income to generate local initiatives, there is little evidence to suggest that this is likely to occur within a participatory framework. Interviews conducted with departmental staff tended to reflect a diversity of opinion on this, ranging from views that suggested local people had no role to play in management to those which saw an important (if secondary) role for locals.

Local people interviewed also reflected a diversity of opinion. In general, large landholders saw an important role to play in management, especially in relation to getting direct benefit from park activities (irrigation water, fodder, major ecotourism developments and the like).

Those L/NL interviewed tended to reflect the findings of Strudsord and Wegge (1995) in relation to general attitudes to the park where the majority want to keep park the size it is. This relatively positive attitude to the park may possibly be explained by respondents having access rights to various grasses and irrigation. It may also reflect the positive contribution the Park supported health outpost has made to local life. It is important to note however that if the positive attitudes to the park are a result of these things, the attitudes have been engendered by development outcomes rather than conservation ones.

However, their positive attitude did not go so far as to see a role for themselves in park management. This was directly opposite to that of many landowners interviewed. Consequently attempts to facilitate a participatory approach which does not incorporate a community education component focusing on the importance of participation may well serve to reinforce existing status hierarchies based on land ownership, ethnicity and, I would expect, gender.

Protected area management as a mechanism for self reliance

To what extent is an autonomous or semi-autonomous 'local' possible around

Royal Bardia National Park and to what extent can protected area management facilitate this? This question needs to be considered at a number of levels, from nation-state through to local or community. The case of Nepal highlights the difficulties in fostering self-reliance within a global system of conservation and development which fosters dependencies (economic, social, political and scientific).

In the direct context of local level self-reliance and RBNP, the issue of land tenure and distribution is once again central. It is of the utmost importance that local initiatives are fostered which will generate a redistributed system of land tenure and not just be based on a trickle down effect which could easily occur.

An example is the increasing number of tourists which are now coming to RBNP. If the beneficiaries of ecotourism are merely those who can afford to articulate their position in the economic system with that of the tourists (through, for example, *lodge ownership* compared to *working for* lodge owners), then ecotourism will merely reinforce the existing relations of economic and social inequality. Already Tiger Tops has a jungle camp and a lodge, where local people are employed as wage labour and profit leaves the area. If tourist development like this continues, RBNP could well become like Royal Chitwan where the benefits of massive tourism accrue to an elite (local, national and international) and the costs are borne by local people and the DNPWC.

The facilitation of the creative relationship between the state and the local level

According to interviewees, the relationship between the state and the DNPWC has been problematic. This has not only been as the result of inappropriate foreign aid, but also with the development of a conservation agency which has ended up in competition with DNPWC - the King Mahendra Trust for Nature Conservation (KMTNC). Not only are the DNPWC and the KMTNC often in direct competition for conservation dollars, they are also in competition for conservation professionals (both local and international). Further, the KMTNC is not hampered with a bureaucratic policy context out of which biodiversity conservation needs to be protected.

There is, then, an easy relationship between the Nepalese state and the DNPWC. This makes the facilitation of an enabling state and an enabling conservation/development policy problematical, and it may well reflect an ongoing tension which will be difficult to resolve.

CONCLUSION

Issues of rural development play a central role in much protected area management. The centrality of rural poverty to rural development issues, and especially that of land tenure and ownership, means that if protected area management is to facilitate socio-environmental justice, it will need to become much more actively a social change agent. For example, it is relatively

straightforward for protected area management to implement strategies which do not question the prevailing sets of socio-economic and political relations. It is much more difficult to facilitate a broader programme of land redistribution and poverty alleviation. Whilst much of this will need the support of the state, it also means that this outcome is the antithesis of existing power relations which are found both within the state itself and those who have a greater access to social and economic resources at the local level. The issue of rural development, then, is a central problem which needs to be overcome. There are, however, few easy solutions.

Rural development issues at RBNP exemplify this difficulty. They represent intersecting points of dependencies, inequalities and natural resource use. Whilst the DNPWC is moving towards a more inclusive program of management, it still remains to be seen how the variety of issues can be resolved and a set of processes incorporating socio-environmental justice outcomes be facilitated.

Currently, it would appear that the local level is merely being incorporated into the global process of international conservation. As part of the new orthodoxy, a proportion of income generated by RBNP is remaining for local development activities. Yet the very issues which lead to local maldevelopment (land ownership and tenure, gender, caste and so on) are not fundamentally addressed. This appears to be due to a combination of factors including the failure to understand the nature of rural poverty in the area, the lack of a political

commitment to both protected area management and land redistribution in the area, and a belief that local involvement can be achieved through a type of trickle down effect. There also appears to be a sense that health outposts, thatch grass collection and access to irrigation water represents an integration of the needs of local people into the management regime.

Such unresolved issues highlight the very real problems of protected area management operating at the local level within an orthodoxy firmly implanted in the global conservation and development agenda.

THE BIOSPHERE RESERVE APPROACH

INTRODUCTION

There has been renewed global interest in biosphere reserves as an approach to integrating local development through protected areas. Along with this interest has come much emphasising the positive aspects to biosphere reserve management (for example, the May 1995 conference at Seville, Spain; the synthetic report published by the MAB programme [MAB 2001]). Further, the new wave of interest has sparked approaches to Biosphere formation and use which go beyond the nationstate, with work being developed on Transboundary Biosphere Reserves (TBR). For example, UNESCO's MAB programme has established procedures for the aims and establishment of TBRs as peace reserves, fostering international cooperation (MAB 2000). Given that the *raison detre* of Biosphere Reserves is to facilitate conservation and development outcomes through management (MAB 2001) it is important to probe critically what exactly they mean and to what extent they offer a way forward in facilitating socio-environmental justice.

As could be expected, not all agree with the Biosphere Reserve model, with most criticism coming from sources who have criticised the environmentalist heritage of

conservation in general (for example, Adams 1993a). Whilst there is no doubt that a biosphere reserve model provides a great deal of potential, what are the implications of its environmentalist heritage? And how do these shortcomings impact on biosphere reserve management? These questions are looked at in this chapter as a way of assessing how biosphere reserves can or cannot achieve their potential for facilitating socio-environmental justice.

THE BIOSPHERE RESERVE MODEL

The Man and the Biosphere Programme emerged out of the 'Biosphere Conference' (the *Intergovernmental Conference of Experts on a Scientific Basis for Rational Use and Conservation of the Biosphere*) held in Paris in 1968. This was one of the earliest conferences to make explicit the connection between conservation interests and development ones (Caldwell 1984). It was also, according to Adams (1993a) a further step in the incorporation of the third world into the global environmental agenda, where control and influence more explicitly rests with the countries of the north.

The interest from conservationists in issues of development is at least partially a result of organisations such as IUCN and UNESCO realising throughout the 1960s that they could not influence natural resource use within the third world without discussing development (Adams 1993b). That these organisations were globalising the environmental agenda in the 1960s is an important point which is

looked at later.

Adams (1993a) goes on to point out that the term 'biosphere reserve' was introduced to ensure MAB's charter could be visible in the field. That is, to be seen to be undertaking initiatives under the charter, it was important to provide this protected area approach with a unique label. As a result, the success of classification of biosphere reserves owes much to the ease with which they could fit the existing mould of action by government.

MAB's function was to 'develop the basis within the natural and social sciences for the rational use and conservation of the resources of the biosphere and for the improvement of the global relationships between man and the environment' (Gilbert and Christy quoted in Adams 1993a). Note here the emphasis on interdisciplinarity. The old disciplinary barriers were to be broken down to ensure that biosphere reserves remained flexible and effective within an increasingly complex world characterised by conservation and development dilemmas.

Note also the use of the term 'rational'. The term is value laden, because what is rational to one person may not be rational to another. What is rational to global conservation organisations such as the various MAB committees may not be rational to local herders grazing their animals along the Xilin River at Xilingol Steppe Biosphere Reserve in China, or the herders near the Nanda Devi Sanctuary in India. Hence, someone's notion of 'rationality' gets imposed on another

persons notion of rationality. That is, power is exerted, a point which resurfaces later in this chapter.

Further, rationalist has a certain connotation related to technical or scientific solutions. This may well have some implications when we consider that the scientific approach may not necessarily fit best with a participatory one. Technical, rational solutions are not always possible, or indeed the most appropriate.

According to Batisse (1986; 1993), the Biosphere reserve has three main roles:

- i. a conservation role which provides for the protection of genetic resources, species and ecosystems on a global scale. Whilst this is obviously an important role, the ways in which this has played out in Biosphere reserves themselves has meant they have provided a foothold for pure wildlife conservation within the much broader aims of the MAB program. This has, in turn, meant they have operated predominantly within a nature preservation/environmental management framework, though couched within the rhetoric of conservation and development. Ultimately, it becomes conservation for human use, rather than a reconstituted relationship with nature and a reconstituted model of development (Adams 1993a).

- ii. a logistic role which provides interconnected and integrated facilities for research and monitoring using an internationally coordinated scientific program as a framework. This has meant the expansion of the global conservation model, as well as the continuation of the priority which science has provided conservation understanding. once again, the ideal of the reserve as a reserve for change has reflected the predominant, northern scientific and preservationist ethic rather than a new approach.

- iii. a development role which emphasises the rational and sustainable use of ecosystem resources and, through this, the close cooperation with the human populations concerned. They are to be mechanisms for integrating local people into conservation and development ideals. The biosphere reserves represent this vision at its rosiest tint (and, perhaps, at its most naive and unproblematic). Batisse wrote that 'experience already shows that when the population are fully informed of the objectives of the biosphere reserve, and understand that it is in their own and their children's interests to care for its functioning, the problem of protection becomes largely solved. In this manner, the biosphere reserve becomes fully integrated - not only in into the surrounding land-use system, but also into its social, economic and cultural reality' (Batisse 1982: 107).

These roles represent an approach to biosphere reserve management which is meant to be interdisciplinary, and which is to integrate conservation ideals with

development needs. These roles have emerged along with a model for the zonation of the reserves which allows for differing degrees of human intervention, including 'development activities' in various areas. The zonation of core, buffer and transition zones was an idealised attempt at implementing, within a resource management framework, development processes without compromising the integrity of the core areas.

BIOSPHERE RESERVES AND THE SEVILLE OUTCOMES

This vision, of conservation integrated with and serving some vaguely defined human (and hence economic) purpose, is central to the MAB program. It is difficult to disentangle the concept of development as it is expounded through the biosphere reserve approaches from the vaguely defined notions of sustainability discussed in earlier chapters, as well as the sense that development is a metaphor for economic growth. If this is so, what then are the implications? What problems are there likely to be with the implementation of biosphere reserve concepts to protected area management?

Do the Seville action plan and vision provide important new directions?

In 1995 UNESCO ran an international conference on biosphere reserves in Seville, Spain. The vision for biosphere reserves into the twenty-first century which was established at this conference is instructive, for it tells much about the state of play of biosphere reserves and their management:

What future does the world face as we move towards the 21st century? Current trends in population growth and distribution, globalisation of the economy and the effects of trade patterns on rural areas, the erosion of cultural distinctiveness, increased demand for energy and resources, centralisation and the increasing difficulty of access to information, and uneven spread of technological innovations - all these paint a sobering picture of environment and development prospects in the near future.

The UNCED process laid out the alternative of working towards sustainable development, incorporating care of the environment and greater social equity, including respect for rural communities and their accumulated wisdom. Agenda 21, the Conventions on Biodiversity, Climate Change, and Desertification, and others, show the way forward at the international level.

But the global community also needs working examples that encapsulate the ideas of UNCED for promoting both conservation *and* sustainable development. These examples can only work if they express all the social, cultural, spiritual and economic needs of society, and they are also based on sound science.

Biosphere reserves offer such models. Rather than becoming islands in an increasingly impoverished and chaotic world, they can become theatres for reconciling people *and* nature, they can bring knowledge of the past to the needs of the future, they can demonstrate how to overcome the problems of the sectoral nature of our institutions.

Thus biosphere reserves are poised to take a new role. Not only will they be a means for the people who live and work within and around them to retain a balanced relationship with the natural world, they will also contribute to the needs of society as a whole by showing us a way to a more sustainable future. This is the heart of our vision for biosphere reserves in the 21st century (UNESCO 1995).

The first thing that stands out in the vision is the uncritical acceptance of the UNCED process and its outcomes. As has already been discussed, the UNCED process was problematic, not the least because it defines sustainability in terms of economic growth and current orthodoxies of development. Biosphere reserves are thus seen as a vehicle for the implementation of these flawed models of

development. Biosphere reserves are also mechanisms for the globalisation of conservation and development approaches. Not only do they hitch their destiny to the UNCED shooting star, they emerged as a response to the countries of the south not 'talking the same language' as the conservation organisations of the north (as mentioned in earlier chapters). Hence, the global community is described as needing to see working models of biosphere reserves.

Whilst this somewhat vague, generalised and homogenised 'global community' needs 'development' which reflects its economic, social and spiritual need, biosphere reserves must also provide options which are based in sound science. Whilst the move to interdisciplinarity is an important one, the 'sound science' sounds some warning bells. Are we to see environmental problems and solutions as requiring technical inputs? Are we to see environmental problems defined in terms of technical knowledge? In the greater scheme of multidisciplinary, what is the relationship between the disciplines, and indeed between the disciplines and local knowledge? The search for sound science has some major implications.

The other thing striking about the vision is its romanticised view of its own role - overcoming the increasingly chaotic world, theatres for reconciling people and nature and so on. This goes beyond mere rhetoric. It is a statement about what reserves are to be, and should be, heading towards and within the twenty-first century. Biosphere reserves were written about through the 70s and 80s in these types of ways. And now, in the early part of the twenty-first century, the vision of

reserves as integrators of conservation and development is still with us. But the problematic assumptions remain.

Ten key directions were identified by the conference and which became the foundations of the new Seville strategy (UNESCO 1995). An analysis of these is also instructive:

- i. *strengthen the contribution which biosphere reserves make to the implementation of international agreements promoting conservation and sustainable development, and especially to the Convention on Biological Diversity, Climate Change, Desertification and others.* The biosphere reserve network and model is explicitly part of the global environmental agenda. It is a mechanism for globalising the preservationist/environmentalist view, and its assumptions related to control, power, and the causes of conservation/development crises.

- ii. *develop biosphere reserves in a wide variety of environmental, economic and cultural situations, from largely undisturbed regions to the peripheries of great cities. There is a particular potential, and need, to apply the biosphere reserve concept in the coastal and marine environment.* The biosphere reserve network is to be used in the protection of a variety of habitats and, particularly note, as a model of urban development. This represents one of its great potentials. However, it also reflects the

preservationist heritage of the MAB approach. As Adams and Rose suggest, these types of concerns 'owe as much to the rationalization of qualitative choices of naturalists as to ecology' (in Adams 1993a: 35).

iii. *strengthen the emerging regional/inter-regional and thematic networks of biosphere reserves as components within the world network of biosphere reserves.* This may be useful, though there are some potential problems associated with the processes of globalisation mentioned earlier.

iv. *reinforce scientific research, monitoring, training and formal education in biosphere reserves since conservation and sustainable use in these areas require a sound base in the natural and social sciences, and the human sciences. This need is particularly acute in countries where biosphere reserves lack human and financial resources.* This point is an interesting one. It cuts to the heart of epistemological questions relating to scientific knowledge, the legitimacy of local knowledge, and the globalisation of scientific knowledge. Whilst there is much evidence which relates to the uses of education as a mechanism for creating dependency in the nations of the south, either through not developing local educational facilities or the teaching of inappropriate, western based and western centred curricula (see, for example, Chambers 1983; Kruijer 1987) the development of an integrated education approach which is trans-disciplinary and which recognises the strengths of local knowledge is potentially very powerful.

How this works out in the field is another matter.

- v. *ensure that all zones of biosphere reserves contribute to conservation, sustainable development and scientific understanding.* This once again highlights the preservationist heritage of biosphere reserves. Scientific understanding is seen to be important, sustainable development is used without explanatory frameworks, and conservation is separated from human ecology.

- vi. *extend the transition area to embrace large areas suitable for ecosystem management and use the biosphere reserve to explore and demonstrate approaches to sustainable development at the regional scale. More attention should be given to the transition area. In short, this view of a biosphere reserve is wider than that of a protected area.* Whilst this is important in that it is suggesting the biosphere reserve is not, and should not be seen as, a protected area in the orthodox sense, it still highlights that reserves are models of management. The emphasis is therefore still on management as an outcome, the question being what type of management.

- vii. *reflect more fully the human dimensions of biosphere reserves. Connections should be made between cultural and biological diversity. Traditional knowledge and genetic resources should be conserved and their role in sustainable development should be recognised and*

encouraged. This is obviously important, but it implies a reversal of the technico-scientific basis of management, so how it is possible to implement this, and at what level does this local knowledge get integrated, are important considerations.

viii. *promote the management of each biosphere reserve essentially as a 'pact' between the local community and society as a whole. Management should be open, evolving and adaptive. Such an approach will help ensure that reserves and their local communities are better placed to respond to external political, economic and social pressures.* Once again, this is obviously an important dimension. However, how it plays out within management frameworks is debateable. The preservationist approach, and biosphere reserve management, is an exercise in power - the power of legitimate knowledge, the power of the expert, and the power of some in the local community over others in the local community. These multi-layered, multi-dimensional power relations must be worked through in order to achieve anything like a result which is a pact between the so-called stakeholders. It is relatively easy or extremely difficult to get local people involved, depending on how you define 'local people' and 'involved'.

ix. *bring together all interest groups and sectors in a partnership approach to biosphere reserves both at site and network levels. Information should flow freely among all concerned.* The earlier discussion has implications

for this.

- x. *invest in the future. Biosphere reserves should be used to further our understanding of humanity's relationship with the natural world, through programmes of public awareness, information and education, based on a long-term, inter-generational perspective* Once again, this is an important point. How it occurs in reality is another matter.

By 2000/2001 the Seville vision had been revisited through a series of meetings, conferences and reports commissioned and supported by the MAB Committee of UNESCO. One of the direct outcomes of this has been the implementation of a process of assessment wherein biosphere reserves were assessed against the Seville vision (which in itself has become a framework for biosphere reserve management). A number of challenges have been identified through this process, including how to reinforce the management and functioning of individual biosphere reserves. Importantly though, the Seville strategy remains largely in tact:

With the Seville Strategy, and the Statutory Framework, biosphere reserves have entered a new phase of development ... the time is ripe for the MAB programme to become increasingly involved in research at the interface of economics, social sciences and ecology and to encourage the development of innovative projects that promote and enhance integrated ecosystem management and biodiversity conservation ... The Seville Strategy is part of a larger picture, a social contract that seeks to reconcile economic progress with ecological integrity (MAB Programme, 2001: 16).

Once again, the important question is to what extent the biosphere reserve concept is able to integrate socio-environmental justice given its concerns with economic progress and biodiversity conservation.

BIOSPHERE RESERVE FUNDAMENTALS

If the biosphere reserve concept is to be used in the facilitation of socio-environmental justice, there are a number of fundamentals which need to be achieved within the management context. The discussions of the previous chapters point to an urgent need for the fundamentals of biosphere reserves and management to include: an integrated approach to the protective function; a local level, participatory development framework; multidisciplinary approaches to knowledge; an educative emphasis; management based on a partnership approach.

These in turn reflect the priorities of a holistic approach to the facilitation of socio-environmental justice through the enabling contexts model.

An integrated approach to the protective function

As I discussed in earlier chapters, there is little doubt that the maintenance of biodiversity is an important issue. However, biodiversity itself is a contested term, for reasons discussed in chapter five. The biosphere reserve therefore, in implementing its protective function, needs to ensure that this is undertaken on the basis of a plurality of understanding. Related to this is the need to maintain ecosystem integrity through the core areas and to ensure that human use is

compatible with this function. However, it needs to also ensure that this function is compatible with human use. The two cannot be seen as separate issues. It is with these human use dimensions that the other fundamentals relate.

The local level, participatory development framework

As discussed in a number of earlier chapters, the fundamental issue of participation is central to protected area management and its altered paradigm. If this is the case, development must be reconceptualised, not only in its fundamental assertions about economic growth, but in its understanding of the relationship between redefined development and local people's involvement in the process. Participation is an ethical standpoint which must be understood, and must be facilitated.

Interdisciplinarity

Messerli has differentiated between three levels of work within the biosphere reserve concept. Firstly, and at its lowest level, there is what can be described as 'pluridisciplinarity', in which various disciplines entertain channels of communication without having a common goal. The middle level is described as interdisciplinarity, where the participating disciplines coordinate their endeavours in the direction of a common goal (that is, answering a common problem) and there is one leading discipline in the integration process. The highest level is that of 'transdisciplinarity', where the process runs through a hierarchy of goals such that there is a large number of primary goals, a smaller number of intermediary

goals and finally one ultimate goal. Accordingly, there may be more than one leading discipline (in Steiner and Nauser 1993; see also Janssen and Goldsworthy 1996).

The aim is to move beyond the first and second levels and achieve that of transdisciplinarity. However, there are a number of difficulties associated with this. Firstly, the language of the disciplines as well as their epistemological base, can be quite different. As a result, different people may well find themselves discussing, and acting upon, different perceptions of similar terms.

For example, out of my own research within an interdisciplinary team, complications have arisen out of 'evolutionary perspectives'. The use of such a term from an ecologist has different meanings to that which I associate with the term. For me, the 'evolutionary perspective' means social Darwinism, biological determinism and an uncritical sense of progress along a continuum. Further, within the context of life in the field, one colleague sees social issues in ecological terms and is inclined to reduce social complexity to ecological complexity. Another colleague tends to focus on economic issues as defining explanatory frameworks while I focus on social development and equity issues. That we do not see the world in the same way is important to note. But what is particularly important in all this is that the goal of transdisciplinarity is difficult to achieve. Yet, if it is not achieved, and multidisciplinarity remains, then we have a 'lead discipline' which means that issues are couched in its technical terms rather than

this plurality of understanding.

All this is apart from the very important issue of local people and their knowledge within this. We are faced with competing knowledge bases, found within science, social science and 'lived reality'. Out of these competing knowledge bases come attempts, often incomplete, in understanding complex social, cultural, political, economic and ecological processes which impact on conservation and development. Biosphere reserve management needs to sort through all of this in its search for transdisciplinarity. It is thus a major task.

The educative role

The educative role needs to move beyond merely educating people about the benefits of conservation. It needs to include a process of conscientisation along Freirian lines where education is not a technical process but one which facilitates participation, equity and critical thinking. If the educative role of biosphere reserves is reduced to a technical process it will have largely failed in its aim of fostering integration and facilitating a protected area management paradigm shift.

The partnership approach to management

This is directly related to participation, and also to the redefining of the term 'management'. Partnership approaches need to be just that, not a consultation process with targets of development. But also, a partnership approach means management is a flexible, dynamic term and process which means knowledge and

insights from a variety of partners are treated equally. This has obvious implications for things like local knowledge, local cultural understanding, and dimensions of inequality such as gender, caste, ethnicity, age and class.

MANAGEMENT ISSUES AT NANDA DEVI BIOSPHERE RESERVE, INDIA

Over the last 15 years the management of Nanda Devi Biosphere Reserve has been problematic. Whilst biosphere reserves are supposed to provide mechanisms for integrated conservation and development, the management has tended to disregard the development aspect and focus on conservation. This has led to significant tensions within the area between management and local people. These are the result of competing ideas related to development, conservation, the management of nature and the rights of local people themselves.

The Development Context

One of the sources of conflict is related to competing ideas about the roles biosphere reserves in general, and NDBR in particular, play in development. Whilst one specific issue, that of ecotourism's role in development at the reserve and in the state, are discussed in chapter nine, some more general comments can be made.

To the extent that senior reserve management acknowledge the reserve has a role

to play in local level development, this role is seen in reasonably narrow terms, usually associated with the creation of seasonal labour opportunities for local men.

When specifically asked about the implications for the area of the 'mail economy' (where young men leave the area and post their income back to the families), senior reserve management took the view that 'this is the way it is'. When asked about the extent that the reserve could provide alternative income for local people, management responded in terms of seasonal wage labour (for example, labouring to make sure tracks are in good condition). Whilst management through this recognised the role the reserve could play in local employment and development, its concept of development tended to be equated with wage labour.

This was in contrast to the concept of development enunciated by local villages and local social workers. For many, the history of the area was a history of protecting forests and livelihoods, and the influence of Gandhian ideas were apparent. As one leader said:

The forest department give us work when they can ... maybe when they want some cheap labour (laughs). But here we follow the three 'H's – head, heart, hand. As Gandhiji said, work should be based on intellect (head), service (heart) and labour (hand). If you only do the one, you loose touch with the other.

Here the concept of labour was entwined with a concept of social development, not wages. This alternative development model was suggested at another village. Once again, in discussing the role the reserve could and should play in local development, the local social worker had this to say:

Some years ago now during a workshop at the village we discussed what type of development people would want. Someone at the workshop came up with this:

D=ED-SD=ND.

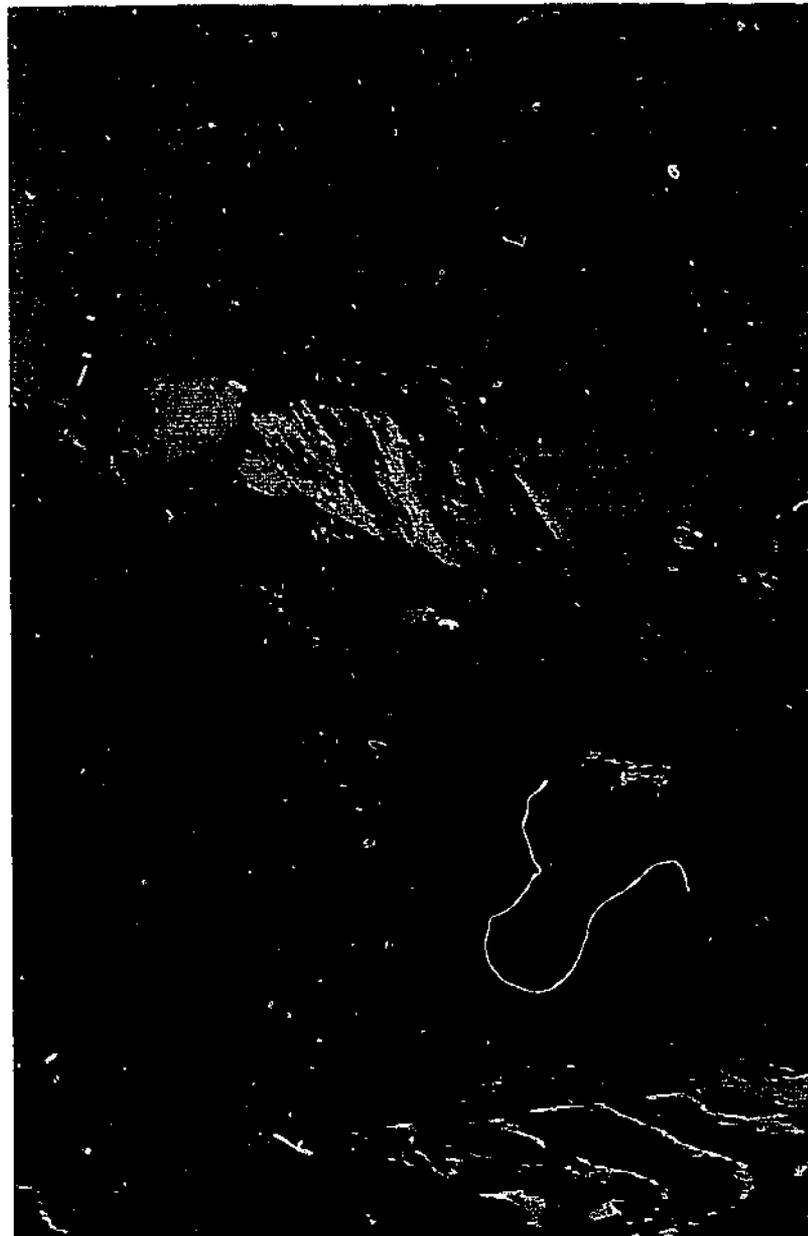
This means development is talked about as economic development, but economic development without social development means no development. For the people here, economic development is important, but they do not want economic development which neglects them and which does not contribute to the good of all people within their community.

There are thus tensions between the development model espoused by management of the reserve and that of local people. These tensions are discussed in greater detail in the next chapter, which uses NDBR as a case in ecotourism.

The Biodiversity Context

The conservation values of the area are very high. Not only does the Nanda Devi Sanctuary have reputedly some of the best wilderness areas of the Himalayan region, rare and endangered species such as the snow leopard can also be found there. The area has significant altitudinal variation and this has contributed to a diversity of flora and fauna within the reserve (World Conservation Monitoring Centre nd).

Illustration 8.1: Nanda Devi and part of the Nanda Devi Sanctuary in Nanda Devi Biosphere Reserve



The Policy Context

At a broader policy level, the biosphere reserve approach has potential to act as a mechanism for facilitating socio-environmental justice, albeit with the provisos discussed above. There are however two specific policy related issues which impinge on NDBR: the Uttaranchal government's policies relating to conservation

and development and to ecotourism.

Policy formulation and application within the state of Uttaranchal is very much in its infancy. Therefore the following comments relate more to indications of policy directions coming from the government rather than concrete policy analysis (as the policy process is still quite fluid).

Firstly, there are clear indications the Uttaranchal government, as well as the government of India, will support a development model based on large-scale infrastructure development and tourism (which I will discuss in the following chapter). For example the Tehri Dam construction is underway, and reports late last year tell of new roads being built through the protected areas of Corbett National Park and Corbett Tiger Reserve. At this stage it is unclear how the new government will interpret its conservation and development priorities.

Secondly, it is clear that ecotourism and religious tourism will be an important component of the state's development policies. Whilst I will discuss ecotourism in more detail next chapter, the important point to note is that currently conservation policy and tourism policy is separate. A specific result of this in the NDBR has been that income generated by tourists (especially those on package tours, or using the state's government-run tourist organisations) is kept by those organisations and the costs associated with the conservation of areas of tourist interest (for example, NDBR) is borne by the Forest Department. Thus, whilst tourists generate income

for one part of government, another part is unable to launch anti-poaching patrols in the higher altitudes as they cannot afford adequate footwear and warm sleeping bags. As one reserve manager put it:

Who cares for the musk deer?

Consequently there appears to be a real tension between the ideals of the biosphere reserve and the policy context impacting on NDBR. Whilst it is hoped the policy contradictions can be overcome in the future, the current situation is that conservation/development policy which should complement and support the management of the biosphere reserve is at best problematic.

An Active Civil Society

With its history of activism (for example, the Chipko movement, the independence movements) the region has a strong foundation for an active civil society. The results of this often came up during interviews. For example, in one manager's words:

They (local villagers) are always holding meetings. There are some times when we spend most of our time at meetings and don't have time to do our own work. The latest problem is with compensation. The department offers compensation for loss of stock and loss of life, but it is very slow. So while they wait, they have meetings and we go to them to say we cannot do anything, it is not our fault.

Local villagers tell me that there is a (proud) tradition in the area of holding village

meetings to discuss important topics, and that many times the topics are ones of conservation/development. For example, during the previous twelve months to my last visit, meetings had been held to discuss compensation, the patronising attitude of biosphere reserve management, the ways in which government policy will affect local villages (especially that related to tourism), ways in which the local villagers can influence government policies and the ways in which the biosphere reserve management can be more responsive to local needs.

Biosphere reserve management was a topic of great interest to local people during interviews and this interest reflected the strength of the civil society. For example, discussions about reserve management reflected an action orientation (for example, 'this is what we will do to stop this occurring') rather than a sense of alienation (for example, 'what can we do?'). This will be further discussed below.

More recently there have been cases of local villagers defying the ban on human movement into the inner sanctuary core area and the launching of an agitation in early 2000 – the *cheeno jhapto* ('pounce and grab') movement to demand access rights to forest resources.

The Community Context

Of course, if an active civil society based on ideals of participatory and social justice exists it is hoped community institutions will reflect these ideals. Whilst this research has not focussed specifically on this, there are indications that at least

some local institutions reflect these values. The village of Lata, for example, has facilitated the development of an organisation aimed at managing tourism in the area. Local *panchayat raj* institutions and women's cooperatives also tend to indicate that community institutions at least partially reflect participatory and democratic traditions.

Protected Area Management at the Reserve

The relationship between reserve management and local people appears problematic. Amongst some villagers there appeared a deep mistrust of the management, and the impacts of the proclamation of the Nanda Devi Sanctuary area as a core zone in 1982 were always mentioned as being an example of this. The exclusion of people from the core area meant tourists and mountaineers were excluded, as well as local people. This meant local people, especially men who derived income as porters and guides during summer, had their economic livelihood decimated. In addition, the proclamation of the core zone excluded some of the local people from herding their animals to their summer pastures. As a result, men were forced to migrate from villages to towns and cities in search of work and contribute to the area's 'post economy' (where men post money back to their families).

There was also a degree of mistrust expressed by senior reserve managers during interviews. Managers frequently complained about having to deal with local people and especially their complaints. The levels of frustration reflected a

recognition by reserve management that they couldn't do anything directly to rectify the situations which gave rise to the complaints (for example, the compensation issue). However at times they also reflected a deeper-seated assumption about what local people were – at best a bit of a nuisance and at worst impediments to managing the biosphere reserve.

Currently the situation at NDBR is fluid. UNESCO has put in place a process whereby country Biosphere Reserve Committees begin to assess management outcomes against the Seville strategy. Yet, at NDBR local people's livelihoods and rights are still restricted, and the resolution of management conflicts seems to be predominantly coming from local initiatives and agitations rather than from management practices and models.

CONCLUSION

Adams writes:

Once again, a global' initiative of the north is reduced to nothing but a small ripple on the periphery. Nonetheless, the biosphere reserve has become a recognised and accepted element in international conservation, and, although the biosphere reserve program as a whole has failed to live up to its hopes it raised at its inception, it undoubtedly contributed through the 70s to the growing belief that that there was an ecologically sound approach to development which could be 'sustainable' and acceptable, and that this could be discovered for specific environments and circumstances through research done in new, open and interdisciplinary ways (1993a: 35).

Has this initiative become a mere ripple in the periphery? Has management of biosphere reserves been able to better reflect socio-environmental justice models

and ideals, despite this tendency towards globalisation and despite the environmentalist heritage?

Biosphere reserves occupy an important role in the search for socio-environmental justice at least potentially. But to achieve this potential, they need to reflect less of the preservationist heritage of the model and more the locally based participatory approach and ethic. They need to be at the forefront of redefining development, and sustainability, and ensuring locally focused management reflects these ideals. If not, biosphere reserves will end up as yet another mechanism for the integration of local people into the global economy.

Chapter 9

ECOTOURISM

Where? Along the road? Let's go (Tourist hearing about a tiger sighting, Corbett National Park and Tiger Reserve, India).

Yes of course we plan to have ecotourism in the reserve. We are planning to get funding for accommodation along the walking tracks. Local people can then work in the lodges (Protected area manager, Uttaranchal, India).

INTRODUCTION

A protected area management option which has gained international significance in the last ten years is ecotourism. An understanding of the concept is of major importance, especially given what appears to be a lack of studies which have theoretical and conceptual analysed ecotourism and its implications (Wall 1994). As a result, ecotourism is often used as a catch-all phrase, with resulting indiscriminate, uncritical use.

One way of overcoming this lack of conceptual and theoretical focus is to analyse ecotourism, not from the direction of tourism *per se*, but from that of development, particularly approaches integrating environmental and social justice.

This approach would emphasise ecotourism less in terms of marketing and more

in terms of local level social and economic development, less in terms of visitors and more in terms of their impacts on local communities, less in terms of tourism management strategies and more in terms of local level empowerment through ecotourism. This chapter will critically assess the concept of ecotourism and its application as a mechanism for locally focused sustainable development in protected areas.

WHAT IS ECOTOURISM?

Ecotourism is a notoriously difficult concept to define. Stewart and Sekartjakrarini (1994) have categorised the current thinking on ecotourism into three camps, each proving a different emphasis in approach, and therefore definition:

- i. advertising and marketing perspectives. Here, ecotourism is linked to tourist behaviour like birdwatching, whale viewing, wildflower photography, walks through forests, and the exploration of remote natural areas. Often the argument for this type of tourism is based on it being a non-consumptive enjoyment of natural habitats and being less erosive than other types of land use.
- ii. value-based travel directed at minimum impact and appreciation of host cultures and what they do. This approach has a number of alternative

labels, including responsible tourism, educational tourism, ethical travel and alternative tourism. These share a minimum impact philosophy and also focus on the responsibility of guests/travellers.

- iii. a close working relationship between the local community and the tourism industry provides the necessary mechanisms to support conservation efforts. Here, local communities, natural resource managers and tour operators are necessary components of an ecotourism development model. The goal of development is to attract visitors to natural areas and use the revenue to fund local conservation and development projects. Tourism is not *ecotourism* unless it clearly integrates both protection of nature and provision of local economic benefits.

Perhaps the last word on problems of definition goes to Miller and Kae who advise:

the merits or deficiencies of ecotourism (or any of its surrogates) are not to be found in any label *per se*, but in the quality and intensity of specific environmental and social impacts of human activity on an ecological system (quoted in Amos 1995: 5).

The increasing affluence in the so-called developed countries has led not only to greater material consumption, but also to increased participation in leisure activities, including tourism, which has numerous environmental and social impacts. In recent years tourists from wealthy countries have increasingly sought new and unspoiled 'natural' destinations, particularly in countries of the periphery

(Place 1995).

Thus, ecotourism represents an outcome of processes of globalisation, in both its economic (global search for economic growth) and its socio-political guises. But, as Place (1995) has pointed out, it also represents a response to phenomena occurring in both centre and periphery.

As a result, during the past decade protected areas (and consequently local people) have increasingly been integrated with the global economy through ecotourism. A consequence of that has also been felt through their integration into the global environmental system.

Whilst ecotourism has been widely promoted as a non-consumptive use of nature and a win-win development strategy, this is not necessarily the case (Place 1995: 162; Bandy 1996). Whilst ecotourism has a significant potential for integrating social and environmental justice, this is not always achieved. This is at least partly due to the conflicting, often competing ways in which ecotourism is used and implemented.

At one level, ecotourism is the linking of a tourist system with an ecological system. However, within this there are competing ideas about the form of these links. Ceballos-Lascurain (1995), for example, suggests nine characteristics which an activity must possess in order to be ecotourism:

- i. *it must promote positive environmental ethics and foster 'preferred' behaviour in its participants*
- ii. *it does not degrade the resource.* That is, it does not involve consumptive erosion of the natural environment.
- iii. *it concentrates on intrinsic rather than extrinsic values.* That is, facilities and services may contribute to the experience but are not attractions in their own right.
- iv. *It is oriented around the environment in question and not around people.*
Ecotourists accept the environment as it is.
- v. *it must benefit the wildlife and the environment.* The measurement of whether the environment (and not just people) has received benefits can be measured socially, economically, scientifically or managerially. At the very least, the environment must gain a net benefit, thereby contributing to its sustainability.
- vi. *it provides a first hand encounter with the natural environment, and with any accompanying cultural elements found in undeveloped (sic) areas.*

vii. *it actively involves the local communities in the tourism process.* This is so they benefit from it, thereby contributing to a better valuation of the natural resource in that locality.

viii. *its level of gratification is measured in terms of education and/or appreciation,* rather than in thrill-seeking or other activities more in keeping with adventure tourism.

ix. *it involves considerable preparation and demands in-depth knowledge on the part of both leaders and participants.* Hence, the satisfaction derived from the experience is felt and expressed strongly in emotional and inspirational ways.

Ceballos-Lascurain's rather technical approach contrasts with that of Orams (1995). He argues for a management strategy that moves the ecotourism experience from a passive to an active one. Using this approach, he develops indicators of 'success' for ecotourism management whereby the tourist system is more fully integrated into the needs of the ecological system. In so doing Orams argues for an ecotourism which actively contributes to environmental health.

Figure 9.1 Objectives of ecotourism management strategies (Orams 1995)

1 Effect on the Ecotourist:

increasing success of strategy ►

Enjoyment satisfaction

Behaviour,
lifestyle change

2 Effect on Natural Environment:

Passive
Minimise disturbance

Active
Contribute to
environmental health

Walls (1994) discusses the paradoxical nature of the links between tourist systems and ecological systems. Given that so much ecotourism is promoted by those who are concerned with ecological degradation, it is surprising that so much tourism which attracts an 'eco' label reinforces this degradation. For Wall (1994) ecotourism has the potential to be environmentally disruptive in at least four key areas:

- i. ecotourism is often directed to special places which may have limited ability to withstand use pressures
- ii. visitation may occur at critical times (eg breeding)
- iii. there is an assumption that the relationship between numbers and

environmental impacts is linear - but research may indicate that small numbers can cause major damage

- iv. even if on-site impact is small, off-site and en-route impacts may be large.

Ecotourism, then is problematical.

THE PROBLEMATIC NATURE OF ECOTOURISM

There have been attempts at developing an ideal type of ecotourism. Hummel (1994), for example, discusses Valentine's three component ideal type:

- i. there is a clear relationship between the interests of the tourists and the place they are visiting
- ii. local population has to benefit from tourism
- iii. local tourism policy and management should be directed in such a way that the development of destinations should be aimed at the satisfaction of tourists, locals and environmentalist.

Orthodoxy tells us that ecotourism is a non-consumptive use of natural resources, and has a win-win outcome for both conservation and for development. Valentine, discussed above, highlights this, even if within an ideal type framework. But this is obviously not so. As Hummel suggests, with specific

reference to Valentine:

All three conditions assume a guided change in the 'right' direction. Tourists have to be educated or informed to behave in a certain way, a 'right' way. The local participation has to be steered in the 'right' direction, and the policy - and decision-makers should steer in the 'right' direction. It seems that the conditions are based on the assumption that it is clear what is and who should decide upon the 'right' development. But 'sustainability' is still to be negotiated, to be fought about, to be socially constructed (Hummel 1994: 21).

Ecotourism, and ecotourism development, is contested, by local people, by policy makers, by dominant assumptions about the development paradigm itself, and about assumptions related to the relationship between humanity and nature, especially the causes of environmental crises (Bandy 1996). Not only is 'sustainability', in Hummel's words, still to be negotiated, so is ecotourism.

Further,

If actors have an idea of the 'desired state' at all, this is different for the several actors producing and reproducing the site (and this has consequences). To understand these consequences, one should know who are the different actors in the development of the site. What is their concept, if they have a concept, for the development of the site and how are these concepts translated in social actions? These actions can be conflicting. Different interests through power relations, can result in power-play between several actors.

Also coalitions can be formed by temporary groups of actors with coinciding interests who unite their power to (ensure) ... that their interests are translated in certain actions to(re)produce the tourist site ... (Power) is a process which results in a continually transforming site. Depending on the power ... of the different actors or coalitions, the physical or symbolic production of the site will be transformed, or not (Hummel 1994: 22).

Often the outcomes of all this will not coincide with the ideal type for ecotourism which Valentine suggests (Hummel 1994). Understanding the power relations

inherent within ecotourism will therefore give us more insights into what is happening at the site.

There are a number of social consequences which are important to understand, and which are derived from this focus on power and the ways in which people construct their views of nature in general, and ecotourism in particular. The concept of ecotourism reflects Western ideas about environmental conservation which tend to separate humankind from nature. In traditional societies, there may be no distinction between the natural and cultural environments - the physical environment is an every-day lived - in experience. However, many advocates of tourism either ignore or fail to understand the relationship of indigenous people to their environment (Hall 1995).

Further, tourism is an environmentally dependent industry. And ecotourism is only the latest expression of this relationship. In many developing societies, Western supporters of ecotourism have focussed on species preservation at the expense of indigenous cultures. Since the natural environment is a cultural resource, we should be talking of 'sustainable' tourism with its emphasis on the interrelationship between ecology, society and economy, and the role of local people in making decisions which affect their land. Any form of tourism development needs to be based not on the culture of the tourists, but on the values and culture of the host community (Hall 1995).

Undoubtedly, the maintenance of biodiversity is a critical component of sustainability. But sustainable development also teaches us that the environment and the economy are integrated with society and culture. Perhaps, therefore, we are facing a new form of ecological imperialism in which Western cultural values are being impressed on indigenous cultures through ecotourism. To neglect the socio-cultural dimensions of development, is to completely oppose the principles of sustainability which ecotourism claims to support (Hall 1995).

Wall (1994) highlights the fact that poor people cannot afford to be conservationists. Many ecotourism projects assume a trickle down effect, and its limitations have been widely reported. As a result, where local people don't receive benefits, they are likely to (often forced to) compete for natural resources. The competition may be between local people and tourists, local people and park management, local people and centralised tourism policy making, and/or local people and tourist operators. It is not an uncommon experience that the supposed win-win context of ecotourism becomes yet a further example of win-lose, where the poor are, once again, the losers.

This can be particularly so in the case of assumed trickle down advantages which have a layer of environmentalist or non-participatory, orthodox developmentalist values and assumptions included. For example, the local and national benefits of tourism need to be examined in the context of the overall cost (see also Bandy 1996). In the case of ecotourism, elimination of competing forms of land use is

usually necessary (hunting, gathering, farming, forestry, mining etc) and tourism in its own right can create dependencies such as on international travellers.

Further, we need to ask where does the foreign revenue go? A high proportion of the tourist dollar may go to outsiders - hotel and tour operators, airlines, foreign travel agents etc. As a result of this economic leakage, natural areas which once provided income to local people now generate profits for outsiders, with, potentially, only a tiny proportion of the tourist dollar remaining in the actual destination. Often, this is largely in the form of wages of hotel and restaurant employees and tips (Place 1995)

Furthermore, while the benefits accrue to affluent national and foreign entrepreneurs, its costs may be disproportionately borne by local people. Not only do local people lose their resources base for farming, lumbering, or mining, but they may lose the subsidy from nature upon which their livelihood was based. In other words, they may lose access to the forest which provided them with fuel, medicine, at no cost other than labour and time or they may lose access to beaches where they fished, swam and engaged in various leisure activities (Bandy 1996; Place 1995).

ECOTOURISM AND SOCIO-ENVIRONMENTAL JUSTICE

According to Place (1995: 163):

If ecotourism is to act as a catalyst for development, rather than the destruction, of rural places and cultures in the periphery, a large proportion

of local people must benefit from the influx of tourists, rather than merely bear the burden of their costs. Some studies have suggested that local participation from the beginnings of conservation projects is critical to their success. If so, participatory planning for park - based tourism development may provide the best opportunity for linking conservation and community development.

According to Brandon (1993), there are a number of issues critical to ecotourism: the empowerment of local people; participation in the project cycle; the creation of stakeholders; linking benefits to conservation; the distribution of benefits; the identification of community leaders and institutions; and the need to be site specific. These provide important, though somewhat managerialist, dimensions to the usefulness of ecotourism as a protected area management strategy in integrating socio-environmental justice.

Empowerment of local people

Brandon compares the participatory approach to the beneficiary approach. The participatory approach is one in which local people are active parts of the whole process, whereas the beneficiary approach is that where local people are merely beneficiaries of benefits. She suggests the beneficiary approach is the cause of ecotourist project failures which assume they have undertaken a participatory approach.

Participation in the project cycle

Participation is important to ensure that local people are represented, their knowledge and experiences understood and they maintain ownership of the

process. However some difficulties come into play here depending on the project itself. If the project is driven by timelines and outputs (found in many development projects) the concept of participation may be defined by, or subsumed by, a conception of time which is generated by the funding agencies, rather than by the readiness/preparedness of local populations.

Linking benefits to conservation and development

These benefits need to be explicit in the aims and objectives, and that benefits accrue to as many within the community as possible. Given what has been discussed in previous chapters, this point actually means that the very concepts of conservation and development need to be redefined. As mentioned previously, both conservation and development are contested terms and uncritically embracing current orthodoxies may not lead to socio-environmental justice outcomes.

Distributing benefits

Benefits need to be equitably distributed to ensure that local elites or other groups are not unfairly advantaged. Such a redistribution may only occur with a redefining of what is meant by development, local economy and conservation.

Identifying community institutions and leaders

Community institutions are important, though they may need to be strengthened. Alternatively, they may need to be developed. Either way, it is important to

understand the local institutions in order to make judgements about the most appropriate use of them. Community leaders are also important, though care should be taken to ensure that there is no elite bias in the project. It is also important to recognise the importance of an active civil society in this, as empowered local people contribute more to local initiatives than those who are disempowered. Consequently an integral aspect of this is empowerment.

Being site specific

The local level matters, and we need to be careful that we are not generalising too much due to the complexity of local social, economic, political and ecological arrangements. These approaches do not lend themselves to incorporation within a blueprint model of natural resource/protected area management.

TOURISM AND ECOTOURISM IN UTTARANCHAL

The above discussions are crucial in understanding/evaluating an ecotourism approach which could facilitate socio-environmental justice outcomes. The extent to which ecotourism embraces a locally-focused participatory approach and the extent to which it reflects the integrative processes of global conservation and development agendas highlight the ways in which ecotourism as a process, a protected area management practice and a model for development is contested. It is instructive to look at how these contested processes are occurring in the state of Uttaranchal, and then look at some specific issues found in the case studies from this state.

It is clear the state of Uttaraanchal has identified tourism/ecotourism as a significant component in its development strategy. What is less clear is the extent ecotourism will play in its conservation strategy. That is, it is unclear if the concept of ecotourism will be closely associated with a development policy which in turn is associated with economic development. In other words, an ecotourism which is focused on markets rather than socio-environmental justice. The following discussion, based on my fieldwork in Uttaraanchal, highlights some of the issues within the state, and their likely affect on tourism, conservation and development in Uttaraanchal. The cases of Nanda Devi Biosphere Reserve and Corbett Tiger reserve are then looked at in greater detail.

The state has a high degree of potential for the development of an ecotourism which integrates the multiple roles of biodiversity conservation, socio-economic development, and environmental education/conservation awareness. The key factors in this potential are: the use of ecotourism for sustainable development; changing priorities in domestic tourism; the emerging international interest in ecotourism and in India; the Himalayan park system; the biological importance of areas outside the park system; the reputation of Corbett Tiger Reserve; the already established religious tourism; an ability for the state of Uttaraanchal to develop an approach to ecotourism which will be able to be copied elsewhere

Integrating conservation and development through ecotourism

The state has a long history of grass roots activism (most recently that leading to the formation of the state), conservation (for example, Chipko *Andolan*) and locally focused development initiatives (for example, various non-government organisations working at village level in the Kumaon). Given that the state is already a significant tourist destination in its own right, the potential for bringing together tourism, conservation and locally focused development would seem to be high.

For this to occur, it is imperative that ecotourism is not just viewed as an economic activity. As mentioned earlier, if ecotourism is viewed only in market terms, it has the potential to have serious environmental, social and cultural impacts. However, an ecotourism which is planned and managed as a multi-dimensional activity incorporating social, cultural, ecological and economic components, will ensure that the foundation for the state's development is indeed sustainable.

Such an ecotourism could include the following aspects:

1. Economic development through ecotourism by managing activities and implementing ecotourism policies to ensure economic benefits accrue to the state and its people. The fact is that the tourism industry is a global one, within which India and Uttaranchal operate. Managing the economic

relationship between Uttaranchal, India and the global tourism industry will be difficult, but needs to be focused on ensuring the maximum potential economic benefits are accrued to the state and its people, and are equitably distributed.

2. Social development by translating the economic benefits to social benefits. This will ensure the foundation of social development is economically and ecologically sustainable, because it is derived from a sustainable form of ecotourism. Consequently, the social development of the state, through its welfare and development strategies, will also be founded on sustainable principles. The foundation of social development should reflect principles of participatory democracy.
3. Cultural development within the state through ecotourism. A successful ecotourism approach manages the interactions between local people and tourists in such a way as to ensure that there are no negative consequences for local populations. Within Uttaranchal, with its tradition of an active civil society, the potential for an ecotourism reflecting this ideal is great. However, it remains crucial that ecotourism is viewed as more than just an economic activity for this to occur.

More generally, the facilitation of ecotourism within the state will play a crucial role in the protection of both the Himalayas and its peoples. An ecotourism

strategy incorporating the above components will provide an important dimension to this protection and the development of sustainable livelihoods amongst rural populations. An approach which views ecotourism as a market opportunity will likely generate a set of dependencies on national and international tourist movements and may well see many of the economic benefits leave the state.

Changing priorities in domestic tourism

Evidence suggests the Indian domestic tourism market is continuing to expand. If the experience in other countries is an indication, this increasing incidence of domestic tourism will translate into an increased interest in ecotourism as a tourism activity and as a tourism ethic.

Assuming this is the case, Uttaranchal has the potential to provide a destination which will have high on-going demand and, with the appropriate planning and policy formulation, be in a strong position to benefit from this in the maximum possible way. Of particular importance in this regard is the wildlife, adventure and trekking subsections of ecotourism. The importance of religious tourism is dealt with separately, below.

The developing international interest in ecotourism and in India

An important factor in ecotourism planning in Uttaranchal is the increasing interest in the India as a destination for international tourists. Given the increasing portion of the international tourist market which is undertaking ecotourism

activities, and given the natural assets of Uttaranchal, the state has a large potential to become an international ecotourism destination of choice. There are a number of locations within the state which fosters, or would be expected to foster, this type of interest, including Corbett Tiger Reserve; Nanda Devi Biosphere Reserve; and Gangotri.

The benefits of this offer the potential to be great, as the state's reputation as an ecotourism destination increases. However, it will be crucial for the state to ensure that this is developed and managed using the multi-dimensional model of ecotourism discussed above. It will also be crucial that the state, in its ecotourism policy and planning, does not create an unsustainable set of dependencies on the international ecotourism market. As with most tourism or ecotourism activities, there are benefits to be gained, but also potential problems needing recognition so they can be overcome. Perhaps the most important of these is considering the priorities of the international market *vis-à-vis* the management and priorities of ecotourism within the state.

The Himalayan park system

The existing system of national parks in the Himalayan region of Uttaranchal represents an important ecotourism asset. The continuing interest in trekking and the so-called 'adventure sports' which occur in the region will provide a basis for ongoing domestic and international demand. The protected area system itself is an ecotourist destination and provides a legally identified system of conservation.

National parks themselves are of intrinsic interest to the ecotourism market as they represent the values and ethical positions which are newly emerging amongst the ecotourism market. The fact that they are part of the Himalayan range provides further interest amongst tourists, trekkers, wildlife viewers and photographers. Of course, the religious significance of this is an important factor which is discussed in greater detail below.

For example, the state includes a biosphere reserve, a tiger reserve and many parks protecting Himalayan landscapes, flora and fauna. This diversity of protected areas highlights two important things. Firstly, it emphasises the importance of the state to conservation. With the Himalayan system under threat from a number of sources, the facilitation of a multi-dimensional ecotourism within the state will significantly contribute to conservation efforts within the Himalayas. Secondly, the state will potentially be able to become a leader in the integration of biodiversity conservation and local level development through ecotourism in protected areas. Both these points represent substantial contributions the state is likely to make to local, national and global conservation efforts as well as to its own economic and social development.

The biological importance of areas outside the park system

Of course, not all locations which are potentially important to ecotourism and which are crucial to biodiversity conservation are located within the protected area

system of the state. In a sense, the issues surrounding ecotourism's role in biodiversity protection and sustainable development of the state is slightly different in these areas.

Whereas protected areas have legislated frameworks supporting conservation, those outside the network face different conservation and development issues. If ecotourism is used as a mechanism for conservation as well as local level development, then unprotected areas may need to be treated as a priority for these approaches. An approach to ecotourism must therefore be flexible enough to accommodate a diversity of ecological and resource management issues and models. This may have implications for the location of responsibility for ecotourism within the Government.

The reputation of Corbett Tiger Reserve

Corbett Tiger Reserve, and more generally the tiger itself, creates demand for the region amongst ecotourists, and provides an important dimension to the development of ecotourism within the state. Whilst Corbett has a well deserved national and international reputation as a park and will attract visitors, this will only continue whilst tourism activities remain sustainable. Corbett has a significant role in ecotourism, but its role will soon be diminished if tourism at the reserve becomes unsustainable, or moves away from an ecotourism focus to one more on marketing of destinations. In other words, Corbett Tiger Reserve will only remain a destination for ecotourism whilst it reflects those things that make a

destination ecotourism. This will take careful planning to ensure that it maintains its potential.

Part of this management may require tourism management and tourist education which takes the focus away from the tiger itself, and generates a more general appreciation and visitor experience based on the forest itself, other animals and perhaps the role Jim Corbett played in conservation. This is not to suggest that the reserve should ignore or reduce the importance of its role in tiger protection. It is to suggest that too great an emphasis on the tiger may lead to high degrees of visitor expectation of tiger sighting. As more and more visitor pressure is on tiger sighting, a potential for conservation education and awareness may be lost. It may also put undue pressure on the tiger population as more and more people, using increasing numbers of jeeps, attempt to see a tiger. This is discussed in greater detail below.

The already established religious tourism activities

Obviously Uttaranchal is already an important destination for what can be called religious tourism. The number of visitors who undertake this activity can potentially provide a sound basis for further tourism developments in the state, and build a diverse advocacy network in India and abroad. Importantly, it can also act as a diversifying influence in the potential tourism market for Uttaranchal. That is, the state will not be dependent solely or substantially on adventure

tourism, wildlife viewing, trekking etc. This diversity will provide strength to the development of tourism within the State.

However, it is crucial that religious tourism is integrated into an ecotourism plan, to ensure that this type of activity reflects the goals and values of ecotourism. The potential is there to provide a solid tourism foundation to the state, and the challenge is to ensure that this foundation is based on ecotourism principles.

Problems in the facilitation of ecotourism in Uttaranchal

It can be seen that the potential for ecotourism within Uttaranchal is great, and that ecotourism can play an important role in the economic, social, cultural and environmental development of the state. However it will require careful planning and discussions amongst stakeholders, as well as policy formulations reflecting aims and objectives of a sustainable (and therefore multi-dimensional) type of ecotourism.

Existing approaches to tourism and ecotourism: converting to active conservation

This is one of the most important, and possibly most difficult, issues in ecotourism development. The state has an already existing system of tourism in place, and also has a number of approaches to ecotourism using a variety of definitions of what ecotourism is. One of the challenges facing the state will be facilitating a tourism which reflects the ideals of ecotourism. The following are

some of the significant issues. Note that much of this is concerned with changing values, which does not occur in isolation from broader social/cultural changes within the tourists themselves.

Institutional change.

It is common that existing institutional requirements for tourism need to be altered to facilitate ecotourism. This may be anything from changing the training curriculum of staff, to shifting the responsibility for ecotourism from tourism ministries to those concerned with conservation or ecodevelopment (or indeed changing the management structure and having a shared management system in place). Whatever the changes identified, they require a commitment by a range of stakeholders to this change, and they also need to reflect the system of management which best serves ecotourism development. If ecotourism is to be a major focus of Uttaranchal's development planning, it is crucial that the management of ecotourism reflects its role as a conservation, development and educational activity as well as that of an economic activity.

Education programmes for tourists.

If one of the goals of ecotourism is to foster an active conservation awareness, one which leads to positive contributions to conservation by ecotourists and by local populations, education programmes become important. Whilst visitor centres and interpretation centres are an important part of this, they are only one part. Other

programmes might include ranger guided activities, children's activities, workshops for visitors, newsletters, websites and a variety of other mechanisms.

Some of these programmes need to be designed to actively engage the tourist rather than assume the tourist will passively read interpretation centre information.

Because of the diversity of Uttaranchal's natural resources, and because of the importance of ecotourism to the state and its development aspirations, the building of a broad-based advocacy is especially important. Consequently, the development and implementation of education and interpretation models for tourists and visitors is important.

Using the diversity of tourist expectations and experiences to foster ecotourism.

One of the key issues in the facilitation of ecotourism is the role of the tourist. The tourist provides the foundation on which the whole ecotourism enterprise is based, so consequently plays an important role in planning and developing ecotourism. But all tourists are not ecotourists, neither do they necessarily share the same or similar expectations about nature, the environment, their activities and the like. Their motivations differ, as do their understandings and their values.

Consequently there are a number of issues around visitor experience which impact on the facilitation of ecotourism. The first stage is to understand more about the tourists themselves and the diversity of expectations and experiences. The second though is to be able ensure that this information is reflected in ecotourism

developments. For example, it might be found that visitor expectations at Corbett are more focused on a weekend away with the possibility of an elephant ride than any conservation awareness. This is not ecotourism, but place-based tourism. However, it is possible to move this type of expectation to one which is more ecotourism based through, for example, education programmes, follow ups to visits, discussions on conservation, children's activities and the like. It is also possible to make the decision that, whilst this visitor motivation is not conservation awareness, the economic value of the visitor's time at Corbett is used in such a way as to reflect the ideals of ecotourism.

In short, it is not necessary to turn every visitor into an ecotourist right away, but what is important is to ensure that their activities and impacts do reflect ecotourism ideals (as discussed earlier in this chapter – see Orams 1995). Understanding the diversity of expectation and activity is also an important aspect to management if that diversity is able to be harnessed to create a broader tourist market, thereby reducing economic dependency on one or two segments of the ecotourism market.

Religious tourism.

This particular issue is a significant one in Uttaranchal. Whilst many areas and countries have tourists with a diversity of motivations and they attempt to ensure that the impacts reflect ecotourism ideals, the numbers and importance of religious tourism to Uttaranchal provides a somewhat different dynamic.

As mentioned in the above point, the issue is not to make every religious tourist an ecotourist. Rather, it is to manage the tourist impacts using ecotourism principles. Whilst this should have a conservation focus for the tourists themselves anyway, it also must ensure a fair distribution of costs and benefits as well as ensuring that there are no negative environmental impacts. This will be a challenge to the state.

Wildlife tourism.

This may not be as big an issue as that of religious tourism as the motivations for wildlife viewing may be somewhat different. It is probable that there is a predisposition to conservation values amongst wildlife viewers, and, if this is the case, the issue is once again ensuring that costs and benefits are shared equally. Ensuring that the wildlife segment is managed correctly will have the benefit of diversifying the ecotourism market segment in the state and thus ensuring that negative dependencies are avoided.

Policy frameworks

The facilitation of ecotourism requires a policy context within which ecotourism principles are able to be reflected and applied, and which reflects the diversity of ecotourism approaches possible at various sites. It therefore needs to be flexible enough to be adapted to a variety of conditions. Some general policy issues include the following:

Where does ecotourism belong?

If ecotourism is defined as tourism and marketing, then it is appropriate that it belongs with a tourism ministry. However, if ecotourism is defined as a conservation strategy, if the majority of ecotourism activity occurs within national parks or protected areas, if this trend is likely to continue, and if it is a model for local level ecodevelopment, then it may be appropriate to be in a conservation-based ministry. If it is to be used as a mechanism for state development, it possibly belongs in a development ministry.

The crucial aspect about this is to recognise that ecotourism encompasses conservation, ecodevelopment, state development and a domestic and international market. Wherever ecotourism is ultimately located, there are a variety of ministries who have some responsibility for it. This will be a particular issue within Uttaranchal, as ecotourism plays an important role in development planning, biodiversity conservation, and, through this, the state's relations with India and the international community.

The importance of integrated policies

Related to the above point, it is essential that policy formulation reflects this multi-dimensional activity that ecotourism is. Policy and policy implementation must be integrated to ensure that all aspects to ecotourism form a coherent whole and that one aspect doesn't benefit to the detriment of others. For example,

income from marketing tourism destinations (economic benefits) may accrue to the marketing department, yet the environmental costs of the activity are carried by the conservation arm. This will only act to disintegrate policy and lead to a tourism, that is ultimately unsustainable.

Policy for the development of ecotourism is different to policy for the maintenance of ecotourism.

Another important issue is the need for a flexible policy that reflects stages of ecotourism development. For example, policy to facilitate ecotourism development is essentially policy about facilitating and then managing changes to existing practices and institutions. After this has been managed, policy then should reflect the ongoing process of ecotourism, and act as a mechanism to ensure ecotourism is monitored and evaluated. This is a different kind of policy and reflects the management of an existing process, with fine-tuning when required. Policies need to be flexible enough to reflect these differing objectives.

Sharing of benefits and costs

One of the crucial aspects to ecotourism is the sharing of benefits and costs. This has been discussed earlier, but two important parts of this are relevant. Firstly, there are a variety of problems associated with the uneven distribution of costs and benefits under tourism activity. These range from the starving of conservation agencies whilst tourism agencies benefit, to local populations being employees at resorts when they need to be out harvesting crops. The results are

similar in that tourism contributes to the uneven and unbalanced development of local populations, and has negative consequences for the environment.

Secondly, it is crucial that an ecotourism be facilitated which is socially just. This is premised on the assumption that it is difficult, if not impossible, to enlist support from a variety of groups for an activity which is unfair to these groups. It also assumes that the best way to ensure cooperation and support is to facilitate a win-win situation.

Relations between stakeholders

Because ecotourism has a multitude of roles there are many stakeholders who have a legitimate interest in planning and management. For Uttaranchal, the management of stakeholder relations is going to be important as existing approaches to tourism are reviewed. There are two significant issues in this regard. Firstly, there needs to be a recognition that government agencies are only one of many stakeholders. As mentioned earlier ecotourism is a complex activity within which a variety of interests are active. The management of the activity must also reflect this diversity. Secondly, there are likely to be significant problems if this is not recognised. A failure to implement a process which reflects this diversity will result in a tourism programme that is not integrated, and which fails to address the principles of ecotourism (see the case of Nanda Devi Biosphere Reserve below).

Conservation awareness of tourists

One of the key attributes of ecotourism is the development of a conservation awareness amongst participants. All tourists who participate in ecotourism activities are not necessarily conservationists, and they do not all share similar views and expectations. Whilst it is relatively straightforward to implement conservation education and awareness for some tourists, especially those who share the ideals of ecotourism, it is more difficult to develop this amongst all tourists. This is because of the different expectations and experiences of the tourists themselves.

Consequently tourist education is important for a number of reasons. Firstly, it promotes an advocacy network for the location amongst a variety of groups in a variety of national and international locations. Secondly, it becomes an investment in the future in that as conservation awareness increases, the management problems of tourists should decrease. Thirdly, it contributes a value framework which reflects sustainability ethics and consequently contributes to sustainable lifestyles.

Tourism and local level development

The social economic and political development of local populations is an important component of ecotourism activities, and it is integrated with approaches reflecting participatory democracy. However, this can be can be problematic for a number of reasons. Firstly a set of principles or guidelines related to local ;level

development ethics are important as local level development for one person (say a tour operator) will be different to another person (say, a farmer living next to a national park). These competing ideas can impact on ecotourism policy and practices, as they will affect the models of ecotourism facilitated and the process by which this occurs.

Secondly, much ecotourism activity which is locally focussed tends to emphasise the employment opportunities which this generates. However, is employment enough? The answer to this question is partly dependent on the way in which local level development is defined. To one group local employment opportunities are an important outcome of ecotourism developments as, for example, accommodation is developed or guides are needed. For others, though, local employment may not be enough on its own, as local people are still dependent on resort owners (for example) to provide employment opportunities, or that employment in the busy tourists season coincides with harvesting. It may be important therefore to look at the possibility of local employment opportunities within a broader framework of institution building (guide cooperatives for example, or co-operative lodges) or how best to ensure local benefit is the most appropriate for the location.

Thirdly, Local development needs to move beyond a focus on economics. It needs to be economically, culturally, socially, politically and ecologically sustainable. Local development initiatives need to be sustainable in all respects,

and are not just economically sustainable. This will likely entail a process of the management of change, and the renegotiation of existing development processes.

Possible Priorities and Action Strategies

This section addresses what have been identified as some key issues for the development of ecotourism in the state of Uttaranchal. They are listed as points for consideration and discussion. It should be noted that religious tourism, tourism within protected areas, and the potential of ecotourism as a biodiversity conservation measure for areas outside the protected area system should be especially focused on.

Clarification of what ecotourism should be in the state of Uttaranchal

An urgent action is to identify what ecotourism should be within the state of Uttaranchal. The ecotourism model/process to be implemented should incorporate the characteristics identified above, and focus on locally focused ecodevelopment and sustainability through ecotourism. The ways this should be developed, and the institutional arrangements to support this, should be identified as part of this process. These may include some or all of the following: the identification of the role ecotourism has in the social, cultural and economic development of Uttaranchal; the location of responsibility for ecotourism in the new Government; the development of an integrated approach to ecotourism in protected areas

within the state; the development of integrated ecotourism planning for areas outside the protected area network.

Assessment of what ecotourism currently is in the state of Uttarakhand

Ecotourism has already been identified as an important component of Uttarakhand's economic and social development. This being the case, it is important to undertake an early assessment of the current state of tourism in Uttarakhand and begin the process of identifying priority areas where existing tourism needs to be moved to one encompassing the principles of ecotourism. This would allow an early assessment of where existing tourism and ecotourism can be improved.

The identification of ways in which ecotourism should be implemented

The above two points develop a model for what ecotourism should be and assess the current situation regarding tourism in the state. It is obviously important to also identify the ways in which the current situation can be facilitated to encompass the goals of ecotourism.

THE CASE OF NANDA DEVI BIOSPHERE RESERVE

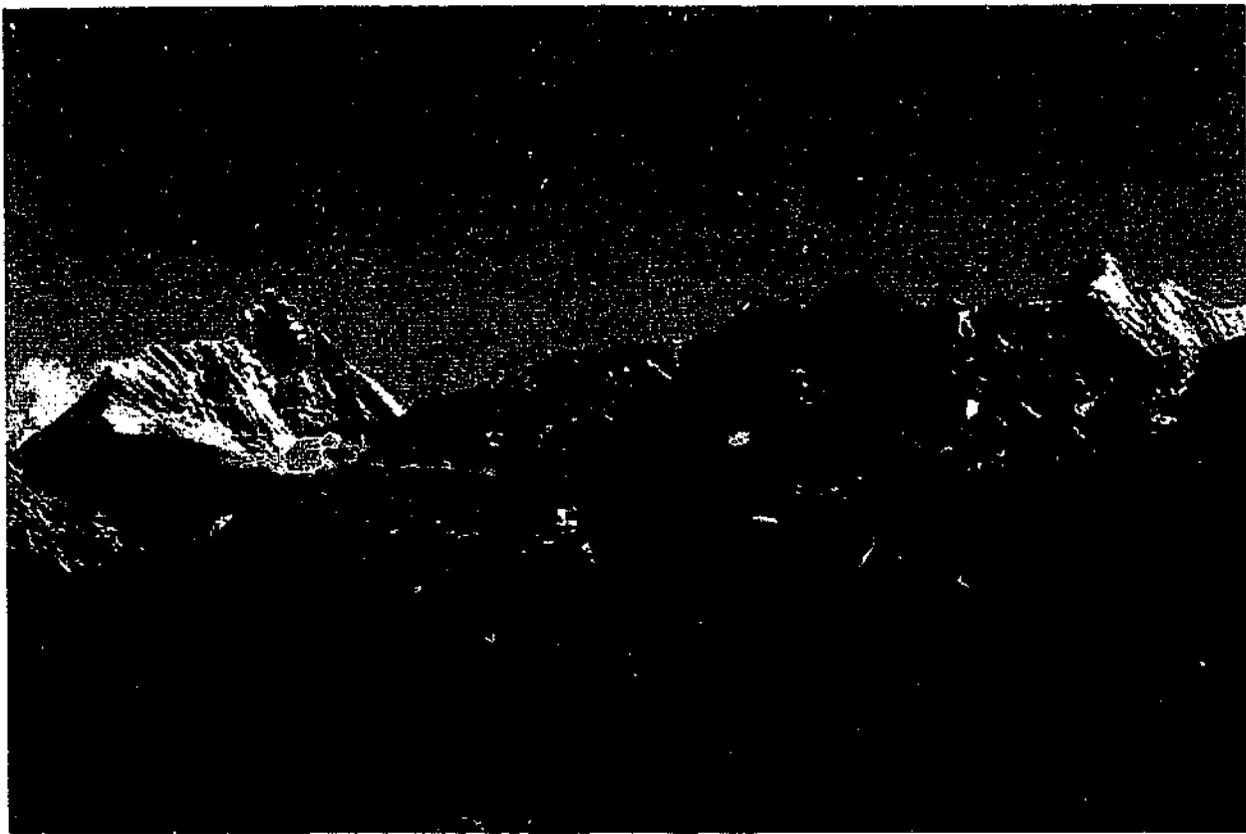
As mentioned in the previous chapter management of Nanda Devi Biosphere Reserve has often been problematic, especially in relation to the impacts management decisions have had on local people rights and livelihoods. In the specific context of tourism and ecotourism the Biosphere Reserve has been the site where a number of the issues discussed above have been experienced. In

particular, those relating to the uneasy relationship between local rights and globalised conservation/development processes.

Up until 1982 tourism and mountaineering played an important role in the economy of local villages. Local men were employed to be porters, cooks and guides and feeding/accommodating visitors further contributed to the local economy. Consequently the closure of the inner sanctuary to human activities in 1982 had a profound effect on local economies. As discussed in the previous chapter, this has been a source of ongoing mistrust and tension between some of NDBR management and local villages.

In May, 2001 the Government of Uttaranchal signalled its intent to assess the feasibility of implementing ecotourism at NDBR by sending a team from the Indian Mountaineering Foundation to assess the possibility of lifting the ban on human activities in the core area. According to my own informants and other sources (for example Community based conservation and ecotourism in the Nanda Devi Biosphere Reserve workshop proceedings 2001; Kazmi 2001) the Indian Mountaineering Foundation team came with the specific instructions to consider the feasibility of allowing the sanctuary to be opened for international travel agencies only. That is, to assess the feasibility of having international agencies monopolise travel in and to the reserve.

Illustration 9.1: Nanda Devi and Nanda Devi Sanctuary



It should be noted that there is a possibility that the monopoly aspect of this may be overstated as it has been difficult to confirm. However there is widespread agreement that the Indian Mountaineering Foundation team was sent by the Uttaranchal government specifically to assess the feasibility of opening up the reserve to international tourism and that international tourist agencies were to be granted rights to operate within the reserve.

In response, the *Gram Sabha* of Lata called a public meeting to discuss issues of ecotourism, management of NDBR and the protection of the region's biodiversity.

The *Nanda Devi Biodiversity Conservation and Eco Tourism Declaration* came out of the meeting. The Declaration stated:

Today, on the 14th October 2001 in the courtyard of the temple of our revered Nanda Devi, we the people's representatives, social workers and citizens of the Niti valley, after profound deliberations on biodiversity conservation and tourism, while confirming our commitment to community based management processes dedicate ourselves to the following:

1. that we, in accordance with the resolutions adopted by the World Tourism's Manila Declaration 1997 on the social impact of tourism will lay the foundation for community based tourism development in our region
2. that in our region we will develop a tourist industry free from monopolies and will ensure equity in the tourism business
3. with the cessation of all forms of exploitation like the exploitation of porters and child labour in the tourism industry, we will ensure a positive impact of tourism on the biodiversity of our region and the enhancement of the quality of life of the local community
4. that in any tourism related enterprise we will give preference to our unemployed youth and under privileged families, we will also ensure equal opportunities for disabled persons with special provisions to avail such opportunities
5. that we will ensure the involvement and consent of the women of our region at all levels of decision making while developing and implementing conservation and tourism plans
6. while developing appropriate institutions for the management of community based conservation and ecotourism in our area we will ensure that tourism will have no negative impact on the biodiversity and culture of our region, and that any antisocial or anti-national activities will have no scope to operate in our region
7. we will regulate and ensure quality services and safety for tourists and by developing our own marketing network will eliminate the middlemen in an endeavour to reduce travel costs of the tourist
8. while developing the tourism infrastructure in our region we will take care of the special needs of senior citizens and disabled persons
9. as proud citizens of the land of the Chipko movement we in the name of *Gaura Devi* will establish a centre for socio-culture and biodiversity, for the conservation and propagation of our unique

culture

10. we will ensure the exchange and sharing of experiences with communities of other regions to develop eco tourism in accordance with the Manila Declaration of 1997 in those regions
11. acknowledging the spirit of Agenda 21 of the earth Summit, Rio 1992, the Manila Declaration on the social impact of tourism 1997 and the International Year of the Mountains and Ecotourism 2002, we will strive for biodiversity conservation and an equitable economic development within the framework of the constitution of the Republic of India
12. Today, on October 14 2001, in front of our revered Nanda Devi, and drawing inspiration from Chipko's radiant history we dedicate ourselves to the transformation of our region into a global centre for peace, prosperity and biodiversity conservation.

The Nanda Devi Declaration is important for a number of reasons. Most obviously, it represents the voices of villagers – their concerns and aspirations. In general, these voices are the voices of participatory justice and equity. However what is also important is how the declaration defines issues of development and of tourism, issues of conservation and issues of equality.

There is also a link made between exploitation of people and of nature. Number three specifically implies that by overcoming exploitation of people the region will be able to overcome exploitation of nature. In other words, the specific connection is made between social justice and environmental justice.

The heritage of grass-roots activism is also recognised, especially the work of the Chipko movement. The importance of an active civil society is thus ingrained in the declaration. The final point, that of transforming the region to a global centre

for peace, prosperity and biodiversity conservation.

Of course there may be a rather wide gap between the ideals and sentiments expressed in the declaration and the facilitation of these approaches, given state policy and biosphere reserve management practices. Currently it is still unclear how these potential conflicts and contradictions will be played out or resolved. However there are a set of practices found within biosphere reserves which potentially reflect the ideals of the declaration. The declaration itself is evidence of the extent of the enabling civil society and its community-based institutions. How the relationship between this, reserve management and the conservation/development policies of Uttaranchal plays out remains to be seen.

THE CASE OF CORBETT TIGER RESERVE

Corbett Tiger Reserve has a very different set of issues to those at Nanda Devi Biosphere Reserve. The reserve itself is experiencing increasing numbers of visitors (approximately 52 000 in 1998, up from 34 000 in 1988) and these are putting pressure on reserve facilities and wildlife viewing opportunities.

As could be expected, interviews suggest visitors are coming primarily to experience the land of Jim Corbett and, of course, to hopefully see a tiger. According to CTR management, these tourists are ecotourists and the park offers unparalleled opportunities for ecotourism.

Illustration 9.2: Park offices at Dhikala, Corbett Tiger Reserve



The issue is to what extent encouraging wildlife viewing (whether this be tigers, crocodiles or the rich variety of birdlife found in the park) actually reflects ecotourism values and ethics. This is very pertinent as it goes to the heart of not only ecotourism, but the differing definitions and approaches mentioned at the beginning of this chapter.

There is little doubt ecotourism is defined by those associated with the management of Corbett Tiger Reserve as essentially nature based tourism. That is, people come to the reserve to enjoy nature, view wildlife and stay in a Bungalow. Because this is based in a natural area, it is ecotourism. Buffer zone activities within the park are essentially seen as supporting this type of ecotourism and consequently the management of the park's tourism operations occurs within this framework.

However, whilst the tourism occurring within the park is managed to a degree, that occurring on the park's boundaries is less so. Resorts have increased along the main road into the park, with many having their own elephants or jeeps to provide wildlife viewing opportunities to their guests. These activities are undertaken within the park, in the buffer zone and in other forest department areas. Further, the number of guides and their jeeps which are based in adjoining villages and which in the past complemented CTR tourism initiatives have increased in number, with many jeep owners now moving into supplying accommodation and meals for their clients.

Currently then, the tourism environment in and around CTR is a very competitive one. According to reserve management, this is having significant impacts on the reserve, including increasing vehicular traffic, difficulty in managing visitor numbers and activities (especially those occurring away from the main locations within the park) and increasing pressure for the reserve to upgrade its facilities to compete with those of the resorts at the edge of the park.

An indicative example of the implications of these issues occurred while I was at the reserve on one of my field trips. I took one of the CTR elephant trips around Dhikala, the main tourist centre of the park. On this trip I was accompanied by an English tourist who had been staying at the park for five days. This day was her last day and she was desperate to see a tiger, as she had been out seven times and

had not had a sighting.

The elephant trip took approximately two hours and, whilst various warning sounds were heard throughout the jungle, no tiger was sighted. The tourist was saying how disappointed she was in the park when a jeep pulled up behind our elephant and the driver and guide shouted 'tiger spotted on the road behind us. Quickly!' The tourist jumped off the elephant jumped into the jeep and it sped off in search of the elusive tiger.

I have no idea whether the tourist found her tiger, or even if the tiger sighting was genuine. But the incident is illustrative of a number of the tourism/ecotourism issues at CTR. The first is related to tourist motivations. During interviews visitors would regularly stress the reason they were at CTR was to hopefully see a tiger. When asked if they would prefer to see a tiger on elephant or jeep, jeeps were overwhelmingly considered to be the best way to see one. This was because jeeps were considered more mobile and would be able to cover a greater amount of territory whilst searching for tigers. The open tops of jeeps were considered to provide an opportunity for bird watching and other wildlife viewing. Whilst many visitors were willing to go on elephant back, this was often for novelty value, especially by non-Indian guests.

The second is how these motivations have led to the type of tourism occurring at the park. Jeep numbers are increasing, whilst the CTR elephant numbers are

decreasing. As more and more jeeps are carrying more and more people in their search for tigers, the tigers themselves are being pushed further and further away from the main tourist areas. Consequently, in order to see a tiger it is essential to be able to cover a lot of territory quickly – that is, to travel in jeeps. This then means demand for more jeeps and so it continues. As jeep owners diversify their tourist activities and move into tourist accommodation, more and more tourists are presented with a local accommodation/wildlife viewing package. This in turn puts further pressure on movements at the edges of the reserve and in the buffer zones.

Finally, CTR management highlighted an important issue which is currently being played out. The increasing amount of resort-style accommodation at the edge of the park has led to some senior bureaucrats and some politicians looking at the feasibility of upgrading accommodation and facilities at CTR to better vie for the tourist dollar. One of the options being suggested is widespread electrification of accommodation on the basis that guests should have access to hot water, reading lights etc. If this was to occur, significant impacts would be felt within the park as electricity was extended throughout parts of the park. It is still unclear if this will occur.

So, at Corbett Tiger Reserve, ecotourism is defined in terms of wildlife viewing, especially the tiger. Local people are involved and beneficiaries of this only to the extent that those who have been able to afford to purchase jeeps have been able to capture some of the tourism economy. Thus the tourism has reinforced local

class/caste relations and, through that, gender.

One of the ways in which some of these negative impacts may be able to be ameliorated would be to recreate the legend of Jim Corbett. Whilst he is famous for books such as *Man-Eaters of the Kumaon* and *The Man-Eating Leopard of Rudprayah* he has also written extensively about conservation in general, and the conservation of the Garwhal and Kumaon (for example, Corbett 1990). He was also extensively involved in the creation of Corbett National Park.

Illustration 9.3: Tourists at Corbett Tiger Reserve



Yet, Corbett the tiger hunter, not Corbett the conservationist is the Jim Corbett many tourists appear to search for. If visitor and local education about Corbett the

conservationist was in place, possibly the elephant ride through the jungle would be an opportunity to appreciate biodiversity and the characteristics of *sal* forest rather than a slow ride in the search for a fast tiger. This new tourism would have a very active emphasis on education and interpretation of biodiversity, not just the search for an endangered species. After all, the tiger is dependent on the biodiversity. It is a shame if the visitors don't realise this.

CONCLUSION

According to Place (1995:171 - 172):

Ecotourism can provide an alternative economic base, but it does not happen automatically, nor without social and environmental impacts. Local populations must be allowed to capture a significant amount of the economic multipliers generated by tourism. Successful reduction of multiplier leakage requires local participation in the development planning and outside assistance with the provision of necessary infrastructure, training and credit. Community participation is also essential for identifying negative impacts on people who live in areas undergoing ecotourism development. Yet there are powerful internal and external obstacles to local participation, from factionalism within the village to state policies that promote centralised planning and the accumulation of capital among large corporations, or at least large tourist facilities. In conclusion, while parks and reserves may perform important ecological functions by protecting watersheds and soils as well as biodiversity, they also represent the loss of vital resources to local inhabitants. If, however, rural people are able to replace the direct exploitation of dwindling biological resources with adequate economic opportunities from tourism attracted by the continuing presence of those resources, park - based conservation programs may be successful.

The potential for ecotourism to act as an integrated conservation and development mechanism within Uttaranchal is great. Indeed, it could be envisaged that, with

the appropriate planning and management, ecotourism will become a key component of the state's conservation and development agenda.

However, for this to occur, it is crucial for policy makers, planners and local communities to realise that this will only occur through the facilitation of a specific type of ecotourism. This must recognise that ecotourism consists of a number of often competing dimensions, and that the three main outcomes of ecotourism activity should be: locally focused economic, social and cultural development which reflects participatory justice ideals biodiversity conservation; and environmental education and awareness.

The task is to ensure that this potential is reached within the state. Currently state policies reflect ecotourism as an economic activity, and this view is at odds with at least some communities views and aspirations (for example, around the Nanda Devi Biosphere Reserve. How these tensions are resolved say much about the ways in which Uttaranchal will be able to achieve this potential.

More generally, ecotourism issues facing Uttaranchal reflect many of the tensions found within ecotourism and the ways it is used as a global conservation and development strategy. The often uneasy connection between policy, practice and socio-environmental justice is reflective of the tensions found within a development model which emphasises market solutions to environmental

problems, the ideals of participatory democracy and the implementation of socio-environmental justice.

SOCIAL AND COMMUNITY FORESTRY

We have used the forests for generations. Now they want us to stop. If it wasn't for us there would be no forest. (Villager, near Kalisi Forest, Haryana).

INTRODUCTION

Social forestry is an important option for protected area management approaches incorporating socio-environmental justice frameworks. Importantly, it is also seen as an orthodox approach to forest conservation and is used in a variety of protected area management regimes internationally. At least potentially, community/social forestry incorporates many of the characteristics of a socio-environmental justice framework, including community focused socio-economic development, participation reflecting or facilitating an active civil society, and building some degree of self-reliance. In addition to these socio-economic and political outcomes, social/community forestry can also provide opportunities for reforestation and the maintenance or even enhancement of biodiversity with benefits accruing at the local level. In some cases, it can even enhance the possibility for tourism and ecotourism.

So, it would seem to offer much. Given the widespread use of social forestry

approaches within protected area and natural resource management approaches, and given the importance of forests to global conservation, it has certainly been attempted within a variety of socio-economic, political and ecological contexts. But does it live up to its potential? What are some of the problems associated with it? How does it merely reflect the assumptions found within the dominant social paradigm of world development and how does it or can it alter these? And, most importantly for this thesis, how does protected area management reflect socio-environmental justice ideals in social/community forestry approaches?

THE FORESTRY CONTEXT

In its 1999 report, the World Commission on Forests and Sustainable Development (WCFSD) highlighted the global extent of forest destruction:

Much of the forest that remains is being progressively impoverished and all is threatened. It is not just the fact of this decline in forest cover and quality that constitutes the crisis, it is the global loss of forest functions in maintaining a habitable earth. The crisis arises because of the importance of forests for environment, for economy, and for society; because of rapidly expanding human demands on forests; because today's economic and political systems permit patterns of use and management that lead to erosion of the forest capital; (and) because of the complacency of those with political power and authority, many of whom ignore or overlook the importance of forests to human and planetary security (WCFSD 1999: 2).

In identifying some of the main contributors to this loss, the report highlights the essentially social, economic and political nature of forest destruction. In other words, the report highlights the essentially human dimensions to forest loss. Further, in its call for the management of forest's 'functional integrity', the report highlights the importance of protected areas and protected area management approaches which reflect the broad range of socio-economic, cultural, political and ecological services forests provide to local and global communities (WCFSD

1999).

The placing of the human dimension and the protective function so centrally in assessing forest protection is an important step. It also highlights how important recognising the relationship between global conservation and development agendas and locally-focused approaches to forest management and use is in assessing this. It is this particular point that this chapter is concerned with.

THE IMPORTANCE OF FORESTS

Forest services cover a wide range of ecological, political, economic, social and cultural considerations and processes. This diversity means that there are no easy management solutions, and emphasises that management is not a technical, mechanical process but one which must necessarily incorporate a variety of competing interest groups and views.

Broadly speaking, forest services can be categorised according to a number of criteria which incorporate specific processes. For example, WCFSD (1999) discuss their role in biodiversity conservation, water, climate, commercial production, rural livelihoods, energy security, cultural maintenance and recreational values. In general, forest services can be seen in ecological and in socio-cultural terms. However, it should be noted that these categories are not exhaustive, nor are they discrete, but interrelated.

Ecological services

There are a number of components to the broad range of ecological services which

forests provide. According to Sousson, Shrestha and Uprety (1995), these include: the regulation of water regimes by intercepting rainfall and regulating its flow through the hydrological system; the maintenance of soil quality and the provision of organic materials through leaf fall; the limiting of erosion and protection of soil from the direct impact of rainfall; playing a key part in modulating climate; being a key component of biodiversity both in themselves and as a habitat for other species

Whilst these services are important and contribute to a biodiversity enabling context, this chapter is more concerned with those which have a more specifically human dimension, economic and socio-cultural services.

Economic services

Obviously forests form the basis of a variety of industries including timber, processed wood and paper, rubber, fruits and coffee. But they also contain products which are necessary to the viability of agricultural communities, especially those in agrarian based societies. These products include fuel and fodder, game, fruits, building materials, medicines and herbs (Sousson, Shrestha and Uprety 1995; WCFSD 1999; Wolverkamp 1999).

Additionally, grazing occurs within forests and local woodlands are used to satisfy local needs. Rural people also grow crops on temporary plots within the forest, often on a rotational basis. These forest products contribute to a diverse rural economy and security when times are difficult. Therefore, the loss of these resources has a tendency to contribute to the undermining of viable agricultural

practices in the so-called developing world (Sousson, Shrestha and Uprety 1995).

Socio-cultural services

Forests are home to millions of people worldwide. Many of these people are dependent on the forests for their survival (Sousson, Shrestha and Uprety 1995; WCFSD 1999; Wolverkamp 1999; Nanda 1999). In addition, many people have strong cultural and spiritual attachments to the forests. Therefore, forest destruction undermines the capacities of these people to survive economically, culturally and spiritually.

The issue of indigenous knowledge is also important. Many local people understand how to conserve and use forest resources. It has been argued that forests are currently being destroyed, in part, because of the non-forest dwellers' lack of knowledge about how best to exploit the vast diversity of medicines, foods, natural fertilisers and pesticides forests contain (Posey 1993).

Spirituality is important also. The Hindu viewpoint on nature, for example, is based on a recognition that nature and its orders of life (such as trees, forests and animals) are all bound to each other within the great rhythm of nature. Thus we can understand forest services within the Hindu cosmology to include religious values (Nanda 1999; Poffenberger and McGean [eds] 1996). Other indigenous cosmologies limit use of forests for fear of spirits. Thus, indigenous belief systems and cultural values have a major protective role in humanity's relationships with forests, and more broadly in nature's relationship with humanity.

ISSUES IN FOREST SERVICES MAINTENANCE

Whilst these and other forest services highlight the diversity of 'uses' of forests, they also reinforce the idea that, for many people, forests have more than economic value. Thus we are sometimes left with a dilemma - tensions and conflicts occurring as a result of dominant models of social and economic development using forests on the one hand and, on the other, the broader understanding of forests which include spiritual and other cultural values.

Valuing forests as a timber resource

The immediate value of forests for timber continues to dominate many considerations of management of forested lands by individuals, corporate owners and policy makers (WCFSD 1999). The reasons are many, and include tax policies, ownership of land and tenure issues, economic exigencies as a result of inappropriate and non-sustainable development models being used, greed and corruption. They all contribute to the continuous global destruction of forests (Ramakrishna and Woodwell [eds] 1993).

In relation to this, Dwivedi (1992) calls for a forest *satyagraha* - a search for truth pertaining to the rights of trees. He argues that by naming forests a resource we have destroyed them because of the ways in which 'resource' has been applied (a predominantly economic value), and it is now crucial to search out a new definition of forest 'resources'. In other words, what is being argued is that forests have become just another natural 'resource' to be used for the benefit of

human populations, or at least some human populations. Hence, nature will continue to be exploited as the rights of trees don't exist within an ethical framework which sees nature in predominantly economic and 'natural resource management' terms. This approach needs to be changed to incorporate the rights of nature and the rights of cultures with alternative cosmologies.

There are signs that this is occurring. It is possible to see that the concept of 'ownership' of forests is changing, in recognition that forests are an important part of the global commons (for example WCFSD 1999). Therefore, whilst the value of timber and its exploitation has tended to override most other values this is now being challenged through the recognition that forests are threatened around the world and their loss will create unacceptable public, global burdens (Woodwell 1993). But we must be careful that 'the public' is not just some nations exerting power and influence over others.

Geopolitical issues

Some of the major issues related to forest services are geopolitical and found within the processes of the dominant social paradigm of world development. Whilst forests are physically located within nation states, issues surrounding their protection go well beyond borders (Maini and Ullsten 1993). This means global geopolitical relations play an important part in the policy context of forest use, abuse and management, whether through the calls for international treaties on the banning of hardwoods, green consumerism or access to the genetic resources of forests by private companies. The current debates related to the Kyoto protocol represent just one example of this.

For Maini and Ullsten (1993), the many geopolitical factors can be distilled into four main issues:

1. the industrialised countries, who are responsible for major deforestation and warming, are advocating strong measures to conserve and protect the world's forests. Many 'developing' countries are rightly concerned that the industrialised countries' preoccupation with tropical forest issues is inconsistent with the amount of attention being paid to global warming and forest decline in Europe.
2. many 'developing' countries view the attempts at forest protection which focus on the locking up of forest 'resources' an intrusion on sovereign rights.
3. the capacity of developing countries to protect biodiversity is dependent on receiving additional funding and technologies from richer countries.
4. many developing countries have expressed concern at the desire of some industrialised countries to gain free access to genetic resources.

Many geopolitical issues are thus related to more general relationships between nation states resulting from the dominant social paradigm of world development. They are consequently issues of power and control.

Policy contexts

Governments have largely determined how forests can be used, and this approach to management has often been implemented at the expense of indigenous or local management and control in many countries (WCFSD 1999; Wolverkamp 1999). The results of this have often meant a loss of control at the local level, either by indigenous groups themselves or by local people who live in the forests or use its services. This potentially creates a situation where certain of the forest services provided (such as spiritual or religious values which reflect local cultures) are ignored or not recognised within the forest policy context. There is evidence however that at least in some locations, this is changing (Wolverkamp 1999; Poffenberger and McGean [eds] 1996).

Agriculture, land distribution and land tenure

It is often suggested that the development of agricultural lands has been at the expense of forests. This process can involve, for example, privatising communally owned forests and grasslands (Repetto 1993), the relocation of people to areas as part of controlled migration, or the forced imposition of sedentary agricultural practices by nomadic or semi-nomadic peoples.

An area of important concern, with specific implications for forest use and management is related to land tenure and land distribution. Of particular importance is the degrees to which land tenure and the distribution of land ownership impacts on rural poverty and consequently both agricultural practices and use of timber/non-timber forest products.

Socio-cultural issues

Social and cultural issues vary across regions and across cultures within regions. However two significant points seem to emerge (see for example, WCFSD 1999; Nanda 1999; Wolverkamp 1999):

1. intergenerational responsibilities and the rights of forest dwellers, indigenous people and communities living in and around forests and who are dependent on them. There are a number of specific issues which are included under this point, including relocation and resettlement of populations, perceptions by the state (which are reflected in policies) that local or indigenous people are 'backward' because of their beliefs and/or level of socio-economic development, the uses of indigenous knowledge and issues associated with the transfer of intellectual property rights.
2. the impact of forest destruction on norms and values of indigenous and local cultures as well as the impact of cultural change on forest use by these people. In many cultures shrines and initiation rite ceremonies, taboos and other cultural values have developed to protect trees, shrubs and the sacred places themselves. Whilst this protective function had religious or spiritual significance, it also acted as an important mechanism for the reinforcement of local cultural values and, often, as a mechanism for conflict resolution. The destruction of forests, the relocation and resettlement of forest dependent communities and broader processes of social change serve to undermine these value systems and their broader community function.

Sustainable development

Whilst sustainable development has become a central component of forest policy and forest use, it is not always clear what the term means and how the term is used. As discussed in previous chapters, sustainable development as a concept and a practice is contested by various groups, from international conservation and development agencies to local people. This is an issue in its own right as the uses of the term reflect broader and conflicting understandings of, and positions on, forests and their management.

TENSIONS AND CONTRADICTIONS

There are obviously a number of issues which arise out of the discussions above. Dominant values relating to forest use have equated forests with economic resources in an extractive industry. As part of this, for many years the social, cultural and ecological components of forest services have been largely ignored or gone unrecognised.

This however is changing. Whilst the search for locally-focused economic development is an important one, pathways towards development equated with the dominant social paradigm of world development have environmental and social costs with forest destruction. In this context, one person or group's economic development can be another person or group's loss of culture, religion or beliefs. Attempts at drawing some people into the economic mainstream may result in the marginalisation of others and a globalised local.

What is needed then is a mechanism whereby the diversity of services which forests provide can be protected, yet with forests still providing direct benefits to local and indigenous people, nation states and others. Such an approach would need to recognise the diversity of forest services, but would also need to recognise the socio-cultural basis for these services, especially as they relate to indigenous and local people's rights. It would need to broaden out the predominant definition of forest services which have emphasised economic considerations to include these broader functions as well as provide a means which could replace, at least partially, the economic benefits which have to be foregone to maintain the broad range of forest services. It would also need to ensure that economic and social development occur by emphasising the rights of local people. Social and community forestry has attempted this.

SOCIAL AND COMMUNITY FORESTRY: A CRITICAL PERSPECTIVE

Social forestry refers to a broad range of tree or forest related activities that rural landowners and community groups undertake to provide products for their own use and to generate local income (WCFSD 1999; Wolverkamp 1999; Poffenberger and McGean [eds] 1996). This being the case, social forestry approaches can incorporate a wide variety of activities, including farmers growing wood to sell or use for firewood, individuals earning income from the gathering, processing and sale of minor forest products such as fruits nuts, mushrooms, herbs, basketry materials, honey, vines etc. It can also include government and other groups planting trees on public lands to meet local village needs.

Unlike in conventional production forestry where the focus is on the wood the trees produce, a social forestry approach focuses on people, on community involvement/participatory democracy and on the trees and non-timber forest products which provide direct and indirect local benefits. The approach therefore is used to create economic, cultural and social benefits to local people or communities from their immediate locality, whilst at the same time maintaining or improving ecological services.

The critical perspectives on social forestry have tended to focus on assumptions. All social forestry projects have inbuilt assumptions which are derived from various ideologies which practitioners and other work out of. As has been argued throughout this study, these assumptions reflect ideas about development, about resource management, technico-scientific solutions, about local people and so on. It is important then to look at some of the assumptions built into the social forestry approach.

Some of these can be traced back to the discourse of colonialism. According to Hausler (1993) for example, the colonial discourse on soil degradation had a number of assumptions, some of which are still prevalent today. Firstly, soil degradation was conceived as an environmental problem, not a social, economic or political one (see also, for a critique of this environmental perspective, Blaikie 1985; Blaikie and Brookfield [eds] 1987). The second assumption dealt with mismanagement. Not only was the environment seen to be mismanaged, but this was directly attributable to farmers' laziness. Once again, this is still current in some thinking, with explanations of poverty, for example, often couched within

a 'failure to adopt' explanatory framework which puts farmers as both lazy and ignorant (see the earlier chapter on rural development).

Thirdly 'overpopulation' was, and still is, identified as a cause. As a result, programs dealing with population control became part of environment programs. Fourth, pastoralists and local cultivators were seen as poor because they were not sufficiently involved in the market economy. This is still very much alive in contemporary debate, especially that coming from international financial and environmental agencies, as has been discussed in earlier chapters (see also SD Dimensions n.d for this view).

The practical effect of this colonial soil conservation discourse, according to Hausler (1993) was to legitimise the extraction of the maximum agricultural and forest produce from the colonies. It was a legitimation of the colonial transfer of surplus, a surplus which was generated out of nature and left a rural environment which was degraded and deforested.

As has been suggested above, the old colonial assumptions about soil degradation are also found within some of the social forestry context. According to Hausler (1993) the causes of environmental degradation and deforestation are still being identified as overpopulation, overgrazing, cultivating too steep slopes, farmers' ignorance and competitive use of scarce forest resources.

Population control and rural reforestation programs were devised by Northern experts as the solutions. But excluded from the explanatory frameworks are the

processes leading to environmental degradation in the first place. For example, the introduction of export led growth policies, deteriorating terms of trade for southern commodities, currency exchange rate mechanisms, debt service to the World Bank, the role of transnational timber corporations lack of land reform policies, and national and local power structures have been, and still largely are, ignored on the debates regarding forestry issues from international development and conservation wisdom. Further, northern consumption of wood, paper and other forest products from the south was never even considered as a problem (Hausler 1993). In short, these reflect the outcomes of the dominant social paradigm of world development.

However, there are signs this approach is shifting (WCFSD 1999; Wolverkamp 1999). The extent to which the social/community forestry approach represents movements towards socio-environmental justice and the extent 'the myth of farmer ignorance about the need for tree planting and of the need for extension and motivation remains pervasive in the international community forestry discourse (Hausler 1993: 86)' remains to be seen.

There are still problems which are observable. Some have been the result of naive assumptions related to local knowledge, and a tendency to simply reverse the hierarchies of western scientific knowledge over local knowledge. Other problems are associated with a lack of an enabling state policy which embraces the social/community forestry ethic and approach, an approach which maintains power within the forestry management/protected area management paradigm and an incapacity of some attempts to recognise fundamental dimensions of inequality

at the local level (that is, a naïve view that 'local' is homogenous) (Wolverkamp 1999; WCFSD 1999; Poffenberger and McGean 1996).

Problematic assumptions are therefore at the heart of problems in community or social forestry approaches. Approaches, and thus knowledge, which ignore power relations, which stereotypes local and participation and which fail to ensure that the less powerful have a voice in forestry are doomed to failure.

Tinker (1994) takes up this point specifically in relation to women. The high expectations for women and social forestry are fuelled by two problematic assumptions that inform current forestry programs: that the major culprit in causing forest degradation is the poor subsistence farming family, and that women are closer to nature than men.

According to Tinker (1994)

These assumptions are perceived as problematic not because they are completely wrong, but because they are only part of the truth: yet the programs based on these assumptions have pushed aside the complexities and oversimplified both the problem and the solution. By designating women as the guardians of community forests and designating community forestry as the primary approach to forest policy, planners and women alike are investing their hopes and expectations in the success of programs that ignore reality of family and class power relationships.

So, the social forestry approach is not as simple as it may first appear. The major issues facing such an approach are related to how erroneous assumptions can be overcome, how participatory characteristics can be incorporated into the approach, and how it can be used to lead to a truly participatory development and

conservation program.

There are a number of protected area management implications coming out of this. Perhaps the most important is the need to examine the assumptions which are found in various community forestry approaches within protected areas. These are rarely explicit, but a participatory approach requires a self-critical process, and part of this process is an examination of the assumptions related to cause and effect, related to what is being 'developed' and whether the model which emerges will fulfil the criteria generated from the local level. As Hausler suggests:

All knowledge is partial and based on a particular perspective. What is needed is an understanding of how knowledge transports and facilitates power relations. If power relations are not recognised at all levels of the problem, and western experts do not acknowledge their biases, the political nature of their work and the partial nature of their knowledge, then most interdisciplinary efforts to cater for local needs, reformist top-down approaches derived from their findings will tend to reinforce old or create new networks of power under which environmental degradation takes place. Arguing for more user-centred and participatory approaches is not enough. - it may just buy a little time. The community forestry discourse must include the role of power relations and how they affect the implementation of development projects. Local people need to gain a voice in this discourse, otherwise it will be only too easy to keep blaming them for their ignorance. (Hausler 1993)

The cases studies are instructive in this.

CASE STUDY: JOINT FOREST MANAGEMENT IN HARYANA

Historically, forests have played a significant role in Indian history and culture, including tree and animal worship, the veneration of forests as abodes of gods,

and as a location for sacred groves and meditation (Poffenberger and McGean 1996; Singh and Varalakshmi 1998; Dwivedi 1992). Functional classifications for customary management of common forests have also been identified within early periods of Indian history (Singh and Varalakshmi 1998).

Forests cover approximately one-fifth of the Indian landmass, with 1997 figures indicating a reversal of a five year trend of increasing forest cover. Increasing pressures on forests are being exerted through population and livestock growth, fuelwood requirements, fodder requirements and industrial wood requirements (Singh and Varalakshmi 1998). These forests are used and managed using a variety of regimes, including state and Government of India (GoI) legislated protected areas, as common property resources, as plantations and as part of joint forest management arrangements. Open access is also common.

Joint Forest Management in India

The ongoing loss of forest cover in India has brought into focus the limitations of orthodox scientific forest management approaches. Given the history of NGO activities in India, and given the history of cooperative arrangements in forest management (arrangements which were partially undermined by British forest policy and post-independence scientific forest management approaches) movements to participatory forest management occurred in a number of states, culminating in the GoI's *June 1990 Notification*. This notification instructed all state governments to support the greater participation of local communities and NGOs in forest management, protection and regeneration (Singh and Varalakshmi 1998).

The notification is an important indicator of a shift in GoI supported forest management approaches. Through the notification, the GoI explicitly supported local people's rights to relation to forest management as well as their participation in this process. Importantly, it provided a foundation for an enabling set of policies at GoI and state level to support these approaches.

Joint Forest Management in Haryana

In the mid 1970s Sukhna Lake in the city of Chandigarh experienced significant silting as a result of water run-off in catchments feeding the lake. This was directly attributable to the amount of deforestation within the Shivalik hills in the area and represented more general deforestation across the Shivaliks in Haryana (Singh and Varalakshmi 1998). One of the first participants in JFM in the area takes up the story:

The Forest Department came to the village and told us we could not graze our cattle in the forests anymore. They told us that if we did, we would be fined. Then they put a fence next to our lands. Of course this didn't stop us. We had been using this land for many years. After a while the Forest Department came to the village again and told us to stop grazing our cattle again. They threatened to fine us and to send us to jail. We told them that we need to feed our cattle and that it wasn't our fault that the lake was (silted) in the city. Then one day the Forest Department sent someone new to the village ... and we talked to him about our problems. We needed the land to graze our animals.

Out of these discussions an alternative emerged – constructing water harvesting structures for irrigating fields. Yields were increased and fodder was now available for livestock. Importantly, this was undertaken with advice from, and support of, local villagers and the Forest Department, and provided a participatory

focus for regeneration and watershed management. With it, Joint Forest Management in Haryana had begun.

The corner stone of JFM in Haryana is the development of the Hill Resource Management Society (HRMS). These registered societies are village-level institutions whose role is to: protect forests from illegal grazing and clearfelling; distribute irrigation water; fix rates for water, grass and other forest products; maintain dams; maintain financial accounts; maintain cooperation with Forest Department staff. The HRMS is a legal entity whose membership is all adult village residents.

Illustration 10.1: Sukhna Lake, Chandigarh



The Experience of Joint Forest Management

JFM has not been successful in all parts of Haryana. Singh and Varalakshmi (1998) as well as voices from the field identify the main reason for this as a lack of institution building capacities by those organisations taking on the role of outside change agent. In short, it's because there are not enough people to do the work of facilitating the functioning of the HRMS (whilst each village may have a HRMS, not all function). There is consequently a significant difference between the existence of the institution and the roles it should play.

However there are many signs that the JFM approach is working in some villages. During field visits to villages considered 'successful' or 'functioning' by the local JFM facilitator local people's opinions of JFM were predominantly positive.

HRMS in some villages functioned on the basis of ensuring economic benefits were shared by all within the village, irrespective of caste, gender, age or landless/near-landless status. Typically, water rights were distributed to all families equally, whether water was needed or not (for example, because the family was landless and not involved in agricultural production). If families didn't require these rights they were able to sell water to other members at a price fixed by the HRMS. This acted as an economic benefit for low caste/class village members and ensured at least a partial redistribution of wealth locally.

Another example of this process was with the sale of the rights to *babaar* grass. Members of the HRMS negotiated with the Forest Department to directly purchase rights to *babaar* instead of having to deal with a middleman. This

resulted in the price of *babaar* falling and the *Banjaras* (rope making caste) gaining direct economic benefit.

The HRMS thus has an important role in facilitating socio-environmental change. In one particular village this role was very explicit and was tied to a Gandhian approach to social change. The leader of the HRMS told me:

Our (Hill Resource Management) Society should be of service for our village. We have made the society function according to what Gandhiji said about social service and uplift of the poor. Compassion and persuasion (karuna) will lead to non-violent change (ahimsa karanti). This is what we have tried to remember.

Illustration 10.2: Making Rope from *Babaar*, JFM Village, Haryana



This comment was made in reply to a specific question regarding the role the HRMS has played in the village. However it should be noted that not all village HRMSs are functioning this way. For example, some use the income generated to pave roads in the village, or build a meeting hall. Others use it to add rooms to the local school (as occurred in the village of the HRMS mentioned in the above quotation). The important thing to note is the decisions are made by villagers through the HRMS, and income has to be invested to benefit the local community.

Unresolved Issues in Joint Forest Management

Whilst the above discussions have tended to concentrate on those villages/cases where the HRMS is operating successfully, this is not always the case as there are a number of unresolved issues within joint forest management in Haryana. Evidence from the field as well as that of researchers such Singh and Varalakshmi (1998), Poffenberger & McGean (1996) and Wolverkamp (1999) suggest the following as significant unresolved issues:

1. the extent of the cultural change within the Forest Department can be problematic (see also the case of the Kalisi Forest below). Whilst many Forest Department managers viewed JFM favourably during my discussions, there was still a tendency by some to view it favourably because it made their job easier, rather than for the organic model of locally focussed protected area management model it was. Whilst on the one hand this is not a bad thing (at least it was viewed favourably), on the other, what would happen when JFM didn't make their job easier? That

is, what will happen when a HRMS is not working effectively, or suffers problems? The extent of Forest Department responsibility for this is unclear.

2. it is not always easy to fit the longer focused participatory approach which JFM is dependent on to the more bureaucratically organised planning of the Forest Department. I have been told of examples where HRMS priorities have had to be 'redefined' as they do not fit into Forest Department timelines. This again raises the issue of the relationship between the Forest Department and the HRMS.
3. there are conflicts within HRMSs. It is hardly surprising that there are cases when the HRMS acts as a personal fiefdom for local elites. I was told that in one case the setting of a 'fair' price for the sale of water was influenced by local elite who put pressure on the HRMS to lower this price. Given that the price acts as a mechanism for the redistribution of income to the landless/near-landless agriculturalists in the village, this resulted in a significantly reduced income for them. Given the elite were also the local money lenders, it was feared this would result in the landless/near-landless agriculturalists having to once again borrow at exorbitant interest rates. A more widespread issue which requires frequent negotiation is related to the competing needs of differing groups within the village. For example, *Gujjars* need the production of fodder whilst *Banjaras* need forests managed for *babaar* production.

4. there is conflict between HRMSs. The lands coming under the jurisdiction of HRMSs do not always equate with traditional land use patterns. As a result a HRMS can have control over the activities of land that has traditionally been used by a neighbouring village. Whilst this may be as 'simple' as resolving access to routes, it can be complicated by natural resource use and caste issues. For example, in one village, *Gujjars* usually cut the freshly sprouting, green *babaar* (locally called *mongri*) for fodder during periods of scarcity. *Jats* in a neighbouring village however are dependent on *babaar* and consequently don't allow the cutting of *mongri*. Both villages have access rights to the same land as both have traditionally used the same forest.
5. not all groups in a village have the same level of dependence on forests. Consequently it is possible for a HRMS to only benefit some within the village. Whilst some HRMSs have ensured all people have access to water rights and can then sell them on the local market, this is by no means a widespread practice.
6. there is general agreement that a lot of the success of the JFM approach within Haryana is because of the work of three facilitators. The extent to which the approach has been institutionalised, and the extent it has remained dependent on facilitation, is therefore unclear.

As could be expected, the experience of joint forest management in Haryana is mixed. Whilst there is no denying the very real gains it has made in forest

protection and revegetation, more work needs to be undertaken to ensure the benefits are able to be built on locally. As the case below highlights, in some areas there is a lot of work to be done.

CASE STUDY: MANAGEMENT OF THE KALISI FOREST, HARYANA

The Kalisi Forest, in the north-eastern corner of Haryana and on the border of Himachel Pradesh, is one case where the JFM approach has been overturned by the Forest Department with what are likely to be devastating results. It provides an example of forest management which is at odds with local people and which sees the conservation of forests in purely scientific terms.

Joint Forest Management at the Kalisi Forest

Six villages occupy land on the edge of the Kalisi Forest. Each has a functioning HRMS and for the last ten years the villagers have been using non-timber forest products as part of the JFM arrangements. As the communities are predominantly *Banjaras*, the local economy is very dependent on access to *babaar*.

Accounts from the JFM facilitators in the area and from local villagers themselves indicate that the HRMS was particularly successful in uplifting the economy of the villages. By all accounts, the Kalisi Forest has also undergone significant regeneration as a result of the JFM model of forest management.

The Re-imposition of the Orthodox Approach

During 2000 the Forest Department gave notification that the Kalisi Forest was to

be reclassified as a wildlife reserve. As a direct consequence of this, people's rights to timber and non-timber forest products were extinguished and a system of fines/jail terms put in place for illegal use of the forest and forest products.

The reclassification of the Forest decimated the local economy of the villages and altered the nature of the relationship between the Forest Department and the local communities. As one villager put it

How can you trust these people? They have taken away our livelihood and our trust. And no-one in the department cares about it.

However, the concerns of the villagers were not only related to economic loss, though obviously this was the significant one. They were concerned that the Forest Department reclassified the Kalisi Forest without consultation, and that the Department still viewed forest management this way.

This is an important point. Whilst the JFM approach has been focused on developing an integrated process whereby local economies are improved ecological services are protected, it has had a significant role in empowering local communities and developing an active civil society which is based on redistributive justice and participatory democracy ideals. The loss of the villages' economic base was of concern, but so too was the undermining of the process of JFM itself.

Currently the reclassification of the Kalisi Forest is before the courts. It is seen as a test case for the rights of local communities, the rights to traditional uses of

forests and to the Haryana and GoI's support for joint forest management.

Illustration 10.3: Rope making is an Important Mechanism for Gender Socialisation in Villages



CONCLUSION

The search for participatory approaches to protected area management, and especially those which try to incorporate community and social forestry approaches, provide the potential for change. However, the movement away from potential and towards a reality is dependent on a critical examination of assumptions surrounding causes of deforestation, what community or social forestry is and what it should be.

Joint Forest Management arrangements in Haryana provide examples where

social and community forestry approaches are able to protect ecological services, ensure equitable economic benefits, and empower local people/communities. In the main, this is supported by an enabling forest management policy and there are signs there is an alteration to Forest department culture to reflect these approaches.

However, as the Kalisi forest case shows, all do not share this. Another worrying sign is the ways in which funding agencies from the global conservation and development agendas are looking at JFM. Significant funding has now been received from the World Bank to further develop JFM in Tamil Nadu. Unfortunately this funding comes with a series of time-based objectives, including having established 300 HRMSs by the end of the project (in four years). Such an approach focuses on a HRMS as a legal entity rather than an institution facilitating socio-environmental justice outcomes. It is to be hoped the successes of the JFM approach don't result in an increasingly globalised local, and the idea of social/community forestry being once again subjugated by a technical approach.

SECTION FOUR

THE CASE FOR PARTICIPATORY PROTECTED AREA MANAGEMENT

This section develops the case for participatory protected area management or PPAM. The argument for PPAM is essentially derived from two sources. Firstly, the theoretical and conceptual discussions contained in the previous sections and the analysis of the case studies contained in this thesis form an important justification for the PPAM approach.

Secondly however, the justification also comes from outside this thesis. Partly it has come from reflecting on my own field-based work in community-focused natural resource and protected area management in Australia, China, Nepal and Indonesia. Partly also the arguments come from secondary sources beyond the Asian region. As the participatory approach has become accepted internationally, there has been an enormous literature discussing experiences. This is in addition to various e-discussion groups, e-conferences and of course, workshops and conferences.

Chapter 11 makes the case for PPAM. It highlights the importance of participation

and an epistemology which incorporates the local level. It goes on to identify key components to PPAM and draws out implications from the cases forming the fieldwork component to this thesis.

Chapter 12 discusses the importance of, and implications for, protected area management incorporating a PPAM approach and becoming an outside change agent in the search for socio-environmental justice. What this means to protected area management will be considered, as will the evidence drawn from the case studies.

Chapter 11

THE CASE FOR PARTICIPATORY PROTECTED AREA MANAGEMENT

I haven't really done anything ... This (regeneration) isn't because of me. All I have done is shown people what is possible. (Protected area manager, Haryana).

We want to involve the local people ... we try to. We hold a lot of meetings and we discuss our plans. We give (local people) work. We have ecodevelopment activities in the buffer zone. But the villagers still hunt and poach. What to do? (Protected area manager, Uttaranchal).

INTRODUCTION

The previous chapters have raised concerns about the ways in which conservation problems are defined as technical ones requiring technical solutions rather than the results of historical, social, political and economic processes. Of particular concern has been the ways in which protected areas, as an institutionalised, global system of biodiversity conservation, have been managed to incorporate local level emphases in development, conservation and economic change.

An outcome of these discussions has been the recognition of the potential for protected area management to act as a mechanism for social control rather than empowerment, and to further institutionalise the very factors which lead to biodiversity loss. This chapter argues for an alternative approach to protected area management. By learning from the lessons of the field studies, as well as the conceptual arguments contained in the earlier chapters, the case will be made for a participatory approach to protected area management based on a critique of global conservation and development and which seeks to implement socio-environmental justice – participatory protected area management or PPAM.

From the outset it should be recognised there is no one pathway to PPAM. Rather, there are a number of approaches which share common goals. The general concept itself reflects a number of points related to what is meant by development, particularly local development, what the effects of development have been on local populations, and how these can be overcome within a framework which fosters self-reliance rather than dependency, participation rather than the 'giving' of development (the target of development approach) and the epistemology of the local level. All this is within a context of biodiversity conservation which is local rather than global, and institutions which facilitate social, economic and political change toward a reintegrated society and nature.

THE SEARCH FOR A LOCAL LEVEL, PARTICIPATORY APPROACH

Access to social and economic equity is fundamental to conservation in general and protected area management in particular. It is important to understand the theoretical and ethical basis of development as the search for a more equitable distribution of social and economic benefits, particularly (though not only) for rural people.

Part of the theoretical heritage of development practice, particularly that coming out of rural development and especially through the NGO experience, has seen the emergence of local or participatory approaches based on theoretical, practical, and ethical considerations. Discussions in previous chapters have highlighted the sometimes simplistic approach to local level involvement incorporating, at best, a recognition of local people within the conservation equation (albeit as objects of consultation or wage labour) and at worst an entrenched view which sees local people as a hindrance to conservation but being 'dealt with' because this is now what funding agencies and NGOs expect.

The concept of an organic, empowered 'local' must underpin not only conservation and development policy, but models of protected area management, community/village expectation and, importantly, ultimately be reflected in an active civil society. Without these essential 'ingredients', protected area

management approaches are likely to reflect more orthodox approaches of consultation (rather than participation) and treat local people as requiring management rather than being partners.

The importance of this has been highlighted in a number of the experiences within the cases. On a general level, the Kumaon and Garwal areas of Uttaranchal have long displayed the characteristics of an active civil society. This has been reflected not only in the Chipko movement as a mechanism for forest protection, but more generally in the agitation of the inhabitants of the region for a new state. The response of the Gram Sabha of Lata in Chamoli on learning that Nanda Devi Biosphere Reserve was to be opened for tourism also highlights the importance of an active civil society and an empowered community in influencing protected area management and state policy (as discussed in chapter eight).

THE EPISTEMOLOGY OF THE LOCAL LEVEL

There is often a perceived duality between the recipients and administrators of development intervention. Such a simplistic duality results in notions that those who administer the development tonic know what's best (on the basis of so-called expertise, on the basis of political criteria or on the basis of economic rationality, for example). The ways this occurs are complex, and have been the focus of much critical attention from, for example, Chambers (1986; 1994 a, b and c), Cernea

(1991) and Shanin (1988) to name a few.

Inherent in these critiques is what can be called the epistemology of the local level, or the process of development intervention which fits the project to the local level rather than vice versa. In short, such an intervention is designed to be community based, and recognises the legitimacy of local knowledge, local economic needs and local forms of social organisation.

The assumption here is that the local level should be the starting point of development intervention, ensuring local level participation in the implementation and operation of the project. In this way, the community has (rather than is given) some form of ownership over development intervention. Of course, such a scenario assumes that community participation and ownership is a positive step in the project, and it must include a consideration of the implications of who is involved in the local level (men? women? landowners only? village headman? etc).

The local level *per se* is not enough therefore. Social knowledge of the variety of local levels is important. Logically, then, such an understanding should be aimed for at the beginning of development intervention. Consequently, the epistemology of the local level is both a starting point for and a focus of development intervention and the implementation of a PPAM approach.

In an insightful study, Dube (1988) suggests that the search for alternative development paradigms must consist of a creative relationship between the state and the local level, a process of conscientisation through education, a process of affirmative action and a process of institution building. His discussions, like those of many writers, focus on the tensions inherent in facilitating change and altering existing socio-economic and political institutions.

Herein lies some of the real difficulties in attempting the facilitation of participatory approaches. Wells *et al* (1992) for example, suggest that these approaches cannot address the underlying causes of threats to biological diversity.

They argue:

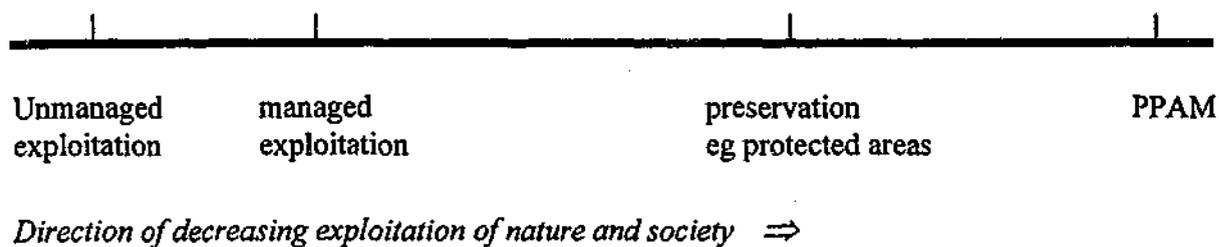
many of the factors leading to the erosion of biodiversity and the degradation of protected natural ecosystems ... originate far from park boundaries ... Addressing these issues in a meaningful way would require engaging the highest levels of government throughout the industrialised and (so-called) developing worlds and mobilising resources on a much larger scale than has been done so far. Today, even under the best of conditions, ICDPs centred on protected areas and directed to local populations can play only a modest role in mitigating powerful forces causing environmental degradation (1992: xi).

Be this as it may, and there is an element of truth in their position, it does not mean such an approach is only reformist, or indeed, should not be attempted. Whilst obviously a globalised local means the continued integration of local populations into the global conservation agenda there are a number of important components to a PPAM approach. Drawing on what Dube (1988) has argued, PPAM requires an

enabling state, an enabling community, an enabling protected area management approach and an active civil society. With these in place, democratic institutions which facilitate socio-environmental justice become much more refined and realistic. Whilst it is recognised that these approaches will not overcome the excesses of the capitalist world economy and its inherent commodification of nature, they provide a starting point and a ray of hope. The movement away from technico-scientific 'environmental management' to a locally empowering socio-environmental justice framework provides an important and necessary first step.

The above discussion can be summarised with a continuum. On one extreme there are exploitative social, economic and political relations which use nature merely as a factor of production without any controls. This is what Colby (1990) has called frontier economics. On the other extreme is a set of social, economic and political relations which are integrated with nature. This may attract a number of labels and contain a number of assumptions about human beings, society and so on. In between, there are paradigms which attempt to mediate between the exploitative and the non-exploitative.

Diagram 11.1: Continuum of society/nature relations with a specific emphasis on protected area management



Resource management, for example, may reflect assumptions about nature as an economic resource within a dominant paradigm of exploitation. Protected area management may attempt a more preservationist approach.

With the current interest in local development protected area management may move in either direction. If it falls back into the resource management approach, it will move towards the more exploitative end of the continuum. This will be particularly the case, I have argued throughout the study, if sustainable development and more generally, conservation, is aligned too fully with economic growth and technico-scientific management (Adger *et al* 2001; Wilshusen *et al* 2002).

If, on the other hand, protected area management incorporates local development within a framework which includes new assumptions about the notion of development, participation, global conservation agendas, power and the like, it

may move towards the less exploitative or integrated end of the continuum. As has been shown throughout this study, how protected area management incorporates the local, what assumptions about development and conservation it uses in doing so, and how it goes about this integration is at best problematic. Often, it has resembled a practice (local level development) either in search of a theory, or with the wrong theory.

IMPORTANT COMPONENTS TO PPAM

Previous chapters have discussed the often conflicting social, economic and political dynamics within protected area management when attempting to integrate conservation with local level development. These conflicts and tensions emerge as a result of the influence of the global conservation and development agendas, the structure of development as a simile for capitalism and consequently the use of nature as a commodity, and the knowledge frameworks which protected area management is based upon.

These discussions complement on-going secondary analysis (including that undertaken for IUCN and published as *Culture Conservation and Biodiversity: the social dimension of linking local level development and conservation through protected areas* [Furze *et al* 1996]) and my own fifteen years experience within various locations in Australia, Indonesia, Nepal and China and reported elsewhere

(for example, Furze *et al* 1996, Furze 2001, Bauer *et al* 1994, Thwaites *et al* 1995 and 1996). Drawing on these conceptually-based discussions as well as my own primary and secondary analysis, it is possible to suggest a number of characteristics which a PPAM approach should contain.

If protected area management is to realise its potential as an agent of social transformation, it must incorporate these characteristics within its praxis. At a minimal level, therefore, a PPAM approach would have the following as a foundation.

Development within PPAM is social transformation, not only economic growth.

It means an increase in awareness, a change in relations of power, and a resultant process of conscientisation whereby the poor or the exploited are able to take greater control over their lives. The linear metaphor in which development is equated with economic growth must therefore be overcome, as must its results. It should draw on the heritage of ecosocialism and radical development theory to understand the socially transformative potential of reconstituted development models.

The example of a JFM village in Haryana highlights what is meant by this. The village, next to a protected forest, was characterised by an unequal access to water

rights based on land ownership. Whilst the villagers needed water to irrigate their fields, access to water was controlled by two brothers, who were also large landholders in and around the village. The brothers had illegally put dams on their properties and these had acted as water catchments. The resultant situation saw the brothers with water storage on their property and the other villagers with little water.

As a result of the JFM activities, the villagers began to recognise the importance of water for the social and economic development of the village. They also recognised that the brothers were locally powerful, and regionally influential. Despite attempts at negotiation between the brothers and the village JFM society, villagers were still precluded from accessing water. Finally, as the chairperson of the JFM society tells

We understood that the brothers could not stop us from having what was rightfully ours. We knew they would tell the local politicians but we didn't really care. One day many of the men marched on the house of one of the brothers. The one who had the dam on the other side of the highway (this was the dam closest to the village). We told him that we were taking the water. Some of us stopped the traffic on the highway while others dug a trench. We then laid the pipe in the trench and covered it. The trucks on the road were free to go. Then we added more pipe – on one side until it reached the dam, and on the other side until it reached the village. Water flowed to our village again.

The resultant sale of water rights back to the brothers generated income for village development activities, including the creation of a supply of drinking water, the extension of the village school (and the subsequent employment of another

teacher), paving of roads within the village and the building of a central meeting place for village meetings.

Illustration 11.1: Irrigation as a result of JFM, Haryana.



This case is instructive not only because of the economic outcome of villagers having rights to water again, but also of the socially and politically empowering process which led to the water flowing into the village again. Ultimately this process was about conservation (animals no longer grazing in forests because access to water meant fodder production), economic development (poverty alleviation occurred because the irrigation facilitated second crops) and social/political empowerment through an active civil society (local people renegotiating local power relations). Importantly, the income generated by the village society having control of water rights was reinvested in communally

focused village level development activities which further contribute to an active civil society

PPAM is participatory, by definition

Local people have rights to participate, and to participate meaningfully, in decisions that affect their lives. They have a right to be heard and a right for their concerns to be acted on. Therefore, PPAM is a dynamic management practice, which changes as more and more participation occurs. It is also an approach which overcomes the separation between management and local people, because management becomes a part of local life, and local life is a central component of management.

Issues relating to the facilitation of participation as well as the potential for the 'tyranny of participation' are discussed more fully later. However, the concept of 'meaningful participation' is crucial. There are often a variety of meanings attached to the participation notion of participation, reflecting various degrees of local people's integration into protected area management. For example

Yes, we have villagers involved – you would have read the management plan. And you would have seen the guides

told to me by a manager at Corbett Tiger Reserve equates participation with reserve and state sponsored ecodevelopment activities within the buffer zone and

guiding tourists through the reserve. Here, participation is equated with: local people being targets of development intervention through the ecodevelopment activities and; fostering economic activities through guiding permits with little recognition that the way guiding has developed has benefited the richer villagers who have been able to afford vehicles (to the extent now that some villagers have more than one vehicle and employ other villagers as wage labour to act as guides.

This understanding of participation can be contrasted with

No, we don't need to go to that village often. We know the society is working

told to me by a forester in Haryana. This forester, discussing a JFM village, equated participation with an on-going partnership between protected area managers and local people (in this case, through local institutions such as the Hill Resource Management Society). As discussed in previous chapters, the JFM approach has attempted to institute participatory approaches to forest management based on a partnership model ultimately leading to a redefinition of 'management'.

PPAM fosters self-reliance

Development, especially rural development, which does not foster self-reliance is inadequate. Self-reliance means self-reliance in social, economic and political decision making as well as control over aspects of the community's life. But this

does not mean a simplistic form of independence, where communities attempt to be self-supporting. Rather, it means that transformations occurring as a result of development do not result in a loss of control over decision-making. The current tendency towards a globalised local must be overcome, as the further integration of local people into the global system of environmental and economic management will generate tendencies toward less self-reliance.

At its best, the JFM approach has fostered self-reliance. People at JFM villages commonly spoke about how Hill Resource Management Societies allowed villagers to make their own decisions relating to the use of funds for village development activities. Even within the Forest Department, some managers (though by no means all) spoke of the importance of self-reliance and how this altered the manager's work (for example, not having to constantly patrol locations). Obviously not all JFM villages have HRMS working in this way.

PPAM uses a plurality of knowledge

Conservation issues, development issues and consequently PPAM are complex issues requiring complex knowledge. The appropriation of knowledge by certain disciplines only provides insights into part of the issue, as do the insights generated from academic disciplines of all types. A PPAM approach must recognise this, and incorporate a wide range of knowledge bases, obviously including local and indigenous knowledge. It must also recognise that evaluations

of projects are also undertaken within this framework, as is monitoring. The research process, the management process and the project development process are thus all part of an ongoing, participatory process attempting to integrate socio-environmental justice.

PPAM consists of a creative relationship between the state and the local level

The vision of self-reliant, locally managed 'communities' which represent Tonnies *gemeinschaft* ideal is debateable (Pepper 1993; Trainer 1995; Bookchin 1982).

Just how far should we go towards this ideal, and what forms should semi-autarky take? We know that the role of the state in conservation is problematic (for example Chatterjee and Finger 1994; Pepper 1993) and therefore a PPAM approach must renegotiate this role. It must look to establish some kind of creative relationship between the state and the local level, one which exemplifies a participatory approach and which does not merely globalise the local level.

There is evidence to suggest that one of the reasons JFM has been successful in some terms is because state-based forest managers recognised the futility of their fences and fines approach and were willing to canvass other options (as long as they were cost neutral). That JFM is now enshrined in policy throughout India, however, does not automatically equate with a PPAM approach. Some JFM villages in Haryana have been relatively successful for more reasons than state policy. It remains to be seen to what extent the JFM approach becomes merely

another technico-scientific solution supported by state and nation-state level policies and sponsored by international conservation/development programmes.

The case of Nanda Devi Biosphere Reserve is also instructive. Here the state (in this case, Uttaranchal) sought to globalise the local through tourism. Development through ecotourism was equated with economic development focusing on a burgeoning national and international tourism industry and having little regard for issues of equity, self-reliance and empowerment. The response of various village *Gram Sabhas* in joining together to build locally based and focused tourism management institutions has hopefully resulted in the state re-examining its approach.

THE RELEVANCE OF PARTICIPATION TO PPAM

Participation is crucial to all of the above points. Each point is underpinned by a notion of participation, and the PPAM approach is premised on the epistemology of the local level. It would be fair to say that participation is where a PPAM approach starts and finishes. But what does it mean, and how can it be facilitated?

These are important questions which need to be addressed.

The following table discusses the differences between a blueprint approach to protected area management and a participatory or process oriented one. I

mentioned earlier that, as protected areas are now becoming more involved in development, there may be a tendency to move towards a resource management oriented approach. This is hardly surprising given that the global conservation agenda is so heavily weighted towards that approach. But to go this way has some important implications for the central component of a PPAM approach, that of participation.

Table 11.1 is an important one in that it gives us a comparison between an approach to resource and protected area management which use blueprints for management and those which should incorporate a more participatory and self-reliant approach. It is very instructive for the issues at hand.

It should be noted however that not all resource management, or protected area management approaches fit within the blueprint or orthodox characteristics. They are idealised characteristics for the sake of comparison.

Having said that, though, the discussions throughout this thesis highlight that there is a global and local tendency for the assumptions of the resource and protected area management approaches to exemplify these points. Not all cases may share all criteria, but the criteria are representative of this approach. This is useful because it provides a sense of the possible differences in approaches and outcomes which occur out of the different paradigms. It also allows for a greater

understanding of key components of PPAM.

Table 11.1 Biodiversity conservation and natural resource management paradigms: the contrast between blueprint and process approaches (WWF nd)

Characteristic	Blueprint (orthodox resource management and protected area management)	Process (reflecting PPAM)
point of departure	nature's diversity (rm/pam) possibly potential commercial values (rm)	the diversity of both people and nature's values
keyword	strategic planning	participation
locus of decision making	centralised, ideas originate in capital city	decentralised, ideas originate in village
first steps	data collection, plan	awareness, action
design	static, by experts	evolving, people involved
main resources	central funds and technicians	local people and their assets
methods, rules	standardised, universal, fixed package	diverse, local, varied basket of choices
analytical assumptions	reductionist, natural science base	systems, holistic
management focus	spending budgets, completing projects on time	sustained improvement and performance
communication	vertical: orders down, reports up	lateral: mutual learning and sharing experience

Points of departure

I have mentioned in earlier chapters the tendency for preservationist and management oriented paradigms to maintain the belief that nature has a commercial value. This is exemplified in the sustainable development debates, the

UNCED process and much discussion which emanates from the green perspective.

On the other hand, though, an alternative approach needs to view this differently. It needs to reflect the diversity of nature's values within a cross-cultural perspective as well as recognising the importance of cultural diversity. Further, as a process, we need to recognise that this diversity should be reflected in our values towards questions of 'management' and research. We should not assume that 'local' or 'community' is homogenous, nor statistically analyse in search for averages. The diversity of experience is an important dimension to understanding, and therefore to PPAM outcomes.

Keyword

Resource management orthodoxy is concerned with planning. It is a planned process with technico-scientific rationality underpinning it. It is therefore the imposition of the logic of the scientific approach within a view which sees blueprints as important management tools.

On the other hand, the keyword for a process oriented PPAM approach is that of participation. Participation means that of all sectors of the local, in all facets of 'management' (project design, development evaluation, monitoring etc). This approach means much planning is irrelevant in the sense that it assumes homogeneity of experience, it assumes that local people are 'targets' of planning processes and that the complexity of socio-economic life can be planned for. Of

course, it is still possible to 'plan' in a sense, within a PPAM framework, but this is a lot different to the process which is applied within both resource and protected area management orthodoxies.

As would be expected, the case studies have reflected both planned and process orientations. The formalised protected area management plans for Nanda Devi Biosphere Reserve and Corbett Tiger Reserve epitomise the notion of planning. Written by the senior managers, their pages contain wildlife counts, three and five year targets for the reserve, budgets and copies of bureaucratic memos, regulations and policies. This is in contrast to some of the JFM villages, where planning is undertaken at village and/or HRMS meetings, with or without forest department officials. The case of the Kalisi forest represents an example where management was defined locally as participatory, but was redefined bureaucratically as technical planning.

Locus of decision making

Much planning within the orthodox approach is centralised, often urban based. As a result, the excesses of rural development tourism and the problems associated with planning and decision making outside the immediate locality are exacerbated.

A PPAM approach decentralises decision making. Ultimately, ideas should originate at the local level, whether it be village, community or group of herders.

Of course, though, there are problems associated with that if we talk about decentralised planning being talking to the headman of the village or the like. When decentralised planning and decision making occurs it must be representative of the plurality of interests found at the local level.

Much management in Nanda Devi Biosphere Reserve is still characterised by top-down decision making, though there are signs this is in process of being at least partially redefined if the example of the *Gram Sabha* of Lata is any indication.

Similarly, at Corbett Tiger Reserve the management approach has tended to be top down. It would appear that this may be the case for sometime if the views of some of the Project Tiger staff remain influential. During interviews some indicated an unease about local people's involvement in decision making given the extent tigers are endangered. Obviously, the Kalisi forest management represents a hierarchical top-down approach.

However, as previously mentioned, one of the characteristics of the JFM approach in Haryana has been a decentralisation of decision-making. Whilst it is not working effectively in all villages, there is certainly evidence to suggest it is working well in some. This is particularly evident for three villages which Forest Department officials identified as 'successfully locally managed'.

First steps

Under the current orthodoxy, the first steps in project development occur through a process of research and the development of a plan. This data collection may be using old methods of analysis such as questionnaires and the like, or they may be using something like rapid rural appraisal approaches. The important point, however, is that information gathering occurs with a minimum of participation from the local people except for them answer researcher directed questions.

A PPAM orthodoxy is based on awareness and action. It is participatory action research, where the boundaries between research and project development are blurred, both because it is an action oriented and hence flexible approach which integrates theory and praxis, and because the project emerges from the action itself.

Design

Project design, whatever it may be, is a static expert driven process under current orthodoxy. Under the PPAM approach, projects evolve because there is no expert as such. There is only a facilitator and a social relationship between facilitator and local people which is based on the bringing together of knowledge and learning.

The case of Nanda Devi Biosphere Reserve, Corbett Tiger Reserve and the management of the Kalisi forest tend to reflect an expert-driven approach. The JFM approach in Haryana has characteristics of both, though its philosophy tends

toward the process orientation. In essence, the process of JFM is one whereby expert knowledge makes way for local knowledge and experience.

Main resources

This is perhaps one of the most important points, especially given the problems associated with funding. Under the current orthodoxy, financial resources are generated out of central funds and the so-called human resources tend to be technicians or technical experts. Under the PPAM approach, this fundamentally changes. Projects should aim for self-reliance in funding, so an economic dependency is not created. Further to this, there should not be a 'cult of the expert' engendered in such an approach. A PPAM approach ensures that local people themselves are empowered to act and to understand. There should be no on-going need for outside experts in the PPAM framework, as they leave their knowledge and experience with local people.

The cases have reflected a mixture of orthodox and process driven characteristics. The resourcing of Nanda Devi Biosphere Reserve and Corbett Tiger reserve are overwhelmingly state based and managed by experts. The management of Kalisi Forest has become this with the reclassification. However, the JFM approach has been founded on the concept of revenue (and cost) neutrality for the Forest Department. As a result, JFM has been able to redistribute income to villages for local development activities without adversely affecting the revenue of the Forest

department. In fact, within the Forest Department, JFM is recognised as being revenue neutral and beneficial as far as the costs of patrolling and reforestation are concerned.

Methods and rules

The assumptions of universality are powerful within current orthodoxies, partly as a result of the technico-scientific assumptions which it is grounded in. There is, therefore, a strong push towards some degree of standardisation of experience and management.

PPAM assumes a diversity of approaches to integrating conservation and development, not only because of the participatory nature of its ethics, but also because of the complexity of socio-economic experiences which local people have. It therefore fits ethics and projects to people rather than vice versa.

The cases provide a mixture of these characteristics. Whilst Nanda Devi Biosphere Reserve and Corbett Tiger Reserve are managed along blueprint lines, there are various ecodevelopment committees which reflect more process orientations. JFM approaches have tended to have a mixture of characteristics depending on the village and the stage of the process a village is at. The Kalisi Forest case has disempowered local people, marginalised their knowledge and experience, and instigated a scientific management programme.

Analytical assumptions

The resource management orthodoxy is predominantly reductionist, with a natural science bias. This is hardly surprising, and reflects its intellectual heritage.

The PPAM approach is systems-based and holistic. Systems are systems of knowledge, of ecology as well as social economic and political ones.

Management and focus

The blueprint model is concerned with budgets and project cycles. It assumes that matters of time are there to govern integrated conservation and development, and the notion of time is created to fit the other assumptions it operates within, such as reductionism, data collection and planning.

A PPAM approach manages outcomes on the basis of sustained improvement. It is less concerned with the problem of time, realising that participatory approaches cannot be fitted into artificially generated project cycles.

As could be expected, the cases were characterised by a mixture of blueprint and process orientations. The three to five year programmes of the management plans of Nanda Devi Biosphere reserve, Corbett Tiger Reserve and the Kalisi Forest Management plan provided significant contrast to the process orientation found

within parts of the JFM experience in Haryana. However, it remains to be seen how JFM will be implemented as an India-wide forest conservation strategy.

Communication

The approach to communication also differs between the approaches. Within the resource management paradigm, lines of communication tend to be vertical. reports are written which go up the line of communication, and centralised agencies search out researchers and project implementors to undertake projects which are managed and generated from upper levels.

The PPAM approach tends to be more lateral. Communication is not couched in terms of management and expert knowledge. Rather, it operates on the basis of sharing experiences within a context of mutual learning. This occurs with the local people themselves, who are an important part of the project rather than merely objects of study.

WHAT DO THE CASE STUDIES TELL US?

A PPAM approach entails a fundamental alteration to existing socio-economic realities and also to current orthodoxies in protectionist approaches to natural resource and protected area management. Intrinsicly, it is based on an approach to both conservation and development which seeks to overturn existing power

relations. In the development arena, this means reconstituting the very concept of development into one which epitomises those principles mentioned above. In the conservation arena, this means overturning a management model which is top-down and based in technico-scientific solutions to problems defined in technoscientific terms.

Given earlier discussions concerning both conservation and development orthodoxies, it is possible to conceptualise some very real tensions inherent within this approach. At the centre of this is the issue of the types of explanatory frameworks which emanate from core nations and which are incorporating peripheral nations and local people themselves more fully in global agendas. This is especially the case in the global conservation agenda if current approaches to incorporating local people into conservation programs fail to acknowledge the political nature of this process, and fail to treat as at least problematic, the uncritical, non-participatory approaches to local integration. This, in turn, may lead to Shiva's (1993) globalised local.

For a PPAM approach to be successful, it must overcome tendencies of incorporation and tendencies of social control. In relation to this, the experience of the case studies is mixed (refer to table 11.2). It's important to note that this table represents a reasonably simplistic categorisation of tendencies. Not all villagers or all protected area managers view these issues the same way and it is important to

recognise this diversity.

However, there have been some tendencies which have been evident. In relation to management views, these tendencies have usually been evident within the senior management structures (as distinct from, and sometimes in opposition and/or contradiction to, junior staff). In relation to the views of villagers, these tendencies have been evident consistently throughout interviews and workshops (of course, this is not to say all people viewed things in the same way).

What has been most striking about Nanda Devi Biosphere Reserve has been the extent of the difference in views between local people and senior managers. This is in part I think a result of an active civil society and a tradition of local level agitation and social movement activity within the region. It would also seem to be at least partly the result also of the views of senior reserve management who tended to refer to local involvement as something which needed to be done, rather than as something which should be done.

The case of Corbett Tiger Reserve is less clear. There is little doubt the protection of tigers has been a driving force in the way management has occurred. However there is also recognition that local people's needs should be met better and tourism provides a foundation for this. Importantly there is also recognition by management that the way guiding occurs is not necessarily the same as local level

development.

There were similar concerns expressed by villagers. Whilst there were distinct concerns about the way the reserve was managed, local people were often unclear about what could be done to improve things. Villagers thought tourism may provide some development in economic terms, but there was also some recognition that this was not necessarily going to be good for all people.

So, at Corbett Tiger Reserve, a management approach reflecting orthodox approaches was supported by policies reflecting the importance of endangered species protection. Local awareness and empowerment was problematic.

JFM villages with functioning HRMSs probably characterised the PPAM approach most fully. There was an active civil society evident, the HRMS provided a means for both economic development and social transformation, national and state policies are in place to facilitate this process and biodiversity protection appears to be occurring. However, not all HRMSs are functioning and there is still some way to go to see these benefits across the region.

Management of the Kalisi forest probably reflects the problems associated with an approach to conservation which precludes local people. Local people themselves have been alienated from the management of forests they had previously been

instrumental in saving. Their attitudes to the Forest department, and to the protection of the forest itself, reflect this. Whilst the resolution of local people's rights to this forest is currently before the courts it would seem that, no matter who 'wins', there will be some time before the relationship between villagers and Forest Department managers will be healed. This will obviously have on-going implications for the protection of the Kalisi forest.

Table 11.2 Characteristics of case studies in relation to PPAM principles

Case	1	2	3	4	5	6	Comments
Nanda Devi	√ (v) x (p)	√ (v) ? (p)					
Corbett	? (v) x (p)	?	?	?	x	?	
JFM villages	√	√	√	√	√	√	HRMS does not function like this in all villages
Kalisi	x	x	x	x	x	x	

Key

- 1 Views development as social transformation
- 2 Extent of participation
- 3 Degree of self-reliance
- 4 Recognition of a plurality of knowledge
- 5 Creative relationship between state and local level
- 6 Incorporation of PPA/PAR management approaches and methods

- √ Definite tendency
- ? Some tendency
- x Little tendency
- v within local villagers
- p within protected area managers

The experience of the cases has once again highlighted the importance having in place policies which enable PPAM, a civil society which embraces socio-environmental justice ideals, a local/community context which supports these

ideals and a protected area management model and methodology which facilitates this. It has also highlighted the centrality of a protected area management approach based on PPAM ideals and methods to socio-environmental justice.

CONCLUSION

PPAM is crucial to the search for integrated conservation and local level development. As the protected area management framework is becoming increasingly concerned with dual and often contradictory roles as preservers and developers, it is crucial it integrates a decentralised, participatory model of 'management' (redefined). If not, protected areas face the very real prospect of being a mechanism not of global conservation, but of global integration and exploitation.

It is essential, therefore, that they take on the role of outside change agents using participatory models of change. The following chapter looks more fully at the role protected area management can play as an outside change agent.

FACILITATING PPAM: PROTECTED AREA MANAGEMENT AS AN OUTSIDE CHANGE AGENT

But that is not my job. (Protected area manager, Uttaranchal)

For me, Gandhi was an inspiration. His work in the villages did a lot for these people. He was able to show people that change was possible (Protected area manager, Haryana).

The previous chapter made a case for PPAM. One of the things that has become obvious from the analysis of the cases forming part of this thesis as well as from other analyses, a PPAM approach is based on socio-economic and political change. That is, the facilitation of socio-environmental justice through PPAM often requires significant change to existing socio-economic and political realities, and, consequently, protected area managers become involved with the facilitation of this change. In short, they become outside change agents.

This chapter discusses some issues in protected area management becoming involved in the facilitation of change. In order to facilitate a PPAM praxis, protected area management must become more overtly a political act. That is, it must, by definition, facilitate the creation or enhancement of the goals inherent

within the PPAM approach. This has fundamental implications for existing approaches to protected area management.

PPAM AS INTERVENTION

Development intervention can be conceptualised as an attempt to manage complex social, economic and political processes and formations by social actors. These actors may take the form of policy makers, development professionals found in government and non government organisations, members of social movements or, increasingly, resource management and protected area management professionals.

Logically, PPAM is an attempt to implement an alternative development agenda based on a fundamentally altered relationship between social organisation and nature. For this to occur, there is, implicitly or explicitly, an intervention into existing social, economic and political institutions. This must be the case, assuming that PPAM needs to facilitate an alternative to the existing global conservation/development problematic.

However, intervention is also an ideologically charged term. What is one person's 'intervention' and social engineering is another's 'facilitation of change', depending on the socio-economic characteristics of the person/group and the ethic with which outside change agents work (see, for example, Cernea 1991; Furze *et al* 1996; Chambers 1993 a, b and c; Cooke and Kothari [eds] 2001).

It has been argued throughout this study that such an ethic must incorporate an understanding of social and economic power, and must seek to facilitate an approach to protected area management which focuses on socio-environmental justice. Further, the facilitation of change must recognise the problematic nature of capitalist development as well as the globalising tendencies of these processes. Of course this begs the question of how, locally, these kinds of recognitions can be used to instigate alternative development agendas.

Some issues can be drawn from the cases forming the field component of this thesis. The Nanda Devi Biosphere Reserve ecotourism issue is particularly instructive. As discussed in chapter eight, the state of Uttaranchal has uncritically embraced tourism and ecotourism as an economic development strategy. This will obviously mean that the state is significantly integrated into the capitalist world economy through a dependence on international tourists, international tourism infrastructure and international capital for the development of facilities. Yet within this globalising tendency has emerged a local response based on empowerment and (relative) self-reliance. In other words, the local response has been to attempt to manage the ways in which local social, economic and political arrangements relate to these globalising tendencies.

The responses of the villagers near Nanda Devi Biosphere Reserve do not signify the end of the capitalist world economy and the beginning of a green future for all,

and it would be naive to think it could. But what it does signify is the very real possibility that things can be done better, that socio-environmental justice can be reached for, and that the globalising tendencies of a capitalist world economy can be mitigated. Most importantly, it highlights what can be done by local people, for local people, through processes of conscientisation, the facilitation of an active civil society and a critically informed awareness of social, economic and political power. A similar case can be made for the JFM experience in Haryana.

And what about sustainable development as part of the global green push? It is unfortunate that the villagers around the Kalisi Forest have borne the brunt of a definition of 'sustainable' which precludes people and focuses almost entirely on non-human ecology (*we have to manage the forest in a sustainable way as one of the Forest Guards explained when I asked why local villagers had been excluded from using timber and non-timber forest products*).

However it is encouraging that Forest Department officials and villagers within JFM areas often define 'sustainable' in socio-environmental justice terms. At least in some of the villages, the JFM process has led to a redefining of 'sustainable' away from the purely technical/scientific and more toward a redefined idea of development based on socio-environmental justice ideals. Here, the protected area management approach has been to act as an outside change agent in facilitating sustainability. However, it may be unfortunate that this important change agent role of the protected area manager may be subsumed once

again to the dictates of three year planning as JFM becomes funded using blueprint assumptions in other states.

PPAM AS A MODEL FOR CHANGE

The use of PPAM as a model for change allows an integration of theory with reality or practice. The development of a theoretically and conceptually informed model of PPAM using an enabling contexts approach provides something which an evaluation can be made against. In this way, evaluations are made on the basis of a 'perfect world' or utopian end result, an idealised model of development which constitutes a new ethic to social relations as well as humanity's relationship to nature. This can then form the basis for a discussion and assessment based on the tensions and points of intersection between the possible and the actually existing.

However, this process goes beyond merely model building. It incorporates an action orientation (Stringer 1996). It provides a way of evaluating existing projects and management regimes as well as a mechanism for facilitating change to PPAM futures.

PROTECTED AREA MANAGEMENT AS AN OUTSIDE CHANGE AGENT

For protected area management to move to an approach dealing in social transformation, an epistemology and praxis in keeping with its ideals is necessary. This is crucial to ensure that PPAM is transformative, and not merely reformative. It is also crucial to ensure the centrality of participation remains, and does not get equated with consultation.

The use of PRA and PAR approaches are crucial to this quest. Through the use of these, protected area management should become a facilitator of change, and empower local people.

The importance of participatory approaches

The epistemological basis of PRA/PAR has emerged from the rural development experience and that of RRA to become important in a range of settings (Chambers 1993 a,b,c; Cooke and Kothari [eds] 2001).

At the same time as development workers began to 'require methods of analysis that are powerful, quick, careful, cheap, insightful and multidisciplinary' (McCracken, Pretty and Conway 1988: 6) concerns were being expressed among some activists and development workers about anti-poverty biases inherent in rural development tourism. This brought with it a disillusionment with large scale

questionnaire design and results (see also Chambers 1986, 1994a, 1994b, 1994c).

Partially out of these concerns, rapid rural appraisal (RRA) emerged. Its aim was to replace the traditional approaches to rural development with a menu of methods which could be described as quick and clean (Chambers 1994a, 1994b, 1994c, 1986; McCracken, Pretty and Conway 1988; Furze, De Lacy and Birckhead 1996).

The principles of RRA gained legitimacy with a variety of rural development practitioners and NGOs and ultimately metamorphosed into participatory rural appraisals or PRA. The ethic inherent in RRA, together with other sources for changes to orthodox approaches such as activist participatory research, agroecosystem analysis, applied anthropology, and field research on farming systems (Chambers 1994a) led to the PRA approach. It is within this where local people are more explicitly part of the processes of research, project design and evaluation. Ultimately, the PRA approaches also have a more explicit basis in social change within a participatory framework.

Discussing the emergence of the interest in PRA, Chambers (1994c) highlights a number of practical and epistemological changes which occurred: the need for quick understandings of the impacts of rapid social change; the fact that theory and theoretical underpinning related to PRA emerged out of the practice of participation, what was found to work; the influence of postmodernism which

stressed philosophical relativism and multiple realities; the crisis of hard science and positivistic, reductionist assumptions which failed in the face of complex environmental problems and the debate accompanying the result need for methodological pluralism when so much was found to be unknowable; and the decline in the influence of normative theories related to development being equated with economic growth, at least in some quarters. Its intellectual and practical heritage is thus diverse.

PRA can be characterised as a wide variety of approaches which 'enable rural people to share, enhance and analyse their knowledge of life and conditions, to plan and to act' (WWF n.d: 1) and are based on the following principles:

- i. professionals working in multidisciplinary teams
- ii. a reversal of learning, to learn with and from rural people. This occurs on the site and face to face. Understanding is gained from local physical, social and technical knowledge.
- iii. learning rapidly and progressively. Flexible use of methods together with improvisation ensure an adaptable approach rather than merely following a blueprint program
- iv. offsetting biases, especially those of rural development tourism. This occurs

by not rushing, listening, being unimposing, and focusing on the concerns of the poorer and the exploited

- v. optimising tradeoffs between quantity, relevance, accuracy and timelessness
- vi. seeking diversity and variability instead of averages, for example through deliberate sampling.
- vii. triangulating methods
- viii. facilitating investigation, analysis and presentation by rural people themselves, so they present and own the outcomes
- ix. self critical awareness and responsibility where facilitators are continuously examining their own behaviour, including welcoming errors as a means of learning
- x. sharing of information and ideas between rural people, between them and facilitators, and sharing field camps, training and experience between different organisations (WWF n.d).

Ultimately, the approach is more than a simple collection of techniques. It involves self-critical awareness of the attitudes and behaviours of the researcher

towards the people with whom s/he works. The methods are also a mechanism for sustaining the process of which they (both researcher and local people) are a part (WWF n.d).

Table 12.1 shows the main differences between RRA and PRA approaches. In general, the movement toward a more active role for local people is discernible in PRA, as is the alteration to the researcher's role as it becomes more oriented towards being an outside change agent.

What is important here is to make sense of a PRA approach within a changing protected area management paradigm, and in particular the context of protected area management as an outside change agent.

Table 12.1: Main differences between RRA and PRA (Chambers, in WWF n.d)

Characteristic	RRA	PRA
Period of major development	late 1970s, 1980s	late 1980s onwards
major innovators based in	universities	NGOs
Main users	Aid agencies, universities	NGOs, govt field agencies
Key resource earlier overlooked	local people's knowledge	local people's capabilities
main innovation	methods	behaviour
predominant mode	eliciting, extractive	facilitating, participatory
Information owned, analysed and used by	outsiders	local people
Ideal objectives	learning by outsiders	empowerment of local people
Longer-term outcomes	Plans, projects, publications	sustainable local action and institutions

Firstly, we can say that PRA is empowering in its own right. Chambers (1994c)

suggests that:

[M]uch PRA has been found to empower. Those who, through a PRA process express and share what they already know, also learn through that expression and sharing. Those who investigate and observe add to their knowledge. Those who analyse become yet more aware and reach new understanding. Those who plan and then implement what they have planned take command and further learn through the experience of action.

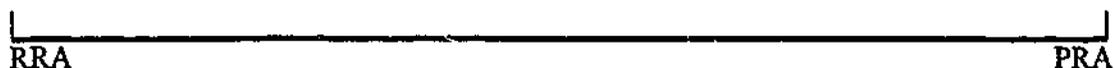
Whether empowerment is equitable depends on who is empowered. There is a danger (stressed by Scoones and Thompson, 1993) of a naive populism in which participation is regarded as good regardless of who participates or who gains. If those who participate and gain are only a local male elite, the poor may end up worse off. The 'natural' tendency is for those who are empowered to be men rather than women, the better off rather than the worse off, and those of higher status groups rather than those of lower status. The challenge then is to introduce and use PRA that the weaker are identified and empowered and equity served (pp 1444-1445).

There is also another important dimension to the participatory action research approach and the whole question of outside change agency. Activist participatory research has a Freirian legacy and attempts change through conscientisation. Freire (1972) believed that poor and exploited people can and should be enabled to conduct their own analysis of their own reality. This view has been widely influential in some quarters, even though it remains a minority view among development professionals as a whole. Activist participatory research and PRA have in common three prescriptive ideas: that poor people are creative and capable, and can and should do much of their own investigation, analysis and planning; that outsiders have roles as convenors, catalysts and facilitators; that the weak and marginalised can and should be empowered. (Chambers 1994a)

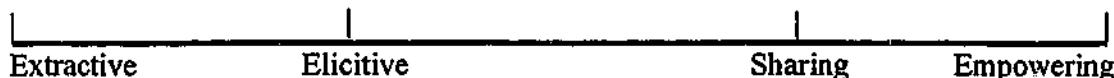
In the context of outside change agency this is important. One role of the agent is to provide those involved in the project an understanding of their location within structures of power, exploitation and so on. It is also to empower local people through this understanding. However, this is not always easy, because it is often a time consuming process, it usually meets with opposition, and, because outside change agents are so important to this process, they themselves must be empowered. That is, they must be able to take on the role of outside change agent, understand their own values and assumptions relating to their role in the process, and the facilitate or initiate change in a reflective and (self) critical way. It is these very changes which move a process away from merely studying and understanding local people (the RRA type of approach) to one where local people and the outside change agents are active makers of history. Diagram 12.1 schematically represents this difference.

Diagram 12.1: The RRA - PRA Continuum (Source: Chambers 1994a: 959)

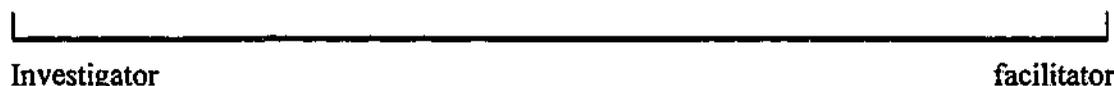
Nature of Process:



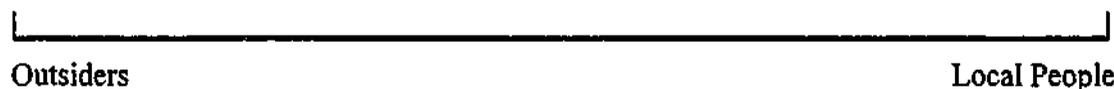
Mode:



Outsider's role:



Information owned , analysed and used by:



Methods used:



Benefits of PRA and PAR

According to Chambers and Guijt (n.d.) there are a number of advantages to PRA.

These are particularly important in the context of outside change agency.

Empowering the poor and the weak

The PRA approach is empowering because it allows the poor or the weak to understand their position and act on it. Rather than being merely recipients of social life they are active agents in change.

Diversification

The PRA approach overcomes the tendency of technic-scientific knowledge to look for commonality or monolithic processes. Social, economic and political

'lived reality' is a diverse range of experiences, even within major structural forces. therefore, the PRA approach seeks out that diversity to look for complexity and diversity, rather than one 'community' or 'local' experience.

The community process

The community is involved in planing, implementation, identification, monitoring etc. All this occurs within participatory mode and taking into account the complexity of experience which lakes up 'community'

Research priorities

Research priorities can be identified through local people's experience and knowledge. They can also be involved in the research process themselves because their knowledge is legitimate.

Organisational changes

The PRA approach can bring about changes to the organisational structure of agencies, government departments and so on. It facilitates this through recognising that an open learning arrangement is in place between the local people and these agencies.

Policy review

The PRA approach can provide a feedback loop into pollices which impact on the lives of the people who are effected by it. A PRA approach allows policy to be

less centralised and/or receptive to local needs and conditions.

Implications for PPAM

Where does all this leave protected area management? There are some real tensions inherent in attempting a paradigm shift in general, and in integrated approaches which are participatory and which moves protected area management to a role of outside change agent in particular.

As has already been discussed in a number of chapters, the globalisation of environmental conservation with its resultant integration of the environmental issues of the countries of the south into the northern power base is important to understand. But protected areas are not necessarily a fractured series of conservation 'pockets'. They represent an institutionalised means of conservation, for better or worse. They also must be 'managed' in such a way as to represent the interests of local populations within a PPAM framework. This has to be done within a participatory approach, even if it means going against established power structures and reinterpreting the causes of environmental degradation and maldevelopment to explanatory frameworks which reflect the relationships of social, economic and political power within and between nationstates.

Herein lies the importance of the PRA and outside change agency approach. The rural and community development literature and experience offers important insights into social, economic and political processes. It also highlights the

importance of integrated approaches to conservation and development. It provides, therefore a rationale for, and broad knowledge of, the importance of community development, of community ownership, and of the ways in which these aims can be facilitated. Importantly, it also provides an important depth of experience to understand some of the ethical considerations and dilemmas which are inherent in the process.

OUTSIDE CHANGE AGENCY IN THE CASES

Table 12.2 summarises management views and tendencies across the cases. These findings were derived through interviews with the managers themselves and also by asking villagers what their experience of management has been.

Table 12.2 Extent of movement to outside change agency by protected area managers

Cases	1	2	3	4	5	Comments
Nanda Devi B R	x	x	√	?	x	Views of senior management and not shared by all managers
Corbett Tiger Reserve	?	x	?	?	x	Shared views across managers
JFM villages	√	√	√	√	√	Manager sees himself as outside facilitator
Kalisi Forest	x	x	x	x	x	Very bureaucratic management

Key

- 1 Use of PAR/PRA
- 2 Transfer of power to local people/communities
- 3 Recognition of PA manager's role in influencing state policy
- 4 Recognition of PA manager's role in facilitating active civil society and community development
- 5 Recognition of PA manager's role in redefining protected area management

- √ considerable evidence
- ? some evidence
- x little evidence

When analysed in conjunction with table 11.2 in the previous chapter, this table reinforces the importance of protected area management moving its role to one of a facilitator of socio-environmental justice. It is evident that there is a very high correlation between the implementation of PPAM ideals, managers embracing the social change agency role, local people's positive experience of conservation, and environmental protection.

At Nanda Devi Biosphere Reserve there is a high degree of ambivalence shown by senior management to PPAM ideals. The effects of this ambivalence are somewhat mitigated by the fact that villages within the area have an active civil society and a history of socio-environmental justice activism. This means management is often forced to deal with village level concerns and, when appropriate, villagers themselves act as socio-environmental justice agents. If Reserve management was able to more fully embrace the PPAM approach, there would be expected to be very high levels of cooperation in reserve management.

The case of Corbett Tiger Reserve highlights an ambivalence by reserve management and by local people themselves. It is difficult to know to what extent this ambivalence is the result of locally existing socio-economic and political arrangements and to what extent it is the result of a particularly important conservation issue (tiger protection) defining and redefining these arrangements.

Be that as it may, the study has shown that reserve management and villages have

some awareness that things could be better, though the reasons why they are not better are not enunciated. It is hoped that with the current movement of project tiger across India and in other parts of the world to more fully embrace the local rights of people and to have them more fully integrated into the conservation/management models these issues may be clarified. But to what extent management will be able to take on the outside change agent role, and to what extent local people will be allowed to agitate for socio-environmental justice given the status of tiger protection internationally is unclear. The issue is to what extent the global conservation agenda with its technico-scientific explanatory frameworks will embrace locally people's rights in such a high profile conservation cause.

Once again the JFM approach in villages with functioning HRMSs seems to provide a definite incorporation of outside change agency into forest management. It is important though to note that this has been a process in place for well over a decade and the reasons for its success are often attributed to one person. One of the very positive things which have come out of the JFM experience is that this person, who was a forester within the Forest Department, was able to become an outside change agent and facilitate significant changes to local villagers economic and community lives, to institutionalising the village-level protection of forests in the area, and to altering state conservation policy which enables this model of forest protection.

Unfortunately the same cannot be said of the Kalisi forest case. Here there is little sign of management embracing the outside change agency role, which is only to be expected given the management model used. Whilst there are some hopeful signs this may change as new staff take responsibility for the area, it remains to be seen.

CONCLUSION

The facilitation of a PPAM approach to socio-environmental justice requires epistemological shifts within the management approach and by managers themselves. The potential of protected areas as mechanisms for the protection of global biodiversity can only be translated into reality through a management approach based on PPAM principles, and a praxis based on PAR/PRA. Once this is achieved, protected areas may well be able to act as institutions protecting global biodiversity because they specifically have an action orientation and they strive for socio-environmental justice. However, there is still some way to go to realise this potential.

SECTION FIVE

EPILOGUE

This section concludes the study. Chapter 13 reflects on the potential and reality of participatory protected area management. It takes the opportunity to reflect on the arguments contained in this thesis as well as my own fieldwork and highlights the problematic nature of participation, self-reliance and multidisciplinary. It goes on to reflect on the implications of a changing paradigm.

Chapter 13 is followed by the conclusion to the study. Here, significant issues discussed throughout the thesis are revisited to once again call for an approach to protected area management which more fully reflects socio-environmental justice outcomes.

Chapter 13

SOME COMMENTS ON POTENTIAL AND REALITY

This has taken many years (Villager in Haryana, discussing the development of the village's Hill Resource Management Society)

We now know we can leave it to the villagers (Forest Department official, Haryana).

We will try to talk to the Department again to get them to listen to us (Villager, Chamoli district, Uttaranchal).

We have listened to what they want many times (Forest Department official, Chamoli district, Uttaranchal).

There is little doubt that the relationship between protected area management and local populations is one of the most significant issues in conservation. I share with West and Brechin their view that

the bottom-up strategy holds the greatest potential for integrating conservation and development and for integrating cultural preservation and development objectives. It also provides the best framework for assessing the viability of the ecodevelopment paradigm in relation to local rural development (1991: 365).

Such a strategy provides for a creative relationship between nature and social organisation, expressed through the protection of biological and cultural diversity

within the protected area system. The potential of this approach, indeed, of the relationship that the approach fosters, is great.

There are many unresolved issues however. An integrated approach has to be conceptualised in a more sophisticated form than it currently is. The integration of both rural development, with all its debates and conflicts, and protected area management, with what it can offer empirically and experientially, has to be a priority.

The specific role that protected areas play in integrating conservation and local development must also be addressed. If we are talking about a paradigm shift from a preservationist and managerialist approach to PPAM, which is the position I have taken, then there is much potential. At the level of everyday life, this approach also presents a great potential for addressing social and environmental issues and the facilitation of non-exploitative social relations (and through that, non-exploitative relations between society and nature).

This also requires further elaboration, especially the links between poverty, development and nature. Methodologically, we must emphasise the comparative and qualitative aspects. Whilst quantitative analysis may assist in showing up trends, it does little to alert us to the lived experience of local rural populations or, indeed, protected area managers. After all, a PPAM approach emphasises aspects of social life which are not easily quantifiable (and perhaps, should not be

quantified, given what it represents in the rational world). Further, a cross-national comparative approach of the experience of integrated approaches will allow a celebration of difference as well as commonality.

Certainly, there have been a number of lessons learnt from the cases which have been the focus of this work. However, it is possible to take some small steps to a much greater generality by teasing out the implications of what the cases have highlighted. For the moment though, let us assess the issues which have emerged out of the study.

THE PROBLEM OF PARTICIPATION

Participation is central to the PPAM approach. However, the cases highlight the difficulty in facilitating a participatory approach and also the difficulties in defining what is meant by participation. Whilst I have discussed some of these issues in the previous two chapters, there are some more general points worthy of noting.

Challenges to participation

Chambers and Guijt (n.d) have highlighted a number of challenges to PRA approaches, and participatory approaches in general, and these are important.

The need to recognise and work at personal responsibilities and professional ethics

Self-critical awareness is an extremely difficult prospect. It involves the self, the questioning of practice, ethics, values. Most of all, it is about questioning the foundation of the individual's knowledge. This is not an easy task.

However, it is a crucial one. Without a capacity for critical self-reflection, we cannot hope, as individuals, to change our praxis. As a resource manager, without a capacity for critical self-awareness, we cannot hope to move away from the resource management based paradigm to one which questions the very model of conservation and development which is used. Without critical self-awareness, the protected area managers will not acknowledge the ethical bases of the new, politicised role as the outside change agent. Without this, it is impossible to move towards a participatory model.

But it is not just managers who need to undertake this process. The politics of interdisciplinarity are such that individuals whose ideas are framed by the assumptions of their disciplinary training need to move beyond this, to take a more critical and holistic view of issues and their resolution.

In the context of local people, without a critical self-reflective process, conscientisation is not possible. Therefore, in the context of protected area management, it is important to develop these critical approaches not only for the

individual's professional practice, but for the whole PPAM approach.

Interaction with community members: ethics and equity

Protected area management must move away from the cult of the conservation expert and move into that of a facilitator of change. The ethical position that such a move entails is located in the rights of individuals to equality as well as the rights of nature. It is about questions of social justice and empowerment, about renegotiated power relations between groups not only within the locality, but also within the nationstate and between nationstates.

But to achieve this requires an engagement with the local level. The process of conscientisation is a process of overcoming equity problems, whilst the PPAM model is a model of local development and support. The cult of the expert has no role in this, neither does the conception of local ignorance that it often brings about. What is required is a recognition not only of the partial nature of all knowledge, but that all knowledge is legitimate knowledge. It also entails a recognition that a protected area manager's role in this task is to facilitate and then leave, rather than create conflict and dependency.

Long term commitment to process

Here we are talking about structural change within organisations, not only those involved with protected area management but those involved with international conservation and development. The project cycle approach and its resultant

quick fix is flawed because a participatory approach is a process which doesn't fit well within an organisational structure concerned with planning and meeting deadlines.

But there is more to changing an organisational structure within this participatory approach than merely changing a few procedures. The insularity of some organisations, particular in the conservation and development fields, needs to be broken down. We should not be thinking in terms of competition for prestige and power. Rather, we need to think in terms of sharing knowledge, of moving in the same direction with, rather than against, other organisations. After all, conservation and development issues are too important for competition between organisations over scarce resources.

Conscientisation, education and training

Protected areas cannot be managed in a reductionist way using the principles of technico-scientific rationality, at least not within a participatory orthodoxy. Therefore, education and training, not only of protected area managers but of local people themselves must reflect the diversity of experience (culturally, economically, politically and socially) which people are likely to confront. There are no single answers to today's questions of conservation and development.

Rather, there are options, pathways which reflect certain principles but which are

adapted to local conditions, to the needs of local people in a variety of educational, social, economic and political settings, whether these be related to gender, caste, class and so on. This must be incorporated within the education and training context, so that conscientisation can occur, and change towards self-reliant development happen.

Contradictory demand of donors for both quick and visible results and slow participatory approaches

Often there are inherent tensions within the search for PPAM. It is difficult to achieve participatory approaches within a project cycle model. It is very easy to consult rather than foster participation and then call it participatory. But by doing this, it not only undermines the whole process of participatory change, it reinforces the belief by the donor agencies that participation is possible within a set of assumptions which reflect a project cycle, planning approach.

Therein lies the dilemma. The delicate balance to be reached between reinforcing the erroneous perception that participation can be achieved quickly and through a bit of consultation, and the very real need to conserve and develop using funding from donor agencies. Hopefully, being able to be critically self reflective, and acknowledging the ethical basis of participatory approaches, the practitioner is able to avoid this 'buying off' process and end up with at least a partial movement towards a participatory approach.

The need for more sharing of good and poor experiences and networking

The experience of participatory approaches must be left behind and shared with local people. It should also be shared with other practitioners, because they too will benefit from it. The competitive nature of much resource management approaches, and the technico-scientific approach is often the antithesis of this, particularly if people think that local people have no rights to this knowledge. I am reminded of one of my conversations with a colleague in Nepal, who made the point that so many western researchers come to that country to do their studies or do research, then go back to the west and write up their findings, never to be seen again, except in some obtuse academic journal.

The assumption is that knowledge is owned. But it should be shared, so that at least more people can benefit from the search for alternative approaches

The Experience of the Cases

There have been mixed signs emerging from the cases. Probably the examples which have most fully embraced this approach can be found in some JFM villages in Haryana. When the HRMS was working well, it was based on a participatory model of forest management and contained high degrees of personal responsibility and ethics. The facilitator of the JFM villages epitomised the critically self-reflective facilitator and worked within a well developed ethical framework incorporating socio-environmental justice. Some Forest department officials were also characterised by this approach, though perhaps not as fully

enunciated as the facilitator's position.

Importantly, some members of local HRMS also embraced these characteristics.

In three villages I visited water rights for irrigation were distributed equally to all households within the village, irrespective of land ownership. For those who were landless, the sale of their water rights to other villagers provided increased income. Whilst it is debateable if this has had a significant impact in overturning local dimensions of inequality, the important point for this thesis is that the *raison detre* of water rights distribution was to facilitate more equitable economic and social relations. The ethical foundation of socio-environmental justice has been laid.

Unfortunately, the same cannot be said for the other cases. Corbett Tiger Reserve is still managed in an essentially top-down fashion, possibly because of the perceived importance of tiger protection and the status this attracts for scientists and ecologists. The management team has embraced the market approach in the generation of income through tourism and there have been signs of management decisions being influenced by the desire for the tourist dollar.

Some of these problems associated with this are encapsulated in a small issue which emerged during interviews. The main tourist accommodation centre at Dhikala has problematic supplies of electricity. There has been discussion about the possibility of connecting Dhikala with high capacity electricity cables to

ensure a reliable supply of electricity. It was argued that this would supply a better tourist experience because of two identified benefits: it would mean constant hot water and; it would enable tourists to watch television.

Nanda Devi Biosphere Reserve is somewhat mixed. There is little doubt the management approach is a top-down one, and during interviews reserve management showed a distinct ambivalence to the issue of local people's involvement in management. Yet local people themselves have embraced some of the participatory approaches and have been agitating to redefine management in their own terms. How this will evolve is unclear at this stage.

Unfortunately the management of the Kalisi forest in Haryana provides little support for the participatory approach. It is difficult to see how this will change in the near future, especially given the sense of alienation and disempowerment experienced by local villagers.

THE PROBLEM OF SELF-RELIANCE

Does funding create self-reliance? This is a vexed question. Further, in a broader sense, how can you develop self-reliance within a global conservation and development system? Should you?

There is probably a reasonable amount of evidence to suggest that external

funding which is used to foster participatory approaches to development, which operate within a PPAM framework, can be successful (see for example, the cases mentioned in Ghai and Vivian [eds] 1995, also Bhatt 1989).

However, if funding is connected to a project cycle in a managerialist sense, and perpetuates the assumptions of the dominant social paradigm of world development, then it is unlikely that conservation and development goals will be able to be achieved. Whilst there are some exceptions to this, it is very dependent on a range of factors related to the inclusion of participatory approaches. Without them, projects are destined to reinvent themselves and the very problems they attempt to overcome. But note that for change to occur, the projects must be participatory, not consultative.

The results from the cases are inconclusive in this regard. Funding of conservation efforts around Nanda Devi is problematic, not the least because the Uttaranchal tourism corporations currently have the luxury of profiting from tourism with none of the profit going to reserve management for managing the negative effects of tourism. But more generally, the funding system within the state is at best unclear and at worst based on 'grant and favour'. This has contributed to a situation where a musk deer sanctuary in the higher Himalaya is rarely patrolled because funding is insufficient to provide the wardens with snow boots, warm clothes and sleeping bags. The extent of poaching is consequently unknown.

JFM has been successful and has attracted relatively little funding, at least in Haryana. However, I understand the World Bank is set to fund JFM in Tamil Nadu and with the funding comes an approach tied to a project cycle and three-to-five year plans. I would expect this would fundamentally alter the process of JFM and it would end up showing the characteristics of a blueprint approach.

THE PROBLEM OF MULTIDISCIPLINARITY

Multidisciplinarity is an issue worthy of separate attention. I agree that the complexity of conservation and development approaches requires a creative plurality of approaches. But this is not always easy to achieve (see also Janssen and Goldsworthy 1996).

On the one hand, there is the working through of the relationship between those espousing different disciplines. Within my own work, my social and community development approach competes for explanatory time with colleagues who come from disciplines such as ecology, biology, economics and policy analysis. On top of that, we have differing assumptions about the nature of human beings (reflective and creative; ecological and rationally self interested for example) and the causes of environmental and development problems (a plurality of views covering everything from nature striking back to lack of articulation with the free market to the operation of a global political economy).

So I, and my colleagues have to work through that as part of a team. Then on top of that, we must work through other issues related to in country partners and priorities and their disciplinary, conceptual and theoretical biases. All this in the search for a plurality of understandings. Whilst this is potentially very exciting (and it is), it also very time consuming, and often the force of personality wins through. Sometimes the force of argument wins through. Rarely is transdisciplinary understanding achieved. I should say, however, that we are moving towards it, but we are not all self-critical individuals who continue to assess and reassess our knowledge base and assumptions, at least not all the time.

But this plurality of understanding is only part of the problem. On top of this we must incorporate local knowledge, the expectations of protected area managers, as well as those of local populations. The search for a transdisciplinary basis to knowledge is thus a difficult one. It is no wonder that knowledge can so easily be appropriated or disregarded. It is so much easier to search for knowing more and more about less and less within the technic-scientific knowledge base.

But of course we cannot just let it go as is. We must work through these issues of plurality, in the hope that, ultimately, knowledge itself, along with understanding, will be redefined and a new approach to protected a area management, to conservation and to development will emerge.

IMPLICATIONS OF A CHANGING PARADIGM

There is much that has been said in this study. It is hoped that the rather broad sweep through my approach has generated issues relating to protected area management approaches.

An ongoing result has been the continuing tension between the PPAM approach which I have been advocating and the existing social economic and management structures in the cases themselves. Perhaps this is not surprising, and reflects my comment throughout the study related to the need for a paradigm shift away from the protectionist and technic-scientific approaches of management orthodoxy to the ethic of PPAM.

Perhaps, though, one of the more concerning things about the study has been the ways in which many players, especially protected area managers, funding agencies and even colleagues and partners, have been quick to promote 'local level' and 'participation' without adequately understanding the ways in which these terms are contested, the implications of the ways in which they have been appropriated to represent the further institutionalisation of existing management structures and existing local structures of power and inequality, and how problematic the very notion of development is.

Without this understanding, or at least a recognition that these are contested arenas, the concern is that protected areas will further institutionalise the very practices which have led to the need for a protective function.

Protected areas offer a great deal to the search for integrated conservation and local development precisely because they are institutionalised. But McNeely is right to want a socio-economic system in place which does not need protected areas. How this can be achieved without a paradigm shift away from the protectionist and towards the action oriented PPAM model is difficult to see.

Protected area management is at somewhat of a crossroads currently. It is institutionalising the processes of global concentration and integrating the local into the power conflicts which occur as a result of the control of the global conservation agenda by the countries of the north. But the current interest in local development offers hope that this can be reversed, that protected area management can facilitate a movement to a participatory approach to conservation which is based on social development rather than an uncritical acceptance of economic growth, that reflects truly participatory approaches whereby local communities gain more control over their own destinies, and in which humanity can once again be integrated with nature.

But for this to occur will need a shift away from the environmentalist heritage to one which incorporates a radical political economy framework, and one in which

the protected area manager becomes an outside change agent. The role therefore needs to be defined, to be made expressly political in the sense that its function is to facilitate conservation through social justice, redistribution of social and economic resources and the broadening of knowledge. When this occurs, conservation is no longer a technical problem requiring technical solutions but a social one requiring political economy solutions. Only then, to go back to McNeely's (1989) wish discussed in chapter two, we may lose the need for protected areas.

SUMMARY AND CONCLUSION

The previous chapters have made a case for participatory protected area management. It has been argued that this approach represents a way forward for both conservation and development, because it redefines both in terms of participation and local level change, in terms of renegotiated power relations and in terms of the facilitation of socio-environmental justice. This is achieved at the expense of the orthodoxy of international conservation and development approaches, which have 'globalised the local'. PPAM represents an approach to protected area management that is explicitly politicised and which moves protected area management away from a preservationist, managerialist paradigm to one which facilitates change and is concerned with matters of social and environmental justice.

I agree with Place (1995: 171 - 172), who suggests:

Under the right circumstances, national parks have the potential to become the motor of community development in some parts of the third world, but there are many obstacles to overcome on the way, including the dominant model of economic development and the passivity of rural populations who have little or no control over local resources within recent memory ... There are many communities around the world engaged in this struggle. Systematic collection of their stories, and analysis of their successes and failures, can help provide support for people's future quests for self determination in community development.

But what are the right circumstances?

TOWARDS AN ALTERED PARADIGM?

This study has focused on a number of key issues to assess the contested ways in which conservation and development are occurring through protected area management. Its central question, introduced in chapter three, was how can protected areas integrate social and environmental justice? In other words, what are the right circumstances within which protected area management can facilitate socio-environmental justice? It has highlighted the following significant issues.

The problematic nature of protected area management

The very practice of protected area management can be problematic. A dominant orthodoxy has emerged in protected area management which has reflected the influential analytical traditions of science and environmental managerialism. Yet currently the movement to locally focused conservation and development is increasingly being incorporated into these explanatory frameworks and into management practice. Can the two co-exist? Can a protected area management approach which reflects natural resource and environmental management assumptions integrate conservation and development objectives? This study has suggested that only with a significantly redefined notion of protected area management can this occur. This paradigm shift must include a redefined set of

assumptions relating to conservation, development, management and knowledge. It must recognise the ways in which protected area management has previously been a political act, and use this to transform itself into a social change agent facilitating socio-environmental justice.

Why development needs to be reconceptualised

This transformation which protected area management needs to undertake must begin with the recognition that development, as it is currently practiced and understood, needs to be reconceptualised. The inherent socio-environmental inequalities found within the dominant social paradigm of world development needs to be recognised and a search made for alternative strategies. Market solutions will not lead to socio-environmental justice as these types of inequalities are inherent within the market system. Without recognising this process, protected area management will merely act to globalise the local, further reinforcing socio-economic and political inequalities.

The social, economic and political context to biodiversity conservation

Further, protected area management needs to incorporate an understanding that biodiversity conservation is not, and never has been, a mere technical process. The uses and abuses of nature are profoundly social in origin, and consequently the protection of biodiversity is a profoundly social process.

When this is realised, protected area management will emphasise the historical,

social, economic, political and cultural processes which lead to biodiversity loss and act to ameliorate them. Its emphasis will then be on overcoming socio-environmental injustices and consequently will facilitate a more equitable set of relationships.

However, to achieve this, protected area management must incorporate a set of practices and ethics which reflect both an understanding of the results of orthodox models of development and environmental management and the institution of alternative arrangements founded on principles of participatory democracy, equity and empowerment. In short, protected area management must move towards an altered paradigm – that which I have called participatory protected area management.

The importance of participatory protected area management

The cases included in this study as well as those in my other work would suggest that protected areas are currently at something of a crossroads. Whilst they have long had a preservationist ethic, which was at times contradictory to that found within the resource management paradigm, their current movement towards filling the dual roles of conservation and local development may well cause problems. They may well find themselves moving more towards the resource management paradigm, pushed by the orthodoxies of global conservation and development agendas who equate conservation with technico-scientific management and development with economic growth.

But their potential as mechanisms for local development which is related to self reliance rather than a globalised form of integration of local people remains. PPAM provides a mechanism for this to occur within a critical framework based on participation, critiques of the global development and conservation agenda and a process of facilitating change. But in order to achieve this potential protected area management must undergo a paradigm shift - it must reinvent itself as a politicised act and as outside change agents.

PPAM is a political act. Whilst protected area management has always been so, the PPAM approach, concerned as it is with matters of social and environmental justice, is more explicitly so. Protected area management can no longer hide under a guise of objective science the power relations which it facilitated within its preservationist orthodoxy, for now its main focus is power. As a political act, PPAM is concerned with renegotiating power arrangements, those found within the various local levels (such as those based on gender, ethnicity, class, caste, race and knowledge), within the nation state (through the political process for example) and those found beyond. It must hold out against the negative impacts of the globalisation process within which 'local' is being further integrated into this agenda and consequently losing still more possibility of self-reliance.

To achieve PPAM, protected area management must become an outside change agent. As protected area management becomes increasingly politicised, its role as

outside change agent becomes more important. In the facilitation of socio-environmental justice, it must build and strengthen institutions, it must conscientise local populations to ensure that participatory approaches achieve their potential, and it must contest existing structures of power. Without undertaking this role, protected area management will have failed in its potential.

What I have been talking about throughout is the need for an altered paradigm. One that moves to PPAM, an approach which places on centre stage local populations and their rights to things such as social and ecological justice, the right to determine their own futures, at least more than is now possible, and the right to have their voices and their experience recognised as legitimate.

This approach will require an altered protected area management paradigm. The signs are that local participation has already become a new orthodoxy. But my concerns are that this has not really indicated an altered paradigm, that the same old views about nature, about humans and about the process of development remain, even if in some renegotiated form.

Of course not all projects merely reinforce the status quo, in much the same way as all resource managers don't operate within the orthodoxies discussed throughout the study. But it is important to take a critical look at the experience, especially in the light of a model of change which exemplifies PPAM ethics and practices. I believe this to be a way forward. I hope that this study has contributed in some small way to this search.

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