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ENVIRONMENTAL MANAGEMENT IN FIJI:
A SOCIO-POLITICAL EXPLORATION OF GLOBAL, REGIONAL
AND STATE DYNAMICS

A thesis presented in partial fulfilment of the requirements for the degree

of

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2001

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J J Turnbull, 8 November 2001

Jane Turnbull

ABSTRACT

The techniques of environmental impact assessment, environmental planning and protected areas are manifestations of the cultural modernisation of western society with its growth of rationality, bureaucratisation and the centrality accorded to science. Environmental impact assessment and planning techniques are also part of a growing international perspective on environmentalism that is moving towards common environmental standards and policies. The concept of formally protected areas is being subsumed into this globalist perspective, part of a scientifically-based discourse that argues loss of biodiversity is a global issue requiring a global solution.

Global environmentalism accounts for the way the South Pacific Regional Environment Programme (SPREP) promotes these modern environmental management techniques to relatively undeveloped Pacific island countries. It also accounts for the way that SPREP's discourse normalises the involvement of outsiders in Pacific island environmental management. But neither global environmentalism nor cultural modernisation account for the limited way that the state in Fiji, one the most developed Pacific island countries, has practised these techniques. Neither does the search for sustainable development, topical amongst the development assistance agencies funding environmental projects in the South Pacific. The Fijian state does not actively control adverse environmental effects from economic growth.

Economic and class division amongst indigenous Fijians has shaped the state's environmental management. Fiji has a hierarchical, hereditary chiefly system promoted as the basis of collective identity and culture, and a wise, unifying and stabilising influence. The systems of land tenure and rent distribution for native land leases adopted by the colonial administration have made many chiefs wealthy, and many have participated in commerce. Many have also held political power. These chiefly élite have a vested interest in both economic development and the political, land tenure and rent distribution systems. They have been able to use these systems to manipulate public opinion within their own institutions and land-owning constituencies. The state has applied environmental management in ways that meet the basic expectations of a modern state, while at the same time ensuring its efforts do not threaten its power base among the indigenous Fijians by bringing the communal ideal into conflict with the discourse of economic development.

Control over the resources of others in the name of planetary health, of preventing environmental degradation, is never too far from the surface of many western proposals for global environmental management.

David Harvey
The nature of environment; the dialectics of social and environmental change, in R. Miliband and L. Panitch (eds) *Real problems, false solutions*, London: Merlin Press, p. 25

The very ink with which all history is written is merely fluid prejudice.

Mark Twain (1835-1910)
Following the Equator

PREFACE

In starting this thesis, I wanted to know whether regional and international agencies are institutionalising modern environmental management practices in the South Pacific to impose their environmental philosophy on the small, less developed states. As the research progressed, over the course of a year living in Suva (Fiji), it redirected my curiosity towards understanding why the Fijian state has little apparent interest in dealing with environmental degradation. In the end, I needed to address both questions in order to understand the global, regional and state dynamics shaping environmental management in Fiji.

There are many agencies involved in, and the influences upon, environmental management in the South Pacific. Although there are trends and common themes, it has been difficult to condense information about what is happening at international, regional, national and local levels. I have included sufficient information to allow those who might disagree with my conclusions, or who might wish to explore them further, to do so without having to repeat the time consuming searches for environmental management initiatives. For these two reasons, this document is longer than might be expected for a Masters thesis.

I thank all those in Fiji and at the South Pacific Regional Environment Programme secretariat in Apia who took the time to talk to me and to freely share information and views on environmental management. With such willing contributors, it was a pleasure to research this thesis. Thanks also to those in Fiji who let me use their collections of reports and libraries – the University of the South Pacific, the land use planning section of the Native Lands Trust Board, the National Trust of Fiji, the Department of Environment, Dick Watling (Environmental Consultants), and Robin Yarrow. I trust you all find something of use in my endeavours. I also thank my supervisor Donovan Storey for reading drafts and suggesting which areas I should explore further.

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ABBREVIATIONS

| | |
|----------|--|
| ADB | Asian Development Bank |
| AIDAB | Australian International Development Assistance Bureau |
| AOSIS | Alliance of Small Island States |
| AusAID | Australian Agency for International Development |
| CROP | Council of Regional Organisations in the Pacific |
| CISEIN | Consortium for International Earth Science Information Network |
| DAWN | Development Alternatives with Women for New Era |
| DFAT | Australian Department of Foreign Affairs and Trade |
| DP | development plan |
| EIA | environmental impact assessment |
| ESCAP | Economic and Social Commission for Asia and the Pacific |
| FAO | Food and Agriculture Organisation |
| FFA | Forum Fisheries Agency |
| FJD | Fiji dollar |
| GCSDSIDS | Global Conference on the Sustainable Development of Small Island Developing States |
| GEF | Global Environment Facility |
| Ha | hectare |
| ICAD | integrated conservation and development |
| INSTRAW | United Nations Research and Training Institute for the Advancement of Women |
| ISO | International Organisation for Standardisation |
| IUCN | International Union for Conservation of Nature and Natural Resources |
| LANL | Los Alamos National Laboratories |
| MAFF | Ministry of Agriculture, Fisheries and Forestry (Fiji) |
| MFAT | Ministry of Foreign Affairs and Trade (New Zealand) |
| NEMS | National Environmental Management Strategies |
| NLTB | Native Lands Trust Board (Fiji) |
| NZODA | New Zealand Official Development Assistance Bureau |
| PICAPP | Pacific Islands Climate Change Assistance Programme |
| PIDP | Pacific Islands Development Program |
| PWD | Public Works Department (Fiji) |
| RETA | Regional Environment Technical Assistance |
| SIDS | small island developing states |
| SOPAC | South Pacific Applied Geoscience Commission |
| SPACHEE | South Pacific Action Committee for Human Ecology and the Environment |
| SPBCP | South Pacific Biodiversity Conservation Programme |
| SPC | South Pacific Commission |
| SPEC | South Pacific Bureau for Economic Cooperation |
| SPREP | South Pacific Regional Environment Programme |
| SPTO | South Pacific Tourism Organisation |
| TNC | The Nature Conservancy |
| 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 |
| US | United States |
| WCED | World Commission on Environment and Development |
| WWF | Worldwide Fund for Nature |
| YMCA | Young Mens' Christian Association |

1 INTRODUCTION

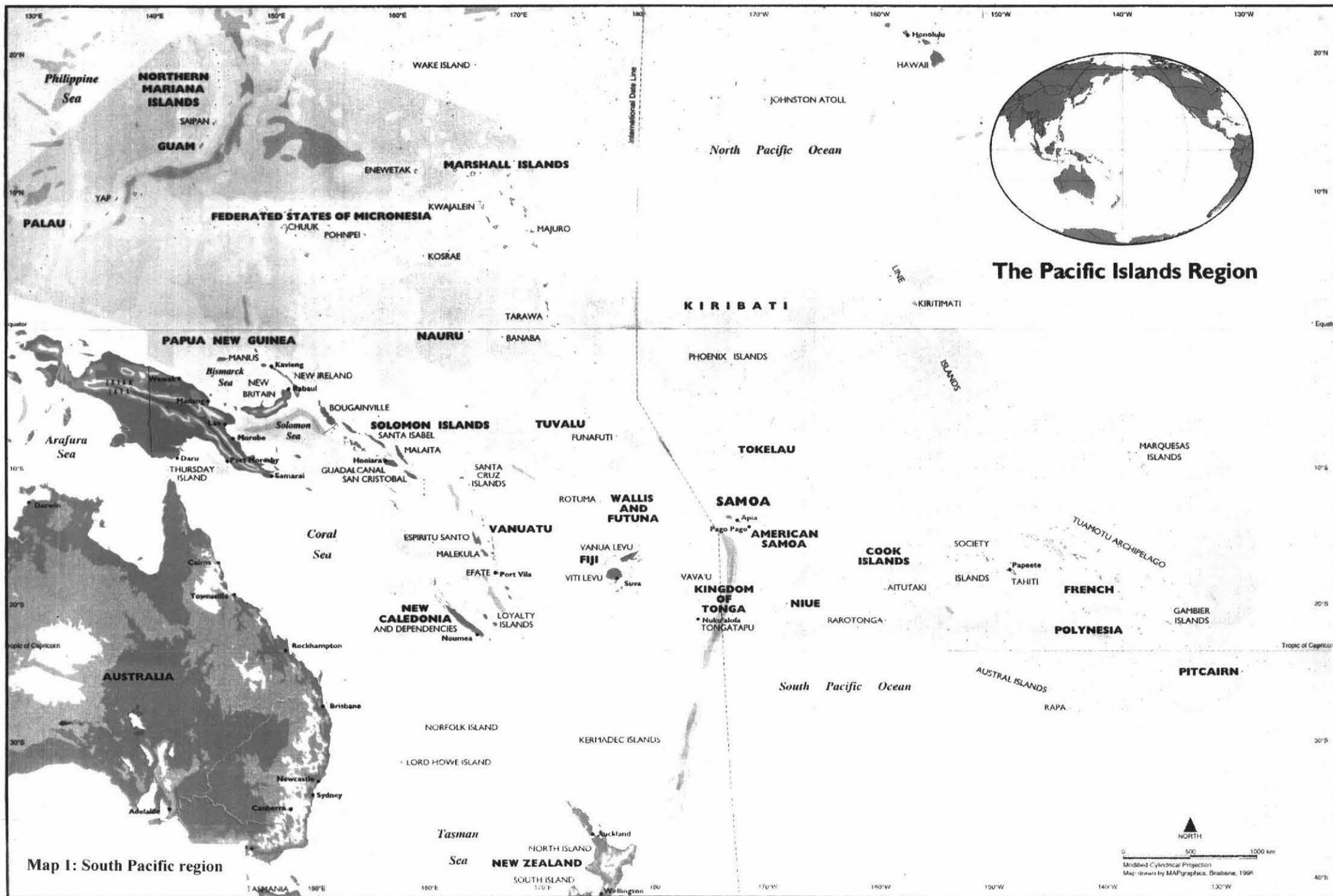
1.1 THE PURPOSE, CONTEXT AND SIGNIFICANCE OF THIS THESIS

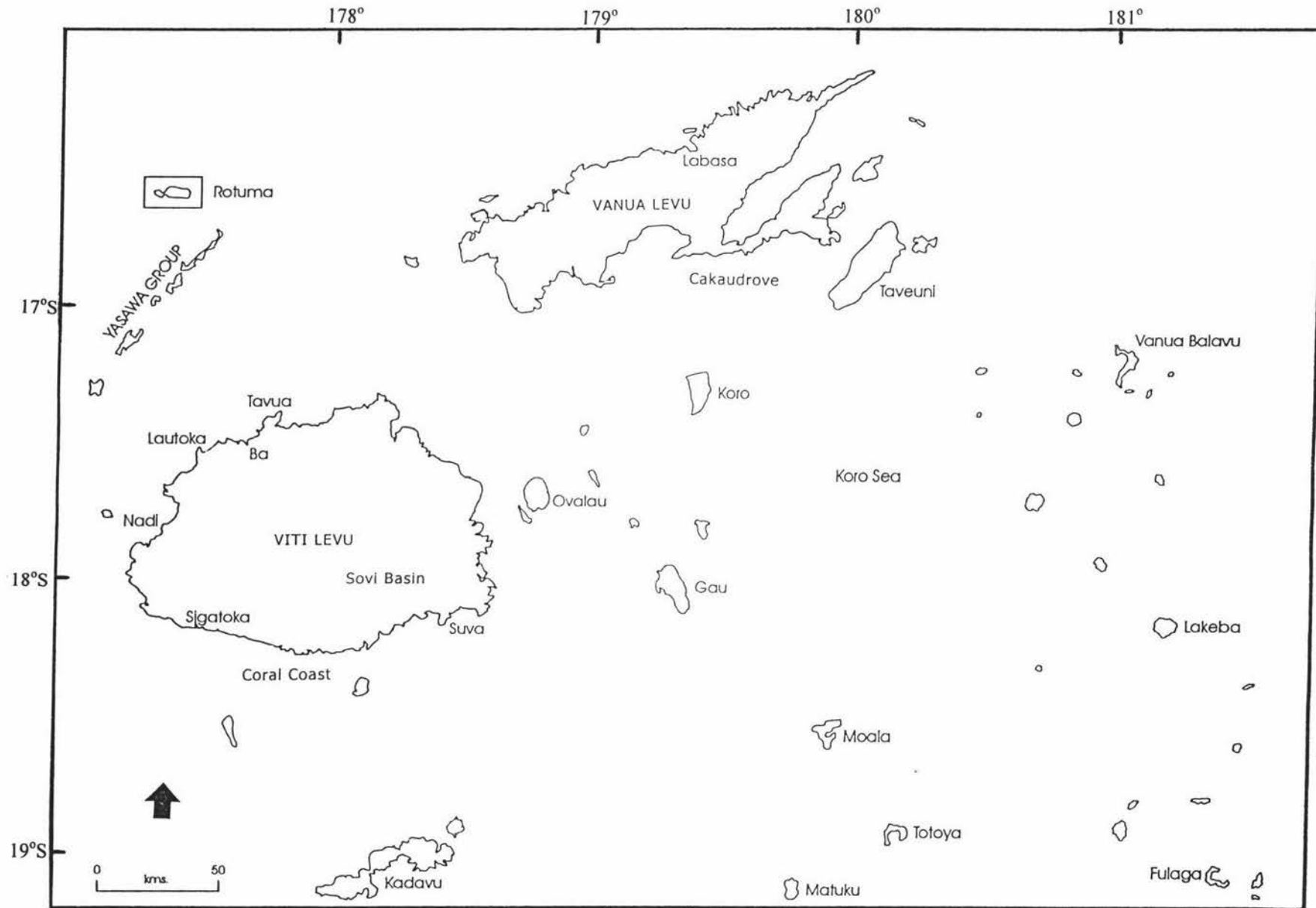
1.1.1 RESEARCH PURPOSE AND FUNDAMENTAL CONCEPTS UNDERPINNING IT

This thesis broadly concerns ideas about the manner in which humans shape and control their interactions with nature in one relatively undeveloped region of the modern world – the South Pacific – and in one country in particular – Fiji. In the South Pacific region (map 1) there are two developed countries – Australia and New Zealand – and around 16 less developed island groups dispersed across the vast Pacific Ocean, at or below the equator. These archipelagos share a tropical location and a high degree of isolation. All have relatively small populations separated by long distances (Overton and Thaman 1999, 19-20). They differ markedly in natural resources, natural hazards and environmental constraints (Overton and Thaman 1999, 19-20).

During the last thirty years, many regional and global intergovernmental and non-governmental organisations and western states (including Japan) have been preoccupied with how these South Pacific environments should be managed. Alley (1999, 141) suggested that Pacific island countries ‘inhabit regional and international policy settings responsive to their environmental needs and concerns’. In this thesis I examine what Alley overlooks: the different aspirations of state, regional and international agencies interested in the South Pacific environment, and the discursive and material practices they use to pursue these. The purposes of this research are to (1) explore the socio-political factors and processes shaping the Fijian state’s use of modern environmental management; and (2) determine whether theories about the growth of the centralised state, cultural modernity and global environmentalism and the search for sustainable development, theories commonly encountered in social science and environmental policy settings in western developed countries, explain environmental management in Fiji.

Modern environmental management consists of practices designed to achieve a certain state of nature, practices such as the analysis of potential risks and impacts associated with proposed activities, and legislative and management practices controlling pollution, national parks and reserves. The objective of environmental management may be to prevent human actions having certain effects on nature, it may be to maintain the status quo, or it may be to allow nature to take its course without human interference. In all cases, it is a considered course of action – a set of purposeful, institutionalised practices – that may involve deliberately doing nothing. To distinguish western environmental management techniques imported into the South Pacific from the traditional practices of communities in the pre-colonial South Pacific, I call the former ‘modern methods of environmental management’. In many parts of the South Pacific, especially in urban areas and their peripheries, these imported, modern practices are displacing traditional ones. The latter are being blended with modern ones, or merely forgotten as those who practised them die. To investigate the socio-political influences upon modern environmental management in Fiji (shown in map 2), I focus on the promotion and use of three techniques: environmental planning, environmental impact assessment and formally protected areas.





Map 2: The Fiji islands

In the Pacific and elsewhere, the use of environmental management techniques such as these is often depicted as being non-political, something that we should all support in order to save the planet. Yet studies of interaction between humans and nature have shown that using such techniques affects not only nature but also political and social relationships amongst humans, and that it initiates social and cultural change¹. Grove (1993, 12-4) demonstrated that historically there has been a strong correlation between those advocating environmental protection and those pursuing social reform. Methods of forest conservation and associated forced resettlement were a convenient form of social control in French and British colonies in the second half of the nineteenth century, and frequently led to fierce opposition by indigenous people. Nygren (2000a, 11, 23-5, 29) described how in Costa Rica in the 1980s, deforestation was constructed as a global problem. The state placed strict restrictions on forest clearing and, with considerable support from international aid agencies and conservation foundations, promoted national parks. This detrimentally affected poor peasants who owned the most marginal lands with limited agricultural potential. Ghimire (1994, 222-6) reported a similar situation in both Thailand and Madagascar where people have been displaced from national parks and their livelihoods disrupted because the state saw national parks as being part of the solution to a perceived national environmental crisis.

Researchers have shown that intentionally improving environmental quality (or even preventing it deteriorating further) can create or alter unequal relations of power among national institutions, non-governmental and intergovernmental organisations, and local communities. The way in which the state's environmental management creates political, social and environmental conditions that disadvantage the poor, is a common theme in Third World political ecology literature (see Peluso 1993a; Bryant and Bailey 1997, 198-9; Bryant, R. 1997b; Majid Cooke 1999, 110, for examples). In seeking to justify specific, usually highly unequal, patterns of human use of the environment in terms of the greater social good, political and economic élites have battled over material approaches to environmental management. They have also battled over meanings, creating struggles at a discursive as well as a material level. In response, subordinate groups have typically challenged them by developing a culture of resistance (Peluso 1993a, 201-9; Bryant, R. 1998, 87; Bryant, R. 2000, 688-700).

The idea that practising environmental management is inherently political and involves relations of power, with both material and discursive manifestations, underpins my research. According to many accounts, the South Pacific is in environmental crisis from the potential effects of climate change and rising sea-levels on low-lying islands, wide-spread deforestation, mining and other destructive practices

¹ Leftwich defined politics (1984, 64-5) as encompassing all the activities of co-operation and conflict within and between human societies, whereby people organise the use, production and distribution of human, natural and other resources in the course of the production and reproduction of human biological and social life. When referring to political implications of environmental management, I do so in the context of this wide definition of politics, notwithstanding that, in looking at the situation in Fiji, I concentrate on the state and intergovernmental agencies because my research has shown these play a significant role.

(Jost 1998; the July 1992 edition of *Pacific Islands Monthly*; and articles in the June 1997 edition of *New Internationalist*, for example). We need to be able to appreciate the ways in which this perception of a crisis, and responses to it, are outcomes of political interests and social processes as much as they are outcomes of environmental change.

The idea that environmental management is an artificial construct is another fundamental concept underpinning this research. This idea draws upon phenomenological ideas that things and events have no meanings in themselves; they only mean whatever human beings take them to mean (Jones 1993, 98; Greider and Garkovich 1994, 1-2; Marshall 1998, 492-3). As humans, we partially construct knowledge about the natural world, our environment. We politically, socially and culturally construct some of our knowledge and awareness about our environment. Our environmental knowledge does not simply mirror this natural world. Some elements of our relationship with the environment are obviously not constructed - the way in which we experience weather when in the open, water when in the sea, and berries when hungry, for instance. We discover at least some of what we know, think and feel about the world through direct engagement with our surroundings, in the process called 'direct perception'. We cannot totally construct our environment because we cannot change it by constructing different truths, different meanings. Nor can we will environmental dangers out of existence through thought alone (Milton 1996, 54).

While we partially construct our environment, we totally construct ideas about how to manage it, ideas which are often embedded in wider cultural, social and political notions (Milton 1996). The justification for modern environmental management is predicated on the belief that the environment (nature) is in a certain state, has certain problems (types of degradation or resource shortages) that need to be addressed systematically, over time, by using certain, repeated practices. These practices usually entail a large number of people changing their behaviour. This concept is not based on an objective reality outside of, and independent of, the culture, beliefs or political aspirations of those involved in defining environmental problems and deciding how to address these.

Unlike traditional environmental management, the practice of modern environmental management is largely carried out within the arena of state and intergovernmental organisations. Politicians and bureaucrats decide how the environment should be managed. Constructivism tells us that the reality of the daily lives of these people, what they experience as the flux and flow of daily life, is not imposed by some impersonal or material force outside of human groups. Their organisational reality is socially constructed and it is amenable to adjustment by human groups (Fox and Miller 1995, 78). Constructivism also tells us that the goals of environmental management are not a concrete objective reality that exists independently of these politicians and bureaucrats involved in constructing them. Environmental management goals are not separate from the goals of specific groups or individuals. They should not, therefore, be privileged above other goals, as those who promote environmental management solely as a public good imply. People (and therefore organisations) may be using methods of environmental management as a means of exerting power over others, and of gaining some benefit.

If environmental management is socially constructed, then there can be no globally accepted, objective notion about what type of environmental management is 'good'. Environmental management is no different from any other aspect of international relations. While various groups may form agreements and negotiate compromises, others will disagree and pursue their own objectives. That means that greater understanding of the relationship between certain techniques of environmental management and socio-political issues – as in this thesis - cannot benefit one group more than any other. It cannot, for instance, benefit only Pacific Islanders to the exclusion of those in intergovernmental organisations deciding upon what approach to take to Pacific environmental issues.

1.1.2 THE LOCATION: FIJI

To understand modern environmental management in Fiji, one needs some information about the country. One of the largest South Pacific island groups, it comprises over 330 islands, about 110 of which are inhabited (Central Intelligence Agency c. 1999). The total land area is 18,270 square kilometres, almost all of it in two main islands, Viti Levu and Vanua Levu. About 85 percent of the land is native land under Native Lands Trust Board management; the remainder being either freehold or Crown land. There is little freehold land. The population exceeds 800,000, just over half being indigenous Fijians of Melanesian and Polynesian descent, the remainder being mostly Indo-Fijians, descendants of Indian labourers brought in by the British in colonial times. At least 93 percent of the population is literate (Fiji Bureau of Statistics 1999, 7). Fiji became independent in 1970, after nearly a century as a British colony, and has a government and legal system based on the Westminster system. Since independence it has been democratic except for two periods: a period of self-imposed government following two military coups in 1987 (elections were subsequently held in 1994), and a presidentially-appointed caretaker government for a little more than a year after parliamentarians were held hostage for six weeks in mid 2000, and the elected government subsequently dissolved.

Endowed with forest, mineral, and fish resources, Fiji is one of the most developed of the Pacific island economies, although it still has a large subsistence sector - over 65 percent of the labour force is engaged in subsistence agriculture. Sugar exports and tourism are the major sources of foreign exchange. The other industries are clothing, copra, gold, silver, timber, and small cottage industries (Central Intelligence Agency c. 1999). There are several urban centres in which at least half the population lives (Fiji Bureau of Statistics 1999, 5). The largest, the capital Suva on Viti Levu, has a population estimated to be over 168,000, and has been the target of considerable urban migration that continues today (Fiji Bureau of Statistics 1999, 7). Annual urban growth in Fiji has been estimated to be 2.6 percent (SPC 1998, 58). This urban growth has created environmental problems including inadequate sewerage and solid waste disposal, pollution of streams and Suva lagoon, clearing of trees and mangroves for firewood, excessive noise, plus various environmental health concerns associated with overcrowded living conditions (Bryant, J. 1993, 19-25). In the rural areas, deforestation (mainly through logging), the associated decline in native species, land degradation through farming practices, and over-fishing are usually cited as significant environmental problems that need to be managed (Fiji Ministry of Housing and Development and IUCN 1992, 145-7).

The situation in Fiji may not be representative of the situation in other South Pacific countries. Demographically and geographically, the South Pacific islands are varied. Some countries comprise a single island, others hundreds. They may be tiny coral atolls barely above sea level as in much of Kiribati, Tuvalu, Tokelau and the Tuamotus, or they may be large, high islands as seen in Papua New Guinea, Solomon Islands and Fiji. Population densities range from around seven persons per square kilometre in Nuie to over 300 in Nauru and Tuvalu (Overton and Thaman 1999, 19-20). Politically they range from fully independent nations to self-governing and dependent territories (Wartho and Overton 1999, 36). Furthermore, the large ethnic Indian population in Fiji, small or absent in other Pacific island countries, may also influence people's attitudes to, and relationship with, the environment in Fiji. For these reasons, I do not attempt to extrapolate my research from Fiji to other Pacific islands.

1.1.3 APPROACH TO, AND SIGNIFICANCE OF, THE RESEARCH

To investigate the influences upon environmental management in Fiji, I have used a macro perspective analytical framework. This framework allowed me to search for general themes in the way that the selected environmental management methods - environmental planning, environmental impact assessment and the creation of protected areas - are being practised, and then to analyse the ability of certain well-known western-oriented socio-political theory, described later in this chapter, to explain the processes shaping these practices. The significance of my research lies in the way it shows how inadequate topical social science theories are in explaining environmental management in Fiji. Theory based around notions of increasing cultural modernity, global environmentalism, and sustainable development, and the idea that the modern centralised state uses environmental management techniques to help gain control of natural resources, proves unhelpful in explaining the Fijian state's approach to environmental management.

My research is also important because it is the first systematic survey of how the three selected methods of environmental management have been used in Fiji since independence. Other authors had examined aspects, such as Ward (1996) who evaluated the effectiveness of 18 environmental impact assessments, and Tuvuki (1995) who described aspects of planning for coastal developments. But no-one had attempted a systematic survey covering several decades, either in Fiji or for the South Pacific generally. There has not been any systematic compilation of the history of environmental management methods, their introduction to, and practice in, the South Pacific. This is despite extensive literature on environmental issues in the Pacific, ranging from forest extraction rates to the campaign for a nuclear free Pacific, and extensive documentation generated during the process of introducing modern environmental management - conference papers, working papers for meetings, meeting reports and workshop proceedings, for example.

My research is also the first systematic examination of political and social factors affecting environmental management in the South Pacific, encompassing the efforts of international, regional intergovernmental, and state agencies. There has been very little analysis of modern environmental management in the South Pacific. There is brief commentary on some specific aspects, the most substantive being Carew-Reid

(1989) on the links between aid, regionalism and the environment; Carew-Reid (1990) on protected areas; Bryant, J. (1992) on the workplan of the South Pacific Regional Environment Programme (SPREP); Emberson-Bain (1994) on *The Pacific Way*, the regional report to the 1992 United Nations Conference on Environment and Development; Kunatuba (1994) on environmental planning; Fuavao (1995) on coastal management and planning; and Yakabi (1997) on Pacific-Europe links concerning environmental management². The only research of consequence on the political, social and cultural consequences of introducing western methods of environmental management to the South Pacific is Hviding and Bayliss-Smith's (2000) book about the rainforest narratives of the Morovo Lagoon in the Solomon Islands, the findings of which I summarise later in this section.

In a general sense, my research concerns development, particularly as it is perceived by opponents of globalisation: a process through which the wealthier sectors of the world's population - 'the North' - have extended and established their power over the poorer sectors by making them serve the needs of the global economy (Milton 1996, 190). Beyond this, my work does not fit neatly into a single research field. I have drawn on ideas from the disciplines of environmental history, political ecology, anthropology and sociology, both the sociology of development and environmental sociology. I discuss these ideas in the next section (1.2) when evaluating pertinent work in various disciplines and describing the methodology I used, and also in chapter 2 when explaining both the theory behind the research hypotheses and the ideology behind the selected methods of environmental management.

1.2 PERTINENT THEORY AND RESEARCH

Most of the researchers who have examined the dynamics between environmental management and social and political processes have limited their work to developed countries. A few researchers have focused on the power relations connected with international institutions and their control over resources – Peluso's (1993b) work on international conservation groups and Rich's (1994) on the World Bank, for instance. As mentioned, some researchers have examined the way in which environmental management creates unequal power relations in the Third World, or between the First and Third World (see Bryant and Bailey 1997 for an overview of this research). Many of the latter studies focus on particular methods of environmental management, often national parks, reserves and wildlife sanctuaries (Neumann 1992; Ghimire 1994; Schroeder 1999; Bryant, R. 2000; Robbins 2000), and state-protected forests (Fairhead and Leach 1995; Leach and Fairhead 2000; Nygren 2000a and 2000b). These constitute only a small sample of the available methods of modern environmental management. Some studies focus on the genesis and transmission of conservation ideas (e.g., MacKenzie (ed.) 1988; Grove 1993; Beinart and Coates 1995). Several authors have looked at the global issue of biodiversity from a sociological stance (e.g., Yearley 1996; Peuhkuri and Jokinen 1999) or a political one (e.g., McAfee 1999).

² I have only looked at English language papers; there may be work published in French concerning New Caledonia, Vanuatu or French Polynesia for instance, or work in other languages.

Despite such work, the types of theories and concepts appropriate to an analysis of the socio-political circumstances surrounding modern environmental management are not well developed, as a brief survey of relevant theory in political ecology, political science, sociology, and anthropology shows. This survey also identifies the types of research methods likely to be useful. Empirical studies using a political ecology approach to the politics and power relations shaping the way that people interact with the environment in the Third World, proved to be of little assistance in providing a theoretical basis from which to study the politics of South Pacific environmental management. As Sneddon (2000, 43) pointed out, political ecology researchers examining the human organisation of activities, their dynamics and their origins, have done so mostly from a political economy perspective, rather than any other theoretical base. I surveyed recent Third World political ecology papers (selected by perusing recent editions of journals most likely to carry political ecology papers) and found that almost all failed to mention any theoretical grounding or methodology³. Researchers who did state their methods used either an ethnographic approach (observer-participation) or analysed discourse, as in liberation ecology works which critique Western reason and investigate its role in the discourses of environment and development (Neumann 1998, 191). In the works which analysed discourse, the methods of analysis were almost always unstated, and when stated were too vague to allow the methods to be reproduced. Bryant and Bailey's contention (1997, 27) that early political ecology research was apolitical appears to still apply, in the sense that much of it still lacks a solid theoretical and methodological base for investigating political dynamics.

Existing political theory is of limited applicability to this research topic. The politics of development in Third World societies is not yet a coherent research field (Martinussen 1997, 165-6), and this topic has barely touched upon environmental management except for some works classed as Third World political ecology. Furthermore, the research on the type of syncretism exhibited in the politics of developing countries such as Fiji is limited, consisting mostly of Bayart's work on historical trajectories⁴, and various work on dialectic theories of modernisation, which are mostly concerned with African and Asian

³ The journals I surveyed were *Annals of the Association of American Geographers*; *Antipode*; *Area*; *Cultural Studies*; *Development and Change*; *The Ecologist*; *Economic Geography*; *Environment and Planning: Society and Space*; *Environment and Planning: Society and Natural Resources*; *Progress in Human Geography*; and *World Development*. For each journal, I searched the last five years.

⁴ Bayart criticised modernisation and dependency theories for attributing too much of the cause of political change in Africa, Latin America and Asia to external factors. He believed that the similarities of economic and political problems have been exaggerated, giving rise to the fantasy that the states in former colonial areas are simple products of colonial rule and western domination. Bayart emphasised that many political systems existed prior to colonisation and that these systems had considerable impact upon the modern states, each of which should be considered as a complex product of societal development over long periods of time (Martinussen 1997, 179-80).

societies⁵ (see Martinussen 1997, 172-3). Theory about the way in which political institutions work, itself relatively undeveloped (Cerny 1990, ix), is also inadequate for investigating the social and political relationships surrounding environmental management. This includes neo-institutionalism and neo-Marxist approaches (Majid Cooke, 1999; Onorio, 2000)⁶.

Most work in the field of international relations is of little help in explaining the role of South Pacific countries in the regimes of international environmental co-operation. Theories based upon power (realist and neo-realist approaches) or on interests (institutionalism) do not explain why Pacific island countries have signed several of the 76 multilateral treaties spawned since 1970, yet have failed to meet their obligations under these; (see Alley 1999 for a general consideration of this disjuncture). Peter Haas's (1993) ideas about the role of epistemic communities in international environment co-operation offer a possible explanation. Haas defined epistemic communities, transnational networks of specialist experts with scientific knowledge, found throughout intergovernmental, non-governmental and state agencies. According to Haas (1993, 178-80), each such expert has an authoritative claim to policy-relevant knowledge within their domain of expertise and creates and spreads scientific knowledge through these networks and uses it to formulate policies. Furthermore, he asserts, the current global environmental regime based on dozens of international treaties is in part driven by their application of scientific understanding about ecological systems to the management of environmental policy issues with which decision-makers are unfamiliar. The way that such experts in the South Pacific appear to be concentrated in regional rather than in state agencies suggests a line of investigation.

Apart from the longstanding debate about heredity versus the environment, sociological thinking has only recently begun to consider the environment and environmental management, especially in less developed countries. It has, instead, focused on aspects of the physical world, such as towns, houses, countryside, air and water (Walker 1989, 36; Marshall 1998, 196); on social (environmental) movements (e.g., Jamison *et al.* 1990; Yearley 1992; Milton 1996); on globalisation processes and cultural constructions of environmental problems (e.g., Yearley 1996; Redclift and Sage 1999); and on ways of ensuring

⁵ Dialectic modernisation theories depart from the more classical modernisation theories in that they emphasise that tradition need not impede development. Tradition and modernity are viewed as social phenomena that interact in a dialectic manner, where both phenomena are altered in the process and where the result is not simply modernisation but numerous different processes of change. Developing societies follow different trajectories determined to a large extent by their traditional institutions and practices (Martinussen 1997, 72-3).

⁶ Instead of focusing on the role of actors, neo-institutionalisation focuses on institutions as processes that are socially constructed and routinely reproduced. This misses the dynamic side of social processes – the way in which meanings are constructed and reconstructed even in the most routinised practice of social agents (Majid Cooke 1999, 211). Majid Cooke (1999, 27) found neo-Marxist approaches too restricted in scope to explain the effects of forest management policy in Malaysia. While neo-Marxist approaches conceive of policy as the outcome of cumulative product of political struggles, they overlook resistance and accommodation, the way in which policies are given meaning, and how this may ultimately influence policy.

sustainable development for the planet (e.g., Becker and Jahn (eds) 1999). Some of the latter work is relevant to this research, as I discuss in chapter 2.

Another sociological field, the sociology of knowledge, is potentially relevant, although literature directly addressing knowledge concerned with modern notions of environmental management in the Third World is scarce. One of the few examples of in-depth research is Majid Cooke's (1999) investigation of the institutionalisation of 'expert' knowledge in the management of forests in Malaysia, including the concept of sustained yield. Majid Cooke looked at the power relationships behind forest policy at different levels, from central government in Kuala Lumpur to long houses in Sarawak. Using interviews, field observations, and secondary sources such as journals and government records, she examined the dominant and counter discourses and subjugated knowledge, situating it in historical events in Malaysia over 25 years. Majid Cooke treated sustained yield management as a socio-technical system, shaped as much by the interest of humans as by the inherent biological and physical properties of artefacts. This required her to understand both the social construction of particular technological developments and the technical relations that go towards making it a stable set-up (Majid Cooke 1999, 53). We could view other environmental management practices as technologies – techniques combined with institutional arrangements that have implications about who gets what natural resources and who decides about the distribution of benefits (Baidya quoted in Majid Cooke 1999, 53). Forest management in Malaysia is heavily entwined with questions of access to resources, and issues of social justice and equality (Majid Cooke 1999, 110). Other methods of environmental management in other countries may be similarly entwined, as R. Bryant (1999) described for Burma, for instance.

Majid Cooke (1999, 168) also found that the network of élite who dominated forest management in Malaysia used the discourse of development to achieve this. This discourse, based on top-down pursuit of national economic growth, pushes aside the opportunity for local communities to use forestry to establish self-sustaining economic bases (Majid Cooke, 1999, 111). In Malaysia the discourse of development reinforces the discourse of sustained forest yield. Elsewhere it may reinforce other discourses connected to other methods of environmental management.

Another useful concept for studying environmental management may be culture, in the sense that anthropologists understand it: all the meanings through which we understand the world, whether these are communicated to us by others or discovered through active engagement with our surroundings ('direct perception') (Milton 1996, 103). Although anthropologists commonly make comparisons of different communities or cultures, they have not studied methods of environmental management in a global setting (Milton 1996, 103), merely undertaken some exploratory thinking (as Milton herself has (1996)). For Oceania, Howe's treatise on nature, culture and history is apposite but he touches only briefly on environmentalism (2000, 74-7). There has been some anthropological work on nature conservation (discussed in Milton 1996, 53, 125-6), but nothing on Fijian communities that is of direct relevance to this research. Hviding and Bayliss-Smith (2000), whose work is largely anthropological, placed the people of Marovo Lagoon in the Solomon Islands at the centre of a bitter struggle for their forest resources, and also in the context of global narratives about tropical rainforests. In doing so, they examined the role of

international non-governmental agencies including Worldwide Fund for Nature (WWF), and the New Zealand government's development assistance agency (NZODA) and showed how these 'eco-missionaries' and their followers do not use a single version of the sustainable use narrative i.e., they came with multiple faiths (Hviding and Bayliss-Smith 2000, 323). This, plus Majid Cooke's work in Malaysia, suggest another possible line of investigation, focusing on narratives and story-lines and upon the discourse of environmental management in the South Pacific.

A discourse is all that can be thought, written, or said about a particular thing such as a product (like a car) or a topic or specialist area of knowledge (like medicine) (Layder 1994, 97). It both draws upon and generates a distinctive way of understanding the world, and a distinctive system of knowledge (Milton 1996, 167). We can only think and talk by using a discourse of one kind or another; a discourse provides us with our knowledge about the world, including our physical environment, and thus a way of knowing about reality (Jones 1993, 106). Discourses do not exist in isolation from social relations, institutional structures, material practices, or power relations. They internalise effects from all these domains, while reciprocally entering in, though never as pure mirror images, to all of the other moments of the social process (Harvey 1999, 159). We can, therefore, look on a discourse in terms of the conditions (beliefs, institutions, social material practices, and forms of political-economic power) that give rise to it and become internalised within it (*ibid*).

Discourses have a naturalising power that is largely unseen; they represent limits within which ideas and practices are considered to be natural (Barnes and Duncan quoted in Bryant, R. 2000, 675). A discourse may exercise power because it determines what people think and know. As a ready-made way of thinking, a discourse may rule out alternative ways of thinking. A particular discourse may function to empower some people while subordinating others – as the discourses of racism and sexism do, for example - and it may preserve a particular distribution of power (Abercrombie *et al.* 1994, 120; Martinussen 1997, 318).

Michel Foucault, the French political philosopher and post-modernist examined the link between knowledge, and the power and domination associated with discourses, as an alternative to adducing social causation to individuals (subjectivism). Foucault believed that power is linked to certain knowledge, techniques and professional expertise that have displaced other modes of political power and dominance in modern western society. He believed these are used to regulate, control and discipline both groups and individuals (Jones 1993, 108). Foucault's conception of discourses as strategies of power provides a theoretical basis for analysing the discourse associated with modern environmental management in the South Pacific. Modern environmental management can be viewed as a system of knowledge concerning matters such as nature itself, the techniques and instruments that are available to alter nature, and what may happen when these are used in certain circumstances. By studying documents and the institutionalisation of certain practices, one should be able to bring to light the mechanisms by which these ideas are formulated and practised.

Other post-modernists have touched upon environmental management, when critiquing the discourse of development (e.g., Peet and Watts 1996; Sachs 1992). Almost all this work is conducted at a theoretical level and the insights it offers into the institutionalisation of methods of environmental management such as planning and protected areas are very broad - the spread of modernity and capitalism, for instance.

In Foucault's thinking, the human self is denied a constitutive role in the circulation of power and the production of social life in general (Layder 1994, 102-3, 111). Yet individuals do play a role in environmental management, and presumably may influence the way certain methods are introduced or used (Leach and Fairhead 2000, 36). I have not tried to analyse the roles that individuals may play in helping various methods of environmental management. I thought it better to establish first whether there are some general themes in the way that environmental management methods are being used in the South Pacific, and the socio-political factors contributing to this. Because of the scarcity of theories to explain the dynamics between environmental management and socio-political processes in less developed countries, I used a macro-theoretical analytical framework for this, and adopted an exploratory approach using a combination of historical research, interviews and discourse analysis. I explain both the framework and the method of inquiry in the remainder of this chapter.

1.3 RESEARCH HYPOTHESES, SCOPE, AND METHODOLOGY

1.3.1 HYPOTHESES

I used four well-known western views of socio-political history to set up a theoretical framework to investigate the way in which regional and international agencies and the state are contributing to the institutionalisation of modern environmental management practices in the South Pacific. I framed each of these views as a hypothesis, a process of social and political change driving the institutionalism of environmental management methods; these are shown in box 1 and explained in the next chapter. In exploring the socio-political dynamics surrounding environmental management at global, regional, state and (to a limited extent) community level and the way in which specific environmental management practices are being institutionalised, I worked downwards from these generalised explanations of political and social processes to specific situations in Fiji.

Aspects of political and social life are said to have become institutionalised when they are commonly adopted and thus persist in recognisably similar forms across generations (Giddens 1997, 7-8).

Throughout this document, I use the phrase 'institutionalisation of modern methods of environmental management' as a form of shorthand that encompasses various phases: the creation of a concept such as environmental impact assessment, its introduction into a new area, the way it is disseminated and diffused, the way in which it evolves through either practice, debate or thought into slightly different forms, and the way in which it is naturalised, perpetuated in various media, and validated.

Box 1: Alternative research hypotheses

The processes of social and political change driving the institutionalisation of environmental management in the South Pacific are:

1. THE GLOBALISATION OF CULTURAL MODERNITY

Global integration of all peoples and nature into the project of progress and modernity, in which certain ways of 'knowing' and acting are institutionalised through instrumental (technical) and scientific rationality (rationality of ends not means)

2. THE INSTITUTIONALISATION OF GLOBAL ENVIRONMENTALISM

Perpetuation of a globalist perspective on environmental conservation through the words and actions of central institutions that operate in the international arena, based on the idea that the environment is a global problem and can only be solved or managed by global institutions

3. THE SEARCH FOR SUSTAINABLE DEVELOPMENT

Attempts to find a way to balance further economic growth desired by both North and South, with the human impacts on the environment that could threaten this growth

4. THE CENTRALISED STATE AND THE STRUGGLE FOR CONTROL OF NATURAL RESOURCES

The modern centralised state's attempt to control the resources (including land) that it needs to develop further, and the associated struggle for control of the state and its resources

1.3.2 SCOPE INCLUDING SELECTED ENVIRONMENTAL MANAGEMENT METHODS

I limited the scale of my research in several ways, in order to make it manageable. I chose not to examine fisheries and marine issues, although the management methods I selected are common to land and sea. It is mainly in the last thirty years that modern methods of environmental management have been used in the South Pacific, so I concentrate on this period. I have focused mainly on the interface between regional agencies (mainly SPREP), intergovernmental agencies and aid donors, and the state (Fiji). Although I have not looked extensively at non-governmental organisations, my research does illuminate their role in institutionalising modern methods of environmental management at both regional level, and in Fiji.

As mentioned, I selected three particular instruments of environmental management to examine, namely environmental planning, environmental impact assessment and protected areas. It is not, however, always possible to investigate the use of selected methods of environmental management separately from the wider practice, or discourse, of environmental management. Although I focused on these selected methods, I also looked at the broader context and history in which they are being used in the South Pacific. I chose these particular environmental management methods for three reasons. First, all three methods are widely used in western societies and they are beginning to be commonly used in the Pacific by states and regional agencies, particularly SPREP. Second, they have different ideological origins and I was therefore able to investigate whether these different origins affect the way that these methods are institutionalised. Third, 'planning' as a management method is often regarded as one step in the process of applying other methods (those specified in the plan as the 'means of implementation' or 'actions'). Yet there is a particular ideology, largely based on rationality, underlying the practice of planning itself (described in section 2.2.3) that is not always recognised, which is illuminating to examine.

1.3.3 METHODS OF INQUIRY

Given the breadth and complexity of the situation - involving global, intergovernmental, inter-state and state-community relationships - it is likely that no single research method would give a sufficiently complete picture. I therefore used three research methods (summarised in table 1).

The first two methods of inquiry entailed (1) a historical analysis of events and organisations connected with the introduction of modern environmental management in the region generally and specifically with the selected methods of environmental management; and (2) an analysis of the discourse connected with this, the methodology for which I describe in the next sub-section. Initial research using these two methods showed that modern environmental management is not extensively used in Fiji, and that the state had not applied the three methods to any significant extent despite considerable rhetoric about them in some regional organisations. I then designed the remainder of my research (method 3) to investigate the reasons why this might be. I interviewed 25 people (see Appendix 1), using a semi-structured interview format. I interviewed consultants, academics, and those who worked, or had worked, in environmental management in the Fijian state, the Native Lands Trust Board, the National Trust of Fiji (both statutory agencies), and intergovernmental organisations; in Apia I interviewed some SPREP staff members (Table

A). I also had open-ended (unstructured) discussions on specific topics with those listed in the second table (B) in Appendix 1, and corresponded with those listed in the third table (C). When there was conflicting evidence (different versions of history), I endeavoured to validate interview data through secondary (written) sources and *vice versa*, and used different interviews to validate one another.

In conducting the research, I followed the principles in Massey University's *Code of ethical conduct for teaching and research involving human subjects*. In order that it was clear that I was not merely recording the history of environmental management in Fiji, but also looking at issues of power and political relationships, I explained the nature and philosophy of the research I was undertaking to each person, and in many instances sent this information to them in advance. When interviewees asked (on three occasions) that I treat certain information as either anonymous or confidential so that it could not be traced back to them, I did so. In general, information and views were freely given.

As well as researching the history and method of use of the three selected methods of environmental management in Fiji, I also researched five issues to better understand the political and social relationships involved. These are listed below:

- Fiji planning processes: national environmental management strategy, biodiversity strategy;
- Bouma Heritage Park and eco-tourism project, Taveuni, Fiji;
- establishment and management of Sigatoka Sand Dunes National Park, Fiji
- the Native Land Trust Board's application of environmental management methods;
- the circumstances in which environmental impact assessments are and are not done in Fiji.

This research entailed searching published and unpublished information including files, conducting interviews, visiting the two protected areas, and some analysis of the discourse in the planning documents. I do not report the results of these as separate case studies; they are merely ways to focus the inquiry and are integrated into the chapters of results.

Table 1: Methods of inquiry and analysis

| RESEARCH METHOD | SITUATION TO WHICH IT IS APPLIED | METHOD OF ENVIRONMENTAL MANAGEMENT INVESTIGATED |
|--|--|---|
| (1) Historical analysis of events, organisations and origins of selected methods of environmental management (using mainly published and documents* and unpublished reports, also some state agencies' files on specific issues) | <p>Historical global context</p> <p>South Pacific regional organisations</p> <p>Fijian state and statutory agencies</p> <p>External influences upon environmental management in South Pacific regional organisations, the Fijian state, community and non-governmental organisations</p> <p>Selected Fijian environmental issues</p> | <p>Environmental planning, protected areas and environmental impact assessment are each investigated, as part of a general examination of modern environmental management in these situations</p> <p>In Fiji, two instances each of environmental planning and protected areas are investigated (listed on the previous page)</p> |
| (2) Discourse analysis (published documents*) | The discourse emanating from South Pacific regional institutions, directed at, and involving, the Fijian state (as well as other Pacific island states) | The discourse surrounding environmental planning, protected areas and environmental impact assessment is treated as a collective one rather than as three separate topics |
| (3) Semi-structured interviews, discussions and correspondence | <p>The state, statutory agencies, intergovernmental and non-governmental organisations in Fiji</p> <p>SPREP in Apia</p> | Interviews about all three methods, about the selected issues, and about environmental management in general |
| <p>(4) Comparative analysis</p> <p>Comparison between use of methods in Fiji, the way the regional organisations promote and use them, and the way they are intended to be used (based on underlying ideology)</p> <p>Analysis of evidence in support or refutation of each hypothesis</p> | <p>Use of selected methods of environmental management in both regional organisations and in Fiji</p> <p>The socio-political context in which they are being used in Fiji</p> | All three methods are first considered separately then the results collated |

* this includes documents available on the Internet

1.4 METHODOLOGY FOR THE DISCOURSE ANALYSIS

I examined the written discourse at both regional level and at state level in Fiji, tracing it through documents published by regional organisations, development assistance agencies and Fijian state agencies, and through papers and reports that commented on these. The bulk of those I used were SPREP papers. There have been relatively few Fijian documents published about modern environmental management.

I found that I could not analyse the discourse in, and surrounding, environmental planning documents in isolation from the wider discourse of South Pacific environmental management. The objectives, proposed programmes and activities in environmental plans are all part of the wider discussion about why and how the South Pacific environment should be managed. The discourse in planning documents could not therefore be separated from this wider environmental management discourse. To get around this problem, I selected documents relating specifically to environmental impact assessment, environmental plans, and protected areas, and then analysed these as part of the wider discourse of environmental management.

I used three methods of discourse analysis. The first follows Dryzek (1997, 15-8). In using this method, I looked at (1) basic entities recognised or constructed – story-lines; (2) assumptions about natural relationships (3) agents and their motives and (4) key metaphors and other rhetorical devices in various documents. I thoroughly analysed 12 documents (four concerning each method of environmental management) and then cross-checked the consistency of my results by examining other documents on environmental management in the South Pacific, most of which were not specifically concerned with these three methods of environmental management but with environmental management in general. In doing this, I kept an eye open for disparities in case these documents were part of separate, non-overlapping discourses. The 12 main documents I examined were:

Comprehensive environmental management programme (SPC and SPEC 1977)

Action plan for managing the natural resources and environment of the South Pacific region (UNEP 1983)⁷

1991-1995 action plan for managing the environment of the South Pacific region (SPREP 1993f)

Action plan for managing the environment of the South Pacific region 1997-2000 (SPREP 1997a)

Action strategy for protected areas in the South Pacific region (SPREP 1985)

Action strategy for nature conservation in the South Pacific (SPREP and IUCN 1989)

Action strategy for nature conservation in the South Pacific region 1994-1998 (SPREP 1994a)

Action strategy for nature conservation in the Pacific Island region 1999-2002 (SPREP 1999a)

A guide to environmental impact assessment in the South Pacific (Morgan 1993)

⁷ These SPREP action plans are intended to be implemented by various actors including Pacific Island governments and non-governmental agencies. They are not merely the secretariat's work plan.

In-country EIA training in the Pacific islands; a review and evaluation of the SPREP environmental impact assessment (EIA) programme (Onorio 1994)

Environmental impact assessment in Pacific Island countries. Review report prepared for the South Pacific Regional Environment Programme (Onorio 1997)

The story-lines I identified and analysed were:

- a call for rational management of resources
- a call for more information, if environmental problems are to be solved
- sustainable development
- ecological modernisation (mainstreaming)
- partnership
- capacity building; strengthening national capacity
- integration of environmental and economic management at national level
- The globalisation of environmental issues.

The second technique I used to analyse discourse involved examining the rationale given for the existence of the discourse. I combined elements of two analytical methods, deconstruction plus analysis of passages of reasoning. I concentrated on the first eight documents in the list above, which span 1977 to 1999.

Using the method that Thomas (1981, 220) recommended for analysing a poorly constructed, vague or confused discourse, I constructed the argument for introducing modern methods of environmental management to the South Pacific that underlies many SPREP plans and related documents. Viewing the discourse as a whole, and working on one argument at a time, I first got an overall idea of the line of reasoning, identified the basic assumptions and final conclusions of the argument. I sketched an argument diagram that roughly expressed the line of reasoning, incorporating as many of the important points in the discourse as could be made to fit. I then refined this to make the argument as strong as possible while still consistent with the text. In doing this, I tried to make all the inferences logical, thereby confining any weaknesses in the argument to the premises. I added 'missing' premises needed to achieve this logic. I then evaluated the identified arguments. I examined their (lack of) consistency and robustness as a means of understanding the underlying politics and power relationship connected to modern environmental management in the South Pacific. This is akin to the concept of deconstruction in the sense that Christopher Norris (1991, 137) described it. Finally I checked other documents concerning environmental management in the South Pacific to determine the prevalence of these arguments, and to check for counter-arguments.

The third concept upon which I drew when analysing discourse was the genealogical approach that Foucault used to explore power relationships. Genealogy is a critique that attempts to reveal a multiplicity of factors behind an event (Darier 1999, 16). Foucault drew his view of history and his genealogical approach to its analysis from Nietzsche. Nietzsche attempted to delegitimise the present by separating it from the past. Sarup (1993, 58) described the methods Foucault derived from Nietzsche as follows: '[t]he

Nietzschean historian begins with the present and goes backwards in time until a difference is located. Then s/he proceeds forward again, tracing the transformation and taking care to preserve the discontinuities as well as the connections'. I applied this concept by looking for discontinuities in the discourse. I concentrated on identifying discontinuities in ideas about environmental management, and then on tracing the transformation that occurred around this time or event. If the past was treated as irrational, this meant there had been such a transformation. I was thus able to ascertain whether new ideas (such as the introduction of 'sustainable development' story-line) represented a discontinuity in the discourse or merely an extension that was not inconsistent with previous story-lines. The only discontinuity I found was that concerning traditional management. It is treated first as an impediment, something that needs to be replaced by modern approaches to environmental management, then a something of value to be incorporated into modern environmental management, as described in Section 3.3.2.

1.5 LAYOUT

Instead of presenting the results method by method, I have combined and arranged them so as to tell the story about how and why modern methods of environmental management are being institutionalised in the South Pacific. This story progresses from the general global context for environmental management, through the efforts of regional South Pacific organisations, to the situation in Fiji. Chapter 2 looks at the relationship between the hypotheses and the western origins of the selected methods of environmental management. It describes the theory behind each of the four hypotheses, and the ideology and history of each of the three environmental management methods, then analyses the links among these. This provides a historical and global background against which to examine South Pacific environmental management in the following three chapters, starting with chapter 3 which describes the relationship between international environmental institutions and the South Pacific regional organisations involved in environmental management. This chapter also describes the types of mechanisms, both discursive and material, that these regional agencies use to institutionalise modern environmental management. The next two chapters describe how the three selected methods of environmental management have been promoted and practised by the regional organisations (chapter 4) and by the state and other agencies in Fiji (chapter 5). As part of chapter 5, I also identify impediments to the institutionalisation of these methods of environmental management and describe the way that their use in Fiji has differed from that in western countries in which they were developed. Having established some general themes about the way that protected areas, environmental planning and environmental impact assessment have been used in both the regional agencies and Fiji during the last thirty years, I analyse the extent to which the hypotheses - macro-theories of socio-political history - explain these themes (chapter 6). Having demonstrated the irrelevance of these macro-theories in explaining modern environmental management in Fiji, this prompts me to assess other possible explanations for the way the Fijian state applied environmental management methods, in Chapter 7. I conclude this final chapter by suggesting further research to better understand this, and ways to more effectively address environmental issues in Fiji.

2 THEORY AND IDEOLOGY

The four hypotheses are one part of the framework I have used to investigate socio-political influences on environmental management in the South Pacific. The three selected methods of environmental management are the other part. To use a mathematical term, these are not mutually exclusive – the socio-political processes that the hypotheses describe have influenced the way that environmental management techniques have evolved in western countries. Before I can determine whether the way in which these methods are practised in the South Pacific reflects these or other socio-political processes (the subject of chapter 6), I need to know the extent to which these processes have influenced the evolution of these particular environmental management techniques in western countries. Section 2.1 examines the theory pertaining to each of the four hypotheses. Section 2.2 looks at the origins and underlying ideology of the three environmental management methods. Both sections are based upon information and analyses in published sources. In the latter section, I also analyse the links between the ideologies underlying the environmental management methods and the hypotheses.

2.1 THEORY PERTAINING TO THE HYPOTHESES

2.1.1 THE GLOBALISATION OF CULTURAL MODERNITY

This hypothesis concerns various ‘modern’ ideas and behaviour that grew out of the decline of medieval society in Europe (Jones 1993, 21). As a concept and as a description of history, modernity comprises three elements – political, economic, and cultural. Politically, it involves the consolidation of the centralised nation-state and the extension of bureaucratic forms of administration, systematic forms of surveillance, and democratic institutions for public-participation. Economically, modernity involves the capitalist practices of a market economy. Culturally, modernity challenges ‘tradition’ in the name of ‘rationality’ and stresses the virtues of scientific and technical knowledge (this hypothesis) (*Social Studies Review*, September 1990 quoted in Jones 1993, 21; Abercrombie *et al.* 1994, 270-1). There are other elements of the package of modernity, including the doctrines of secularism, tolerance and individualism (see Allmendinger 2001, 12 for a synthesis). Feminists include the emancipation of women (Braidotti *et al.* 1994, 45-7).

There are three general and inter-related ways in which cultural modernity may be shaping modern environmental thought, public policy, planning, and decision-making, namely (1) the way in which it depicts nature, (2) the centrality it accords to science, and (3) the way that rationality dominates administrative, legal and technical decision making. Modernity links rationality, the attainment of knowledge, and science with human freedom: ‘liberation from both drudgery and the dangers associated with eking an existence out of the natural environment’ (Cloke quoted in Allmendinger 2001, 11). As industrial society emerged in the nineteenth century, nature became something to be conquered and used to better oneself. It became ‘a human product, turned into resources available for appropriation’ (Stehr 1994, 101; see also Braidotti 1994, 52). Feminist and other environmental writers have attributed this transformation to ‘the process of western capital’, along with the ‘western patriarchal project of science

and technology', achieved first through colonialism and latterly through the development process, aiming to modernising all societies on the planet (Haraway 1991, 197).

Because the appropriation of nature was driven by science, science gained a pre-eminent position in society and became the dominant form of knowledge (Stehr 1994, 101). A faith in science as a cure-all for environmental problems characterises modern societies. Westerners look to science for the 'technological fix' or 'magic bullet' without a change in human values or morality or in political-economic systems (Smith, Z. 1992, 12). Ehrenfield (quoted in Milton 1996, 187) has called this 'the arrogance of humanism', a supreme faith in the ability of human reason to overcome all difficulties and solve all problems. The centrality of science in ideas about environmental management and development was strengthened by international scientific cooperation in the 1960s. In 1972 the Stockholm Conference on the Human Environment drew institutionally and conceptually on international scientific collaboration in the International Biological Programme (established in 1964), the Scientific Committee on Problems of the Environment (established 1969) and the Man and the Biosphere Programme (established 1968) (Adams 1995, 91-2)¹.

The scientific community has achieved a central position in defining the existence and nature of environmental risks and problems, and scientific knowledge is increasingly being used as the main source of arguments in many environmental debates including the conservation of biodiversity and climate change. The science of ecology has produced integrative environmental concepts used in formulating national and intergovernmental policy (Peuhkuri and Jokinen 1999, 134-6). This centrality of science has various implications for human-nature interactions. Scientific reason operates with a logic that is allegedly independent of personal factors or whims. It aims at formulating laws existing independently of people (Alvares 1992, 228-9). Mainstream science's notions of the existence of the world are independent of the human knower and the primacy of the senses as the source of knowledge about the world. Their aim is to arrive at truth about the phenomenal world is through strict adherence to neutral procedures by the observer/subject. The eradication of the bias of the researcher is needed to achieve objective knowledge, unmediated truth about the world, free from the distorting lenses of the particular observer (Braidotti *et al.* 1994, 43). This overlooks the issue that the person who asks which question does so for a specific purpose - that is, it overlooks the political nature of the process and the exertion of power (Braidotti *et al.* 1994, 43-4). Furthermore, as Alvares (1992, 229) pointed out, the certifiers of scientific research are persons who usually have a vested interest or are dependent on it for their livelihoods. They may use the prestige associated with their discipline to gain a share of political power. For these reasons there are likely to be implicit biases in the formulation of scientific problems and research agendas as well

¹ The International Biological Programme was established under the auspices of the International Council of Scientific Unions and the International Union of Biological Sciences, consisting of co-operative studies by scientists from many disciplines. It encouraged the study and analysis of whole ecosystems to assess environmental impacts (FindLaw c. 2000). It played a minor role in early South Pacific conservation, discussed in section 4.1.2.

as policy stances (Braidotti *et al.* 1994, 43-4). This includes research and policy concerned with environmental management.

The dependence of modernist thinking upon rationality has shaped the way humans interact with nature. Modernist thinking implies the constant pursuit of improvement in human lives and the pursuit of progress, underpinned by a belief in the power of reason – ‘in the ability of humans to think about themselves, their condition and their society reflexively and rationally, and to improve it in the light of such rational thought’ (Jones 1993, 21-2). Weber asserted that, in impersonal bureaucratic organisations, reason was shaped into scientific rationality and that the object of rationality was to gain mastery over the social and the physical environment (including control of nature) (Marshall 1998, 550-1). The transformation of nature into a human product has been associated with the development of a bureaucracy and arrangements of an administrative, legal or technical kind (Stehr 1994, 107). A bureaucracy is important for managing the environment. Governments that assume the role of mediator between humans and their environment need to gather evidence on the state of nature and the effects of humans; they need to enact norms and laws to direct behaviour and they need to ensure compliance. They also need to monitor the continuance of nature’s capacity to deliver the required resources and services such as clean air and water (Sachs 1992, 35). For this, bureaucratic organisation is essential.

There is no single definition of rationality. Some authors define various types such as social, economic, legal, political, ecological, technical (or instrumental) and scientific rationality (Dryzek 1987, 55-9; Bartlett 1990, 83-4). When considering environmental management, both technical and political rationality are useful concepts, along with a distinction between a rationality of ends and one of means. Examples of technical rationality are examples of rationality of means – of ways of getting to an endpoint. If one follows the specified rules again and again the results are the same (assuming the goals remain the same). In modernity, technical rationality is based upon the value of efficiency rather than on specific moral or aesthetic values. In contrast, political rationality requires rationality of goals and values, as well as of means. Goals need to be conceptualised and justified, as well as the means to achieve them (Simons 1995, 38). In modernity, political rationality is based upon the ability to solve problems and to arrive at effective, collective decisions (Dryzek 1987, 57; Bartlett 1990, 83; Simons 1995, 38). Foucault’s concept of governmental rationality (considered post-modern rather than modern) is based upon a combination of technical and political rationality working together (Simons 1995, 37-8). This combination enables the systematic pursuit of values, the determination of ends selected according to those values, and effective planning of the application of means to achieve these given ends. It induces rational conduct that is simultaneously rule-governed, reproducible and principled (*ibid.*).

Cultural modernisation is linked to political modernisation, the development of key institutions that support participatory decision-making (Abercrombie *et al.* 1994, 270). Cultural modernisation produced rational planning; political modernisation created the opportunities for public participation in this. Thirty years ago, the critical theory author Habermas wrote about the potential opposition between scientification and participatory or directly accountable democracy. Habermas was concerned about technocrats usurping political power, forcing the state into a course of rational administration that

depoliticised the mass of population. He foresaw a growth in government intervention, legitimated by technocratic rationales (Habermas 1971, 63-5; 103-4). Although this does not appear to be happening, given the shrinking of western state sectors under neo-liberal economic policies, Yearley (1996, 118) has pointed out that what Habermas has feared of the state has, in significant respects, become true of the international policy community. In the international arena, in issues such as biodiversity and climate change, scientific debate plays a central part not only in identifying global environmental problems but also in forming policy responses (Yearley 1996, 140). This has similarities to Haas's assertions about the existence of an epistemic community, a network of trained science professionals formulating international environmental policy, discussed in section 1.2. The phenomenon of rationality and the centrality of science should not be viewed in isolation of the global institutionalisation of environmental management (the next hypothesis).

2.1.2 THE INSTITUTIONALISATION OF GLOBAL ENVIRONMENTALISM

This second hypothesis is based on the idea that modern institutions are inherently globalising, enabling social and political relations to operate over distances in time and space in a way that would have been inconceivable in a pre-modern world (Milton 1996, 152). It holds that more globalisation is the best way of protecting the environment for human use. Its supporters advocate the integration of all human societies into the global economy and the co-ordination of resource management on a worldwide scale. They would like to see all governments, communities and individuals adopt common goals and standards specifying how people should interact with their environment (Milton 1996, 174). The responsibility for formulating public policy on environmental matters is elevated from state institutions to global intergovernmental ones.

The words and actions of agencies that operate at a global level have helped establish this perspective. These organisations include alliances of nation-states (such as the United Nations and its agencies), international financial institutions (the World Bank and the International Monetary Fund), transnational corporations, development agencies (the Asian Development Bank for instance) and the larger non-governmental organisations representing sectoral interests including the environmental groups WWF, the World Conservation Union (IUCN), Friends of the Earth, and Greenpeace.

The United Nations has taken the lead in generating international discourse on environmental issues by organising conferences, commissioning reports and setting up research and development agencies. Those that have helped propagate a global view on environmental issues include the United Nations Conference on the Human Environment held at Stockholm in 1972; the United Nations Environment Programme (UNEP) initiated at that conference; the World Commission on Environment and Development (WCED) which published the *Brundtland Report* in 1987; and the United Nations Conference on Environment and Development (UNCED, the Earth Summit) in Rio de Janeiro in 1992 (Milton 1996, 180-1; Rist 1997, 178-204). These widened involvement in a global environmental perspective, extending it to those outside the scientific and science-policy communities who had been involved in the scientifically-based international programmes initiated in 1960s.

The idea that the use of the Earth's resources needs to be managed through international cooperation has been an important component of environmentalist discourse since before the Stockholm Conference. This discourse no longer considers it acceptable for nations to pursue their own independent environmental policies, since the earth is perceived as a single ecosystem and nations integrated into a global economy (WCED 1987, 312). If processes taking place in one location can affect the environment many miles away or even the general state of the global ecosystem, then it makes sense to aim for widest possible agreement on appropriate action. Global management is seen as the logical outcome of this.

Scientists have promoted this view, revealing global problems (acid rain, global warming and ozone holes, and loss of biodiversity), demanding widespread collective action beyond the boundaries of nation-states. This can be seen both as legal, institutional and cultural challenge to the closed bureaucratic rationality of nation-states (Harvey 1999, 165), and as a promotion for nation-states to the principal regulators of human activity, monitoring the role of global institutions. The understanding of environmental problems in global terms has elevated the role of nation-states, as well as those of the international and transnational organisations, including the larger non-governmental organisations (Milton 1996, 187). Defining environmental problems in global terms has legitimised the claims of competence made by organisations that operate at a global level (Chatterjee and Finger 1994, 162; Milton 1996, 179). When the global organisations are seen to be acting, people can believe that something effective is being done about environmental problems. On the other hand, it has effectively marginalised, within global environmental debate, those who are already disadvantaged by the existing power structure (Chatterjee and Finger 1994, 103-4). It is difficult for groups whose views are ignored by their own national authorities to make their voices heard in an arena in which they are assumed by others to be represented by those authorities. It is also difficult for those whose understanding of the environment differs fundamentally from the global model to influence a debate that takes that model as its starting point (Milton 1996, 179). The opportunities for citizens to influence environmental decision-making becomes restricted to those whose views coincide with the bureaucrats staffing the intergovernmental agencies, or with the views expressed at intergovernmental forums.

Some authors argue that one of the reasons why this occurs, is because global environmental management has become dominated by a universal 'global techno-managerial discourse' based on predetermined remedies based on scientific knowledge, technological fixes and institutionalised management structures (reflecting cultural and political modernisation). Northern interests propagate universalising discourses, identifying issues as global problems that all countries are expected to address, issues justified with 'impartial' science (Yearley 1996, 140). They make it difficult for those in less developed countries to ignore these, using supposedly moral grounds couched in the sentiment of helping save the planet, and tempting them to participate by offering buckets of money to implement certain pre-determined solutions. Although universalising discourses offer a way of dealing with global environmental problems, they mask political assumptions and self-interest (*ibid*; see Fischer and Hajer 1999 for a synthesis of these views). Global institutionalisation and the centrality of science and rationality combine to influence environmental management.

2.1.3 THE SEARCH FOR SUSTAINABLE DEVELOPMENT

In 1987, the WCED (also known as the Bruntland Commission), reporting to the United Nations General Assembly, advocated the concept of sustainable development, in order to alleviate world poverty. The Commission (WCED 1987, 43) defined sustainable development as ‘development that meets the needs of the present without compromising the ability of future generations to meet their own needs’, a definition still widely used. Sustainable development has become the term that refers to the challenge facing contemporary human society of reconciling future growth and development with the protection of the environment (Elliott 1994, 107). It is also a term that describes attempts to find a way to balance further economic growth desired by both North and South, with impacts of humans on the environment that could threaten this growth. It is this search that forms my third hypothesis.

The motivation for developing the idea that development should be sustainable is based in part on a Malthusian fear that resources will run out, reflected in the Bruntland report’s critical objectives (Adams 1993, 212). It is also based on concern about the state of receiving environments such as the atmosphere, stratosphere and the oceans (Bromley and Pearce 1989, 11). But sustainable development has far wider connotations than just environmental ones. One can better understand this by considering opposing views.

Neo-Marxists suggest that, because of the inequality that exists among major regions of the world, truly sustainable development is not achievable within the existing world system. In their view, the political and economic processes that link people and places keep some areas underdeveloped while simultaneously enabling others to exploit these regions to in the course of their own development. They believe this can only be changed by a fundamental restructuring of the world economy. In contrast, the search for sustainable development, in the way the WCED defines it, does not challenge the existing liberal capitalist political–economic system or the hegemony of the advanced capitalist powers accumulating capital through economic growth (Elliot 1994, 109-110; Harvey 1999, 167).

Proponents of the ‘ecology centred’ approach assert that economic growth and environmental conservation are contradictory. They are anti-growth and advocate a steady-state economy with a more equitable distribution of resources. They believe that the harmful effects of existing technology are outpacing the development of new ones that are needed to protect the environment, and that the existing dominance of scientific values and ways of thinking has reduced the flexibility and capacity for environmental protection through alternative technologies, cultural structures or views of the environment. They advocate strategies such as eco-tourism, organic agriculture, sustainable forest management using selective helicopter logging techniques, resource substitution, waste minimisation, recycling and new technologies (Elliot 1994, 109). In contrast, the search for WCED’s notion of sustainable development encourages scientific and technological expansion, in order to promote growth.

This search for a balance, for ways to manage the detrimental impacts that humans have on the environment, without impeding further economic growth, is what distinguishes sustainable development as a social and political process. Harvey (1999, 164-7) placed sustainable development within the discourse of ecological modernisation. This discourse depends upon and promotes a belief that economic

activity systematically produces environmental harm and that society should therefore be proactive about environmental regulation and ecological controls, necessitating a set of politics, institutional arrangements and regulatory practices (Harvey 1999, 164-5). The belief in ecological modernisation contrasts with what Harvey (1999, 161) termed the standard view of environmental management which, in the belief that environmental concerns should not impede progress, only addresses environmental deterioration after it has occurred. It also contrasts with the libertarian view that private property owners have every incentive to maintain and sustain the ecological conditions or productivity that furnish them with a living and that, left to their own devices, they will more likely pass on their land to their offspring in an improved rather than a deteriorated condition (Harvey 1999, 172).

In countries already industrialised, sustainable development maintains the status quo rather than initiating change. In promoting further economic growth, it allows the people of the North to continue their consumerist lifestyles. It does not seek redress for the impacts that, through their lifestyles, the people of the North may have caused others. A combination of market mechanisms, globalisation and international trade has made it possible to take resources (oil, water, wood for instance) from one region, to consume them in another region and to dispose of waste in yet another, either for payment or by dumping (Rist 1997, 186). This shields Northern consumers from the effects of their consumption, be it the over-use of resources or pollution from waste disposal. Adopting sustainable development does not serve to change this combination of market mechanisms, globalisation and international trade; it only attempts to manage the environmental impacts that result. Sustainable development helps draw communities in the South further into the capitalist system. It therefore means more fundamental change for the people of the South than those of the North.

Although it requires the state to gather information about the environment and use this information to manage environmental quality - Sach's (1992, 35) managerial state - sustainable development also removes some of the emphasis for environmental management from national governments and state actors (Dryzek 1997, 131). It is a discourse of intergovernmental agencies and non-governmental ones, including global environmental groups, but it differs from global environmentalism in that sustainable development is not the sole preserve of global institutions. The search for sustainable development has become popular at all levels of society. Community groups, local government, central government, regional organisations and non-governmental organisations of all sorts of sizes have all taken up the call for sustainable development. For this reason, Dryzek (ibid) has labelled it as discourse of global civil society.

Sustainable development is more than a managerial discourse used by bureaucrats employed in intergovernmental, state non-governmental agencies. It is a discourse that facilitates wide-ranging, open and democratic discussions of environmental management. It is a democratic discourse. Ordinary citizens use it. The Brundtland report had a vision of a simultaneous mutually reinforcing pursuit of economic growth, environmental improvement, population stabilisation, peace and global equity, all of which could be maintained in the long-term (discussed in Dryzek 1997, 126). This broad ranging concept has provided opportunities for public debate and philosophical reflection on values, ethics and justice connected with

various environmental issues ranging from local to the global (cf. Harvey 1999, 167-8). This debate and reflection occurs at multiple levels of society, from local communities to intergovernmental organisations and conferences.

2.1.4 THE STATE AND THE STRUGGLE FOR CONTROL OF NATURAL RESOURCES

The concept of the state as both a servant of capitalism and a steward of the environment is entailed in the fourth hypothesis. It is based on the theory that, in order to develop, the modern centralised state needs to control resources, including land, which leads to a struggle with other actors who wish to control these - grassroots actors, foreign interests, and other domestic actors, some in alliance with foreign interests. Certain approaches to environmental management and conservation enhance the political survival of the state, cementing its control of resources and enabling it to control unruly subjects. This is Majid Cooke's (1999, 53) conceptualisation of environmental management technologies – techniques combined with institutional arrangements about who gets what resources and who decides about the distribution of benefits, discussed in section 1.2.

Historically, the development of states has been closely intertwined with the management of local environments. Even in ancient times, the need to extract an economic surplus in order to maintain or increase state power was associated with a quest to maximise natural resource production. Richard Grove's (1993) historical enquiries have suggested that early colonial states' struggles for control over natural resources were for more than short-term economic gain. Grove (1993, 15) pointed out that the long-term economic security of the state (and thus its political survival) was more important to it than short-term interests of private capital, which could be bent on ecologically destructive transformation. These early colonial states also found that conservation approaches not only helped ensure sustainable timber and water supplies, but also helped control unruly marginal subjects (*ibid*). But states are not always benign users of nature; they have also been damaging.

Colonial administrations, including those in the Pacific, generally sought to extract resources to pay the costs of administration (e.g., Bennett 1987, 105-6, regarding the Solomon Islands). Firth (1997, 266) mentioned that 'the accepted wisdom' was that Pacific island colonies should provide investment opportunities for whites, in plantations for instance. Bryant and Bailey (1997, 67) suggested that the common colonial bureaucracy comprising separate departments for forestry, agriculture and fishing and so forth was partly an attempt by colonial rulers to reconcile maximum resource extraction (and thus revenue) with the maintenance of long-term supplies of potentially renewable resources such as forest trees. After independence, the management structures associated with those policies frequently remained in place in less developed countries (Bryant and Bailey 1997, 55). Through such structures, most of the independent Pacific island governments now obtain revenue from the export of primary produce including logs, timber, fish and minerals, partly because many of these resources remain under state control and partly from taxes and duties. State élites have used this arrangement to further their own status and wealth. Politicians and officials can gain power and cash by forming alliances with First World-based transnational corporations and other businesses that wish to harvest natural resources -

Malaysian logging companies wanting tropical hardwoods in the Solomon Islands (Bennett 2000; chapter 16), and various foreign companies seeking mahogany in Fiji (World Rainforest Movement 2000), for instance.

In modern times, the role of the state as the provider of 'public goods' has been vital for businesses, both local and foreign, as have its legal-coercive abilities in relation to disaffected actors in society (Bryant and Bailey 1997, 107). In providing these goods, the state has helped increase market production dependent on natural resources. This has drawn less developed countries into the global capitalist system, integrating peoples and environments into a larger system over which they have no control. This global capitalist system is predicated on the elimination of most grassroots actors' 'traditional' local environmental management practices throughout the Third World, and their replacement by state-sponsored environmental management. This means these grassroots actors lose control over such means, and are unable to maintain a livelihood independent of powerful outside actors (Bryant and Bailey 1997, 105-6). For specific examples of this, see Hviding and Bayliss-Smith (2000, 285-289) regarding the Dutch non-governmental organisation Solomon Western Islands Fair Trade's certification scheme for ecologically sustainable timber production in Solomon Islands; Nygren (2000a) regarding the agrarian transformation of Alto Tuis in Costa Rica; and Ghimire's (1994) descriptions of the states' efforts at creating national parks in Thailand and Madagascar, mentioned in section 1.1.1.

2.2 IDEOLOGY AND HISTORY OF ENVIRONMENTAL MANAGEMENT METHODS

2.2.1 EXAMINING THE LINKS WITH THE HYPOTHESES

To determine the extent to which these generalised views of socio-political history are also historical accounts of the development of environmental management techniques, one can look at the extent to which certain key elements occur in both. I searched accounts of the history of the three selected methods of environmental management for mention of the following elements: the relationship between global institutions and these methods; the state's use of these methods; any basis in science and rationality; and the relationship between environmental issues and economic growth. Before examining these, it is useful to set some limits on the investigation by defining each of the three selected methods.

Protected areas are those in which the effect of human activities on the environment are regulated by law so that these effects are minimal. I have concentrated on areas designed to protect natural features rather than cultural or historic ones. Environmental plans are plans that focus primarily on managing human impacts on the environment. By definition this excludes sectoral plans such as forestry management plans that focus on extracting optimum or sufficient resource for profit. It also excludes land use plans that merely parcel out land to potentially competing uses using economic and social criteria. I concentrate on plans as written documents setting out an intended course of action, rather than merely as oral processes of negotiation. Environmental impact assessment is a process by which the likely (physical and often social) effects that an activity will have on the environment are predicted, evaluated and reported in a written document, with a view to ensuring environmentally sound and sustainable development through decisions on specific proposals. I look at all parts of the assessment process from considering alternative

types of development, designs and locations, to monitoring actual impacts when the development is complete, and ensuring the developer has complied with any environmental conditions agreed upon.

2.2.2 PROTECTED AREAS

Historical influences

The concept of nature conservation through protected areas is one of the oldest forms of state environmental management (Grove 1990, 17). As mentioned in section 2.1.4, the motivations for early (17th and 18th century) colonial agendas for conservation included colonial administrations' wish to appropriate resources for the needs of the state, and the state's interest in preventing or localising environmental degradation or climate change that threatened its economic or political viability (Grove 1993, 17). By the mid-eighteenth century, European biologists and naturalists were worried about habitat destruction and extinctions on tropical islands being exploited for their natural resources. They had persuaded administrators to create forest reserves and protect trees on St Helena in the South Atlantic and the West Indian islands of Tobago and St Vincent. Most of these early (17th and 18th century) conservation measures were initiated by scientists and amateur naturalists, elite members of the public interested in nature for largely aesthetic or intellectual reasons. Governments, however, almost always approved protective measures when their economic interests were directly threatened (Noss *et al.* 1997, 22). Establishing protected areas has never been the sole preserve of the state, either historically or today.

In Europe and America there was a distinct phase of environmental concern from the mid-1880s to the turn of the century. This comprised two distinct strands (Pepper 1996, 217-9). The first was a fundamentally aesthetic appreciation of the landscape, which manifested itself as a nature preservation movement. National parks were established to preserve scenic beauty and natural wonders such as Yosemite in the United States. By about 1840, this 'romantic mood' was reasonably widespread in North America, promoted by the literati of the major eastern cities who wrote, in the grand romantic manner, of their excursions into the wilds (Kain 1981, 2). The second strand, a more scientific, managerial approach to wildlife and landscape conservation, was based primarily on a scientific understanding of nature conservation. It was stimulated by inter-war developments in ecological research, and cemented further when ecology became an established scientific discipline (Pepper 1996, 217-9). These two strands persist in western societies. Today's deep ecology movement is a legacy of wilderness thinking of Thoreau, Muir, Aldo Leopold and others (Buckingham-Hatfield 1998, 381), and the IUCN's work is a legacy of the more scientific approach.

Game preservation for sport inspired a national park movement in the British Empire. Following a pressure group's agitations for the protection of game hunting, the colonial administration created game hunting reserves in Africa and Asia in the years before and immediately following World War II (Grove 1990, 18-19). Hunting, and the call for game preservation, was the preserve of the rich colonists and tourists. The pressure group concerned was the Society for the Preservation of the Fauna of the Empire, formed by English aristocrats trying to preserve an idealised Africa based on their experience with the landscape of rural England (Neumann 1996, 79). From these Northern roots, based on the concerns of

wealthy men of leisure, the international conservation movement grew during years between the World Wars (Adams 1995, 93). Since then, there has been a gradual transition to conservation along more modern lines (MacKenzie, 201-2).

International concerns, institutions and instruments

Recently, ideas about biodiversity, a term first used by American biologist E. O. Wilson, have influenced the concept of protected areas (Guyer and Richards 1996, 5-7). The Convention on Biological Diversity, negotiated at the 1992 Earth Summit, defines biological diversity, in Article 2, as:

The variability among living organisms from all sources including, *inter alia*, terrestrial, marine and other aquatic ecosystems, and all the ecological complexes of which they are part; this includes the diversity within species, between species and of ecosystems.

Recent argument in favour of protected areas is based on the idea that loss of biodiversity is a global problem not just a local one, and on the notion that global institutions need to oversee the way the problem is solved. Yearley (1996, 59) noted the way in which, by using the term biodiversity, we can generalise concerns about the loss of species in many different localities, up to a global level, speaking of the overall loss of biodiversity richness of the planet as a whole. Biodiversity loss can be interpreted as a problem for the global environment in several ways. First, some commercially important species – mostly fish – are hunted on a global scale and poorly-regulated competition has contributed to serious declines in many populations. Second, some endangered species, such as the panda and elephant, have acquired a global significance, becoming a focus for attempts at nature conservation (Ibid). Third, forest conservation is now mixed up with the global climate change issue, through the idea of carbon sinks.

Intergovernmental organisations such as UNEP, United Nations Development Programme (UNDP) and the United Nations Commission for Sustainable Development (UNCSD), and many non-governmental organisations including IUCN and WWF are involved seeking a solution to this global loss of biodiversity. One of the mechanisms used has been international treaties binding signatory states to a certain course of action. There are at least 21 legally binding international instruments that have provisions about protected areas (Convention on Biological Diversity 1998a, 6). These include the Convention on Biological Diversity, the World Heritage Convention and the Ramsar Convention².

Over 150 nations have signed this Biodiversity Convention, making biodiversity a global concern (Yearley 1996, 57). The convention emphasises the importance of in-situ conservation and thus of protected areas, and requires the establishment of ‘a system of protected areas or areas where special measures need to be taken to conserve biological diversity’ (Article 8 (a)). Articles 8 (a) and (b) of the Convention on Biological Diversity state that a system of protected areas forms a central element of a

² While several Pacific island states have signed the Convention on Biological Diversity and the World Heritage Convention, only Papua New Guinea had signed the Ramsar Convention as at June 2001 (CIESIN c. 2001).

national strategy to conserve biological diversity. The parties to the Convention concerning the Protection of the World Cultural and Natural Heritage 1972 agree to take appropriate legal, scientific, technical, administrative and financial measures necessary for the identification, protection, conservation, presentation and rehabilitation of their cultural and natural heritage (article 5 d.). Under the Convention of Wetlands of International Importance Especially as Waterfowl Habitat (Ramsar) 1971, parties agree to designate suitable wetlands within their territory for inclusion in a list of wetlands of international importance maintained by the Secretariat, and to conserve these. Wetlands may have international significance in terms of ecology, botany, zoology, limnology or hydrology (Articles 2 and 3).

Many different types of international instruments besides treaties call for the establishment of protected areas. These include the 1982 General Assembly resolution on the World Charter for Nature, the 1992 Caracas Action Plan and the 1980 *World Conservation Strategy* (Convention on Biological Diversity 1998a, 6). *Caring for the Earth: A Strategy for Sustainable Living* (IUCN 1991) established a target of ten percent protected area for each major ecological region for countries by the year 2000. The IVth World Congress on National Parks and Protected Areas agreed to a similar target in 1992 (UNCSD c. 1999b).

Different types and concepts of protected area

Initially protected areas were designed to be areas from which humans were excluded as far as possible, except during the course of management, a role reserved for professionals. The concept has been broadened in recent years to accommodate local communities. The IUCN, usually considered a key global authority on this matter, has defined six management categories of protected area, three totally and three partially protected. It intends totally protected areas (strict nature reserves/wilderness areas, national parks, and national monuments) to be maintained in a natural state, closed to extractive uses. Partially protected areas (habitat/species management areas, protected landscape/seascapes, and managed resource protected areas) are to be managed for specific uses such as recreation, or to provide optimum conditions for certain species or ecological communities (UNCSD c. 1999b). The UNCSD (ibid) stated that partially protected areas are useful when certain human activities are required to protect particular species or ecological communities, or when they protect 'valued expressions of human relationships with nature'.

Both the Convention on Biological Diversity and subsequent interpretations of it are ambiguous and contradictory about what constitutes a protected area and what protection is required, especially about whether protected areas need to be legally defined and managed through regulation (compare the interpretations in Convention on Biological Diversity (1998a, 4-5) and Convention on Biological Diversity (2001b, 1)). Country delegations and non-governmental agencies meet every 12-18 months, at a conference of the parties to the convention, to negotiate its interpretation (McAfee 1999, 140).

Since the early 1980s, there has been a concerted attempt to reduce the conflict between the preservation of the earth's biodiversity and demands for development that involve increased material consumption by humans, by redefining the concept of protected area. A new approach emerged from these efforts. It treats humans as part of ecosystems, entitled to the benefits of development, rather than as threats to be

excluded from protected areas. Called 'Integrated Conservation and Development' (ICAD), this approach has overtaken much of the earlier emphasis on strictly protected areas (Martin 1999, 1-2). The ICAD approach retains conservation objectives as the primary goal; development objectives are incorporated as a means of achieving these objectives. This is intended to distinguish ICAD projects from environmentally sound development projects that have development as the main goal (Hardie-Boys 1999, 187), although making this distinction in practice could be difficult.

Community conservation areas are one manifestation of the ICAD approach. These are intended to 'integrate the protection and use of natural resources and biodiversity in a sustainable manner as a means of achieving the dual objectives of conservation and development' (SPREP 1994a, 5). The general approach is to have advisers and experts work with communities to carry out studies considered necessary, to plan how to manage the area, to assist in setting up enterprises that integrate conservation and development and so forth. The concept of community-based conservation areas moves the idea of areas protected for conservation purposes out of the ambit of the state and into that of the community. There is no clear definition of what constitutes a community conservation area, but generally these have no formal legal protection.

The way in which ideas about how to use protected areas have evolved over the last half-century is an example of gradual refinement of ideas about how to achieve further economic growth while managing the impacts that human have on their environment. As such the concept of protected areas, fits well with the concept of sustainable development, as set out in the third hypothesis (on page 24).

Protected areas and political agendas

The notion of protecting areas for nature conservation purposes is tied up with broader political agendas in several ways. For example, protected areas are one of the solutions proposed for the loss of global biodiversity. But the manner in which the problem is being addressed (and possibly also the solutions chosen) has a strong political basis, as several authors have pointed out. An international coalition of industrial countries and powerful environmental and development organisations have advocated an interpretation that defines biodiversity loss as a Third World phenomenon, putting primary responsibility for the problem onto developing countries. It often strongly emphasises particular areas as 'hot spots' for conservation – tropical rainforests and coral reefs, for instance (Peuhkuri and Jokinen 1999, 143). The IUCN, World Resources Institute, World Bank, and WWF are part of this coalition (ibid).

Such organisations continually try to characterise the underlying causes of ecological destruction in ways that suggest this can be corrected without disturbing existing economic structures or powerful northern state, individual or corporate interests (see McAfee 1999, for a discussion of this in regard to the Convention on Biological Diversity). While promoting the idea of a global environmental crisis, and the need for collective action, they do not question either First World contributions to the environmental crisis they promote, or the impacts of existing international political structures, development models, or present international and national distributions of resources (McAfee 1999, 141). Their proposed solutions are biased away from changes in socio-economic structures. Establishing protected areas fits

this agenda nicely. Protected areas serve to move the spotlight away from northern interests that have contributed to global environmental degradation. A call to create more protected areas places the burden of doing something onto those in less developed countries, since western countries already have a system of these. Northern interests prescribe the actions less developed countries should take and fund them but only on the condition that they do it in a certain way. Reviewing global practice, Ghimire and Pimbert (1997, 32) observed that most protected area management plans and proposal evaluation reports avoid referring to structural issues such as land reform, income distribution, decentralisation of power, social mobilisation as well as local rights and sovereignty over resources.

Other First World interests can be seen in the way that the concept of protected areas has become meshed with the debate about appropriate development (see Peluso 1993b regarding East Kalimantan, Indonesia; Nygren 2000b regarding Nicaragua; and Ghimire and Pimbert 1997, 23-32 for a general consideration of various initiatives). Hviding and Bayliss-Smith's (2000) description of the efforts of an aid agency (NZODA) and non-governmental organisations (WWF and Solomon Western Islands Fair Trade) to protect the forests of Marovo Lagoon in the western Solomon Islands, illustrates this. On the one hand these organisations variously promote butterfly farming, furniture making, bee keeping, small tourist lodges, and small scale logging of 'eco-timber', in tandem with protecting various forests from logging. On the other hand some Marovo villagers choose to sell their timber to Malaysian logging companies, in exchange for cash needed for better housing, school fees, contributions to the church, and some household items and food. The government has also sold timber rights for land under state control to Malaysian companies, and has negotiated plans for the subsequent development of a large scale oil palm plantation on logged land, to bring the revenue needed to build the state sector and provide state services. This illustrates two different routes to development with which the conservation message of the aid agencies and non-governmental organisations has become entwined not only in the Solomon Islands and in other Pacific islands, but in many other less developed countries. The first route is often seen to be synonymous with traditional rights and practices and the second route with the globalisation, trade liberalisation, and its perceived evils, concerns which have fanned protest at recent World Trade Organisation and G8 meetings.

Under the neo-liberal economic ideology promoted by global institutions such as the World Bank, there is pressure to allow foreign companies to trade with and to purchase the resources in a less developed country. Yet, various Northern countries and agencies including the World Bank (1996, 86-92; 1998, 68) exert pressure on these governments and communities in less developed countries not to sell certain things, in certain quantities, at certain prices: for example, their criticism of rates of deforestation and sales of logs to Asian companies. Such pressure does not accord with the neo-liberal dictate of letting the market decide. Protecting areas (therefore making them unavailable to potential buyers) is a way of overcoming this contradiction and of maintaining some integrity in the neo-liberal agenda. This does not mean that there is a conspiracy between international environmental non-governmental organisations and transnational business interests to promote protected areas: it is wrong to assume that many of the individuals promoting protected areas in Third World countries are overtly aiding neo-liberalism. The relationship is at a structural rather than an individual level.

Rationality and science

Although the relationship between protected areas and rationality is not clearly spelled out in the literature, one can surmise it. Protected areas, as a means of protecting habitat, species and other aspects of biodiversity in the first instance, and amenity and landscape and water quality in the second instance, are a tool. In any campaign to create more protected areas, the tool (the means) is thus pre-chosen. Rationality in decision-making can only apply to questions concerning which area is to be protected, with what boundaries, how large and area, and what activities need to be forbidden or regulated, rather than to the question of what tool (means) is needed to protect various valued features. On what basis are such decisions made – what, if any form of rationality is involved and is it a rationality of means or values? In considering questions of which habitats, species, ecosystems or other units of biodiversity deserve protection, questions of different values arise. The focus is often trees and birds rather than insects or mosses, for instance. Notwithstanding, decisions about which areas to protect and about their boundaries, are often based on expediency – they have a certain technical rationality, based on efficiency of effort; if it appears that is possible to get one area protected more easily than another, the first is invariably chosen. Alternatively, the decision may be based on political reasons - the facilitated arrival at a collective decision of the most powerful players. There is a notion of political rationality in the view of protected areas as a technique that applies shared logic and principles to address a problem perceived to be both common and global (cf. Simons 1995, 38).

There is also, presumably, a certain scientific rationality, given the strong scientific basis of nature conservation. Scientific knowledge, especially that concerned with the natural sciences, is an important component of policies for nature conservation and protected areas in western countries. The core of the idea of biodiversity is rooted in conservation biology (Peukhuri and Jokinen 1999, 134-5, 140).

2.2.3 ENVIRONMENTAL PLANNING

Origins and modes of planning

Environmental planning is even more rationally based than protected areas. The origins of environmental planning are the origins of planning itself, and the usual conception of planning is as a rational process for approaching the future that involves preparing for action in an intelligent and rational way, identifying desirable ends and ways of attaining these ends, then implementing these (Boon 1998, 74). The rise of planning is linked with that of western modernity described in section 2.1.1, involving at least three factors, being (1) the development of town planning as a way of dealing with the problems of the growing industrial cities; (2) the rise of social planning intended to promote people's welfare; and (3) the invention of the modern economy and the institutionalisation of the market (Escobar 1992, 132-4; Hall 1996). The latter allowed the 'disembedding' of the economy from society and thus the instrumental (modern) attitude towards nature that underlies both cultural modernity and planning (Escobar 1992, 132-4). During the twentieth century, planning practice was refined during the mobilisation of national production during World War I and Soviet planning, and as a result of the scientific management movement in the United States and Keynesian economic policy (ibid).

There is no single coherent theory of planning. Instead, planners have applied bits and pieces of theory including sociological theories of urban life and geographers' concepts of the natural region (Hall 1996, 322-3). There are different ways that one can go about planning, and different planning modes one can use, depending on circumstances and what one wants to achieve. If a rational approach is used, it can be used to make best use of limited resources and to avoid potential difficulties. There are various schools of planning thought and modes of planning with bases in different types of rationality (see Meijer 1984, 80-85; Smith, L. G. 1993, 272 for descriptions of these). Planning theory distinguishes rationality of means and rationality of ends (Meijer 1984, 78). Planning concerned with ends – basic considerations of human purpose – tends to be normative planning, setting ideals and values. In contrast almost all planning, whether for strategic, operational, institutional or structural purposes, is based on rationality of means (Meijer 1984, 73, 80; Smith, L. G. 1993, 78). Rational-comprehensive planning is inherently confined within a conservative political philosophy. It does not consider the state to be an agent of change, nor does it accommodate analysis on the basis of class, gender or political ideology (Smith, L. G. 1993, 272). By the 1970s, planning in western societies was no longer being recognised as a 'technical expertise' but as a highly politicised and value-laden activity. As such, it has increasingly come under public scrutiny (King, A. D. 1980, 219). This has prompted other modes of planning besides the rational-comprehensive approach.

Other modes use planning as a way to draw together disparate views, to increase each party's understanding of others' viewpoints, and, if based upon a participatory process, to decide upon a common course of action. Ideas about participatory development and empowerment (e.g., Friedmann 1992; Chambers 1997), and about ethics and notions of social justice (expressed by Korten 1990 and Goulet 1995, for example), have influenced planning. They are reflected in the communicative planning mode (Meijer 1984, 84).

Influences upon environmental planning

A particular type of planning, environmental planning owes its existence to growing international concern about the quality of the environment, and the preservation and conservation of nature (Boon 1998, 76). Prior to the 1960s, western governments introduced environmental policies on an ad hoc basis. As global awareness of environmental problems grew, so did recognition of the need for a comprehensive and integrated government response to environmental problems (Bühns 1997, 287). This is the phenomenon described in section 2.1.2 as global environmentalism.

As a discipline, environmental planning has had various influences. Various technocentrist approaches towards improved and more rational planning have heavily influenced it. These influences include utilitarian values, and the concepts of economic progress and efficient management of natural resources and administration by technical experts in the public interest (i.e., the growth of cultural modernity). In the United States, Gifford Pinchot (the first Conservator of Forests) and other Progressive advisors of President Theodore Roosevelt promoted this credo of natural resource management in the first decades of

the twentieth century (Adams 1995, 89; Andrews 1999, 152-3). The application of science to 'solve' human problems has also influenced environmental planning.

In the Third World, the antecedents of environmental planning include colonial land-use planning and 'town and country planning'. In Fiji colonial planning legislation showed distinct traces of its West Indian origin, which in turn had been based upon the English town and country planning system (Stevens quoted in King, A. D. 1980, 203). English town and country planning was a form of 'technical expertise' by which environments were modelled or controlled with an assumed public good (King 1980, 209-10). This expertise – with its assumptions, values and mechanisms only partly modified by local conditions - was exported throughout much of the British Empire.

Although the practice of development planning has to some extent influenced environmental planning in the Third World, development planning largely remains the work of economists and mainstream urban and regional planners, and environmental planning remains the exclusive and separate realm of environmentalists, ecologists and resource managers of various kinds (Boon 1998, 76). It is this divide that many attempts at sustainable development try to bridge.

Links between environmental planning, the state and global institutions

Given its antecedents, environmental planning is largely associated with the state. When used by the state, environmental planning by definition is not designed to allow the state to take over resources, merely to manage the state's impact on the environment. But plan provisions could, in theory, be worded in such a way as to justify taking over resources (by protecting an area, for example) based upon the assertion that this is in the public interest and in the interest of good environmental management.

Environmental planning is not necessarily confined to national or sub-national level. In theory, it is feasible to prepare environmental plans covering larger geo-political areas (this is what SPREP does as I discuss in section 4.2). Furthermore, environmental policies are often driven by a hierarchical planning model based on several tiers (Peuhkuri and Jokinen 1999, 142). The framework of policies is set at international level, and from there the general principles are brought onto the agenda of national policies. By the time that the policy finally reaches regional and local levels, more concrete and detailed control of actions have appeared (ibid). This is the process of global environmentalism, seeking to establish common global goals and policies.

Despite this, only a few international environmental instruments require states that are party to them to prepare environmental plans. The Convention on Biological Diversity, for instance, requires environmental plans in order to protect biological diversity. The International Tropical Timber Agreement (1994) encourages all members to develop national policies aimed at sustainable utilisation and conservation of all timber-producing forests and their genetic resources, and at maintaining ecological balance (SPREP 1999a, 43). The need for planning is, however, implicit in many international treaties.

2.2.4 ENVIRONMENTAL IMPACT ASSESSMENT

The basis in rational management

In contrast to the diverse influences on environmental planning and protected areas, environmental impact assessment is firmly rooted in one philosophy - the rational, scientific way of thinking and accumulating knowledge. Environmental impact assessment is one of a suite of predictive, scientific techniques of environmental management developed in the late 1960s and early 1970s in Europe and North America, in response to growing public and official concern about environmental degradation (Mitchell 1989, 218-21; Smith, L. G. 1993, 76). Techniques such as environmental impact assessment, computer modelling (as used in fisheries stock assessment and in oceanography), and risk analysis were developed to help scientists and managers predict the likely environmental impact of both natural disasters and of human intervention. Forewarned by these predictions, managers could then choose specific techniques, often technologically based, to avoid, remedy or mitigate the predicted adverse effects. Environmental impact assessment accords with sustainable development; it permits further economic growth through development projects, while at the same time trying to limit the adverse impacts these may have on the environment. It is designed to address concerns about environmental quality rather than to allocate natural resources.

The philosophy of environmental impact assessment is firmly based on a rationality of means rather than ends – technical rationality. As Morgan (1993, 9) stressed, doing an environmental impact assessment does not, by itself, produce a decision. Rather, it is a tool that generates particular types of information that decision-makers – including developers and politicians – can then use. It is based upon the scientific method (for collecting baseline information, monitoring changes occurring after the development and deciding to what extent the development has caused these changes) and upon a perceived need for efficiency. But in concentrating on the impacts of particular proposals as the technique of environmental impact assessment is designed to do, practitioners overlook the cumulative way that the general approach to investment and development in a country or region may be affecting the environment. Suggestions broached in western countries about extending it to assess plans - strategic impact assessment - might address this shortcoming³.

State and global links

Environmental impact assessment is predicated on the belief that there is a central decision-maker controlling the environment, usually the state, an agency with the power and authority to shape the way in which humans impact upon the environment. Environmental impact assessment is one of a suite of planning tools that this central agency can use to manage this impact. By monitoring actual impacts that

³ In theory, the approach to environmental impact assessment can be applied to policies, plans and programmes at local, national, regional or even global level but in practice political constraints have precluded it being widely used in this way (Wood 1995, chapter 19).

developments have on the environment, including the cumulative impacts of various activities in an area, managers can refine their predictions, and also their decision making (planning) about what activities should be allowed under what conditions. They can better predict the impact that a suite of planned activities (as set out in a comprehensive planning document) may have. Environmental impact assessment is a tool to aid environmental planning. It is also a form of planning, in the sense of thinking about the likely environmental implications of some activity, before doing it.

The belief that environmental management is a state concern strengthened in the mid-twentieth century as the western state assumed responsibility for a growing array of environmental and social tasks. The state was seen as a key actor in the management of public goods and the environment on behalf of the citizens it claims to represent. Environmental management has been widely understood to be synonymous with the development of large bureaucracies and an associated 'top-down' approach to environmental problems (Bryant and Wilson 1998, 321-3). Environmental impact assessment is an attempt to use technocratic means - scientific expertise and the latest technology - to provide practical assistance to state officials concerned with the environment by solving specific environmental problems (Bryant and Wilson 1998, 321-2, 327-8). It is a process in which state-affiliated experts trained in western-positivist science apply their expertise to the attempted resolution of selected problems. It is a largely linear approach to knowledge in which it appears as if scientific data are foundational and that human societies will then base their behaviour upon such findings (also Simmons 1997, 203). Both industrialised and less developed states worldwide have adopted the technique of environmental impact assessment (Paehlke 1995, 248).

Various international agreements refer to environmental impact assessment including the United Nations Law of the Sea, and the Framework Convention on Climate Change (UNCSD c. 1999 a). The Convention on Biological Diversity requires environmental impact assessment for projects likely to have significant adverse effects on biodiversity (Article 14). Principal 17 of UNCED 1992 states:

Environmental impact assessment, as a national instrument, shall be undertaken for proposed activities that are likely to have a significant adverse impact on the environment and are subject to a decision of a competent national authority.

There is an inherent conflict in the technique of environmental impact assessment. On one hand, the insistence on standardised techniques acknowledges that environmental management is a global problem. On the other hand, the technique is designed to allow decisions to be made locally (its emphasis on public participation in part of this), not by global institutions. As a result not only state agencies, but also intergovernmental organisations have regularly used the technique to aid decision-making on projects for proposed for environmental impact assessment (Paehlke 1995, 248). So too have the development assistance arms of various governments, including NZODA (Heather Riddell, MFAT, *pers. comm.*, July 2001) and AusAID (which has a set of guidelines, namely AusAID 1996).

Institutionalising the practice of environmental impact assessment and making it routine and mandatory, carried out to international standards, may allow external interests to have more of a say in the type of

development and environmental quality in a particular country. This could occur directly through the public participation processes or indirectly by 'educating' local people to seek a certain type of environment and to object to certain impacts. Under the title '*Some success stories*' a recent World Heritage flier told how the World Heritage Committee had questioned the findings of the environmental impact assessment for a proposed river diversion project in the Royal Chitwan National Park, a World Heritage site in Nepal; 'the project was thus abandoned and this World Heritage site was saved for the benefit of future generations' (World Heritage Commission 2000). Requiring environmental impact assessment to be routinely used is moving towards standardisation of environment – towards commonly held notions of what is acceptable and what is not - a manifestation of global environmentalism.

The basis in democratic pragmatism

There is another important facet of environmental impact assessment, which also broadens its sphere of interest from state and intergovernmental agencies. Since it was pioneered in the United States, environmental impact assessment has included provision for the responsible authority to produce a draft, release this for public comment, and get responses from other government agencies, other levels of government, environmental and community groups, interested corporations, resource users and ordinary citizens. Information is thus gathered from a variety of perspectives that might otherwise have been excluded from administrative decision-making (Dryzek 1997, 87). Although this information may not directly influence the decision made, it has made environmental and democratic values more visible and legitimate than before (ibid). This occurred in New Zealand when the Resource Management Act made environmental impact assessment mandatory in a wide range of circumstances.

For this reason, Dryzek (1997, 95-6) equates environmental impact assessment with the discourse of democratic pragmatism, in which government is not a unitary state but a multiplicity of decision processes populated by citizens, and there is (theoretically at least) equality among citizens. Environmental impact assessment is also firmly rooted in liberal capitalism. Environmental impact assessment does not question the utility of a proposed development to the local community nor does it question the development path or political philosophy that a country or government may be following. Subject to a few conditions about where a development should be located and how it should be constructed and operated, the environmental impact assessment philosophy meshes with the neo-liberal philosophy of letting the market dictate development. People do not have to live beside a factory or prison once the state has approved it as being an acceptable development; they can sell up and move away).

2.2.5 SUMMARY

Environmental impact assessment and much of environmental planning are manifestations of cultural modernisation. Both techniques have evolved as part of a growing international perspective on environmentalism. While the concept of formally protecting areas predates this perspective, it too is being subsumed into it, becoming part of a scientifically based discourse arguing that loss of biodiversity is a global problem requiring global solutions. All three techniques can be used to aid the search for sustainable development.

3 EXTERNAL INFLUENCES UPON REGIONAL ORGANISATIONS

Having established possible socio-political influences upon environmental management in the South Pacific – those suggested by western social science views of history - I can now begin to look at what those influences are. In this chapter I look at the South Pacific regional organisations involved in environmental management and their relationship with international environmental institutions. I summarise the types of mechanisms that these regional organisations are using to institutionalise modern methods of environmental management, describe the environmental discourse associated with these organisations, and analyse the main messages this discourse contains. This provides the broad picture of environmental management in the South Pacific against which to examine the ways in which the regional organisations are promoting and using environmental planning and impact assessment, and protected areas (the next chapter).

3.1 REGIONAL ORGANISATIONS INVOLVED IN ENVIRONMENTAL MANAGEMENT

The Pacific region has one of the most extensive networks of regional cooperation and regional regimes in the world (University of the South Pacific 1999b, 6). I describe the general responsibilities and members of the various regional organisations in Appendix 2. Almost all the regional organisations have been involved to varying degrees in environmental management, especially those listed below:

- Secretariat of the Pacific Community (formerly South Pacific Commission) (SPC)
- South Pacific Applied Geoscience Commission (SOPAC)
- Forum Fisheries Agency (FFA)
- University of the South Pacific (USP)
- South Pacific Regional Environment Programme (SPREP)
- Pacific Islands Forum (PIF, formerly known as the South Pacific Forum (SPF)) and the Forum Secretariat
- Council of Regional Organisations (CROP)

Of these, SPREP has played by far the greatest role in environmental management in the South Pacific. These agencies have overlapping functions and mandates on various issues including environmental ones. CROP is mandated to ‘promote harmonisation and collaboration among member programmes and to avoid duplication of effort and resources’ (DFAT 2001a, 1). In practice, there is little formal co-ordination among these agencies, and they do not work well together on environmental matters (AusAID 2000, 11).

Over the years various international agencies have influenced the ideology and work programme of SPREP and the other South Pacific regional agencies. I now look these external influences, starting with the influences that lead to SPREP being created as a regional programme under the auspices of both SPC and SPF.

3.2 EXTERNAL INFLUENCES UPON THE REGIONAL ORGANISATIONS

3.2.1 CREATION OF SPREP

There are two themes connected to the creation of SPREP in the late 1970s. It was set up partly as an expression of the growing independence of the Pacific island countries, in an attempt to reduce the influence of metropolitan countries (Carter 1977, 8-8; Hawkins 1978, 28-9; Fry, 1979, 117-20). At that time France, Britain, United States, Australia and New Zealand dominated the South Pacific Commission, the first regional organisation established. Pacific islanders' main environmental concern was nuclear testing - its potential effect on both public health and the environment - arising from France's testing in French Polynesia and the United States's in the Marshall Islands. The Pacific island nations did not have a suitable regional forum in which to raise these concerns. They were not allowed to debate political issues at the South Pacific Conference (the annual meeting of representatives from various member states, with the power to make recommendations on various matters including the commission's work programme (SPC 1996, 16, 23-4)). The metropolitan powers considered nuclear testing to be a political issue (Carew-Reid 1989, 69). Creating SPREP offered a potential solution, an organisation that might be more responsive to the island nations' environmental concerns.

At the 1976 and 1977 South Pacific Forums, the annual meeting of the heads of independent and self-governing states in the region, the leaders of some island states, principally Papua New Guinea, pushed for the nascent environmental programme to be autonomous (Carter 1977, 8-8; Hawkins 1978 28-9). At the South Pacific Conference that made the final decision to establish SPREP, it was, however, placed under the auspices of both the SPC and the South Pacific Bureau of Economic Co-operation (SPEC, which was then the secretariat of the SPF), a compromise arising from bitter discussion at the conference (Hawkins 1978, 29).

Two United Nations agencies played a key role in establishing SPREP - principally UNEP and, to a lesser extent, the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP). As soon as it was established after the 1972 Stockholm Conference, UNEP took an almost immediate interest in the Pacific, drawing the area into its fledgling Regional Seas programme. In 1974, UNEP began negotiating with the SPC, SPEC and ESCAP about ways to regionalise environmental problem solving, which led in part to the discussions at the 1976 South Pacific Conference and the 1976 South Pacific Forum mentioned above. This then led to requests to both SPEC and SPC to prepare proposals for a regional approach to environmental management (SPC 1980, 1). To this end, 'technical' specialists from governments, aid agencies and regional institutions met in March 1977 and defined 'priority problem areas' and 'the steps in programme development' for a regional environment programme (SPC and SPEC 1977, 3). Judging from the names listed in the meeting record, only two of the 28 participants were indigenous people from the South Pacific island nations; almost all were Europeans representing island administrations (many still colonies) or representatives from intergovernmental organisations (SPC and SPEC 1977, 52). Arthur Dahl, newly employed as the South Pacific Commission's ecologist, subsequently prepared a proposal document with help from a consultant funded by UNEP (this document

was SPC and SPEC 1977, 3). This became SPREP's first multi-year workplan. This is the flip side to the endeavours of some South Pacific indigenous statesmen's efforts to establish SPREP in order to distance South Pacific nations from colonial and metropolitan powers. In contrast to indigenous concern about whether the programme should be autonomous or under SPC's wing, UNEP was concerned about what issues the programme should address and how it should tackle these.

3.2.2 UNEP AND IUCN'S INFLUENCE IN THE 1970S AND 1980S

The early relationship between UNEP and SPREP is confused. Various reports refer to SPREP as being a joint project among SPC, SPEC, UNEP and ESCAP with SPREP implementing activities of common interest to these agencies (SPREP 1981, 2; SPREP 1986b, 11). Other reports describe SPREP as being part of UNEP's Regional Seas Programme, as if it was a subsidiary of UNEP. For instance, in 1981 Richard Helmer of UNEP explained at a SPREP meeting, that the role of SPREP was to be 'part of a worldwide effort of UNEP to develop regional seas programmes which would ultimately cover all the major world oceans' (SPREP 1981, 2; also see Carew-Reid 1989, 70).

Throughout the 1980s UNEP provided considerable support for SPREP, working with it rather than directly with Pacific island countries. It assisted SPREP in matters of international law, education and training, and environmental impact assessment (SPREP 1992c, 17), and exerted considerable influence on SPREP's first two actions plans (the first one being the *Comprehensive Environmental Management Plan* (SPC and SPEC 1977) mentioned above). As it had done in other Regional Seas programme areas, UNEP sponsored a series of studies and consultative meetings of government technical experts to determine the scope and substance of the second SPREP action plan, finalised in 1982. This plan was part of the series of Regional Seas programme action plans being developed at that time (Carew-Reid 1989, 70).

Participants at a conference in Rarotonga in 1982 produced a 14 point declaration on the natural resources and environment in the region and a five year work plan for SPREP, subsequently endorsed by the 22nd South Pacific Conference and the 13th South Pacific Forum (Reti 1990a, 149-50). This work plan followed the basic philosophical approach and format laid down by UNEP (SPREP 1981, 13).

SPREP still co-ordinates all UNEP programmes in the region (Thistlewait and Votaw 1992, 214), although UNEP's involvement in SPREP has declined since the 1980s. In the 1990s UNEP funded only a few SPREP projects including a state of the environment database, and paid SPREP to operate the Pacific's contribution to Global Environmental Outlook, assessing the state of the environment (SPREP 1996a, 18; SPREP and UNDP 2000, D-10; Gerald Miles, SPREP, *pers. comm.*, August 2001).

The other international agency that shaped SPREP's work in the 1970s and 1980s was the IUCN. It was involved in a regional nature conservation symposium in Noumea in 1971 (SPC 1973); in promoting the need for, and drawing up a model for, the Apia Convention on the conservation of nature in the South Pacific, described in section 4.1 (New Zealand National Parks Authority 1975, 280); and in reviewing progress with protected areas in Oceania (SPREP 1989a, vol. I, 36). Like UNEP, IUCN mainly worked through the regional agencies rather than directly in Pacific island countries.

3.2.3 THE SPREP CONVENTION

The process of drawing up a convention covering marine issues began after the 1982 Rarotonga conference. This was to complement the Apia Convention on nature conservation that some Pacific island states signed in 1976. There were four meetings of experts during 1983-5, leading in 1986 to adoption of a Convention for the Protection and Development of the Natural Resources of the South Pacific (the SPREP convention) that covered the coastal marine area and to two related protocols dealing with marine pollution. This convention provides a broad co-operative framework for preventing pollution of the coastal and marine environment. Even though it contains ideas imported from western countries, the SPREP Convention was the outcome of local efforts and the subject of much negotiation especially over nuclear testing and pollution from this (Mere Pulea, University of the South Pacific, *pers. comm.*, July 2001). Fifteen countries have signed the SPREP Convention - ten Pacific island countries plus Australia, New Zealand, France, United Kingdom and United States (CIESEN c. 2001). Both the SPREP and Apia conventions came into operation in 1990 and are administered by SPREP (SPREP 1992b, 9).

3.2.4 EXTERNAL INFLUENCES ON SPREP IN THE 1990S

In 1993, 16 states signed an agreement establishing SPREP as an autonomous entity, and the organisation moved to Apia in Samoa, away from the South Pacific Commission under whose auspices it had been operating since the late 1970s (SPREP 1995b, 10; Boer 1996, 12; DFAT 2001c, 1). This agreement gave legal effect to SPREP as an intergovernmental, regional organisation. It came into force in August 1995 after being signed by ten states (Miles 2001, 98). The reasons given were that autonomy would help SPREP capture international funding; improve dialogue with international bodies and allow it to better represent the interests of the region in international forums; improve management efficiency; and also make SPREP more directly accountable to member countries and territories (SPC 1990, 23-4). An earlier review had indicated the latter was a matter of concern (Rongap and Piddington 1986, 10). Since it became an autonomous regional organisation, SPREP has been much more active and has campaigned for national environmental management, a co-ordinated regional position on global issues, and access to global funding for environmental activities (Hughes 1998, 32). Since 1993, both SPREP's membership and the size of its secretariat in Apia have increased. SPREP now has 22 Pacific island members (see table 2).

On its web page, SPREP states that it could not have expanded its international linkages without the significant financial help from its four metropolitan members, especially Australia and New Zealand (SPREP c. 2001, 1). SPREP has also increased its capacity, size and resources by executing aid-funded projects. These projects have formed the majority of its work. Providing policy advice and technical assistance to member countries has been a minor part (AusAID 2000, 5). The emphasis on projects has limited the time that SPREP staff have had for either policy development or strategic planning (AusAID 2000, 10; Miles 2001, 104).

Donor funding for projects forms the bulk (90 percent) of SPREP's budget. The remainder is core funding of US\$0.5 million per year from member countries' annual subscriptions and from project management

fees, plus some discretionary funding from AusAID and NZODA in recent years. The core funding pays some staff salaries, co-ordination activities, servicing of SPREP meetings, general communications, liaison and information services to members. Although the SPREP secretariat has grown significantly over the years, its core funding has not increased. In contrast, donor funding, tagged to specific projects, has risen steadily from US\$5.8 million in 1994 to \$9.6 million in 1999 (AusAID 2000, 9). Over the last five years SPREP has raised nearly US\$30 million in funds from external sources for new activities (AusAID 2000, 11). This has allowed it to significantly increase staff numbers. In 2000, at least eight multilateral and bilateral donors were funding members of SPREP’s professional staff, more half the total staff positions (AusAID 2000, 12) - see table 3.

Table 2: SPREP membership in 2001

| | | |
|--|--------------------------------------|-----------------------------|
| (* Parties to the Agreement Establishing SPREP; <u>Independent</u> Island States) | | |
| American Samoa | <u>Republic of Marshall Islands*</u> | <u>Samoa*</u> |
| Australia* | <u>Republic of Nauru*</u> | <u>Solomon Islands*</u> |
| <u>Cook Islands*</u> | New Caledonia | Tokelau |
| <u>Federated States of Micronesia*</u> | New Zealand* | <u>Kingdom of Tonga*</u> |
| <u>Republic of Fiji*</u> | <u>Niue*</u> | <u>Tuvalu*</u> |
| Republic of France* | Northern Marianas Islands | United States of America* |
| French Polynesia | <u>Palau</u> | <u>Republic of Vanuatu*</u> |
| Guam | Pitcairn Islands (UK*) | Wallis and Futuna |
| <u>Republic of Kiribati*</u> | <u>Papua New Guinea*</u> | |

(Source: Hunnam and Tuioti 2000, 3)

Table 3: Sources of funds for SPREP staff positions in March 2000

| SOURCE OF FUNDS | NO. POSITIONS |
|--------------------------|----------------------|
| Core budget | 30 |
| Australia | 4 |
| Canada | 1 |
| Commonwealth Secretariat | 2 |
| European Union | 1 |
| France | 1 |
| New Zealand | 12 |
| New Zealand/ Australia | 1 |
| New Zealand/ UNDP | 1 |
| PICCAP project | 3 |
| SPBCP project | 7 |
| UNDP | 2 |
| LANL | 1 |
| Multiple | 1 |
| Total | 67 |

(Source: Hunnam and Tuioti 2000, 29)¹

To a large extent, the available donor funding has determined SPREP's work programme. The Secretariat has formulated projects that match both donors' interest and gaps in its workplan (AusAID 2000, 7). Given the constraints on various sources of global funding, staff have shaped projects in such a way as to maximise what Pacific island states can receive (Gerald Miles, SPREP, *pers. comm.*, August 2001). At times, SPREP has tried to use its project resources to develop its core activities; this has not been acceptable to donors (Hunnam and Tuioti 2000, 26; Jenny Bryant, UNDP, *pers. comm.*, May 2001).

SPREP proactively seek donor funds. Various intergovernmental organisations (UNEP, UNDP, ESCAP, IUCN), non-governmental organisations (WWF), bilateral development assistance agencies (the governments of Australia, New Zealand, Britain, France, United States as well as non-member countries - Canada, Japan, Chile, Denmark) have all helped fund SPREP over the years. So too have the World Bank and the Asian Development Bank, and the Global Environment Facility (GEF), administered jointly by World Bank, UNEP and UNDP. The GEF has funded major programmes including the South Pacific Biodiversity Conservation Programme and more recently the International

¹ Two references, Hunnam and Tuioti (2000) and AusAID (2000), refer to a single review of SPREP. The summary of the report (AusAID 2000) is freely available but the full version (Hunnam and Tuioti) is not. I have quoted from the summary where possible.

Waters Programme. The Commonwealth Secretariat, International Maritime Agency, World Meteorological Organisation and European Union², have also been among SPREP's contributors (SPREP 1994b, 24; SPREP 1995a, 36; SPREP 1996a, 38-9; SPREP 1998b, 62-30).

In addition to donor funding, SPREP acknowledges that many regional and international associations also provide 'technical expertise, in-kind contributions or sub-contracting and consultancy arrangements'. There are 46 such organisations listed in the 1999 annual report (SPREP 1999b, 23).

SPREP is important to donors wishing to spend money on environmental matters in the South Pacific. NZODA likes to fund SPREP and other regional agencies to try to achieve a co-ordinated regional action on agreements such as the Apia Convention, Convention for Biological Diversity and the World Heritage Convention (NZODA 1996, 34). AusAID relies on it to 'spread environmental protection across the Pacific' (AusAID 2000, 6). As well as running their projects, SPREP gives donors advice and information about the region's environmental issues and how best to operate there (AusAID 2000, 5). Without SPREP, the donors would have to deal with state agencies individually, multiple agencies in multiple countries, without benefit of a local co-ordinator.

Developed countries have far more influence upon SPREP's work programme than Pacific island countries do; and developed countries probably have more influence upon its professional culture given the number of expatriates working there. But one should not assume that the attitudes towards environmental management that developed countries exert on South Pacific regional organisations such as SPREP are the same attitudes to be found within their primary environmental management agencies. First, the primary contact with SPREP is usually through the Ministry of Foreign Affairs not the environmental and conservation ministries. Second, within developed countries such as New Zealand, there are often tensions between various government departments. Each department may be dominated by a different cultural attitude to conservation and environmental management and may advocate different management approaches³ (*pers. obs.*).

Hunnam and Tuioti (AusAID 2000, 6) observed that, in contrast to the amount of contact that SPREP has with aid donors, there had been relatively little interaction between SPREP and various Australian governmental and non-governmental agencies concerning joint programming and cooperation in regional environmental protection and management matters. This also applies to New Zealand

² The European Commission has placed little emphasis on environmental projects, only recently attempting to include environmental projects in its country programmes under the Africa-Caribbean-Pacific programme under the Lomé Convention. Under Lomé IV (1991-1995), only 0.7 percent of its funds to the Pacific were for environmental projects (European Commission c. 2000.). The European Union is, however, funding the information centre currently being built at SPREP in Apia (Pacific Island Report, 2001).

³ An example of this is the different attitudes that the New Zealand Department of Conservation and Ministry of Fisheries took to marine protected areas and to aquaculture, which I observed from 1987 to 1995.

government departments involved with environmental matters. In New Zealand, the Ministry of Environment has had some contact with SPREP over the past decade assisting it with administrative procedures, environmental impact assessment training and advice on implementation of the Montreal protocol. But New Zealand's membership of SPREP has not had a large, direct effect on the Ministry's work practice (Marion Hobbs, New Zealand Minister for Environment, *pers. comm.*, September 2001). The Department of Conservation has on occasion loaned a staff member to assist in a SPREP project or contribute to SPREP meetings, usually on matters connected with nature conservation, species recovery work with endangered species and weed control, also with SPREP work planning (Sandra Lee, New Zealand Minister of Conservation, *pers. comm.*, August 2001).

3.2.5 INTERNATIONAL TREATIES AND SPREP

Pacific island countries have signed several of the 80 or more multilateral environmental treaties negotiated since 1970, some of which require the signatories to use the specific methods of environmental management, as mentioned in section 2.2. These treaties serve to introduce ideas about modern environmental management, in two ways. First, they act discursively and, second, they serve as a prompt for aid funding, drawing the agencies administering them into South Pacific environmental matters, justifying external involvement in South Pacific affairs. For instance, the World Heritage Centre of UNESCO was one of the signatories to the 1999-2002 nature conservation strategy, prepared by non-governmental and intergovernmental organisations including SPREP (but not directly by Pacific island governments). This strategy states that ratification and effective implementation of international conventions should be promoted as useful tools for advancing national conservation priorities (SPREP 1999a, 13).

SPREP actively helps Pacific island countries implement their obligations under international agreements on issues such as biodiversity, climate change and marine pollution - the Convention on Biological Diversity, World Heritage Convention, Convention on International Trade in Endangered Species of Flora and Fauna, United Nations Framework Convention on Climate Change, for instance (SPREP 1999b, 23)⁴. Almost all SPREP's work could be said to derived from obligations that Pacific island states have under these treaties (although only some of the Pacific island members of SPREP have signed these and other treaties that SPREP works with). The treaties provide SPREP with a mandate to work on specific issues and SPREP uses its mandate to act as a middle-man between Pacific island states and the international secretariats responsible for each treaty.

But SPREP is more than just a middleman implementing treaties that Pacific island states have negotiated themselves. SPREP staff have represented the region in such negotiations. They were involved in negotiations for UNCED, the Convention on Biological Diversity, and the Framework

⁴ Various Pacific regional agencies are involved in helping states implement international agreements; of these SPREP has been the regional organisation most concerned with treaties which require use of the three selected methods of environmental management in terrestrial situations, the focus of this research.

Convention on Climate Change; in meetings of Commission for Sustainable Development, Global Environment Facility, Global Conference on the Sustainable Development of Small Island Developing States (GCSDSIDS), and are currently preparing for the 2002 World Summit on Sustainable Development (Hunnam and Tuioti 2000, 36-7; Gerald Miles, SPREP, *pers. comm.*, August 2001).

The fact that Pacific island states have signed various conventions gives SPREP a mandate to seek funding on matters connected with these. In theory, SPREP acts in ways in which member countries wish it to. But SPREP staff stretch this mandate. I observed an example of this at a coral reef monitoring workshop, convened by University of the South Pacific marine studies staff in Fiji in August 2001. Selected experts (scientists interested in the biology of coral reefs) attended this, along with representatives of donors or those with access to funding – Canadian government and Packard Foundation funds in this case – and by representatives from some Pacific island government departments. The SPREP representative (Mary Power) argued that SPREP should be in charge of all coral reef monitoring in the Pacific, and that it should be funded to employ a regional co-ordinator and national co-ordinators and to oversee methods, standards, and data management. The meeting passed a motion in support of this central co-ordination (although not necessarily at SPREP). Yet Ms Power had no specific mandate from Pacific island states to seek such a role, and several island representatives did not approve of such a role. What had happened was that an alliance of donors (through their staff based in Pacific island countries) and interested people from the University of the South Pacific (scientific academics), invited other people with a professional and financial interest in doing the envisioned work, and arranged for Pacific island states to send a representative, expenses paid by donors. They offered a certain amount of funds (several thousand dollars) to each country irrespective of how much coral reef they owned, provided they prepared acceptable proposals to monitor coral reefs in their area. This allowed the organisers to later say that Pacific island states were in favour of this approach (despite their limited and outnumbered participation – not all Pacific island members of SPREP were represented).

There are other examples of SPREP using this tactic to expand its role. For example, the 1982 Rarotonga conference, at which SPREP's second action plan was devised, and South Pacific nature conservation meetings held every four years, which attract experts with similarly vested interests,

3.2.6 SPREP'S RESPONSIVENESS AND ACCOUNTABILITY

In August 2001, I discussed environmental planning and nature conservation strategies separately with two SPREP staff responsible for these functions and asked why SPREP would not consider taking a different approach to certain issues that I mentioned. Their response, which I perceived was a fairly standard response to any criticism, was that they could not change their approach unless Pacific island states requested this⁵. I received the impression that this was a standard SPREP response. Yet the idea

⁵ Gerald Miles and Sam Sesega.

that SPREP acts only at the request of Pacific island states and is fully responsive to their needs is clearly inaccurate.

As it currently works, SPREP cannot be responsive to Pacific island states. Because of the way in which it is structured, SPREP has had difficulty in responding to members' requests for assistance in areas not covered by its portfolio of projects (AusAID 2000, 9). When it starts a donor-funded project (some of which last for years), it has contractual obligations to the donor. Furthermore, once it has started approaching an issue in a certain way, there is no doubt that inertia and the number of people involved (donors, Pacific island states, and non-governmental organisations) make it difficult to change this approach, even should one or more Pacific island states request this. Since 90 percent of SPREP's work is in projects, this precludes it being responsive to Pacific island states. Hunnam and Tuioti, who reviewed SPREP in 2000, on behalf of AusAID, criticised the emphasis on donor funded projects as producing an inflexible, narrow and piecemeal approach, which outweighed the benefits of administrative control and direction (AusAID 2000, 5). They judged that the costs of administering, supervising and managing projects probably exceeded project fees, and had been subsidised from core funding (Hunnam and Tuioti 2000, 25).

A review in mid 1980s indicated that the Pacific island governments had only indirect input into deciding SPREP's priorities (Rongap and Piddington 1986, 6). Given that Pacific islanders have little influence on SPREP's work programme, largely shaped by donors and experts, this raises the question: to whom is SPREP accountable - Pacific island states, its other developed country members, or its donors? An equally fundamental issue is whether SPREP is in any way accountable to the Pacific islanders affected by its projects.

The measures in place to ensure that SPREP is accountable to Pacific Island states are very weak. During the 1990s, state officials rather than politicians contributed almost all the island input to SPREP's programming priorities⁶. Ministers for the Environment met every four years only, with a plenary meeting of officials every two years, and a sub-committee of officials in the intervening years to approve the work programme and budget (AusAID 2000, 6). Beyond this contact, there is no legal accountability to Pacific island people. There is little contact between SPREP and people in government and statutory agencies in Pacific island countries, outside of the one agency in each country designated as the primary contact (called the focal point). The AusAID reviewers found, in 2000, that Pacific island countries had poor knowledge of SPREP's current strategies, plans and activities (AusAID 2000, 7). (I discuss Fiji's contact with SPREP in chapter 5). Generally, local and national stakeholders have not felt that they owned SPREP-run projects and that often these projects did not address the priorities of local participants (AusAID 2000, 8). The AusAID reviewers judged

⁶ For the first few years of its existence, a co-ordinating committee managed SPREP. The first intergovernmental meeting designed to provide direction to the secretariat was convened in 1986, then again in 1988 and 1990 (Miles 2001, 98).

that SPREP's emphasis on donor-funded projects has meant that, over the years, local partners in Pacific island countries have gained less than SPREP itself (AusAID 2000, 8).

It is not possible to assess what effect SPREP's work may have had on the nature of the Pacific island environment. SPREP itself does not collect data, or monitor trends that would allow it to make any such assessment (Hunnam and Tuioti 2000, 40). As almost all SPREP's professional staff are tied up administering projects, there has been little time for collecting baseline data and monitoring higher-level trends and strategic achievements (AusAID 2000, 10, 13). It is only in the last year or so that SPREP has begun to work out ways of monitoring the outcome of its work (Miles 2001, 105; see section 4.2.2 for further discussion).

Given the funding arrangements, it is not surprising that SPREP has arranged matters so that it is more accountable to donors than to Pacific island states. SPREP's funding largely comes from donors, and from the core contributions from USA, Australia, France and New Zealand, not from Pacific island countries. In 1999 only about 1.5 percent of SPREP's total income came from Pacific island states⁷. The donors are important to SPREP. Their funds have allowed the organisation to expand in the last decade. SPREP clearly has a vested interest in continued expansion; there are two large building projects currently underway on its site that will expand its capabilities – an information centre and a training centre, both donor funded (*pers. obs.*). Because of such concerns, there are doubts over SPREP's value to Pacific island states, including Fiji, as I discuss in chapter 5.

3.2.7 IMPACT OF THE EARTH SUMMIT ON REGIONAL ORGANISATIONS

The Earth Summit at Rio in 1992 (UNCED) affected the environmental management work of the South Pacific regional organisations. UNCED raised widespread expectations of new international cooperation to address global environmental problems through the mechanism of sustainable development. It produced some new agreements, namely a Framework Convention on Climate Change, a Biodiversity Convention, a draft agreement on forest conservation, and a 'Rio Declaration' restating the core principles of international environmental law (Andrews 1997, 331). But these had indifferent support from the United States and other key countries. At the insistence of poorer countries, UNCED also explicitly affirmed the national sovereignty of every country to exploit its environment in any way its national government chose (*ibid.*). UNCED affected South Pacific environmental management partly through the influence upon regional organisations, which I discuss

⁷ Pacific Island states' annual contributions amount to 35 percent of SPREP's core funds (when they actually pay them – some have not done so for several years) (Hunnam and Tuioti 2000, 26). I applied this percentage to the figure for members' contributions in the table stating SPREP's income for 1999, in Annex III of Hunnam and Tuioti (2000) to get the estimated proportion of total income contributed by Pacific island members. In the years 1994 to 1999, the highest proportion of total income that Pacific Island states collective contribution ever reached was 2.2 percent in 1995. Even this is an overestimation because it does not account for unpaid fees, which would reduce Pacific Island states' collective contribution to less than 35 percent of core funds.

below, and partly through direct influence upon Pacific island governments, as I discuss in relation to Fiji in chapter 5.

Planning initiatives

Pacific island states have been involved in two separate lines of environmental planning initiatives that emanated from UNCED. One is through the Small Island Developing States network, initiated at GCSDSIDS at Barbados in 1994, at which several Pacific countries participated (Henningham 1995, 350). The other is the United Nations Commission for Sustainable Development (UNCSD) created to promote and monitor UNCED's implementation, in particular Agenda 21. This was the plan of action developed at UNCED, to be taken by organisations of the United Nations system, governments and major groups interested in the environment (Chatterjee and Finger 1994). UNCSD meets annually. Under its auspices, ESCAP has co-ordinated an Asia-Pacific planning programme, overseen by an inter-agency committee on environment and sustainable development in Asia and the Pacific. Pacific island nations are represented on this committee, which is dominated by Asian interests. There have been four Asia Pacific regional ministerial conferences on environmental and development, held in 1985, 1990, 1995 and 2000 plus a regional consultative meeting in Manila in 1998 (ESCAP 2000c; ESCAP 2000e; UNCSD c. 1999, 15). At the 2000 conference participants agreed upon a regional action plan for environmentally sound and sustainable development. This plan mentioned environmental impact assessment as one of a suite of 'communications means' that should be 'promoted, adopted and disseminated on a wider scale' (ESCAP 2000d, 66). In regard to environmental planning, the plan stressed the need for strategic environmental management, and a tool kit of policies to be used as required. It pushed the need to standardise the content of plans. The plan also affirmed the need for networks of strictly protected areas, but did not mention community conservation areas or the ICAD approach (ESCAP 2000d 16-20).

The ESCAP approach appears to be influenced mainly by Asian rather than Pacific concerns. There appears to be little co-ordination between the ESCAP plans and those of SPREP. ESCAP tends to deal with foreign affairs departments in Pacific island states while SPREP liaises with environment departments (Gerald Miles, SPREP, *pers. comm.*, August 2001).

The Pacific island states have been more involved in the Small Island Developing States (SIDS) planning initiatives than in these ESCAP ones. They participated in GCSDSIDS which produced a fifteen page action programme (the Barbados Programme of Action). There was no new funding for this programme; donor countries emphasised the need to rearrange other aid funding if environmental matters were to be accorded priority (Henningham 1995, 350). Regional organisations became responsible for the regional co-ordination of the small island developing states programme of action. In the South Pacific, these activities have been incorporated into SPREP's process of seeking donor funds and into its work planning (Gerald Miles, SPREP, *pers. comm.*, August 2001). In 1996 SPREP co-ordinated Pacific island nations' reporting to UNCSD about their progress on implementing the

Barbados Programme of Action⁸. A lack of financial and human resources have hampered this. At the five year review in 1999, the Fijian representative blamed this on the international communities' failure to provide adequate resources to implement it (Earth Negotiations Bulletin 1999).

GEF and UNDP

As a result of funding arising from UNCED, the 1990s became a decade for projects intended to bring sustainable development to the South, including the South Pacific region. Responsibility for funding follow-up projects to UNCED was allocated not to the UNCSO, but to the Global Environment Fund (GEF), an initiative of the World Bank (Chatterjee and Finger 1994, 151, 157-60). GEF and other bilateral and multilateral aid donors have funded projects on sustainable development for the South Pacific. Many of these have been co-ordinated through UN agencies such as UNDP, which manages GEF funded projects in the South Pacific through its offices in Port Moresby, Suva and Apia. SPREP has used GEF funds for large multi-million dollar projects. These include the South Pacific Biodiversity Conservation Programme (SPREP's largest single project, which finished recently); climate change programme (SPREP 1998b, 62; Miles 2001, 101); and International Waters Programme that began in 2001 (SPREP 2001b). In 2000, GEF funds accounted for 40 to 50 percent of SPREP's annual expenditure (Miles 2001, 101).

UNDP worked closely with SPREP in the 1990s. In the early 1990s it concentrated on 'institutional strengthening' of SPREP after it had become autonomous and on funding the preparation of national environmental management strategies in 13 countries, all of which (apart from Fijian one) were co-ordinated through SPREP (SPREP 1998b, 62). These were designed to be long-term strategies for sustainable development, looking at specific environmental management issues and approaches especially appropriate legislation and environmental impact assessment of development proposals (Boer 1992, 1996). The ADB, UNDP and IUCN funded their preparation; I discuss these strategies further in section 4.2.

UNDP ran other environmental management projects in the South Pacific using GEF funding, but these had, in general, little impact on the institutionalisation of the selected methods of environmental management⁹. I look at the UNDP's role in Fiji, in chapter 5.

⁸ SPREP produced a document called *Report to the United Nations Commission on Sustainable Development on activities to implement the Barbados Programme of Action in the Pacific region* (SPREP and ESCAP 1996). This was compiled by SPREP staff with help of a New Zealander from the Department of Conservation seconded for the task. It entailed collating information from various states about what had happened since the *Pacific Way* exercise, and noting activities planned and underway. It was not an in-depth analysis of how best to make the vision in the Barbados Programme of Action come about.

⁹ UNDP ran two projects in the Pacific in the 1990s, to improve the technical and institutional capacities of various countries to implement Agenda 21. These were the Capacity 21 project and the Capacity Building for Environmental Management in the Pacific (CBEMP) project (UNDP 2000b, 5). Both involved SPREP.

Non-governmental organisations

The greening of aid since 1970s has expanded the role of non-governmental organisations (Hardie-Boys 1999, 188-9). Aid agencies began to fund non-governmental organisations to deliver aid, to supplement skills that they, the aid agencies, lacked. International non-governmental organisations and those based in western countries formed partnerships with non-governmental organisations in less developed countries to deliver 'green aid'; traditional development non-governmental organisations formed partnerships with environmental non-governmental organisations. A good example is the link between the Solomon Islands Development Trust and New Zealand's Maruia Society. This sort of collaboration has accelerated since UNCED, as non-governmental organisations focus on sustainable development,

Since 1970, at least 20 international non-governmental organisations have been active in South Pacific environmental matters. Several, including WWF (which has a Global 2000 project) and The Nature Conservancy (TNC, which has a Parks in Peril project) have promoted protecting specific areas (ESCAP 2000a, 4). Others promoting both nature conservation and protected areas in the South Pacific include the Biodiversity Conservation Network; the Swedish Society for Nature Conservation; the Maruia Society, Conservation International, Rainforest Alliance, Solomon Western Islands Fair Trade Netherlands Foundation (Biodiversity Conservation Network 1999; Overton and Scheyvens (eds) 1999), and the IUCN (mentioned in section 3.2.2). Still others have been involved in environmental advocacy or research about environmental matters, including Development Alternatives with Women for a New Era (DAWN), and the International Environmental Law Centre (Thistlewait and Votaw 1992, 215-7).

Some non-governmental agencies collaborate with SPREP, especially WWF and TNC which were both signatories to the 1999-2000 South Pacific nature conservation action strategy, under which they planned to fulfil certain identified tasks. One of TNC's staff played a key role in writing this strategy and in setting up the Pacific Island Roundtable for Nature Conservation, a coalition of conservation organisations and donor agencies launched in 1998 as a forum to develop new ways of addressing nature conservation (Pacific Regional Biodiversity Planning Support Programme c. 2000, 1).

3.2.8 EXPATRIATE INFLUENCE

Another way that ideas about environmental management are disseminated through the South Pacific is through expatriates employed in regional organisations. At SPREP, people from developed countries form the bulk of the professional staff (Michele Lam, SPREP, *pers. comm.*, June 2001). This also occurs in other South Pacific regional organisations. Although the organisation is usually headed by a Pacific islander, many of the professional positions, including the deputy position, are filled by expatriates, e.g. currently SPREP and FFA (Taga, 2001).

The expatriate component of any organisation obviously waxes and wanes. What appears to be relatively constant is that Pacific islanders dominate Pacific island state environmental management

agencies, while the regional organisations have a significant expatriate professional staff. Given their professional and cultural backgrounds, expatriates provide a conduit for western ideas about how the Pacific environment should be managed. The approach that SPREP takes to issues is largely determined by the professional training and background of its professional staff, many of who are expatriate, the remainder western-trained (Gerald Miles, SPREP, *pers. comm.*, August 2001). The few expatriates employed in national environmental management agencies in the South Pacific have often been part of a volunteer scheme run by the United Nations or by a bilateral aid agency.

3.3 DISCURSIVE MECHANISMS INSTITUTIONALISING ENVIRONMENTAL MANAGEMENT

3.3.1 SUMMARY OF THE MECHANISMS

Having established the external influences upon the regional organisations involved in environmental management, I can now look at the way that these organisations institutionalise modern environmental management. Using their annual reports, I categorised these mechanisms:

1. holding conferences, meetings, workshops, seminars and inviting participation;
2. offering advice to representatives from Pacific island states present at negotiations of new environmental treaties which these representatives are asked to sign;
3. providing advice on obligations under treaties signed;
4. helping translate international and regional treaties into domestic legislation (drawing up a template of suitable legislation which states can copy, for example);
5. preparing regional strategies about what should be done (nature conservation strategies; SPREP plans and so forth);
6. doing plans, protected areas, environmental impact assessments that states and other organisations can use as models or examples to follow;
7. running training courses;
8. arranging exchanges, taking people on visits to established protected areas;
9. preparing guidelines – how to do it guides;
10. maintaining databases and collecting statistics e.g., about protected areas; storing and disseminating this information;
11. running aid projects that provide funding, to ensure that environmental management methods are used.

Many of these mechanisms are discursive rather than material (concerned with production).

3.3.2 MESSAGES IN THE DISCOURSE

Introduction

Given the number of discursive mechanisms involved in efforts to institutionalise environmental management in the region, it is worth examining the messages contained in the discourse. There is an extensive environmental management discourse emanating from the regional and international

intergovernmental organisations in the South Pacific. Non-governmental organisations have also had a hand in producing it (see SPREP 1999a for instance). This discourse first developed in the late 1960s and 1970s and is both an oral and written discourse. The oral discourse is perpetuated at conferences and meetings, mostly regional or international. The written discourse manifests itself in plans and strategies, meeting reports, and Ministerial declarations. The two are essentially the same discourse since written summaries have been prepared after many regional meetings and conferences, including SPREP meetings, Forum communiqués and records of regional conferences. Much of this documentation emerges from the SPREP secretariat either as a direct result of its administrative role, or as a result of aid funded projects. The other regional agencies and the United Nations agencies also contribute to it. There is a strong internal cohesion to this discourse (more than that suggested by Hviding and Bayliss-Smith's account of multiple narratives among the 'eco-missionaries' in the Marovo Lagoon (section 1.2)).

Mechanisms reducing dissension

The discourse reduces dissension by drawing into it those who might oppose it. If people become part of the environmental management discourse they cannot challenge it from the outside. One attempt to do this is the ecological modernisation (mainstreaming) story-line that emerged in the SPREP discourse in the late 1990s. This suggests working with leaders and organisations who do not see biodiversity or conservation as their major concerns, including businesses, finance and planning agencies and policy decision-makers (SPREP 1999a, ii; 1). Advocating the integration of environmental matters into economic policy-making (ESCAP c. 1999, 1) is an attempt to widen the circle of participants to include economic planners and decision-makers, as I discuss later in this section.

The development literature describes an alternative discourse to the globalist perspective on environment conservation. This one is based around the idea of empowering communities and women i.e., bottom-up rather than top-down development (Chambers 1983; Braidotti *et al.* 1994, for instance). There have been attempts to blend this alternative discourse with the environmental management discourse in the South Pacific. Such attempts centre around attitudes to traditional environmental management. For instance, one of the statements in the Rarotonga Declaration:

Traditional conservation practices and technology and traditional systems of land and reef tenure adaptable for modern resource management shall be encouraged. Traditional environmental knowledge will be sought and considered when assessing the expected effects of development projects (UNEP 1983, 14).

Various documents espouse the need to learn more about traditional methods, to record them and incorporate them into modern environmental management (see for instance UNEP 1983, 9, 10, 13; SPREP and IUCN 1989, v, 1, 11; SPREP 1993f, 6). One of the objectives in the 1999-2002 nature conservation action strategy is:

To involve and support communities, resource owners and resource users in co-operative and sustainable natural resource management that recognises and strengthens the rights and customs of local people as a basis for promoting environmentally sustainable and equitable development (SPREP 1999a, 16).

In the late 1990s UNDP set up a project specifically to integrate traditional and non-traditional natural resource management systems in the Pacific (SPREP and UNDP 2000, A-11), another attempt to blend the discourses. Expressing an intention to use traditional knowledge to improve the way humans interact with the South Pacific environment is not an intention to swap modern methods of environmental management for traditional ones; it is an intention to assist more traditional communities to incorporate their current practices with more modern western ones. It is an intention of drawing more and more communities into the modern discourse. This emphasis on retaining traditional management seems to be about two things, namely blending traditional decision making systems with a modern state political system so that the former is retained along with the concomitant power structures, and retaining indigenous knowledge that might otherwise be lost as old people die (Asenaca Ravuvu, UNDP, *pers. comm.*, June 2001)¹⁰. As Clarke (1993, 257) pointed out however, it is a misconception to think that indigenous knowledge can be ‘plucked like some unchanging jewel off the shelf of indigenous life to be used in the modern world’. Indigenous knowledge is embedded in a particular society, culture, place and sense of time (Clarke 1993, 254). It is not static; Pacific islanders adapt their knowledge as their world changes around them.

Mechanisms justifying external involvement

As well as drawing people into it, the regional discourse also serves to create a space for outsiders – both expatriates and external organisations – to become involved in South Pacific environmental management. It does so through at least five discursive mechanisms, which reinforce the perception that Pacific islanders need help in managing their environment, and that global cooperation is needed to solve the environmental management problems of the Pacific. These include (1) arguing the need for a regional programme on the grounds of efficiency; (2) depicting the environment as a problem to be solved; (3) describing this as a problem beyond the ability of Pacific islanders, thus justifying the need for global cooperation and western environmental management experts; and (4) describing it as a problem that needs to integrate modern environmental management approaches with those of economic development experts. The discourse also (5) depicts the South Pacific environment as fragile

¹⁰ In Fiji work on traditional environmental management has taken various forms: e.g., a Fijian warden system for coastal areas (Jenny Bryant, UNDP, *pers. comm.*, May 2001); protecting traditional sites during development (Pio Manoa, Native Lands Trust Board, *pers. comm.*, May 2001); WWF work on traditional fishing systems on Kadavu (Asenaca Ravuvu, UNDP, *pers. comm.*, June 2001) and on the use of kuta (*Eleocharis dulcis* and *E. ochrostachys*) (WWF 2001).

and vulnerable and in need of special attention from foreign environmental management and development experts.

Argument for a regional programme of environmental management

There is an argument within the SPC and SPREP plans of the 1970s and 1980s that justifies the stated need for a regional, as opposed to several national, programmes (see table 4). It is based upon the need for, and the paramouncy of, efficiency or technical rationality (see section 2.1.3). This argument implies that external, interested organisations share a common goal, and that they share it with everyone in the South Pacific who has an interest in nature and human interactions with nature. This goal is never specific, merely, assisting 'South Pacific countries to protect and improve their shared environment and managing their resources to enhance the quality of life for present and future generations'¹¹. This general statement does not specify the nature of the environment or the quality of life to be pursued. It leaves sufficient room for different parties to interpret it as they wish; to decide what such improvements might entail and how to effect them, and to choose the means to reach that end, provided these chosen means are efficiently pursued.

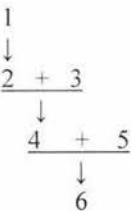
Various statements in the discourse emphasising the need for 'a coordinated approach' and for regional planning, also reinforce the perceived need for a regional programme. For instance, an objective of 1999-2002 nature conservation strategy was to implement regional planning: co-ordination, monitoring and reporting among all regional and international organisations with active programmes for nature conservation or economic development in the Pacific islands (SPREP 1999a, 15). SPREP's rationale in the early years was to pool scarce available resources of finance and manpower to make the Pacific a better human environment (Rongap and Piddington 1986, 13). I have constructed these arguments, using the method described in section 1.3.3. In this and following arguments, so as to get to the essence of the argument, I have simplified the wording of the premises instead of using the exact wording in the references quoted.

¹¹ See SPREP (1993f, 4) for instance; there are minor wording changes in various versions of the goal repeated over the years.

Table 4: Argument for a regional programme of environmental management

| No | THE PREMISES ¹² | EXAMPLES OF WHERE THESE OCCUR |
|----|---|--|
| 1 | There are many common characteristics among the territories and countries of the region | SPC and SPEC 1977, 1 |
| 2 | There are efficiency gains to be had by co-operating in environmental management | |
| 3 | Overlap [of functions perhaps] and competition is not desirable and should be prevented; the most efficient use of available human and financial resources is desirable and should be pursued | SPC and SPEC 1977, 1, 24; UNEP 1983, 2 |
| 4 | Those organisations and governments interested in South Pacific environmental management should co-operate in this | |
| 5 | Various organisations are interested in the environment of the South Pacific (governments, international agencies) | SPC 1985, 1 |
| 6 | These interested parties, South Pacific governments and administering authorities should all co-operate on matters of South Pacific environmental management, in the interests of efficiency, and avoiding overlaps in authority or any competition | SPC and SPEC 1977, 1, 24 |

THE STRUCTURE OF THE ARGUMENT



¹² As explained in section 1.3.3, the unreferenced premises have been added to make all the inferences in the argument logical, thereby reducing any weakness in the argument to weaknesses in the premises.

Depicting the South Pacific environment as a problem to be solved, needing external help

Metaphor is a rhetorical device designed to convince readers by putting a situation in a particular light (Dryzek 1997, 17). The metaphor of the environment as a problem to be solved recurs and predominates throughout SPREP publications over twenty-two years (since SPREP began). It presents an image of 'problem-solvers' - a group of experts who can provide advice on all manner of environmental problems and can show Pacific island government officials and politicians the way to proceed; an image of benign parental figures who advise and guide children. There is an inference that these experts could do all the required work (environmental management) but, really, they need to teach locals how to do it themselves. There is another metaphor associated with this – teams of people beavering away collecting information, planning, enforcing regulations, and making a better world for others, including 'local communities'. In this metaphor, more information means better management.

In the 1989 nature conservation strategy, those with traditional knowledge and skills are added to the list of those with the potential to solve the problems, but the metaphor remains unchanged. Those with the modern knowledge and prestige are still in charge, deciding how things should be – only now they have found a place for traditional practices and knowledge. In the 1994-98 strategy for nature conservation, another metaphor is introduced, along with the concept of community conservation areas. This additional metaphor is the same as that associated with participatory rural analysis, that of the village helper, living and working alongside villagers helping them develop micro-enterprises and teaching them to behave appropriately – rather like the friendly, benign missionary¹³. In this scenario of community conservation, local communities take advice and help from outsiders so that they learn how to use their resources to make money, without destroying them, or 'losing biodiversity'. This still involves outside experts helping solve the region's 'problems'.

By depicting the environment as a problem to be solved, one is then justified in specifying the skills and tools needed to help solve it. In this case, it requires technical experts, both to guide the process and to carry out technical tasks. The technical nature of the problem (rather than its political nature) is reinforced by the use of jargon and technical concepts. To solve the problem also requires information. It requires special tools, such as scientific procedures and environmental impact assessment. It requires a legal code and mechanisms to enforce this. These are all suggested in the discourse. To solve the problem on as wide a scale as the South Pacific requires not only a ready source of experts but also a co-ordinating agency. This is SPREP's role; FFA is involved when it concerns living marine resources and SOPAC when it concerns non-living resources, including freshwater resources and energy (see Appendix 2; Miles 2001, 105). SPREP places considerable importance on expert knowledge and the employment and training of experts. It aims to create a hierarchy of experts – first those employed by SPREP as staff, then consultants and advisors, then those in government environment units, and finally those in other parts of government such as national planning units.

¹³ See Chambers (1997) for an explanation of this technique.

There is in the discourse, an argument for introducing modern environmental management to the South Pacific through the help of foreign experts and institutions. It occurs in all four action plans prepared for SPREP and all four strategies for nature conservation in the region, prepared since the late 1970s. It is rather a piecemeal argument, best seen by reading all these plans together rather than each in isolation. Even though it is piecemeal, it is nevertheless a consistent argument and there are not any opposing arguments within the SPREP discourse. Reconstructed, it appears in table 5.

In the SPREP action plans and nature conservation strategies produced in the 1990s, further arguments are advanced for the involvement of outside interests. There are statements about how the Pacific is important in a global sense, including how some Pacific ecosystems are of global conservation significance (SPREP 1993f, 1), and the significant role that forest and marine environments in the Pacific play in stabilising global climates and acting as carbon sinks (SPREP 1999a, ii, 1-3). There are also assertions that there are globally important fisheries, coral reefs and forests in the Pacific, plus the general conclusion that the Pacific is essential for the sustainable development of our region and the world as a whole (*ibid*).

These statements are connected to an argument for global cooperation, shown in table 6. This is based on the asserted need for global cooperation rather than on the argued need for modern methods of environmental management because of inadequate local knowledge and expertise, the latter being the basis of the older argument shown in table 5. Both arguments create space for outsiders to become involved in South Pacific environmental management. The annual Forum communiqués¹⁴ (the documents by which the Pacific island leaders announce, in summary, the matters discussed at the yearly Pacific Island Forum meetings) also reinforce the idea that the South Pacific is part of a wider community, and the importance of the various international institutions concerned with environmental problems, and of South Pacific nations staying in contact with these (Forum Secretariat (n.d). is the web site reference for these communiqués). Greg Fry (1996, 1-2, 20-9) pointed out how recent Australian foreign policy also depicts Pacific islanders as needing guidance both in looking after their environment and in developing their island communities.

¹⁴ Since 1991, the Forum communiqués have contained commitments on environmental matters and sustainable development (Miles 2000, 100).

Table 5: Argument for modern methods of environmental management and external assistance

| No | THE PREMISES | EXAMPLES OF WHERE THESE OCCUR |
|----|---|---|
| 1 | Humans depend on the environment for their survival and health | SPC and SPEC 1977, i; UNEP 1983, 13 |
| 2 | Population growth and [some other unspecified] human activities threaten the environment and the resource base needed to live healthily | SPC 1985, 2; SPREP and IUCN 1989, 1 |
| 3 | If people are to survive and live healthy lives, then their impacts on the environment must be managed | SPC, 1977, i; UNEP 1983, 13 |
| 4 | Humans deserve to live healthy lives – both this generation and future generations | Implied e.g., SPC and SPEC 1977, 3; UNEP 1983, 13 |
| 5 | Humans need to manage their environment | |
| 6 | Traditional methods have been outpaced by the scale and speed of development | |
| 7 | The South Pacific ecosystems and species are particularly vulnerable to human activities and therefore to destruction | SPC and SPEC 1977, 3; UNEP 1983, 14; SPC 1985, 2 |
| 8 | There are features in the South Pacific that require ‘special care’ such as tropical rain forests and small island/lagoon/reef ecosystems | SPC 1985, 2; UNEP 1983, 13; SPREP 1994a, 1 |
| 9 | The South Pacific environment needs special attention and management | |
| 10 | We need modern methods of environmental management in the South Pacific | |
| 11 | Local expertise is inadequate to manage the environment and natural resources in modern ways | SPC and SPEC 1977, 3; UNEP 1983, 5 |
| 12 | Experts from outside the region are needed to use and teach modern methods of environmental management | SPC and SPEC 1977, 1; UNEP 1983, 13 |

STRUCTURE OF THE ARGUMENT

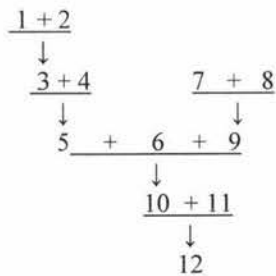
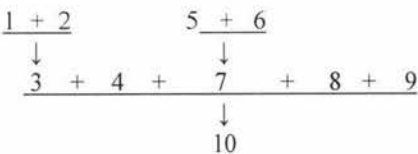


Table 6: Argument for global intervention in environmental management in the South Pacific

| No | THE PREMISES | EXAMPLES OF WHERE THESE OCCUR |
|----|---|---|
| 1 | There are threats to the South Pacific from outside the region | SPREP 1993f, 2; SPREP 1999a, ii |
| 2 | There are large-scale industrial fishing and logging in the region – much of the value of which goes overseas | SPREP 1999a, ii |
| 3 | Environmental issues within the region are intertwined with those of other parts of the world | SPREP 1991b, 40-1; SPREP 1993f, 5; SPREP 1997a, 3-4 |
| 4 | There is a global concern for environmental protection | SPREP 1991b, 37, SPREP 1993f, 5; SPREP 1997a, 3-4 |
| 5 | Solving these environmental problems in the South Pacific requires money, expertise and the right sort of institutions | |
| 6 | Pacific island governments struggle against daunting institutional and financial constraints | SPREP 1999a, ii |
| 7 | Pacific island countries cannot solve these problems on their own | |
| 8 | Developed countries and the large intergovernmental organisations such as the United Nations agencies have the required money, expertise and institutions | |
| 9 | Problems of global concern require co-operative solutions | |
| 10 | Countries and agencies with these attributes should co-operate in managing the environment in the Pacific | SPREP 1993f, 2 |

STRUCTURE OF THE ARGUMENT



Meshing the discourse of modern environmental management with that of economic development

Despite their weaknesses, these recurring arguments and the metaphor with which they are associated reinforce, through discourse, the need for external help in managing the South Pacific environment. Another discursive mechanism in the SPREP literature also does this. This is the recurring story-line about the need for economic growth and development. Since independence, economic development has been a priority for planners and politicians in Pacific island states. National development strategies in the region focused on fostering economic growth (ESCAP 1999b, 1). This priority is also presented

in SPREP documents (for example, SPREP 1993f, 2; SPREP 1997a, 3; SPREP 1992b, 37). Since the 1980s, there has been persistent rhetoric at intergovernmental level about the need to blend economic development and environmental management. One manifestation of this is the greening of aid mentioned on page 52. Following the acceptance of the sustainable development ideal in the 1980s, environmental considerations increasingly became integral components of development aid projects, then separate projects in environmental output programmes (Hardie-Boys 1999, 187-8). The boundary between environment and development became blurred.

Although attempts to integrate environmental considerations into economic policy-making have had little effect in the South Pacific, the story-line persists in various forms, one of which is mainstreaming, sometimes called ecological modernisation, mentioned above. As mentioned, this first appeared in the 1999 nature conservation strategy (SPREP 1999a, ii; 1). The national environmental management strategies that I mentioned in section 3.2.7 are another manifestation, promoted as a tool for integrating environmental and economic development concerns (SPREP 1991b, 12-3). A large research project that ESCAP conducted in the late 1990s is another manifestation. This was carried out in eleven Pacific island countries including Fiji, as well as in Asian countries. This research was intended to assist 'capacity building, policy formulation and implementation efforts to integrate environmental considerations into economic policy-making' (ESCAP c. 1999, 1).

Depicting the South Pacific environment as fragile and vulnerable, in need of special attention

Associated with this depiction of the South Pacific environment as a problem to be solved, is the idea that this environment is fragile and vulnerable and therefore in need of special care (e.g., premises 7-9 in table 5). This idea lends further weight to the assertion that Pacific islanders need help from experts to manage their environment. The notion that the South Pacific environment is fragile and vulnerable is a recurrent theme in much of the regional literature, especially that from SPREP and SPC. This depiction accords with the globalisation narrative of conservationists, which emphasises the fragility of the biosphere, in which increasing human populations, the indirect effects of habitat degradation and the direct impacts of harvesting plants and animals are used to construct an image of the world on the verge of an ecological crisis (Hviding and Bayliss-Smith 2000, 322).

The basis for asserting the fragility of Pacific environment is set out in some regional documents (e.g., SPC 1985, 2; SPREP 1994a, v). In others, the nature and extent of fragility is not explained. Instead the adjective 'fragile' is used to describe the Pacific environment as if the two concepts always go together (e.g., SPC and SPEC 1977, 3; SPREP 1998b, ii; SPREP 1999a, 1). In such instances, the concept has become 'black-boxed' in the sense that it no longer needs to be justified¹⁵.

¹⁵ Hajer (1995, 272) referred to Callon and Latour's description when explaining the discursive mechanism of black-boxing: '[a] black box contains that which no longer needs to be reconsidered, those things whose contents have become a matter of indifference'. Modes of thought, habits, and objects can all be black boxed.

Where it has been explained, the basis for describing the environment as vulnerable is generalised. The following summary from the 1985 and 1991-95 regional action strategies for protected areas (SPC 1985, 2; SPREP 1994a, 1) illustrates this. The argument has two parts (I concentrate only on the terrestrial and ignore the marine elements). The first part of the argument is based on natural characteristics. The basis of this part of the argument is that geographical and ecological isolation has led to the evolution of 'unique' species and communities of plants and animals, many of which are adapted to only one island or groups and found nowhere else in the world. On some Pacific islands (which islands and how many islands are not quantified) 80 percent or more of the species are endemic¹⁶. Furthermore, limited space means ecosystems are restricted; this increases the vulnerability of small populations. Sometimes the statement is added that there are about 2000 different ecosystems throughout the South Pacific; this is based on a desk top exercise that Dahl (1980) conducted. Dahl arbitrarily listed types of ecosystem, made little attempt to define, compare or differentiate ecosystem types, and produced a coarse and questionable estimate of ecosystem numbers¹⁷. In the argument for vulnerability, the addition of the statement that there are about 2000 different ecosystems throughout the South Pacific, implies that each type of ecosystem is distinct and worth saving and that this estimated 2000 ecosystems represents a high level of biodiversity. Although the SPREP literature quotes Dahl's estimate repeatedly, it never questions its validity.

The second part of the argument sets out to establish that this 'extraordinary high and unique biological diversity' of the South Pacific islands is 'critically threatened' by human activity (e.g., SPREP 1994a, 1). The stated threats include population growth; steady habitat destruction from increasing demands on limited land resources; habitat destruction through accelerated soil and coastal erosion, coastal reclamation, mining activities; excessive harvesting of native forests and coastal fish resources;

¹⁶ The prevalent biogeographic view is that islands are typically species-poor for their area in comparison to areas of mainland, and this poverty is accentuated by increasing isolation and decreasing island relief and latitude. But many islands also have high level of endemism, out of proportion to the land area when considered on a global scale, and in this sense collectively islands can be thought of as 'biodiversity hot-spots'. Many Pacific Island have high levels of endemism (Whittaker 1998, 51-2).

¹⁷ To understand the deficiency, one needs to go back to the original publication (Dahl 1980) which estimated there were approximately 600 ecosystems by identifying 74 'habitats/ biomes' and judging which of these occurred in each of twenty different island groups of the Pacific said to be separate geographic provinces (without any evidence proffered for this differentiation). Assuming that a habitat/ biome in any of these biogeographic provinces is different to that on any that on any other island group (which is questionable), this gives around 600 separate individual habitat/ biomes. Dahl (1980, 20) then stated, without any substantiation, that the total probable number was about 2000, because of additional factors such as substrate, slope exposure and rainfall¹⁷. Dahl's habitat/ biomes categories were such items as bog, beach, lowland rainforest, grassland, permanent lake, fringing reef, estuary, continental shelf and seamount (Dahl 1980, 22-3). He did not attempt to describe the extent of each identified ecosystem on the planet, or to compare this with ecosystems in other regions.

pollution of inland and coastal waters, and competition and predation by species introduced by humans. Again the extent of each is not quantified although it is obviously highly varied - there is far more forest clearance in Fiji than mining, for example.

A third part is sometimes added to the argument, as in Sesega *et al.* (1993, 1, 4). This is that the region is vulnerable to massive habitat alteration not only because of the islands' geographic isolation and limited geographical extent but also because of proneness to tropical cyclones, volcanic eruptions, and other unspecified natural events. Again the degree of proneness in different parts of the South Pacific is not specified.

Instead of being argued on an island by island basis, the notion of fragile and vulnerable islands is generalised over the entire South Pacific. This generalisation supports the argument that the [entire] South Pacific environment is in need of special care and therefore the help of outside experts. In reality, some atolls may be vulnerable because of increasing population, shortage of land, over-use of natural resources, sea-level rise and so forth, but not all are. Not all Pacific island countries have increasing populations – the concern in the Cook Islands and Nuie is a decline owing to migration. In the Solomon Islands, Malaita is overpopulated but Guadalcanal is not. In Fiji, substantive emigration after the political machinations in 1987 meant the net population growth rate declined to almost zero (SPC 1998, 13). On the high islands – the main Fijian islands for instance, there is no shortage of land and these are far less threatened by sea level rise than low-lying atolls are. Furthermore, as various authors have pointed out, the validity of the assertion that population growth is threatening the environment is also questionable, in its general form (see the chapters by Darling, Tyson and Fried in Silliman and King 1999).

Weaknesses in the other arguments

The argument for a regional programme (in table 4) is based on the supposed need for efficient use of financial and human resources. It is, however, tautological, arguing that we need to use available resources efficiently; a regional programme will use them efficiently; therefore we need a regional programme; now we have a regional programme, it needs to use the available resources efficiently. Given the premises, there are possible solutions other than the proposed regional approach to modern environmental management. A regional programme does not have a monopoly on the efficient use of resources; national programmes might also use the resources available to them efficiently. Other countries could stop exploiting the resources of South Pacific countries as an alternative, or they could pay larger sums of money for this, for instance. The argument overlooks these options. It does not address the question of the sort of institution needed to address the environmental problems in the South Pacific.

The argument in table 5 has several weaknesses. First, it is a teleological explanation in the same way that modernisation and dependency theories are teleological. These theories reduced the causes of underdevelopment to internal impediments in society and to capitalist penetration, respectively. The argument in table 5 reduces the causes of environmental degradation to the failure of traditional

management methods to keep pace with the scale and speed of development. It does not challenge the surrounding political system of liberal capitalism, nor does it seek to explain the underlying reasons for environmental degradation.

Second, it is inappropriately generalised in several regards. There is nothing specific in the argument about which methods of environmental management are required – they could be anything as long as they result in wise and rational management (SPC and SPEC 1977, i; UNEP 1983, 13). It is a general argument that could be developed for any part of the world labelled special or vulnerable (whether or not these labels are justified). It generalises the situation throughout the South Pacific despite obvious differences between Pacific islands and states (as mentioned in section 1.1.2, for instance).

Third, the argument is not specific about which humans are the target. In plans written after the 1983 SPREP action plan, the idea that people should be able to maintain their quality of life ('a resource base able to support the needs and maintain the quality of life of the people of the Pacific' (SPC and SPEC 1977, 7)) is changed to the idea that they should be able to improve it (to 'manage their resources to enhance the quality of life for present and future generations' (SPREP 1993f, 4)). Does this mean everyone – even those already well-off – should be able to improve their lot? There is no concept in any of the SPREP documents of addressing social inequities, even though this is an integral part of the concept of sustainable development on which recent SPREP plans ostensibly are based.

Fourth, the suggestion, implicit in tables 5 and 6, that people from developed countries can fix the problems is questionable. It ignores the widespread and continuing destruction of ecosystems and extinction of species in industrialised and westernised countries such as NZ, Britain and the US, countries from which these proffered experts and methods of environmental management come. It also fails to acknowledge that Western countries took centuries to establish centralised control and regulatory mechanisms to control the actions of the population and their use of natural resources; Pacific island countries are expected to make this adjustment in a few years.

The older argument (table 5) is not based on recognised environmental problems, although the later one is (table 6). Particularly in the 1970s and 1980s, the case for modern environmental management and external involvement in environmental management in the South Pacific was argued with little supporting data. From 1977 throughout the 1980s, when these arguments were first advanced, there were little data on environmental problems in the South Pacific. Hence the call in SPREP action plans and nature conservation strategies in the late 70s and 1980s for more information (SPC 1985; SPREP and IUCN 1989, for example). The first systematic attempt to identify environmental problems in South Pacific countries occurred in 1981-2 when governments prepared reports for the 1982 Rarotonga conference on the human environment (Reti 1990a, 150; Thistlewait and Votaw 1992, 302). The next systematic attempt was the preparation of country reports compiled as part of the South Pacific preparations for UNCED in 1992; this information was used in preparing the national environmental management strategies (SPREP 1992b, 6).

In describing the arguments in the discourse, I have shown them to be weak and flawed. They are like much advertising – flashy on the surface but with no substance, designed to convince at a superficial level. As in advertising, maybe the arguments themselves are not particularly important, maybe it is the repetition that counts. One cannot assume that in every culture, discourse must be logical and succinctly argued if it is to convince. The Kanak leader (from New Caledonia) Jean-Marie Tjibaou has been quoted as saying ‘the Kanak discourse is not a thesis, antithesis, synthesis. It consists of repeating to convince’ (Waddell, 1994, 82). Discourse in other Pacific cultures may be similarly based.

Yet, surely no-one could seriously advance and believe such flawed arguments? This does not necessarily mean there is an organised conspiracy to impose modern environmental management on the South Pacific. The explanation could be connected to bureaucratic culture. People hear certain jargon and snippets of argument in their workplace, at conferences and on training courses. They then use it to justify their own work, perhaps in a project proposal or a policy document, because they know it is the acceptable way of communicating, and that if they use it, no-one is likely to disagree with it. How many people who add ‘sustainability’ to their report, really have any idea of what it means? But if they use language people recognise, then likely as not, their project has a good chance of being approved, their policy accepted and they can keep and expand their job. The arguments are perpetuated in this way until they become superseded by new ideas with perhaps equally flawed logic.

3.3.3 THE EFFECT OF THESE DISCURSIVE MECHANISMS

Reinforcing the status quo

The discursive mechanisms I have described reinforce the appropriateness of continuing with a liberal capitalist system. Calling for environmental matters to be integrated into economic policy perpetuates the idea that the current economic planning methods are appropriate and should continue, with the added refinement of attending to the detrimental environmental effects of activities. This avoids the need to justify economic growth as a suitable path to development – it black-boxes it. So too does the argument in table 5 that seeks to justify the introduction of modern environmental management to the South Pacific, based on the idea that humans deserve to live healthy lives. This argument avoids questioning whether the general form of development occurring (capitalist development) should be allowed to continue, or whether there are alternative, healthy ways.

The regional discourse of environmental management, with its persistent problem-solving metaphor, resembles the discourse of administrative rationalism that Dryzek (1997, 63) described as being a ‘problem-solving discourse that emphasises the role of the expert rather than [the role of] the citizen/consumer in social problem solving, and which stresses social relationships of hierarchy rather than equality or competition’. Dryzek noted that this discourse emerged as environmental issues rose to prominence in the 1960s and 1997s, generating institutional and policy responses that were remarkably similar in content and timing across the nations of the developed world. These responses included professional management bureaucracies, regulatory policy instruments, environmental impact assessment, expert advisory commissions and review teams, and rationalistic policy analysis

techniques such as forecasting, computer modelling, decision analysis, risk analysis and cost-benefit analysis. SPREP, itself a professional management bureaucracy, has promoted several of these methods (but not rationalistic policy analysis techniques). Dryzek (1997, 76) described how the discourse of administrative rationalism takes the political-economic status quo of liberal capitalism as given. 'It then puts scientific and technical expertise, organised into bureaucratic hierarchy, motivated by the public interest, to use in solving environmental problems without changing the structural status quo' (ibid)¹⁸. The regional environmental management discourse does not consider the alternative arguments that the environment is threatened by certain patterns of consumption and commodification, or that drawing Pacific islanders further into the behaviour characterising developed countries only increases the environmental threat. SPREP has never tried to analyse the relationship between various development paths and environmental quality. SPREP prefers not to identify how international politics, development and the environment may have common political elements (Storey 1997, 15). It has not addressed the differential effects of various types of development on environmental quality – tourism, agriculture or industrialisation for example, or the extent of control over the environment that these place in the hands of overseas investors or markets. SPREP publications avoid any mention of politics in environmental management, including any reference to the political nature of its history (described in section 3.2.1).

The victim mentality

The discursive mechanisms in the regional environmental management discourse make Pacific islanders look vulnerable and needing help to ensure that they interact with nature in appropriate ways. They portray Pacific islanders not as victims of the West (as dependency theorists might: Frank 1971; Lall 1975), but as victims of their geographical circumstances, own actions, and lack of expertise. This supports the assertion that they need help to address their environmental problems.

This regional environmental management discourse ignores ways in which the West has detrimentally affected the Pacific environment. The World Bank (2000b, 35-6), for instance, writes about managing the islands' environmental vulnerabilities but does not attribute these to its own policies. *The Pacific Way*, compiled from Pacific island country reports for UNCED, failed to address some of the biggest environmental management issues in the Pacific – French and American nuclear testing and dumping, and mining including the British, Australian and New Zealand devastation of Nauru to supply rock

¹⁸ Dryzek (1997, 69) suggested that trying to get the public to participate in environmental impact assessment relates better to the discourse of democratic pragmatism rather than the discourse of administrative rationality. But in the Pacific, where public consultation has not commonly been sought when assessing potential environmental impacts of proposed developments (Onorio 2000, 11-2), the practice of environmental impact assessment fits well with Dryzek's description of administrative rationality.

phosphate to farmers in Australasia (Emberson-Bain 1994, 40-1)¹⁹. This contrasts with other commentary on climate change, sea-level rise and nuclear testing that depicts Pacific island communities as victims of largely western-generated environmental change – Greenpeace’s view (Overton 1999, 9) and that of some local non-governmental organisations.

The SPREP discourse not only fails to mention the relationship between various development paths and environmental quality but also to the extent of control over the environment, among other matters, that they place in the hands of overseas investors or markets. For instance, ‘when a Third World country uses tourism [including eco-tourism] as a development path it becomes entrenched in a global system over which it has no control’ (Britton quoted in Plange 1996, 212).

Legitimising external involvement

There is an implicit suggestion in this discourse that development, in the form practised in Third World countries, needs to be managed by a higher authority, because those doing the development (assumed to be active) will probably harm the environment if left unsupervised. This is the philosophy underlying both environmental impact assessment and the call to integrate environmental matters into other forms of planning (in, for instance, Onorio 1994, 1).

This regional environmental management discourse legitimises the involvement of SPREP and other regional organisations in Pacific island environmental management. The discourse legitimises the involvement of donors, both international organisations and other countries, by emphasising the need for expert, external help and global cooperation. It also legitimises western-trained experts as people who know best how to manage the environment. In the next two chapters I show how using environmental planning and impact assessment and creating protected areas creates opportunities for these organisations and experts to work on environmental management in the South Pacific, further legitimising their involvement.

¹⁹ Nauru should not be seen as an intractable environmental problem. The solution was for every bulk carrier that removed phosphate from the island, instead of carrying seawater ballast, to have brought back to Nauru equal volumes of soil and clay from New Zealand and Australia to fill the quarry holes dug.

4 ENVIRONMENTAL METHODS IN REGIONAL ORGANISATIONS

Chapter 3 described how external institutions such as international environmental treaties, UNEP and UNCED influence the regional organisations promoting environmental management in the South Pacific, and the nature and effects of the discourse emanating from the primary regional agency, SPREP. In this chapter, I describe the ways that the regional organisations attempt to institutionalise the three selected methods of environmental management and the role external organisations play in this. This provides the context for examining the way in which these selected methods are being practised in Fiji, the subject of chapter 5. I save all specific comments on Fiji for that chapter.

4.1 PROTECTED AREA INITIATIVES

4.1.1 OVERVIEW

In the South Pacific, virtually all of the areas formally and legally protected for nature conservation purposes were set up before 1980, mostly under colonial administrations (Carew-Reid 1990, 31). As well as these formally protected areas, at least 34 community conservation areas have been established in Pacific island countries since 1995 (SPREP 1999a, 2).

Regional organisations such as SPREP are not placed to set up and manage protected areas because there is no intergovernmental mechanism for this. Either governments or local communities choose to protect areas. Regional organisations can only encourage and support their set up and subsequent management. At regional level, the activities concerned with setting up protected areas have taken four main forms (1) holding conferences; (2) preparing regional strategies; (3) participating in the negotiation of conventions and advising states about their obligations under these; and (4) running programmes and projects designed to lead to areas being protected. SPREP has co-ordinated this work. Neither FFA or SOPAC have been involved in promoting protected areas. At the University of the South Pacific, papers in environmental law and geography (resource conservation and applied biogeography) touch upon protected areas, amongst other subjects, but there is no specific focus on protected area management (University of the South Pacific 1999a, 272, 429-30).

Work on protected areas in the South Pacific goes back many decades. For the early part of the twentieth century, interest in nature conservation in the Pacific was largely expressed through the regular congresses of the Pacific Science Association¹, and through colonial administrations.

¹ The Pacific Science Association is a regional, non-governmental scientific organisation founded in 1920. Its objectives are to promote cooperation and communication in science and technology among Pacific communities. It is based in Hawaii, and holds regular congresses and other meetings (Pacific Science Association c. 2001).

4.1.2 PROTECTED AREA INITIATIVES: CONVENTIONS AND CONFERENCES

At the 11th Pacific Science Congress in 1966, eminent British scientists M.W. Holdgate and E. M. Nicholson proposed an international conservation programme for the Pacific islands. This led to those present at the congress resolving to conserve, for scientific study, a series of Pacific islands. They also called for the International Biological Programme² and the IUCN to develop a joint programme for the permanent conservation of an adequate series of natural habitats throughout the Pacific (Douglas 1973, 201). A series of initiatives arose from this congress. There were meetings and symposiums on nature conservation including the 12th Pacific Science Congress in 1971 (see Costin and Groves 1973 for the proceedings) and a regional symposium on the conservation of reefs and lagoons, held in Noumea in 1971 (SPC 1973). The IUCN was involved in both of these. With SPC, it co-sponsored the conservation chapter of the International Biological Programme's production of checklist of Pacific oceanic islands, summarising matters of ecological and conservation interest, and conservation status. This collated existing information (Douglas 1973, 203).

Arthur Dahl, the ecologist appointed to SPC following the 1971 symposium that called for SPC to increase its ecological expertise, worked actively over the next few years to ensure that protected areas were a key part of SPC's programme. Dahl surveyed the protected areas in the Pacific, and reported in 1985 that there were a hundred protected areas, almost all of which were strict nature reserves or wildlife sanctuaries, two being national parks (Dahl 1985, 5).

Following the regional symposium in 1971, the IUCN drafted a convention on the conservation of nature in the South Pacific, and tabled this at the first South Pacific conference on national parks and reserves held in Wellington in 1975 (Carew-Reid 1989, 69). At a meeting in Apia in 1976, which the IUCN and SPC jointly sponsored, twelve Pacific island countries signed a convention, which was largely based on this earlier draft³. Known as the Apia Convention, it aims to protect mainly terrestrial plants, animals and areas of historic and cultural significance. The parties agree to encourage the creation of protected areas to safeguard representative samples of the natural ecosystem (giving particular attention to endangered species), superlative scenery, striking geological formations and regions and objects of aesthetic interest or historic, cultural or scientific value (Article 2). These protected areas are supposed to be kept as inviolate as possible. Countries were slow to ratify this convention and it did not come into effect until 1990 (SPREP 1992b, 9; Mere Pulea, University of the South Pacific, *pers. comm.*, July 2001). In 2001, only six of the original 12 country signatories had ratified the convention: Australia, France, Fiji, Cook Islands, Papua New Guinea and Samoa (CIESEN c. 2001).

² See footnote 1 in Chapter 2.

³ It was initially open for signing until 31 December 1977, after which it was available for ratification.

Since the 12th Pacific Science Congress in 1971, which focused on protected areas, there has been a regular series of South Pacific conferences on protected areas and nature conservation, held every four years. The other event that regularly occurred has been the compilation of 'action strategies' for nature conservation in the region. The first two were compiled at the 1985 and 1989 conferences respectively, but the latter two have been prepared under the auspices of SPREP (these are SPC 1985; SPREP and IUCN 1989; SPREP 1994a; SPREP 1999a). In each nature conservation action strategy from 1985 to 1999, the key reason behind protection is that humans depend upon protected areas (and species) and need them: 'protected areas serve environmental, social, economic, cultural, and spiritual needs of society' (SPC 1985, 3). Deep ecology ideas have not penetrated these strategies; there is no mention of intrinsic values or the rights of species to survive despite human efforts.

Nature conservation has always been a key part of SPREP's work since its establishment in 1980. It is accorded the status of a separate work programme (species protection is part of this programme as well as protected areas). Under the SPREP Convention described in section 3.2.3, SPREP also has a role in coastal and marine protected areas. This convention encourages the parties to protect and preserve rare or fragile ecosystems and depleted, threatened or endangered flora and fauna, as well as their habitat, where they occur in the convention area.

To this end the parties shall, as appropriate, establish protected areas, such as parks and reserves, and prohibit or regulate any activity likely to have adverse effects on the species, ecosystems or biological processes that such areas are designed to protect (Article 14).

4.1.3 COMMUNITY CONSERVATION AREAS

Over the last thirty-plus years, the ideology underpinning protected areas in the South Pacific has had the same two distinct faces found elsewhere and described in Chapter 2: strictly protected areas and community conservation areas. The concept of strictly protected areas that the Pacific Science Congresses encouraged was based on a scientific understanding of nature conservation⁴. In the 1980s, SPREP's conservation programme was modelled on this scientific concept and on the European concept of establishing national parks owned and controlled by the government, then being applied in New Caledonia, Australia and New Zealand (ESCAP 2000a, 3). The concept of community conservation areas first appeared in the 1989 nature conservation strategy but it was not until after the 1992 regional conference on nature conservation that SPREP seriously began a community-based approach to nature conservation (SPREP and IUCN 1989, 12; ESCAP 2000a, 3). The 1994 strategy reflected this shift in direction. It stated that this new approach was intended to address the 'emerging consensus' that dedicating land and sea to national parks and reserves was generally inappropriate for Pacific islands (SPREP 1994a, 5). The fact that, first SPC, and then SPREP had had little success in

⁴ Unlike Africa, the idea of game preservation for sport did not arise in the Pacific islands, naturally bereft of big land mammals.

encouraging Pacific island countries to set up totally protected areas was another incentive to change direction. The community conservation idea has also been linked to implementation of the 1993 Convention for the Conservation of Biodiversity that came out of UNCED and which 14 Pacific island governments have signed (Convention on Biological Diversity 2001a). This approach has largely overtaken the protected area provisions of Apia and SPREP conventions (Hunnam and Tuioti 2000, ii).

SPREP has actively assisted Pacific island countries to meet their obligations under the Biodiversity Convention (UNDP c. 1998), largely through the South Pacific Biodiversity Conservation Programme (SPCBP) that has dominated regional conservation activities. Started in April 1993, this is the largest programme that SPREP has co-ordinated (SPREP 1998b, 62). It aimed to develop strategies for the conservation of biodiversity and the sustainable use of biological resources in the South Pacific; to set up community conservation areas that protect biodiversity and in which resources are used sustainably; and to identify new areas important for conservation of biological diversity (UNDP c. 1998, 3). It was almost entirely funded by GEF with extra funding from UNDP, AusAID and NZODA, a total of over US\$10 million spread over the eight years of the project (UNDP c. 1998, 1; SPREP 2001a).

In running the South Pacific Biodiversity Conservation Programme, SPREP staff have been involved in identifying suitable conservation areas, preparing project documentation, and assisting communities to set up sustainable economic activities. They have conducted participatory rural analysis training for local communities and project personnel. They have funded publicity brochures, prepared educational material about protected areas, disseminated information, prepared training and public awareness material, run workshops, training courses and arranged attachments. These activities are described in SPREP's annual reports and in ESCAP (2000a).

While it has ostensibly not abandoned the pursuit of strictly protected areas (Sam Sesega, SPREP, *pers. comm.*, August 2001), since 1990, virtually all SPREP efforts aimed at protected areas has been directed into establishing community conservation areas (as its annual reports since 1991 show). It has been involved in setting up 17 community conservation areas in 12 Pacific island countries (SPREP 1999b, i). In aiming to 'conserve natural resources without losing the products and services that can be developed and produced sustainably' (*ibid*), it is promoting certain products and services such as eco-tourism, bee-keeping, and butterfly farming, as being appropriate forms of development for local communities. In the South Pacific as elsewhere, the concept of protected areas has become entwined with that of development, as described in Chapter 2; protected areas are seen as part of one route towards development. This contrasts with the situation for most of the twentieth century when they were seen as an antidote to some of the adverse impacts of development⁵.

⁵ NZODA has also moved away from strictly protected areas towards community conservation areas. It has a strategy of supporting community conservation of biodiversity based on providing alternative sources of income and sustainable resource management (NZODA 1996, 50). It does not have any policy about helping set up formally protected areas without also helping communities generate income.

4.2 ENVIRONMENTAL PLANNING INITIATIVES

4.2.1 TYPES OF INITIATIVES

In the regional organisations, particularly SPREP, environmental planning has become accepted as an important tool of environmental management. SPREP regularly produces various types of plan; FFA produces tuna management plans and SOPAC occasionally produces a specialist environmental plan. The extent of planning in regional organisations in the last thirty years is depicted in box 2. This is intended to show both major efforts and the relative degree of effort amongst regional organisations. It is not a complete list, which is difficult to determine absolutely given the uncertainty over whether any particular planning document is or is not an environmental plan.

In these regional organisations, environmental planning is being institutionalised in three ways: (1) through the practice of planning (leading by example); (2) through projects funded by donors; and (3) through advocating planning, such as at regional development planners' fora (SPC and Forum Secretariat 1993). Although it encourages planning when this is appropriate, SPREP has not set out to teach people how to plan, the exception being a regional workshop on community-based resources planning that focused on participatory and community-based planning (SPREP 1999b, 2; Gerald Miles, SPREP, *pers. comm.*, August 2001). SPREP's role in institutionalising environmental planning in the South Pacific is best described as setting an example, preparing regional plans on various environmental topics. Many of the plans coordinated or produced by SPREP are linked to international conventions or to aid funded projects (such as the regional wetlands action plan, turtle conservation strategy and the national environmental management strategies). The exceptions are its action plans and nature conservation strategies. These serve to cement SPREP's role in managing region-wide environmental projects on specific topics.

The largest donor funded project concerning environmental planning in the region has been the production of national environmental management strategies, mentioned in the last chapter (3.2.7). In 1990, the Asian Development Bank and IUCN provided technical and financial support for environmental planning projects in five Pacific countries, under a project called the Regional Environment Technical Assistance (RETA) project. UNDP subsequently funded similar projects in a further seven countries, starting in mid-1991; these became known as the National Environmental Management Strategy (NEMS) projects (Boer 1992). SPREP co-ordinated these projects. The concept of preparing a national environmental management strategy came from the World Conservation Strategy *Caring for the Earth* prepared by the IUCN, UNEP and WWF (1991) (Thistlewait and Votaw 1992, 207). The RETA and NEMS projects involved producing state of the environment reports and strategies, reviewing environmental legislation in each country; considering appropriate country institutional arrangements to implement these national strategies; and providing training on subjects such as environmental impact assessment and raising environmental awareness (SPREP 1992c, 7). I describe the Fijian national environmental management strategy planning process in the next chapter.

Box 2: A summary of environmental planning in South Pacific regional institutions, 1970-2001

SPC

- Comprehensive environmental management programme proposal (the document proposing that SPREP be established) (SPC and SPEC 1977)

SPREP

- Action plan produced at the 1982 Rarotonga Conference on the Human Environment (UNEP 1983)
- Subsequent SPREP action plans (SPREP 1993f; 1997a; and 2000)
- Nature conservation strategies (see SPC 1985; SPREP and IUCN 1989; SPREP 1994a; and SPREP 1999a)
- *Pacific Way* (SPREP 1992b; Thistlewait and Votaw 1992)
- RETA and NEMS projects to produce national environmental management strategies
- Plans on various topics: turtle conservation strategy, regional invasive species strategy, regional wetlands action plan, oil spill contingency plans (listed in SPREP's annual reports and in Hunnam and Tuioti 2000, 19)
- Work on national biodiversity action strategies

SOPAC

- Strategy and action planning for the water sector, energy planning, hazard and disaster management planning, and coastal planning, for instance (SOPAC 2001)

FFA

- Fisheries management plans for tuna in various Pacific Island states (mainly stock management) (FFA, 2001).

CROP

- Regional strategies that incorporate environmental matters.

Consultants and expatriate advisors played a key role in preparing many of these strategies, most of which follow a similar planning process and format and even have entire passages in common (Lionel Gibson, University of the South Pacific, *pers. comm.*, June 2001).

Prior to UNCED in 1992, Pacific island developing countries submitted thirteen national reports to the UNCED Secretariat along with two regional contributions – the Ministerial Declaration on Environment and Development and the Regional Statement to the Third UNCED Preparatory Committee (see SPREP 1991b for these two documents). These were based in large part upon the information compiled on the state of the environment in various Pacific island countries during the RETA and NEMS projects. SPREP co-ordinated these national reports and regional contributions, which various donors helped fund: the Asian Development Bank, UNDP, AIDAB [Australia], and the government of New Zealand (SPREP 1994b, 1; Thistlewait and Votaw 1992, v). This and the subsequent *Pacific Way* overview combined a review of environmental issues in the Pacific with plans for future approaches. In doing so, they pushed states into undertaking environmental planning (as did the subsequent preparations for GCSDSIDS in the mid 1990s).

In 2000, the Forum Secretariat began co-ordinating the development of regional strategies on several topics that cut across environmental issues⁶. Working groups were preparing an oceans policy, an agriculture strategy and an energy strategy, all of which concern the environment in some way (John Low, Forum Secretariat, *pers. comm.*, August 2001). These are ‘high-level’ strategies, designed to reduce that fragmentation that has characterised various regional organisations efforts at environmental management, and to avoid duplication on various environmental issues (Gerald Miles, SPREP, *pers. comm.*, August 2001). Working out how best to implement them is being deferred until the Forum has approved the strategies. Only at this stage will the costs of implementation be considered, along with possible sources of funds (John Low, Forum Secretariat, *pers. comm.*, August 2001).

On one hand, the regional organisations have used environmental planning as a tool to advance modern environmental management in the South Pacific, through the message in the plans and through discursive mechanisms. On the other hand, they have not systematically attempted to institutionalise environmental planning in the South Pacific. The University of the South Pacific does not teach the discipline of statutory planning and the nearest school that does is at Auckland, New Zealand. The university’s law school has in the past taught land planning (Mere Pulea, University of the South Pacific, *pers. comm.*, July 2001), and law students currently examine the utility of planning as part of a third year course on economic development and planning (University of the South Pacific 1999a, 426-7).

⁶ The Forum Secretariat has also taken on the role of co-ordinating regional advice to the United Nations Commission on Sustainable Development, on behalf of the Council of Regional Organisations in the Pacific (Miles 2001, 105).

4.2.2 STYLE OF SPREP PLANNING

As discussed in section 3.3.3, these action strategies and nature conservation strategies portray Pacific islanders as victims of their geography, own actions and lack of expertise. They do not address social, socio-economic and political influences on environmental degradation. According to SPREP plans, the solution to the environmental problems of the South Pacific lies in such things as more projects, education, training and raised public awareness; better understanding of the environment; better information systems, better relationship with international organisations, and more planning and protection mechanisms. It does not lie in any fundamental change to political or economic relationships. Concepts of distributive environmental justice do not rate a mention in SPREP documents.

Neither SPREP's action plans or nature conservation strategies reflect the gradually increasing scientific knowledge about the region obtained through research at a wide range of institutions. Nor have advances in ecological thinking had a significant impact on SPREP action plans and nature conservation strategies. For instance, in the last two nature conservation strategies, there is no reference to any theoretical developments in island biogeography, or to any scientific research into individual ecosystems or species.

The action plans and nature conservation strategies appear to be a mix of ideas from various sources and people, cobbled together in a way that gives an appearance of coherence. When each new plan is produced it contains new ideas, plus various parts are carried over from previous plans. The introduction in the various action plans follows a similar line over the years, merely fleshed out a little more each time. Principles and objectives reappear, plan after plan, with only minimal tweaking. So do goals, objectives and programmes. There is also a 'flavour of the year' taste to these plans – one year it is sustainable development, another year ecological modernisation.

Both Meijer's (1984) and L. G. Smith's (1993) categorisation of modes of planning can be used to try to identify the type of planning process that characterises SPREP plans. SPREP planners have not used the common rational-comprehensive mode of planning mentioned in Chapter 2. That would involve identifying and evaluating all policy alternatives and choosing the best to implement. Nor can the SPREP plans be characterised as communicative planning. Communicative planning emphasises participation and communication in decision-making processes; participation has a value in itself. But participation in the process of writing SPREP plans is very limited. Consider those likely to have been involved in preparing an SPREP environmental plan: probably SPREP staff, possibly also consultants that SPREP has employed, and people from the donor agencies who are funding the plans and who wish to see it meets their expectations and standards. People from some non-governmental organisations are likely to have had some input, especially those from international ones with the resources to pay their staff to spend time on the plan. Politicians from various countries will meet to approve the plan – they may not have been involved before this stage. Although individual governments have the discretion to ask their people to become involved, the design of the SPREP

planning process has restricted the degree of inclusiveness that can be achieved. Staff from environment departments may be consulted, but people in departments which subsequently make the decisions needed to effect the planned tasks in their home countries are seldom involved (forestry staff who administer protected areas, for instance). Similarly, Pacific island state development planners, who often produce conflicting plans, are seldom involved; nor are those who control the budget in state agencies (various interviews).

Of all the modes of planning used in western societies, the SPREP action plans and nature conservation strategies best resemble an approach called 'disjointed-incremental planning'. Policy makers using a disjointed-incremental mode investigate only those that differ to a limited (incremental) degree from existing policies (Meijer 1984, 81). As a consequence the content of each subsequent plan differs only a little from the previous one. In disjointed-incremental planning the changes to policies are marginal – the decisions are always marginal to the status quo and objectives are adjusted to the means (Meijer 1984, 81).

There are advantages to the incremental mode of planning. In theory, it serves to bring consensus (Meijer 1984, 81), considered important in regional meetings of people from Pacific island countries. The Pacific Island Forum operates on this basis for instance, rather than by voting on issues. Instead of generating opportunities to respond to new situations with extensive reflection, the disjointed-incremental mode of planning reinforces the apparent need to maintain SPREP and its institutions so it can carry on the good work tackling the environmental problems of the South Pacific in the way it knows best. In contrast, a rational approach may suggest that past practice is not the best option any more. The disjointed-incremental mode also acts to emphasis the importance of talking about what to do rather than spending time and money assessing the situation, researching the feasibility of alternative approaches, monitoring their success and feeding this back – the plan/do/review cycle. It places much less emphasis on the need for monitoring results than a rational approach would.

Over the years SPREP staff have, through practice and experience, gradually improved their regional environmental planning process, expanding the range of participants (Gerald Miles, SPREP, *pers. comm.*, August 2001). These improvements can be seen in the action plans and nature conservation strategies over the years. SPREP staff have started to design a process to monitor the environmental outcomes when their plans are implemented (Gerald Miles, SPREP, *pers. comm.*, August 2001). The rudiments of this are in the 2001–2004 action plan. The Pacific Island Roundtable for Nature Conservation, created in 1998, is also working on assessing the effectiveness of conservation activities through monitoring and evaluation of the action strategies (Pacific Regional Biodiversity Planning Support Programme c. 2000, 1). The Roundtable has drafted the first 'inventory' of conservation activities in the region and to have drafted a set of 'success indicators' to be used by groups throughout the region to monitor conservation progress at key sites and at national level (Pacific Regional Biodiversity Planning Support Programme c. 2000, 2).

4.3 ENVIRONMENTAL IMPACT ASSESSMENT

When the SPREP Convention (described in section 3.2.3), was negotiated in the early 1980s, the issue of pollution from nuclear testing was very much in the minds of the delegates (Mere Pulea, University of the South Pacific, *pers. comm.*, July 2001). Article 16, which was very carefully considered and negotiated, requires each party to, within their capabilities, assess the potential effects of major projects that might affect the marine environment. In doing this, they are required to invite public comment according to their national procedures, and to invite to consult with them other parties to the convention that may be affected. In short, they are required to prepare environmental impact assessments. They are also required to convey the results of any such assessment to SPREP, which is then to make these available to other interested parties to the convention (SPREP 1983b, 16). SPREP administers this convention

One of the key ways that environmental impact assessment has been encouraged in the Pacific island region is through bilateral and multilateral donor programmes, many coordinated by SPREP (Onorio, 2000, 2). These have focused on training government staff, including training future trainers; on providing manuals and guidelines, encouraging governments to establish units to oversee their use of environmental impact assessment; and undertaking some environmental impact assessments for various development proposals.

The South Pacific Commission started the first training courses in environmental impact assessment techniques in the late 1970s. SPREP then ran specific training for environmental impact assessment for development projects in the mid 1980s (SPREP 1987, 1, 4). Despite this, by the end of the 1980s few Pacific island governments had staff who were able to evaluate and to monitor any environmental impact assessment study fully, or who could provide technical input. Aid agencies then began to allocate funds for technical training (Thistlewait and Votaw 1992, 208). The Asian Development Bank funded the preparation of a manual in 1989, written at the East-West Centre in Hawaii (*ibid*).

In the early 1990s, SPREP developed a regional programme on environmental impact assessment, 'Strengthening Environmental Management Capabilities in Pacific Island Countries', to (a) provide technical guidance to the region in response to requests regarding environmental planning and management of development activities; (b) increase environmental planning and management experience for development activities within the SPREP region; (c) promote further training in environmental planning and development management; and (d) enhance the SPREP Secretariat's abilities to coordinate research and training in environmental planning and management (Thistlewait and Votaw 1992, 305). Despite this emphasis on environmental planning generally, almost all the effort was concentrated on environmental impact assessment. Over eighteen months in 1992-93 SPREP staff carried out an environmental impact assessment training programme in 11 Pacific island countries to raise awareness of environmental impact assessment amongst both government ministers and officials. The courses were designed to encourage the integration of environmental considerations into economic development planning. As part of the course a booklet a *Guide to environmental*

assessment in the South Pacific was produced and a training video (Onorio 1994, ii, 1). UNEP and AIDAB funded this work (Morgan 1993, iii). As a result of this programme (according to Onorio 1997), almost all island governments established national environment units. SPREP then assisted these units to build up environmental impact assessment capacity. It drafted environmental impact assessment legislation and procedures to enable the units to develop and integrate their own environmental impact assessment procedure into their national development planning systems (Onorio 2000, 17).

A follow-on SPREP programme, 'EIA in National Planning', aimed to enhance the use of environmental impact assessment in island governments' national planning, and emphasised the need to train environmental impact assessment trainers (Onorio 1997, 5). From 1993 to 1997, over 400 Pacific island government staff participated in short courses designed to teach them how to use environmental impact assessment in their work (12.5 percent being senior government officials). More than 30 people (government staff) were trained as teach environmental impact assessment (although almost all had limited experience in applying it). SPREP staff undertook nine environmental impact assessments in various Pacific island countries and reviewed eight more (SPREP 1993e, 8-9; SPREP 1994b, 12-3; SPREP 1996a, 18; Onorio 1997, 11-2). UNEP funded this programme (SPREP 1994b, 18)⁷.

In 1997, Onorio (1997, 28), who had coordinated this effort, concluded that implementing environmental impact assessment as a management technique did not appear to be working in island countries. SPREP, therefore, decided that it should further encourage the use of environmental impact assessment, and that it would assist by: as managing information; developing a register of expertise and procedures; facilitating peer review of environmental impact assessment; and responding to requests for one-off urgent work (SPREP 1998b, 36). Amongst Pacific island states, there was some doubt over whether SPREP should fill this role. At a review meeting in September 1998, there was considerable support amongst Pacific island delegates, for establishing an environmental impact assessment unit at University of the South Pacific rather than at SPREP (Premila Kumar, Department of Environment, *pers. comm.*, July 2001). This has not eventuated.

Having vigorously marketed the technique of environmental impact assessment for a decade, in 2000-1, SPREP stopped promoting it in favour of wider environmental assessment techniques such as strategic environmental assessment, use of integrated guidelines, the ISO 14000 quality assurance system, land capability assessment, and participation methods (Matt McIntyre, SPREP, *pers. comm.*, September 2001). This coincided with a change in SPREP staff and was no doubt influenced by the professional background of the new Australian officer appointed to work on environmental assessment and reporting.

⁷ Between 1993 and 1997 AusAID funded a further environmental impact assessment training project in some Pacific Island countries (excluding Fiji); this project did not involve SPREP (SPREP and UNDP 2000, D-10).

Other regional organisations have helped institutionalise environmental impact assessment in the South Pacific. The University of the South Pacific teaches the technique as part of several courses in environmental law, land management, geography, and marine affairs (University of the South Pacific calendar 2000a). Over the last few years, SOPAC has also been involved in carrying out environmental impact assessment albeit in a minor way, and in providing advice on proposals affecting natural resources that fit their mandate – minerals, water, coastal development and energy (as explained in their web site - SOPAC 2001).

4.4 SUMMARY

Regional inter-governmental organisations are a conduit for environmental management ideas from bilateral and multilateral development assistance agencies and international institutions including the United Nations agencies, and from non-governmental agencies such as the IUCN. The staff of these organisations, many of them expatriate, have professional backgrounds and training in these methods of environmental management. As well as passing on these ideas to Pacific island states and organisations, regional staff have also been pro-active in promoting the way that they think the environment should be managed, influenced by their own professional and cultural backgrounds.

Of the three selected methods of environmental management, the regional organisations, without any authority over territory, can only use environmental planning and environmental impact assessment - the latter for assessing matters of regional interest. Of these methods, they have only practised environmental planning. Regional agencies, especially SPREP, have used environmental planning for their own purposes, to cement their own role and to help them coordinate regional efforts, including that on topics covered by international treaties from which they draw a mandate to work with both international institutions and Pacific island states. They have not, however, tried to transfer environmental planning techniques to Pacific island states through training courses and projects, as they have done for environmental impact assessment. Notwithstanding, the large planning projects they have co-ordinated have no doubt increased awareness amongst the island states about planning techniques.

The regional agencies have encouraged Pacific island states to protect areas, more recently as community conservation areas, and to conduct environmental impact assessments. Prior to 1990, regional agencies' work on protected areas took a scientific approach, and drew heavily on overseas experts in ecology and nature conservation. Since 1990 their work on protected areas has been mainly GEF funded, linked to international conventions and increased awareness about biodiversity following UNCED. It has focused on community conservation areas, and in doing so, has allowed regional agencies a more direct interface with communities, while still depending upon overseas experts.

The work on environmental impact assessment has been donor funded and was aimed at officials in Pacific island governments. It sought to transfer techniques developed in western countries to Pacific island states, and to establish government units that use these techniques. There has been only patchy implementation of environmental impact assessment systems across the Pacific (Onorio 2000, 16).

This aid funded work – the majority of protected areas work since 1990, all environmental impact assessment work and some of the environmental planning – has largely taken the form of projects and has involved the various mechanisms for institutionalising environmental management methods listed in section 3.3.1. It has contributed to the discourse described in section 3.3.2, through the documents that donors and SPREP have produced.

Not all the external influences upon environmental management in the South Pacific have been routed through regional organisations. Australia, Canada, China, Japan, New Zealand, the United States, France, Germany, and the United Kingdom all provide bilateral funding for environmental management in the South Pacific. Asian Development Bank, World Bank, GEF, UNDP, UNEP and European Union provide multilateral funding, some directly to Pacific island states⁸ (ESCAP 2001, 3). Development assistance agencies, both bilateral and multilateral, collectively channel far more aid directly into Pacific countries than into Pacific regional programmes. As at January 1999, their total annual budget for environmental management and sustainable development in Pacific islands was over US\$228 million (ESCAP 2001, 3). Non-governmental organisations' expenditure is additional to this. Much of this aid is for sustainable development in a general sense, rather than being targeted specifically at improving environmental management. For instance, only 15 percent of AusAID assistance of US\$88 million in 1999-2000 was for environment and natural resource programmes (ibid). Of this estimated US\$13 million, around US\$700,000, went to SPREP (Hunnam and Tuioi 2000, 27), and the remainder to Pacific island governments and other agencies working in the South Pacific (including other regional agencies that have a minor role in environmental management compared to SPREP). This example illustrates that a considerable amount of aid funds intended for improving environmental management reaches South Pacific countries without passing through SPREP. In the next chapter we examine instances in which development assistance agencies have worked directly with Fijian agencies, bypassing regional organisations.

⁸ In the 1990s the World Bank changed its previous approach to the Pacific which had been little concerned with the environment and more with the economy. It subsequently focused on (1) a series of regional economic and sector reports and (2) advice on development strategies and problems (World Bank 2000b, 25). The five reports on the region it has since produced include recommendations about specific methods of environmental management (World Bank 1993, 80; World Bank 1996, 86-8; World Bank 1998, 18 for instance). But none of the bank's environmental messages were new; they merely echoed concerns that had already been expressed in other forums and reports generated in, or already available in, the region e.g., SPREP plans.

5 ENVIRONMENTAL MANAGEMENT METHODS IN FIJI

This chapter describes how environmental planning and impact assessment have been used in Fiji, and how Fiji has established and managed its various protected areas. I describe the extent to which these methods have been institutionalised, the organisations that are involved, and the factors that may have impeded such institutionalisation. I also point out how Fiji's use of these techniques differs from the way that one expects these methods to be used in more developed countries like New Zealand. To provide background to sections on protected areas, environmental planning and environmental impact assessment in Fiji, I start with the general and indirect ways in which various types of international and regional organisations have influenced environmental management in Fiji.

5.1 INTERNATIONAL AND REGIONAL ORGANISATIONS IN FIJI

5.1.1 INTERNATIONAL ORGANISATIONS

The efforts of international organisations to institutionalise modern methods of environmental management in Fiji have been piecemeal. They have approached it in several ways, lobbying for their use, funding projects using them, and (with environmental impact assessment) requiring they be used. They have also paid the employment costs for volunteers and project officers practised in these methods, to assist state agencies. I describe specific instances in sections 5.2 to 5.4.

Environmental development assistance

Government use of foreign aid and development assistance for environmental management

Fiji relies less on foreign aid than all other Pacific island nations do. Foreign aid funds form only a small component of the government's annual budget (Thistlewait and Votaw 1992, 234-5). The Native Lands Trust Board, responsible for administering all native land for the benefit of the landowners under s. 4(1) of the Native Land Trust Act 1940, rarely uses foreign aid funds for its land management work. It relies instead on the 25 percent it derives from leases and on its annual government grant (Samisoni Matasere, Native Lands Trust Board, *pers. comm.*, August 2001)¹. In contrast, the Department of Environment relies heavily on foreign aid, and uses aid funds to undertake almost all its initiatives (*ibid*; Bhaskaran Nair, Permanent Secretary, Ministry of Local Government, Housing and Environment *pers. comm.* July 2001). This department is small by standards of other Fijian government agencies. It has nine staff and a budget that is around one tenth of one percent of the total government budget (ESCAP c. 2000a, 3). The department does not have any legislative powers. It acts instead through other ministries that do,

¹ When native land is leased the rent is distributed in the proportions of 25 percent to the Native Lands Trust Board, 22.5 percent to those holding three specified chiefly positions (not necessarily three separate persons), and 52.5 percent to all other members of the land-owning mataqali, which is the only type of land-owning unit that the colonial authorities recognised and codified (Gerard Ward 1994, 141). The Board is permitted to retain up to 25 percent for collection and administration expenses, under s14(1) of the Native Land Trust Act 1940.

negotiating with staff of these to use their powers to protect the environment (Epeli Nasome, Department of Environment, *pers. comm.*, May 2001).

Bilateral aid

There has been just one aid-funded project in Fiji designed specifically to institutionalise any of the three selected methods of environmental management. This project, carried out by a New Zealander in 1982, entailed preparing guidelines for environmental impact assessment and was funded by the New Zealand government (McClymont 1982). Several other aid-funded projects have, however, assisted in institutionalising environmental planning and impact assessment, and protected areas in Fiji. I describe these in sections 5.2 to 5.4. In addition, the Australian government assisted indirectly when it funded government infrastructure to administer environmental management, after the 1987 coups. Through its aid programme, it funded a principal environmental officer and three planner positions, to form a new environment management unit within the Ministry of Housing and Urban Development. An Australian, Stuart Chape, who had a background in environmental regulation and management in the Australian government, was appointed as principal environmental officer and remained for three years, during which time the government upgraded the unit to a full department (Dick Watling, *pers. comm.*, May 2001; Epeli Nasome, Department of Environment, *pers. comm.*, May 2001).

Multilateral aid agencies and United Nations agencies

UNDP has been the most active multilateral aid agency in Fiji. With its office in Suva that is also an operational centre for the GEF, UNDP's local staff have been able to work directly with the Fijian government, bypassing SPREP and other regional organisations (Jenny Bryant, UNDP, *pers. comm.*, June 2001). This happened during drafting of the national strategy for conservation and sustainable use of biodiversity, required under the Convention on Biological Diversity. The Department of Environment prepared the strategy, with financial assistance from GEF. Nominally SPREP funded the department for this work, as it co-ordinated various national biodiversity strategies in the region as part of a GEF project. In practice, UNDP administered the project in Fiji through its Suva office (Jenny Bryant, UNDP, *pers. comm.*, May 2001). I describe the environmental planning entailed in this project, in section 5.3.

The Asian Development Bank has also tried to shape environmental management in Fiji through various projects described later in this chapter. ESCAP, on the other hand, has had little direct influence on environmental management in Fiji. The Fiji government has tended to look towards SPREP rather than towards ESCAP (Bhaskaran Nair, Ministry of Local Government, Housing and Environment, *pers. comm.*, July 2001). None of the World Bank's Fijian projects has focused on institutionalised specified methods of environmental management (see World Bank 2000b, 24, 39). Even though the World Bank first became involved in the Pacific in the 1970s, and Fiji joined it the following year, the only contributions the Bank has made to introducing modern environmental management to Fiji have been through the GEF.

International environmental non-government organisations in Fiji

Several international environmental non-governmental organisations are represented in Fiji including WWF, whose South Pacific programme is based in Suva, Greenpeace, and the World YMCA (UNEP c. 1998, 5-6; Fiji telephone directory 2001). Apart from some small-scale lobbying of government, none of these organisations has worked specifically on institutionalising environmental impact assessment or environmental planning in Fiji. Several international environmental non-governmental organisations have, however, been involved in proposals to protect certain areas, as I describe in section 5.2.

5.1.2 FIJI'S IMPLEMENTATION OF REGIONAL AND INTERNATIONAL TREATIES

The regional and international environmental treaties that Fiji has signed are listed in Appendix 2. The list is extensive. I have already discussed the provisions of treaties relating to protected areas, environmental impact assessment and environmental planning (see section 2.2 and 3.2 for international and regional agreements respectively). Fiji has yet to give effect to almost all its obligations under these treaties (ESCAP 1999a, section V-F; Mere Pulea, University of the South Pacific, *pers. comm.*, July 2001).

In the mid 1990s, the Asian Development Bank funded a consultant to prepare a comprehensive package of legislation to implement 13 international conventions and agreements concerning sustainable development, environmental protection and resource management, and to give effect to the commitments the Fijian government made at UNCED (SPREP and ESCAP 1996, 44)². Mere Pulea an environmental law specialist from University of the South Pacific and Sefanaia Nawadra from the Department of Environment worked with the consultant to draft legislation (Mere Pulea, University of the South Pacific, *pers. comm.*, July 2001; Sefanaia Nawadra, *pers. comm.*, August 2001). The resultant draft bill contained provisions relating to biodiversity conservation, pollution and waste management, natural resource management, environmental impact assessment and other development controls. It incorporated two previous attempts at drafting wildlife management and protected areas legislation. It was a large bill and would have necessitated sweeping changes to the government and a huge investment in new and expanded institutions.

The government set up various sub-committees and technical committees to consider aspects of the draft bill and sought public submissions (Mere Pulea, University of the South Pacific, *pers. comm.*, July 2001). Then, upon Cabinet's instruction, the Parliamentary draughtsman reduced it to a much shorter bill of 75 clauses - the Sustainable Development Bill 1998. The shorter bill specifies a process for mandatory

² These 13 agreements were the Apia Convention, SPREP convention, the Convention on International Trade on Endangered Species of Wild Fauna and Flora, the Ramsar Convention, World Heritage Convention, International Convention for the Prevention of Pollution from Ships, London Dumping Convention, Waigani Convention, International Convention on Oil Spill Preparedness, Response and Cooperation, the Vienna Convention and Montreal Protocol on the Ozone Layer, the Climate Change Convention, Agenda 21 and the Rio Declaration (ESCAP c. 2000b, 2).

environmental impact assessment, codes of environmental practice, and a national resource management inventory and plan, and provides for a National Council for Sustainable Development, environmental management units, and environmental management committees. The provisions regarding wildlife management and protected areas were omitted.

Although Cabinet did not state its reasons for shortening the bill, it is widely believed that it was to avoid massive changes to the state, changes that had not been adequately considered during its drafting in which the overseas consultant had undue influence (Sefanaia Nawandra, *pers. comm.*, August 2001)³. Another reason commonly cited for shortening the bill was that of existing government ministries objected to the proposed, greatly increased power of the Department of Environment. Parliamentarians were considering the shortened bill in May 2000, when armed gunmen took them hostage. The subsequent caretaker government did not consider the bill during its term (Mere Pulea, University of the South Pacific, *pers. comm.*, July 2001) and it awaits the government elected in late 2001. According to the permanent secretary, the government will, some time in the future, reconsider the parts deleted when the bill was shortened. These include sections about biodiversity and conservation (Bhaskaran Nair, Ministry of Local Government, Housing and Environment, *pers. comm.*, July 2001).

5.1.3 FIJI'S INTERFACE WITH THE REGIONAL ORGANISATIONS

Aside from SPREP, the principal regional agencies involved in environmental management are based in Suva. SOPAC, the Forum Secretariat, and the University of the South Pacific are all based there. SPC, based in Noumea, has a secondary office in Suva. Of all South Pacific countries, Fiji is probably best placed to interface with these agencies. Even SPREP, based in Apia, is relatively close in Pacific terms. Fijian government staff are able to talk directly to staff in the regional organisations based in Suva and are able to make use of their expertise (such as asking SOPAC staff for advice on the geophysical matters connected with potential environmental impacts of certain development proposals). These organisations are well placed to influence the use of specific environmental management methods in Fiji.

SPREP has a system of national focal points in each country – both government and non-governmental contacts. In Fiji, the Department of Environment is the SPREP focal point. (There are also the non-governmental focal points – local non-governmental organisations including SPACHEE, Foundation for People's of the South Pacific, and the Pacific Concerns Resource Centre.) All SPREP contact with the Fijian government is directed through the department, including publications and invitations to attend meetings or to participate in projects (Epeli Nasome, Department of Environment, *pers. comm.*, May 2001). Because of this arrangement, the Native Lands Trust Board, custodian of the bulk of land in Fiji,

³ Various problems have been identified in hindsight. These include the template approach which the consultant tried to use in Fiji and other countries; the emphasis put on developing legislation rather than other solutions; disregard for local circumstances including the Native Lands Trust Board set-up; and the fact that there was not any costing of the of institutional changes being considered (various interviews).

has had little contact with SPREP especially in recent years (Pio Manoa, Native Lands Trust Board, *pers. comm.*, May 2001).

SPREP's annual reports document its assistance to Fiji. In mid-1980s it helped fund two mangrove management plans. Since 1990, it has mostly assisted Fijians to participate in various meetings, conferences and training sessions. The only projects concerning environmental planning, protected areas and environmental impact assessment on which SPREP has worked with Fijians since 1990 have been the Koroyanitu Conservation Area and, in a minor way, on the Bouma eco-tourism venture associated with another community conservation area (both described in section 5.2). It also funded a turtle conservation strategy (Weaver 1996). There may be other projects not listed in these annual reports but the overwhelming impression is that SPREP has had little involvement in institutionalising environmental planning, impact assessment and protected areas in Fiji.

5.2 PROTECTED AREAS

5.2.1 EXTENT AND MECHANISMS OF INSTITUTIONALISATION

Legal requirements

The Fijian government has acceded to both regional conventions that contain provisions on protected areas – the Apia and SPREP conventions – and to the World Heritage Convention and the International Convention on Biodiversity Conservation that also contain such provisions (see Appendix 2). Fiji has yet to meet its obligations under the Apia Convention to conserve representative ecosystems adequately. It has yet to provide adequate protection for rare and fragile ecosystems, and depleted, threatened and endangered flora and fauna, required under the SPREP Convention. Fiji has yet to take appropriate legal, scientific, technical, administrative and financial measures to identify, protect and rehabilitate its natural (and cultural) heritage under the World Heritage Convention. Although it is yet to declare any World Heritage sites, several government departments have in recent years discussed the suitability of Sovi Basin in Naitasiri (Viti Levu) (Susana Tuisese, Department of Forestry⁴, *pers. comm.*, August 2001). The Fijian government has also been considering joining the Ramsar Convention and has been searching for a suitable area to declare a protected wetland (Epeli Nasome, Department of Environment, *pers. comm.*, May 2001).

The government does not have a clear policy about protected areas or about its national priorities and goals (Pulea 1992, 115). The legislation covering protected areas is piecemeal; at least seven different acts cover different types of protected area (*ibid*). There is no special purpose legislation providing for reserves or national parks, an unusual omission by Australasian standards.

⁴ The Department of Forestry is part of the Ministry of Fisheries and Forests.

Number of protected areas; degree of protection

All the land areas protected under Fijian legislation are listed in box 3. I have not included beaches managed for amenity purposes, areas in pine plantations, or any marine areas. The Extension Division of the Department of Forestry manages some of the formally protected areas – the forest and nature reserves protected under s.6 and s.7 of the Forest Act 1953 Cap. 150 respectively. The National Trust of Fiji, a statutory body, manages others⁵. A commercial tourist operator manages one under a lease arrangement with the Native Lands Trust Board (Namenalala Island, 43 ha of native land, protected since 1984). Under s.9 of the Native Lands Trust Act 1940 Cap. 134, the Board may grant leases and licences for native land, and occasionally does so for conservation purposes such as creating the Namenalala nature reserve (Pio Manoa, Native Lands Trust Board, *pers. comm.*, June 2001).

In addition to the formally protected areas listed in box 3, there are also areas with informal protection, for which there is no definitive list. They include conservation areas that communities have set up, namely Bouma on Taveuni Island, and Koroyanitu in western Viti Levu (SPREP 1999a, 39; Pio Manoa, Native Lands Trust Board, *pers. comm.*, June 2001)⁶. Since 1970 the Department of Lands has managed Nukulau, a small island in Suva lagoon, and the surrounding reef as a protected area, under regulations pursuant to the Crown Lands Act 1946 that provide for public use of the area (Tabua 1997, Appendix II)⁷. These are shown on map 3.

⁵ The Trust has the power to purchase land and to enter into voluntary agreements to protect land. It was created by special act: the National Trust for Fiji Act 1970 Cap. 265. This Act states the general purpose of the Trust includes promoting permanent reservation for the benefit of the nation of lands, buildings, furniture, pictures and chattels which have national, historic, architectural or natural interest or beauty; protecting and augmenting the amenities of any such land or buildings and their surroundings to preserve their natural aspects and features; protecting plant and animal life; and providing for public access and enjoyment of these (s. 3).

⁶ There is a third, a marine community conservation area at Verata in Eastern Viti Levu. This is associated with a biodiversity prospecting arrangement with a Scottish pharmaceutical research group in which the University of the South Pacific is also involved. Non-governmental organisations are also involved: Biodiversity Conservation Network, the Rainforest Alliance and the South Pacific Action Committee on Human Ecology and the Environment (SPACHEE) (Biodiversity Conservation Network 1999, 207-9).

⁷ See legal notices numbers 102 of 1970, 107 of 1982. At the time of writing, the island was being used as prison for those awaiting trial on treason charges after the hostage-taking at Parliament in May 2000, and was closed to the public.

Box 3: Areas in Fiji protected by legislation for nature conservation purposes

NATURE RESERVES (FOREST ACT)

Draunibota and Labiko (1 and 2 ha, gazetted in 1959; islands close to Suva, Viti Levu)
Nadarivatu (93 ha, gazetted in 1956; part of a forest reserve; montane forest on Viti Levu)
Naqaranibuluti (279 ha, gazetted in 1958; montane forest on Viti Levu)
Ravilevu (4,020 ha, gazetted 1959; coastal/ hill forest on Taveuni)
Tomaniivi (1,332 ha, gazetted in 1958; montane forest on Viti Levu)
Vunimoli (19 ha, gazetted in 1967; montane forest on Vanua Levu)
Vuo (1 ha, gazetted in 1960; an island close to Suva, Viti Levu)
Wabu (1,102 ha, gazetted 1999; montane forest on Viti Levu)

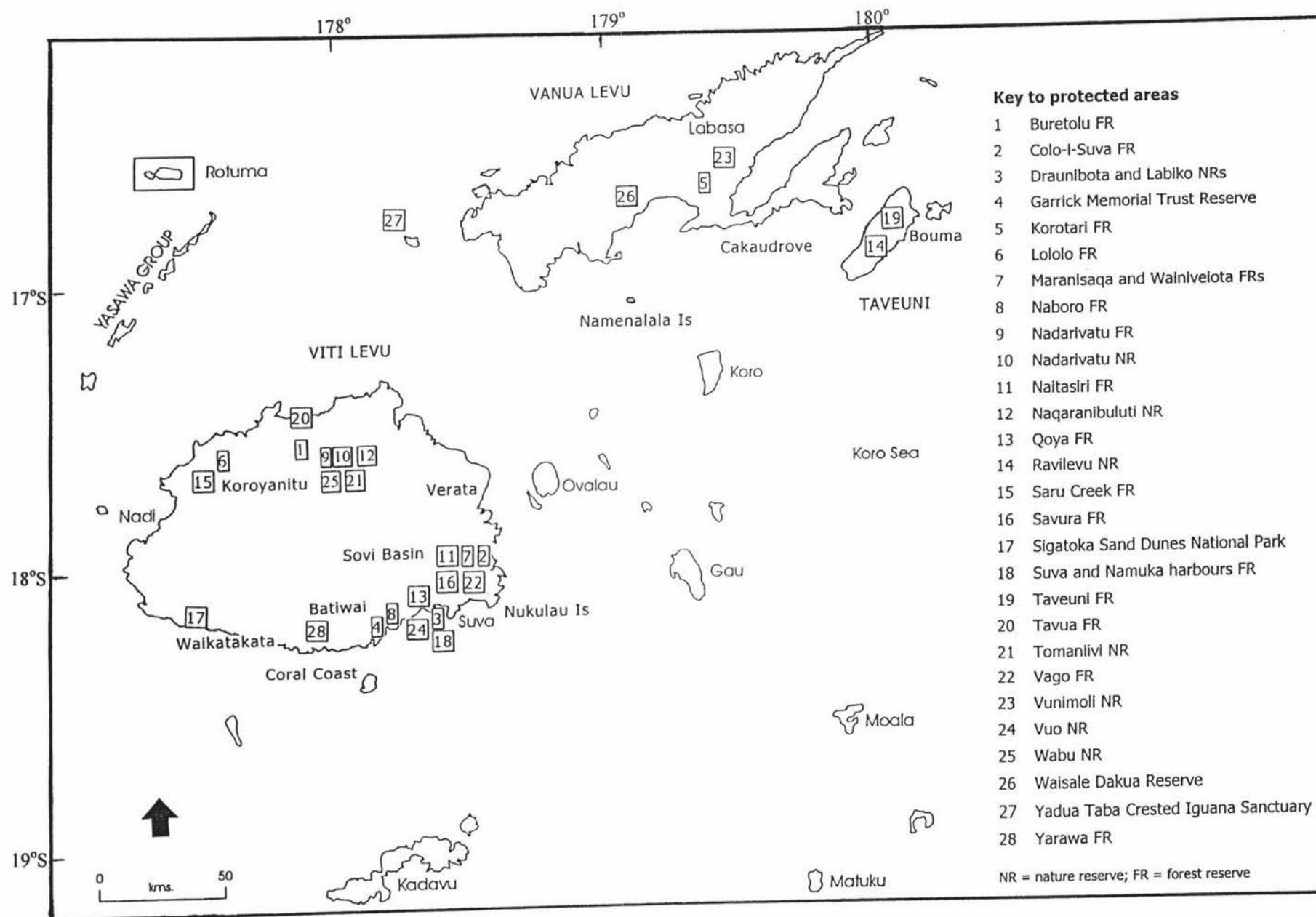
FOREST RESERVES (FOREST ACT)

Buretolu (1,199 ha, gazetted 1926, Viti Levu)
Colo-i-Suva (370 ha, gazetted 1963, Viti Levu near Suva)
Korotari (1048 ha, gazetted 1964 and 1961, Vanua Levu)
Lololo (6,872 ha, gazetted 1968, 1969 and 1980, Viti Levu)
Maranisaqa and Wainiveiota (77 ha, gazetted 1955, Viti Levu)
Naboro (19 ha, gazetted 1969 Viti Levu)
Nadarivatu (6,625 ha, gazetted 1954, 1968 and 1975, Viti Levu)
Naitasiri (30 ha, gazetted 1969, Viti Levu)
Qoya (67 ha, gazetted 1955, 1959, Viti Levu)
Saru Creek (1,260 ha, gazetted 1973, 1983 and 1980, Viti Levu)
Savura (448 ha, gazetted 1963, Viti Levu)
Suva and Namuka harbours (undefined area of mangrove, gazetted 1913 and 1955; Viti Levu)
Taveuni (11,160 ha, gazetted in 1914, Taveuni Island)
Tavua (0.2 ha of mangrove, gazetted 1958, Viti Levu)
Vago (389 ha, gazetted 1959 Viti Levu)
Yarawa (162 ha, gazetted 1962; Viti Levu)

SITES PROTECTED BY NATIONAL TRUST OF FIJI UNDER THE NATIONAL TRUST ACT

Garrick Memorial Trust Reserve (430 ha, freehold title gifted by landowners in 1983; Viti Levu)
Sigatoka Sand Dunes National Park (240 ha, gazetted by Cabinet in 1988; a Lands Department lease; Viti Levu)
Waisale Dakua Reserve (120 ha established c.1981 with landowners agreement; a NLTB lease; Vanua Levu)
Yadua Taba Crested Iguana Sanctuary (70 ha island off Vanua Levu protected after a Cabinet decision in 1981; initially by agreement between National Trust and the mataqali chief; now leased)

Source: The Forest Act area details are from Tabua (1997) with the addition of details on Wabu from Susana Tuisese, Department of Forestry, *pers. comm.*; the remaining details are from National Trust files and from Fiji Ministry of Housing and Development and IUCN (1992).



Map 3: Areas in Fiji protected for nature conservation

Landowners, with assistance of Native Lands Trust Board and Department of Forestry, set up the Waikatakata Forest Park, 70 hectares of rain forest on the Coral Coast of Viti Levu, in 1991 (Tabua 1997, Appendix II). The Extension Division of the Department of Forestry states that it manages approximately 264, 000 hectares of forests on steep land for soil conservation reasons. This includes Batiwai protection forest (16,000 hectares) in southern Viti Levu in which forest clearance is prohibited under section 8 of the Forest Act 1953 (MAFF c. 2000, 21). Customary law also plays an important role in the management and preservation of traditional protected areas such as sacred sites, old village sites, burial grounds, and areas with both spiritual and cultural significance protected for one reason or another (Pulea 1992, 115).

Forest areas protected under the Forest Act (forest, nature reserves and protection forests) form the bulk of formally protected land in Fiji. These areas amount to about five percent of the forest area remaining in Fiji and less than three percent of the total land area⁸. Virtually all of this is on steep land, with little coastal or mangrove areas being formally protected. Prior to 1975 all areas of mangrove outside urban areas had been declared forest reserves. The government declassified these in 1975 to allow indigenous Fijians to practice their traditional rights. Mangroves now have no legal protection (IUCN 1985), except for the small areas that are in forest and nature reserves.

The legal degree of protection varies for the areas listed in box 3. Around 7,500 hectares are totally protected, mainly as nature reserves. Various uses for customary purposes, or uses that benefit a village are legally permitted in the forest reserves which total approximately another 30,000 hectares; the Conservator of Forests may approve uses of these reserves under a contract or grant (s6 Forest Act 1953). Many of these forest reserves have been logged and planted out in mahogany, a valuable, introduced timber species (Dick Watling, *pers. comm.*, May 2001). Reservation under the Forest Act is not in perpetuity. De-reservation only requires Ministerial approval and a number of de-reservations have occurred in recent years (Department of Environment 1997, 16). In short, there is little protection at all.

The degree of protection also depends upon management efforts. In Fiji this is minimal by Australasian standards. The Extension Division of Department of Forestry, which is responsible for nature and forest reserves, has a very small operational budget and the only reserves upon which its staff can keep an eye are those near Colo-i-Suva, at which it has its headquarters on the outskirts of Suva. The Division does not have funds to place forest rangers around the other reserves, and although its staff are aware that there is encroachment in places because other forestry staff occasionally advise them of this, they are not aware of extent of logging or other forms of forest clearance in the reserves (Susana Tuisese, Department of Forestry; *pers. comm.*, August 2001). There have definitely been illegal clearances. Logging and clearances are reportedly common in other forests managed for protection purposes; the Batiwai

⁸ These calculations are based on an estimated land area in Fiji of 1,892,106 hectares and a total forested cover of 1,067,310 hectares (MAFF c. 2000 21). This estimated forest cover includes areas previously cut-over or otherwise altered.

protection forest was logged several years ago (Chape and Watling 1992, 138-9). The state does not have a satisfactory system to monitor the areas under its jurisdiction, or to prevent these being illegally logged.

Over the years the National Trust has also struggled to adequately manage the areas under its protection. The Garrick reserve was illegally logged several years ago (Chape and Watling 1992, 139) and no-one was prosecuted for this (Elizabeth Erasito, National Trust, *pers. comm.*, July 2001). The Sigatoka Sand Dunes, the most visible and well-known of its sites, is another example of this struggle. The dune area is considered outstanding for several reasons – it is the only extensive dune area in the Pacific islands, it is a burial ground for more than 100 people of considerable archaeological interest dating back at least 2000 years, and is of botanical interest (Chape and Watling 1992, 138). It also has an attractive lagoon at the western end that locals use for fishing and recreation (*pers. obs.*). The Trust has built a visitor centre at the Sigatoka dunes, installed a ranger who collects entrance fees, and maintains the centre grounds and access tracks. With the assistance of a local Rotary club and the National Poverty Alleviation Fund, the Trust relocated several squatter families living in the area when Cabinet first declared it a national park (National Trust file, Suva). The park is on Crown land and Cabinet declared it a national park in the expectation that it would shortly pass legislation concerning park management. This legislation never eventuated. The government delegated park management to the National Trust and granted it a 99 year lease. The lease document sets out how the Trust is to manage the park.

The Trust does not manage the park to the standard expected of a national park (or in compliance with its lease conditions), largely to lack of finance, but also to problems with nearby villagers who were not consulted when it was set up (Elizabeth Erasito, National Trust, *pers. comm.*, July 2001). The park suffers from regular burning of grassland and scrub in the back of the dunes, weed infestations, litter, grazing stock, and villagers who drag firewood through sensitive dune areas and regularly sell the sand (National Trust file, Suva; *pers. obs.*). The government gives the Trust an annual grant to manage the areas under its control, and expects it to raise finance elsewhere⁹. The Trust has failed, however, to attract significant financial support. This may, in part, be because its past management did not inspire confidence (Viane Amoto Ali, National Trust, *pers. comm.*, July 2001; Robin Yarrow, previous Trust member, *pers. comm.*, August 2001).

The ways protected areas have arisen

Considered collectively, the areas formally protected in Fiji do not constitute a network of protected areas based on ecological criteria; they were largely set up for different purposes (Chape and Watling 1992, 138). Ecological and heritage considerations were involved in the selection of only one or two reserves (Department of Environment 1997, 16). The colonial government chose reserves based upon terrain, soil

⁹ For several years, the government allocated the Trust FJD\$80,000 a year to run its entire operation which includes headquarters in Suva and eight sites; it increased this a little in 2001 (Viane Amoto Ali, National Trust, *pers. comm.*, July 2001). This is approximately USD\$36,800.

erodability and climatic considerations rather than on ecological ones (Susana Tuisese, Department of Forestry, *pers. comm.* August 2001).

Aside from the reserves created by the colonial government (almost all the nature and forest reserves), protected areas in Fiji have come about by a number of routes. These include the efforts of the National Trust negotiating with landowners (Yadua Tabua; Waisale Dakua), and the efforts of the Native Lands Trust Board and the Ministry of Fisheries and Forests (Wabu). The areas managed by National Trust arose because of desires to protect certain aspects (iguana on Yadua Tabua, sand dunes and archaeological sites at Sigatoka, dakua (kauri) forest at Waisali). In 1989 a government-sponsored Conservation Steering Committee, comprising people from various government departments and non-governmental organisations in Fiji, looked at options to protect forest areas and at eco-friendly options for development. Having identified 14 possible areas, the committee then asked the New Zealand government for assistance (Alivereti Bogiva, Ministry of Fijian Affairs, *pers. comm.*, July 2001). This led to four people from the Maruia Society and from Forest and Bird doing a rapid survey of the 14 areas and to the recommendations in Lees 1989 (which confirmed the committee's choices). Following the survey, the first area that the committee chose to follow up was Bouma, on Taveuni Island. After five years of consultation, plus assistance from NZODA, this led to establishing an eco-tourism venture and forest heritage park as a community conservation area; the park does not have any legislative status. The committee then lapsed (Alivereti Bogiva, Ministry of Fijian Affairs, *pers. comm.*, July 2001).

Community conservation areas have arisen where landowners wanted to supplement their income or wanted an alternative to logging. When the Bouma landowners set up their area in the early 1990s, it was as an alternative to granting logging permission to a Korean company that had been seeking it actively (Mika Colaudolu, Bouma, *pers. comm.*, June 2001). The Bouma community wanted to provide local employment and income. Their park includes forest near the villages plus an adjacent nature reserve and forest reserve. In 1993, work began on establishing another community conservation area at Koroyanitu in western Viti Levu. This also centred on eco-tourism operation. Koroyanitu was the 'official' community conservation area project for Fiji under the South Pacific Biodiversity Conservation Programme that SPREP co-ordinated; both NZODA and SPREP have assisted it (SPREP 1994b, 8; Reti 1996, 5). NZODA has supported both the Koroyanitu and Bouma ventures since the early 1990s (Dave Bamford, Tourism Resource Consultants, *pers. comm.*, August 2001). The state has been involved mainly through the enthusiasm of certain people: Alivereti Bogiva, then in the Department of Forestry played a key role in establishing the Bouma venture, and Sefanaia Tabua at Native Land Trust Board actively encouraged both ventures. The Board's land use planning staff encouraged eco-tourism to provide some income to these landowners, in an attempt to use development aid without communities becoming dependent on it (Sevanaia Tabua, formerly of Native Lands Trust Board, *pers. comm.*, May 2001).

The Native Lands Trust Board's role in protecting areas

As well as the Bouma and Koroyanitu community conservation areas, the Native Lands Trust Board has been involved in other proposals to protect areas of native land, including Namenalala, Waisale Dakua

and Yadua Tabua. The Board may choose to restrict its involvement to issuing a lease under s.9 of the Native Lands Trust Act 1940. Alternatively staff may become actively involved in researching and developing the proposal, working with the Fijian landowners.

In the late 1980s and 1990s, Board staff pro-actively searched for ways to ally conservation and development in certain areas. They investigated the forest areas identified in the National Environmental Management Strategy as being a priority for protection (letter from Stefan Cabaniuk land use planner Native Lands Trust Board to Roko Tui, Kadavu, 9 August 1996). The strategy had listed 10 'priority areas for complete protection', several of which were existing proposals or reserves (IUCN 1993, 49). The Board's land use planning staff researched the feasibility of these, discussed the idea with villagers sometimes at length, and prepared plans incorporating proposals for forest conservation areas (see Cabaniuk 1997; Wright and Cabaniuk 1996; Cabaniuk 1998 for instance). There has not been any further legal protection as a result of this work. When Board was restructured in the late 1990s, there was a complete turnover of staff in the Board's land use planning section and all these projects were halted (Samisoni Matasere, Native Lands Trust Board, *pers. comm.*, August 2001). New staff are focused on promoting development of native lands, but may yet take a fresh look at some of the earlier conservation proposals (Samisoni Matasere, Native Lands Trust Board, *pers. comm.*, August 2001).

Attempts to create a system of protected areas

Various government reports plus papers from regional nature conservation conferences refer to several attempts to establish a system of protected areas in Fiji. In 1975 the Government expressed, in Development Plan (DP) 7, the intention to survey potential national parks and reserves and to set some aside as natural areas (Government of Fiji 1975, 59). This was retained as a policy in Development Plan 8, produced five years later (see Government of Fiji 1980, 284). In 1980 a consultant, in a study supported by IUCN, WWF and UNEP, suggested a system of national parks and reserves that the National Trust could pursue (see Dunlap and Singh 1980). In 1989, two New Zealand non-governmental organisations (Maruia Society, Forest and Bird) proposed a system of national parks and reserves for Fiji's forests (Lees 1989) based on the Conservation Steering Committee's list of areas to investigate. In 1993, the national environmental management strategy recommended protection of several areas and a national survey to identify further worthy areas (IUCN 1993, 49). In 1999, the draft biodiversity strategy and action plan contained a similar although expanded list, as well as the objective of establishing 'a comprehensive and representative core protected areas system' (Department of Environment 1999, Focus 3).

Much the same group of government agencies (and some of the same people) has been involved in these attempts: various government agencies and local non-governmental organisations, the National Trust, and the Native Lands Trust Board. Very few of the suggestions for protection have ever been fulfilled. In comparison with western countries such as Australia and New Zealand, the Fijian state has rarely used formal legal mechanisms to protect new areas or to add to existing ones. And of the new areas that it has protected since independence, Government departments manage only two.

5.2.2 IMPEDIMENTS AND POINTS OF DIVERGENCE

Institutional impediments to establishing western-style protected areas in Fiji

There are several institutional difficulties in creating protected areas in Fiji. To begin, no single government agency is charged with conservation, and with identifying, institutionalising and administering a system of protected areas. As a result, the western ethos of conservation and park management has certainly been less effectively promoted in Fiji than it has in countries such as New Zealand which has a Department of Conservation, and before that a powerful Department of Lands and Survey, working with the national parks ethos. Both the national environment management strategy and the long version of the Sustainable Development Bill recommended a single conservation agency, one that was not followed up. For its part, the National Trust resisted being changed into a conservation organisation, because it believed it was, and should continue to be, concerned with heritage as much as with nature conservation (Elizabeth Erasito, National Trust, *pers. comm.*, July 2001). The Trust manages historic sites not listed in box 3.

Apart from the Sigatoka sand dunes, the post-independent government has not shown any initiative or willingness to declare Crown land protected and has in fact removed the protection accorded mangrove forest by the colonial government. Almost all recent proposed areas for protection are areas of native land, but policy, legislation and practice all suggest that the state does not condone alienating any native land to create protected areas in the public interest, unlike the situation in Thailand, Madagascar and many other Third World countries mentioned in Chapter 1.

Proposals to protect native land mean discussions between the local community, and various agencies including the Native Lands Trust Board, Ministry of Fijian Affairs, the provincial councils and several other government ministries that wish to be involved. The ministries of Fijian Affairs, Education, Women and Culture, Environment and Forestry, as well as University of the South Pacific staff, non-governmental organisations and the Native Lands Trust Board are all involved in discussions about whether Sovi Basin should be declared a World Heritage site (Susana Tuisese, Department of Forestry, *pers. comm.* August 2001). Although such involvement probably serves to avoid subsequent conflicts, it is a protracted process.

Another major impediment is that to conserve even a single area requires dedicated people inside Government to champion the idea. All too frequently, however, such dedicated staff resign, are promoted or transferred before the lengthy and cumbersome process can be completed. The project is then filed and forgotten and their efforts are wasted. This means proposals wax and wane in popularity as people become enthusiastic then move on. Furthermore, most public servants are based in Suva and have very small budgets for frequent travel, so they rely on foreign aid to supplement this (Alivereti Bogiva, Ministry of Fijian Affairs, *pers. comm.* July 2001). Negotiating with villagers and helping them develop alternative income sources to logging also requires certain skills, skills that are not necessarily found in government staff employed for other skills and experience.

With the exception of tabu areas, the idea of protecting areas and excluding all human activities except professional management ones or low impact recreational activities, is foreign to rural Fijian communities¹⁰. In these communities, people ‘manage’ the areas that surround them to provide items for daily life – everything from food, housing materials, medicines, cosmetics, items of spiritual significance and areas to place their dead (Ravuvu 1988, 10-14; Gerard Ward 1994, 134-5). In the forest, they hunt wild pigs and fowl, gather food such as wild yams, nuts and freshwater prawns, cut trees for building houses and canoes and for firewood, and gather medicinal plants (Isaaki Tale, *pers. comm.*, Bouma, July 2001). Because of this, these village surrounds differ from formally protected areas in industrialised countries, which are managed to remain as natural as possible, to the extent of ensuring that no-one lives there permanently or harvests items either for daily use or to sell. The Fijian attitude sometimes seems strange too westerners in Suva suburbs where a household may cut down an avenue of roadside palms to provide decoration for a feast (*pers. obs.*). Imagine people cutting down cabbage trees on a median strip in Invercargill or Christchurch.

When an area is informally protected as a community conservation area, with or without an accompanying income-earning venture, the respective roles of the traditional community leaders and those managing the latter ventures are not necessarily clearly defined and understood in the villages, as experience at Bouma has shown. This can lead to confusion and conflict (Alivereti Bogiva, Ministry of Fijian Affairs, *pers. comm.*, July 2001).

When an area is protected it needs to be managed to ensure it remains in a natural state and to make it suitable for tourist who pay to see it. This may entail preventing the introduction of natural pests; it may involve providing tracks and bridges. Such concepts of park management are poorly known in Fiji (Alivereti Bogiva, Ministry of Fijian Affairs, *pers. comm.* July 2001). Concerns such as the recent introduction of the mongoose to Taveuni Island that has the potential to decimate the native bird population, do not even feature on the government’s agenda (Dick Watling, *pers. comm.*, August 2001). The government is completely careless about internal quarantine and actively spreads some potential pests such as tilapia (and African freshwater fish) (Cameron Hay, University of the South Pacific, *pers. comm.*, October 2001). In the state, there has not been any recognition of the concept of management planning for the areas protected under the Forest Act. The National Trust has prepared draft management plans for its main protected areas but these have not been followed (Elizabeth Erasito, National Trust, *pers. comm.*, July 2001; National Trust files).

Within native communities, people are used to managing areas to provide their own needs, but not those of tourists. Nor are they used to managing ecological threats that come from outside. Expatriate advisers can have little experience of local situations and culture and attempt to apply overseas standards of park management in communities in which the idea is totally alien. An example of this is the management plan

¹⁰ Tabu areas (or items) are forbidden or prohibited, a form of spiritual or religious sanction, which usually means ‘no admission’ (Cappell 1991, 210).

that a New Zealand Department of Conservation planner drafted for Bouma along the lines of a New Zealand park management plan, which included patronising and inappropriate statements about how villagers should behave (Wakelin 1991).

Paying for conservation

Community conservation areas give rural communities a way of earning money from their resources without selling these – to loggers for example. But Fijian communities are not queuing up to protect their land in order to derive income from it. Apart from the Bouma, Koroyanitu and Verata community conservation areas, the only other places where this is happening in Fiji are two reserves, Wabu nature reserve and Saru Creek forest reserve, for which the government pays annual rent and compensation, along with the Taveuni forest reserve which is part of the informal heritage park at Bouma. The government pays a total of almost FJD\$29, 000 in compensation annually for these three reserves¹¹. It pays this to Native Lands Trust Board which takes its 25 percent and then distributes the remainder to the chiefs and members of the mataqali. In addition the government paid annual rent for these three reserves, which amounts to almost FJD\$22,000 and also pays an one-off lump sum in the first year in which an area is leased for protection (Susana Tuisese, Department of Forestry, *pers. comm.* August 2001). The government adopted this system of compensation for foregone royalties on standing timber in undeveloped reserve forest on native land in 1991 (MAFF c. 2000, 21). It spends far more on rent and compensation than it does on conservation management for these reserves. The state is reluctant to pay compensation for any more reserves (Susana Tuisese, Department of Forestry, *pers. comm.*, August 2001) and the National Trust is reluctant to start paying compensation – as requested by the Waisale landowners, for instance (Viane Amoto Ali, National Trust, *pers. comm.*, July 2001).

The option of conserving areas is really only favoured when foreigners are willing to pay for it. This may be providing infrastructure and marketing for eco-tourism, or through compensation. Both these routes to rural development involve the state, including the Native Lands Trust Board. The state generally, and the Board in particular, benefit from the income from leasing native land, subsequent production on it, and from logging or mining this land (through rents, income tax and indirect tax). It follows, that if land is to be protected, the state and Native Lands Trust Board miss out on this income, unless they find ways to derive income from conservation. Various government departments and the Native Lands Trust Board have been investigating trust funds, in order to finance its commitments under the World Heritage and other conventions that specify the formal protection of areas¹². Maruia Society and Conservation International, non-governmental organisations have assisted this investigation, which has largely focused

¹¹ In 2001, the Fijian dollar usually bought around 0.46 US dollars.

¹² With environmental trust funds, the trustees hold legal title to specific property, under a duty to manage it for the benefit and in the interests of the beneficiaries who thus are said to hold equitable title. The trustees act through a Board of Directors which disburses income for the purposes and activities outlined in the legal agreement establishing the trust (Guérin-McManus 1998, 10-11, 14).

on the Sovi Basin (Guérin–McManus 1998). The Trust Board wants to use trust funds to finance both compensation for the landowners and some sustainable development activities. The idea is that donors donate money to the trust, and the board of directors then pay compensation to the landowners (Guérin–McManus 1998), with the Native Lands Trust Board presumably taking its 25 percent. The board would also make grants to the rural community involved, to help them develop some sustainable sources of income (Guérin–McManus 1998, 15), rather like the efforts associated with community conservation areas. Such an arrangement would bring yet another group of experts into Fijian environmental management, this time fund managers. Guérin–McManus, a Conservation International environmental finance expert who looked at the feasibility of this mechanism in Fiji, thought the Native Lands Trust Board had insufficient expertise to manage such a trust fund.

Community conservation areas

Community conservation areas are based upon two assumptions that in Fiji have not proved to be true. First, community conservation areas are based on the idea that tourism will pay for conservation. It doesn't. Experience with these areas in Fiji has clearly shown that this is an overly optimistic assumption (Elizabeth Erasito, National Trust, *pers. comm.*, July 2001; Dave Bamford, Tourism Resource Consultants, *pers. comm.*, August 2001; *pers. obs.*). Instead, communities become dependent on donors. Recent (2001) research showed this has happened at Abaca, the main village involved in the Koroyanitu project (Elizabeth Erasito, National Trust researcher, *pers. comm.*, July 2001). This assumption has created unrealistic expectations of the communities involved, but it has justified aid agencies and non-governmental organisations working directly with local communities.

Second, community conservation areas are premised on the assumption that, provided they can obtain income from it, the local villagers will all protect the area concerned. They don't. Setting up a tourist venture (or some sort of business) is not, by itself, likely to cause locals to adopt either a western ethos of nature conservation or strict protection of areas. Their attitude to nature is likely to remain unchanged in their life-span. This is evident at Bouma. There, the commercial ventures are divorced geographically from the two areas protected earlier under the Forest Act. When undertaking the walks and activities on offer, tourists do not enter either the nature or the forest reserve (*pers. obs.*). The villagers continue to use the areas that tourists frequent, as they did before. The exception to this is at Waitabu (one of the four villages involved at Bouma) where the villagers decided to stop fishing a section of their reef as a way of obtaining income. They decided to do this to attract tourists rather than to increase fish numbers for their own use (Salo Apao, *pers. comm.*, Waitabu, July 2001). Although the tourist income is important to villagers at Bouma, there is no evidence to suggest that this in itself is sufficient to change their philosophy about nature. Furthermore, as Majid Cooke (1999, 204) pointed out, producing for the market is bound to create similar sorts of pressures as corporate logging.

5.3 ENVIRONMENTAL PLANNING

5.3.1 EXTENT AND MECHANISMS OF INSTITUTIONALISATION

Amount of environmental planning done

The antecedents of environmental planning in other parts of the world, namely town and country planning, land-use planning, development planning and resource sector planning have all been present in Fiji (see Davidi c. 1981; Adams 1970; Chape 1990b; and Fiji Ministry of Housing and Development and IUCN 1992, 118-20). Yet this has not led to the coherent development of environmental planning as a professional discipline or as a rational approach to managing impacts upon environment quality. Since 1970, there have been a few attempts at environmental planning in Fiji. I have listed, in box 4 below, the documents produced as a result of such planning processes. I have not included sectoral management plans in this category as they do not focus primarily on managing human impacts on the environment. Nor have I included general land-use planning which in Fiji to date has been urban based, without a specific environmental focus (Crosbie c. 1995; Leslie and Ratukalou c. 1999).

The environmental planning efforts listed in box 4 have few connections. With the exception of the report to UNCED and national environmental management strategies, which were done by the same people around the same time, they do not build on previous plans.

Legal requirements to prepare environmental plans

Although at least two of the international conventions that Fiji has signed require environmental planning, the Convention on Biological Diversity, and the International Tropical Timber Agreement, the relevant provisions of which were described in section 2.2.3, there is no statutory requirement in Fijian law for environmental plans. The Town Planning Act 1946 Cap. 139, in particular some of the schedules, are the only legislative requirements in Fiji pertaining to environmental planning (Mere Pulea, University of the South Pacific, *pers. comm.*, July 2001). The most recent (short) version of Sustainable Development Bill contains provision to prepare a national resource management plan (Part V). It provides for a national resource management unit in the ministry responsible for agriculture, fisheries and forests, and a national resource inventory and database to provide the infrastructure and information needed for such a plan (clauses 52 and 53).

Mechanisms for institutionalising planning

The Fijian government does not train its staff in the practice of environmental planning, although some planners in the Department of Town and Country Planning have trained overseas in countries like New Zealand where the teaching goes beyond the traditional urban focus of town and country planning, into environmental planning (Maraia Ubitau, Department of Town and Country Planning, *pers. comm.*, July 2001). During interviews with government staff (listed in Appendix 1), I did not find anyone actively promoting the need for environmental planning (as some have promoted the need for protected areas – Sevanaia Tabua and Alivereti Bogiva for example).

Box 4: Summary of environmental planning efforts (written documents) in Fiji, 1970-2001

- Provisions in post-independence development plans; the second such plan devoted a whole section to the environment (Government of Fiji 1975, 55-60); the environmental content generally declined with each subsequent plan.
- Environmental provisions in two national tourism plans produced in 1973 and 1989; the first proposed a range of protective measures to ensure compatibility of tourism development and the environment (described in King and Weaver 1993; 99; Plange 1996)
- Two mangrove management plans, produced in and based on zoning of activities and conservation areas (Dick Watling, *pers. comm.*, Suva, May 2001)
- Draft management plans reserves managed by the National Trust including Sigatoka Sand Dunes National Park (Cabaniuk *et al.* 1986), Waisale and Yadua Taba reserves (National Trust files)
- Planning for a system of protected areas (Dunlap and Singh 1980; Lees 1989)
- Fiji's report to UNCED (Chape and Watling 1992b)
- National environmental management strategy (IUCN 1993) (adopted by Cabinet in 1993)
- Native Lands Trust Board planning efforts to integrate environmental and development considerations for various areas: a report proposing a forest park at Bouma (Cabaniuk 1989); an integrated development plan for the upper Busa/Waikatakata catchment (NLTB 1989); a preliminary report concerned with developing an integrated environmental and conservation development plan for Kadavu (Wright and Cabaniuk 1996); a draft discussion paper on tourism development plan and heritage conservation strategy for Cakaudrove province (Cabaniuk 1997); also a draft integrated resource management plan for Ovalau Island (Cabaniuk 1998)
- Guidelines for dredging and river improvement (Tortell 1992)
- Strategy for the conservation of sea turtles (Weaver 1996)
- Fiji draft biodiversity strategy and action plan (Department of Environment 1999) (returned unapproved by Cabinet; may be resubmitted)
- Draft land use plan developed for MAFF which addresses soil conservation (not actioned; Leslie and Ratukalou c. 1999)

Given that SPREP does not offer training in environmental planning, and there are no local institutions offering statutory planning courses, then it is possible that many Fijians working in state and non-governmental agencies are generally unfamiliar with the concept, especially the range of approaches that can be taken.

Overseas and expatriate involvement

In Fiji, the majority of attempts at institutionalising environmental planning are either local initiatives or have been prompted by aid agencies without any conduit through SPREP. The plans have arisen for a variety of reasons. About half of them have been funded by foreign aid to some extent. SPREP had some peripheral involvement in three plans concerning mangroves and turtles. The mangrove management plans were locally produced but were a joint project between the government and SPC, funded in part by SPREP which was part of SPC at that time (Watling 1985). WWF and SPREP funded the sea turtle strategy that was written by a consultant from New Zealand, in consultation with a local working group (see Weaver 1996).

The Asian Development Bank funded preparation of the Fijian national environmental management strategy in the early 1990s, after another proposed (agricultural) project, the funding for which it had already approved, fell through. The Fijian strategy was not part of the regional RETA and NEMS projects described in section 4.2 but a separate project (Epeli Nasome, Department of Environment, *pers. comm.*, May 2001). It was largely written by westerners, many of them Australasian environmental consultants commissioned to prepare reports on a variety of issues, including environmental legislation in Fiji (see IUCN 1993)¹³. A perusal of a list of contributors (in Appendix 1 of the strategy) reveals only five names that are recognisably those of indigenous Pacific islanders or Indo-Fijians; the remaining 20 names are European ones. Cabinet approved the finished strategy in late 1993. Fiji's report to UNCED was largely based on the state of environment report prepared as first stage of preparing the national environmental management strategy.

The protected areas planning discussed in the previous section were initiated locally; overseas experts were asked to prepare them and these experts largely determined the approach and content of the plans. Overseas consultants also prepared the tourism plans mentioned in box 4 (Plange 1996). The biodiversity strategy and action plan was a local effort as I mentioned in section 5.1.1. The environmental parts of the development plans, and the various Native Lands Trust Board planning initiatives were all local

¹³ Stuart Chape drafted the terms of reference for the project; the permanent secretary of the Ministry of Housing and Urban Development approved these as did the inter-departmental Environmental Management Committee and Cabinet (UNDP 1990, 27). Asian Development Bank then tendered preparation of the strategy (Epeli Nasome, Department of Environment, *pers. comm.*, May 2001). IUCN, in association with Environmental Services Australia, won the tender and subsequently asked Dr Dick Watling, a Fijian consultant, to lead the consultancy team. The Environmental Management Unit in the Ministry headed by Chape, assisted by Epeli Nasome, managed the project (IUCN 1993, 1).

initiatives, although the majority of these involved expatriate professionals, such as the expatriate Director of Economic Development involved in Development Plan 7, and Stefan Cabaniuk who played a significant role in writing almost all Native Lands Trust Board plans during 1990s¹⁴. Authorship of planning documents may unfairly reflect their contribution to changing attitudes – the essence of effective planning – since planning documents tend to have expatriate authors whereas those involved in local discussions and negotiations tend to be indigenous Fijians. This may reflect a cultural difference – different preferences for written or oral communication and planning.

5.3.2 IMPEDIMENTS AND POINTS OF DIVERGENCE

The policy base

Environmental plans do not need to develop new policy, they can instead suggest ways to implement existing policy. The environmental plans prepared in Fiji are notable in that they did neither. There is no existing environmental policy (about environmental quality) to implement.

There are bits and pieces of uncoordinated environmental policy in various Fijian legislation (Pulea 1992; McBride 1992). These include the Land Conservation and Improvement Act 1953 Cap. 141 that provides for intervention over the way in which land is being used in the interests of water and soil conservation including provision to require that a particular land should cease and remedial works should be undertaken (sections 7, 8 and 9). Section 37(1)(c)(i) of the Agricultural Landlord and Tenant Act 1967 Cap. 270 allows the landlord to terminate the lease if the tenant is not operating according to the practice of good husbandry.

The early development plans (7 and 8) also contained some policy designed to create and protect appropriate environmental quality. These were expressed intentions rather than as firm policy, and hindsight shows they were not used to guide government decision-making:

... the functioning of estuaries should not be disrupted (Government of Fiji 1975, 59).

... government will protect unique species of mangrove (Government of Fiji 1980, 289).

Government does not intend to initiate development that could lead to such extensive disturbance that it would be responsible for depriving future generations of the opportunity to experience and study representative samples of Fiji's ecosystems (ibid).

¹⁴ Stefan Cabaniuk came to Fiji in late 1980s as a British government volunteer, with professional expertise in planning. The Native Lands Trust Board subsequently employed Mr Cabaniuk (Native Lands Trust Board Human Resources Manager, *pers. comm.*, August 2001), and he played a key part in several environmental planning projects during the 1990s.

Some consultancy reports policy guidance about the acceptability and management of potentially adverse environmental impacts in Fiji, such as the FAO-sponsored methodology for dredging and river improvement (Tortell 1992). The Belt-Collins tourism plan suggested policies that the government should adopt in order to preserve the quality of environment needed for tourism. Apart from these externally written reports, Fijian government planning documents have not contained policies on what sort of environmental quality may be appropriate in Fiji. They have not provided any policy to guide the way in which humans interact with their environment, or to define the desirable quality of environment.

There have been opportunities to create national environment policies at recurring national economic summits and strategic planning meetings at which environmental matters were considered. But no such policies eventuated. Instead of suggesting the type of environment that was acceptable and impacts that were unacceptable, those present made decisions about structural matters within government and about projects the government should do (Chape and Watling 1992b, 101-2; ESCAP 1999a, IV-A). Similarly, the national environmental management strategy noted that 'although Fiji has presented some environmental policies and objectives since 1971, there have been no national environmental policies which have formed the basis of practical application'. It then recommended that the government develop a comprehensive policy for environmental protection and natural resource management (IUCN 1993, 20), but failed to make this one of the recommended 15 projects. The draft biodiversity strategy did not contain any such policies either.

Collectively, this means that there is virtually no policy about appropriate environmental quality. There are no such policies to guide government departments, the Native Lands Trust Board, or local authority officials making decisions on matters under their jurisdiction. This includes the occasions when government staff make decisions about development proposals for which the potential environmental impacts have been assessed, and the occasions when they are deciding on their own work activities¹⁵. This lack of policy about environmental quality probably reinforces the disconnectedness of the various environmental plans. The only threads of state policy to tie these together are those legislative provisions concerned with allocation of land and other natural resources (such as the Native Lands Trust Act 1940, Agricultural Landlord and Tenant Act 1967, and Forest Act 1953).

Environmental planning in Fiji loosely fits with the hierarchical policy model described in section 2.2.3. Some Fijian plans attempt to translate policies set at international level into national actions rather than into national policy about appropriate environmental quality. For instance, the national environmental management strategy is based on the concept of sustainable development in the WCED report (IUCN

¹⁵ The government has a minerals policy with a section on sustainable development (see Tompkins 1997), which the Department of Mineral Resources uses to guide its work and decisions (Ifereimi Dau, Department of Mineral Resources, *pers. comm.*, August 2001). This was not prepared as part of an environmental plan. It also has a statutory Forests Policy, gazetted in 1950, which staff at the Extension Section of the Department of Forestry still consider government policy (Susana Tuisese, Department of Forestry, *pers. comm.*, August 2001).

1993, 18-9). The biodiversity strategy is based upon the Sustainable Development Bill, which was based in part upon the Convention for Biological Diversity (Department of Environment 1999, section 1.3.2). But, given the lack of national legislation to give effect to the international policies, and the way plans are not usually implemented (discussed below), this hierarchical planning model does not accurately describe what is happening in Fiji.

The planning process

Judging by the type of environmental plans produced in Fiji, there is either a general lack of understanding of the different ways in which one can go about planning even amongst those doing it, or an unwillingness to use different styles. The environmental planning documents all serve to support pre-chosen actions, including the national environmental management strategy which stated the need for a threefold approach to environmental management in Fiji based largely on institutional concerns: (1) increased government capability in modern environmental management through new policies, new legislation, strengthening of the Department of Environment, reorganising the National Trust, establishment of two new departments – an agency to advocate conservation and another to manage protected areas and sites, wildlife protection and trade in threatened species – plus an Environment Commission and National Environment Council; (2) a register of natural and cultural sites of national significance; and (3) more public involvement through non-governmental organisations (IUCN 1993, 30-7; 51-2). The document is a collection of ideas about how to manage Fiji's environment, placed within an envelope of words that loosely appear to justify these, without any rational, logical analysis to reach this conclusion. It appears to be an attempt to give these ideas credence and public exposure in the hope of making them reality. This is not to say that these may be inappropriate actions in the circumstances.

The style of planning used in the strategy and in other Fijian environmental plans is evocative of March and Olsen's garbage can model of public policy formulation (described by Howlett and Ramesh 1995, 144-5). In this model, March and Olsen treat decision-making as a highly ambiguous and unpredictable process only distantly related to searching for means to achieve goals. They deny the limited rationalism permitted in incrementalism (described in Section 4.2.2), and begin with the assumption that the level of intentionality, comprehension of problems, and predictability of relations among actors simply does not exist in reality. They argue that decision opportunities (such as those afforded by a formal planning process) are:

... a garbage can into which various problems and solutions are dumped by participants. The mix of garbage in a single can depends partly on the labels attached to the alternative cans; but it also depends on what garbage is being produced at the moment, on the mix of cans available, and on the speed with which garbage is collected and removed from the scene (quoted in Howlett and Ramesh 1995, 145).

To continue this analogy, in Fiji, development assistance agencies often provide and label the garbage cans (funding for certain topics) but they do not remove them – nor does the state, judging by the limited extent to which it implements any environmental plans, discussed below. While this model may not be

strictly pertinent, especially in the way it discounts intentionality¹⁶, it describes environmental planning practice in Fiji much more accurately than other models of planning and public policy such as rationalism, incrementalism or communicative planning.

None of the environmental plans prepared in Fiji systematically assess threats and constraints, or the costs, benefits and risks of alternative approaches to achieving specified goals (the rational approach to planning described in section 2.2.3). The idea that the plan is part of a larger cycle, at least in rational planning (the plan/do/review cycle), is not well recognised in Fiji. In theory, one should plan, then takes the actions decided upon, then assess whether this moves one closer to one's goal, and then adjust one's actions accordingly. The state does not have any system for monitoring the implementation of these plans, or environmental quality generally. There is little monitoring or systematic collection of information about the environment and how it may be changing, as a result of human activity for example or from natural changes. As a consequence the information base for preparing plans is very weak. Furthermore, reviewing the actual impacts of development proposals for which environmental impact assessment were done, (discussed in the next section) has not been used to improve the quality of Fijian environmental planning.

The national environmental management strategy avoided discussing the quality of environment that may be appropriate in various parts of Fiji. It did mention the need to look at the adverse environmental impacts of some activities including logging and ginger farming, but without attempting to define any policy or standards about appropriate environmental quality (IUCN 1993, 5-9). The strategy pointed out that the economic development path taken by the Interim Government depended upon the exploitation of natural resources which, therefore, should be managed sustainable; it also mentioned that environmental issues cannot be framed and addressed in isolation from other sectors (IUCN 1993, 8, 11). But it only addressed social and political contributions to environmental degradation in a superficial manner and in doing so precluded any serious analysis of how to address this degradation. The authors assumed that the solution to Fiji's environmental problems is better education, raised public awareness, more surveying, better information and planning, aid projects, better legislation, and above everything, better state management. They did not suggest any change in socio-economic or political dynamics is needed to reduce environmental degradation. In advocating better management, the strategy accepted, as given, the

¹⁶ Intentionality distinguishes the role individuals play from that of the state *per se*. Individuals carry out the recursive practices (repeatable practices, habits, and social processes that recur in rule-like fashion) that constitute environmental management, not an artificial construct such as the state. In confronting a situation, individuals may want to take action – and situations are ‘usually loaded with possibilities for actualising or foiling intentions’ (Fox and Miller 1995, 9). Individuals are capable of more than predictable responses to the external manipulation of rewards, they are capable of discourse (ibid). They make strategic decisions (Layder *et al.* 1990). They may actively strategise to represent issues in certain ways and may forge alliances to promoting these, such as the discourse coalitions that Hajer (1995, 12-3, 58-8) described for environmental issues such as acid rain in Europe.

appropriateness of modern methods of environmental management such as environmental planning, environmental impact assessments and protected areas and did not analyse their merits.

Those involved in preparing the strategy did not approach planning as an interactive, participatory process or a method of empowering locals to shape their own future. Public consultation was minimal. Although there was a public submission period, advertised in a local newspaper, for two weeks only; it occurred after the strategy was virtually complete (Fiji Times, 9 September 1992). Consultation was mainly at government level. Yet, the Native Lands Trust Board and the Lands Department did not feel they owned the plan or that it was their job to implement parts of it (Sevanaia Tabua, *pers. comm.*, May 2000). Nor apparently did the economic development planners in the government, judging by their failure to allocate finance to implement it.

It is not clear whether there is any recognition amongst those involved in producing environmental plans in Fiji that the process of planning is at least as important and usually far more important than is the document produced. Planning is about changing attitudes and approaches, taking a fresh approach or bringing new people on board; the process is what brings about such changes, not the document produced at the end. The Director of the Department of Environment indicated that he considered the national environmental management strategy a valid and useful document eight years after it had been completed, even though very little of it had been implemented. He also indicated that they were still working towards implementing it (Epeli Nasome, *pers. comm.*, May 2001). This suggests that he thinks its value lies in the document and not in the process that produced it.

Implementation of plans

In Fiji, the trend has been that after environmental plans are completed, the extent to which the actions they suggest get implemented is low. Very little of the national environmental management strategy has been implemented. The strategy breaks its suggested actions into 15 projects, each with suggested target date, personnel and indicative cost. These suggest the amount and type of international assistance to seek (IUCN 1993, 63). The target dates for many of the projects are 1993–4, i.e. within a couple of years; all projects are planned to be finished within five years. The bulk of the projects have not been implemented eight years later. Some relatively minor actions have been taken: environmental management units were established in the Departments of Mineral Resources and Lands; the Native Lands Trust Board prepared an environmental charter; and resource databases were set up in several departments and in the Native Lands Trust Board. Shortly after the strategy was completed the government worked on implementing the parts dealing with increasing its capacity, through the Sustainable Development Bill that has yet to become law. If the Bill is passed, it will implement less than a quarter of the strategy.

Very few provisions of the plans listed in box 4 have been implemented, including the Native Lands Trust Board plans as I mentioned earlier in section 5.2.1. The plan most consistently implemented has probably been the mangrove management one (Dick Watling, *pers. comm.*, May 2001). The draft biodiversity strategy was submitted to Cabinet for approval in 1999 whereupon Cabinet returned the paper as being

substandard. The Department of Environment has yet to prepare a better paper for resubmittal (Jenny Bryant, UNDP, *pers. comm.*, August 2001).

Public participation

Many of the Fijian environmental plans were prepared by a committee or had input from a range of government agencies, statutory agencies and non-governmental organisations. But apart from this, public participation has been minimal. If one is not an active member of such organisations, then one's chances of having some input are limited, and one's chances of having this input taken seriously are low. The idea that the public should shape the approach the government takes to environmental management, and should determine the sort of environment that Fijians live in, is non-existent. This is understandable for rural areas in which indigenous Fijians live since they largely have the control over their own physical environment, although there can be conflicting views on logging especially about down-stream effects and cumulative effects on local climate. But in urban and peri-urban areas, the residents have little control over the quality of their environment. The idea that the public should have some say about that quality of environment in areas in which they do not live – whether remaining forested land should be logged, for instance – is largely an alien idea in Fiji, acknowledged only through limited public submission processes such as that for national environmental management strategy discussed above.

During preparation of the draft biodiversity strategy, the Department of the Environment made an effort to seek public opinion beyond the people involved in the technical groups and the steering committee. It ran six community workshops at selected sites including rural villages and urban squatter settlements. There was also poster, radio, newspaper and television advertisements for a brief period. But the only way in which the public was able to participate was through these workshops (described in Department of Environment 1999). Although this ensured the Department obtained some public views, public input was heavily constrained by the choice of workshop location.

For rural developments on native land, the question of public participation, over and above the views of certain chiefs, has not been addressed, despite large scale migration to cities and towns, and the widespread presence of Indo-Fijians in many rural areas. Consultation continues to be largely through the rural system of traditional chiefs and administrative centres (provincial councils and Indo-Fijian advisory councils). This parallels the issue of urban Maori in New Zealand. There is also the question of whether the Native Lands Trust Board, which sees itself as a custodian of land for the benefit of Fijians and is the legal owner of the land, in any way speaks on behalf of landowners or precludes them speaking for themselves. Perhaps the Native Lands Trust Board has some resistance to the people in Fijian communities having their say about the use of their land, in an open process such as occurs in developed countries. This is an area not addressed in academic literature, and I was unable to explore it satisfactorily through the interviews I conducted. It merits specific research. Furthermore, there appears to be some tension between the Native Lands Trust Board acting on behalf of landowners and Ministry of Fijian Affairs acting on behalf of the Fijian people (Alivereti Bogiva, Ministry of Fijian Affairs, *pers. comm.*, June 2001).

5.4 ENVIRONMENTAL IMPACT ASSESSMENT

5.4.1 EXTENT AND MECHANISMS OF INSTITUTIONALISATION

Legal requirements and history

Fiji has signed two treaties stipulating the need for environmental impact assessment for specific purposes, namely the Convention on Biological Diversity for projects likely to affect biodiversity (see section 2.2.4) and the SPREP Convention (described in section 3.2.3) for developments in the coastal and marine area. There is, however, no mandatory legal requirement for environmental impact assessment in specified circumstances, although provisions in various acts give the state the discretion to require such assessments.

The discretionary power of the Director of the Department of Town and Country Planning has been the catalyst for most of the environmental impact assessments prepared in Fiji. Under the wide discretion of s7 of the Town Planning Act 1946, the Director may require someone proposing a development covered by that Act to prepare an environmental impact assessment. This applies only to private and not government sector developments¹⁷.

Prior to 1980, the Department of Town and Country Planning considered new developments without any consideration for conserving or protecting the resource (Epeli Nasome, Department of Environment, May 2001 *pers. comm.*). The government then established an inter-ministerial Environmental Management Committee that increasingly focused on advising the Director of Town and Country Planning about the environmental implications of development proposals (Chape and Watling 1992b, 109; ESCAP c. 1999, II B-1)¹⁸. In 1981, the government, at the behest of this committee, commissioned a consultant to prepare suitable procedures for incorporating environmental impact assessment techniques into Fiji's planning framework (the resultant guideline is McClymont 1982). When the government set up an environmental management unit in 1987 (described in section 5.1.1), this unit dealt with various environmental impact assessments, referring only the most significant to the Environmental Management Committee for advice (Fiji Ministry of Housing and Development and IUCN 1992, 128-9, 134-5; Lal and Minerbi 1987, 205).

Since the early 1990s, environmental impact assessments, not only of private development proposals but also government projects, have become more common practice in Fiji. As a result of commitments to increasing the government's institutional arrangements for environmental management, which Prime

¹⁷ Development is defined to include any building or rebuilding operations, and any use of land or buildings that are materially different from the purpose for which the land was last used; interior alterations, agricultural and forestry use of land and buildings are excluded from the definition and thus from the Director's powers to impose conditions such as an environmental impact assessment (s. 2 Town Planning Act 1946).

¹⁸ This committee consisted of heads of various departments and ministries although over the years technical people dominated the meetings because the various department heads have nominated staff to represent them (Epeli Nasome, Department of Environment, *pers. comm.*, May 2001).

Minister Rabuka made at UNCED, the government upgraded its Environmental Management Unit to a department in 1993 giving it responsibility, but no legal mandate, for considering environmental impact assessments (Premila Kumar and Epeli Nasome, Department of Environment, *pers. comm.*, May–July 2001). The Director of Town and Country Planning retained the discretion to require the environmental impact assessment of private developments, when making decisions about consent for these developments.

Government department's requirements for environmental impact assessment

The Director has, over the years, concentrated on requiring impact assessment for hotels and industrial developments, including timber milling and factories¹⁹. It is current practice (in 2001) for a staff committee to consider each development application and recommend to the director whether he/she should require an environmental impact assessment. In the eight municipal authority areas with approved planning schemes, these authorities, not the department, deal with developments that meet the requirements for permitted and conditional activities; environmental impact assessments are not done for these (Maraia Ubitau, Department of Town and Country Planning, *pers. comm.*, June 2001). Development may be proposed for either state or native land. The Native Lands Trust Board has the legislative powers to require a potential leasee to undertake an environmental impact assessment, for which the Board can seek an independent review (under its discretion in s.9 of the Native Lands Trust Act 1940). As yet, it has not required any such assessments separately from the Town and Country Planning process (Samisoni Matasere, Native Lands Trust Board, *pers. comm.*, August 2001).

It is current practice at the Department of Town and Country Planning to rely entirely on the Department of Environment to deal with all environmental impact assessments once the Director of Town and Country Planning has made the decision that one is required. Working with the developer, a Department of Environment staff member scopes the assessment terms of reference (using the expertise of staff in sectoral government departments and other Suva-based institutions such as SOPAC), reviews the assessment when the developer has completed it, and makes recommendations about whether it should be approved and about any consent conditions. Department of Environment staff may also be called to defend the decision to seek an environmental impact assessment, and may on occasions suggest to the Department of Town and Country Planning that one is required when staff of the latter department may have recommended otherwise (Premila Kumar, Department of Environment, *pers. comm.*, July 2001). Staff of the Department of Town and Country Planning do not always agree with staff of the Department of Environment about which development projects need their environmental impacts considered. The former tends to be more conservative than the latter (Premila Kumar, Department of Environment, *pers. comm.*, July 2001).

¹⁹ There have been four directors over the years, plus acting directors at times, including in 2001 (Sevanaia Dakaica, University of the South Pacific, *pers. comm.*, July 2001).

In contrast, at the Department of Town and Country Planning, the workload for processing environmental impact assessments is light (Maraia Ubitau, Department of Town and Country Planning, *pers. comm.*, July 2001). Notwithstanding it has no statutory powers, the Department of Environment is in practice the lead agency for environmental impact assessment for private developments in Fiji, excepting those on foreshore and in the sea, or those concerning mining.

The Department of Town and Country Planning does not deal with all development applications. The Minister of Lands controls activities on rivers, the foreshore or seabed and can issue leases and licences with wide discretion²⁰. Those concerning mines are the responsibility of the Department of Mineral Resources. Under the Mining Act 1965 Cap. 146, the Minister of Mineral Resources has a wide discretion to impose any terms and conditions considered appropriate in the prospecting licences and mining permits (ss. 30 and 31). This may include an environmental impact assessment. There is also a government mineral policy, with a section on sustainable development, plus a departmental guideline on environmental impact assessment. These were developed in the mid-1990s, with Australian assistance (Ifereimi Dau, Principal Environmental Officer, Department of Mineral Resources, *pers. comm.*, August 2001).

Government departments can also undertake in-house environmental impact assessment of their own projects although my enquiries suggest this is uncommon. ESCAP researchers reported that environmental impact assessment of public projects have been undertaken 'on occasions' within line ministries, but 'the staff are generally not qualified to do the work' (ESCAP 1999, IV-B 1(g)). The Ministry for Primary Industries (now MAFF) reportedly undertook environmental impact assessments and environmental reviews for some of its projects in the late 1980s and early 1990s (Tuvuki 1996, 117).

The Public Works Department (PWD) has recently developed its own system for environmental impact assessments concerned with road upgrading financed by Asian Development Bank loans. In 1998 the Public Works Department commissioned a New Zealand consultancy to write a code of environmental practice for road design, construction and maintenance. Department staff use this code in conjunction with the Asian Development Bank's 1993 environmental guidelines for selected infrastructure projects. They require PWD contractors to abide by the provisions of both documents, binding them through contract documentation (Alan Mackinlay, Public Works Department, *pers. comm.*, August 2001). When they receive an environmental impact assessment document from PWD consultants, Departmental staff ask the Department of Environment to comment on it, but the final decisions rests with Public Works Department engineers who do not seek independent review (Alan Mackinlay, Public Works Department, *pers. comm.*, August 2001).

²⁰ Section 2 of the Crown Lands Act 1946 Cap. 132 declared foreshore to be public land; s. 2 of the Rivers and Streams Act 1982 Cap. 136 declared rivers and stream (all waters that natives have been accustomed to traverse in takias or canoes) to be public land.

The Sustainable Development Bill precipitated several changes in government procedures. The Department of Town and Country Planning now tries to follow the Bill's requirements, as do guidelines of the Mineral Resource Department and those of the Department of Environment (Maraia Ubitau Department of Town and Country Planning; Ifereimi Dau, Department of Mineral Resources; Premila Kumar, Department of Environment respectively; *pers. comm.*, July - August 2001). The Public Works Department has implemented its environmental impact assessment system in preparation for the Bill becoming law (Alan Mackinlay, Public Works Department, *pers. comm.*, August 2001).

Funding and aid agency' requirements for environmental impact assessment

In Fiji, some environmental impact assessments have arisen, at least in part, because users such as tourist operators or film companies want to be seen to be environmentally aware²¹. Some arise because the funding agencies (aid agencies and lending institutions) require them. Projects funded through foreign aid and development assistance may or may not receive environmental impact assessment depending on the source of aid. The Asian Development Bank, Australia and New Zealand all require environmental impact assessment. Korea, China and Taiwan are the main aid donors in the South Pacific have no environmental impact assessment procedures. Japan's procedures 'appear to be erratic' (Onorio 1994, 6). Example of projects in Fiji for which multilateral and bilateral aid agencies and international financial institutions have required environmental impact assessment include the Kinoya Sewage Treatment Plant (1982) and the PAFCO cannery on Ovalau Island, both funded by AIDAB (Ward 1996, 68). The World Bank required one for the Korotogo Bypass/ Outrigger hotel project (Sefanaia Dakaica University of the South Pacific, *pers. comm.*, July 2001).

Amount of environmental impact assessment in Fiji

Following a lull after the 1987 coups, the rate of development in Fiji increased again in the 1990s, precipitating an increase in the number of environmental impact assessments done. Rebekah Ward (1996, 10) reported an estimate from an official of the Town and Country Planning Department that up to 1993, only about 10 percent of Fiji's major developments had been subject to environmental impact assessment. At her count, about 20 environmental impact assessments had been done prior to 1993 (Ibid); Morgan (1993, 15) estimated this to be 25. The number of environmental impact assessments conducted has increased markedly since the early 1990s, especially in recent years (Premila Kumar Department of Environment, *pers. comm.*, July 2001). The Department of Town and Country Planning has processed nineteen environmental impact assessments since 1993 (Maraia Ubitau, Department of Town and Country Planning, *pers. comm.*, July 2001). To this can be added those done under other legislation (four under the Mining Act and around ten under the Crown Lands Act), those done by Public Works Department consultants (about two a year) (Ifereimi Dau; Pumale Reddy; Alan Mackinlay respectively, *pers. comm.*

²¹ See, for instance, 'Hollywood tiptoes around endangered iguanas' regarding the filming of *Castaway* on a small Fijian island. Before filming, the Dreamworks company undertook an environmental impact assessment (WWF 1999).

August 2001). This totals about 40 since 1993 and 65 in total since 1980. It is likely that a few more have been prepared either within government departments or because development banks or bilateral aid agencies have required them.

Various activities do not require an environmental impact assessment, either for legal reasons, or because it is long-standing practice not to apply the full discretion in various legislation. These include activities on residential sites, small commercial developments other than tourist resorts, subdivision, changes of use of existing buildings that may include new industries, new discharges to water or air from existing industries agricultural uses, forest clearance, and any clearing of mangroves separate from any development requiring an environmental impact assessment. The activities of indigenous Fijians on native land have not been subject to environmental impact assessment. Almost all the environmental impact assessments that are done are for rural rather than urban development.

Mechanisms of institutionalisation

In Fiji, environmental impact assessment has largely been institutionalised through practice, as described above. Some government staff have participated in the SPREP training mentioned in the previous sub-section. Others have become aware of environmental impact assessment practice through tertiary training, either at the University of the South Pacific or overseas. There has not been any training targeting the consultants, the people who usually carry out environmental impact assessments. Non-governmental organisations have only been involved on the fringes of environmental impact assessment in Fiji, given that the public participation provisions are used erratically.

5.4.2 IMPEDIMENTS AND POINTS OF DIVERGENCE

Divergence in practice from that in western countries

If judged by the standards to which environmental impact assessments are expected to conform in western countries such as New Zealand, the way these are prepared in Fiji generally falls short. Ward (1996) showed this clearly when, in 1993, she assessed the quality of 18 reports, comprising the majority of environmental impact assessment done until then. Ward (1996, 73-107) found that only a third of the reports were of reasonable standard, all had significant short-comings, and that many were poor compared with Australasian standards, even when prepared by, or in conjunction with Australasian consultants.

In the past decade, the Department of Environment has tried to improve the standard of environmental impact assessments. It has pressurised developers, and their consultants to meet improve standards According to Premila Kumar who has processed environmental impact assessments at the Department of Environment for several years, many consultants have little understanding of what constitutes a good environmental impact assessment (Premila Kumar, Department of Environment, *pers. comm.*, July). In Fiji, developers and consultants do not acknowledge how environmental impact assessment can improve project choice, formulation and design, especially when used at the feasibility stage. In theory, it can help make choices among alternative projects and among alternative locations, but it is rarely used in this way in Fiji (Ward 1996, 77-8; Bhaskaran Nair, Ministry of Local Government, Housing and Environment,

pers. comm., July 2001). This is compounded by a reluctance to decline approval for development proposals. Both Tuvuki (1995, 78) and Ward (1996) observed that once the Director of Town and Country Planning has accepted a proposal for consideration, then it was likely to be approved and implemented more or less as proposed in the application.

In Fiji, even when completed, environmental impact assessments are not always readily available. They are considered confidential to the developer (Ward 1996, 33). In contrast, in western countries environmental impact assessment is seen as a means of making the premises of decisions explicit and of forcing decision-makers to publicly account for their decisions (Ortolano *et al.* 1987, 285). Generally in Fiji there has been little public consultation beyond villagers or landowners on whose land a development is planned, the local provincial or sometimes the Indo-Fijian Advisory Council (various interviews; Ward 1996, 86-8).

Who determines environmental quality?

In theory the practice of environmental impact assessment should enable the state to control the quality of the environment, at least in the vicinity of proposed developments. In practice, in Fiji, it is the consultants who do this. This comes about for several related reasons. First, compared to New Zealand, there is a dearth of government policy to guide those preparing environmental impact assessments, about what may be acceptable or unacceptable, or about which impacts need to be mitigated, as I discussed in section 5.3.2²². A partial exception is *Fiji's Mineral Policy*, an approved government policy statement, which states that 'developers are expected to identify anticipated impacts and suggest methods of compliance with acceptable international standards for mine-related environmental releases' (Tompkins 1997, 9), but does not specify which international standards. This gives considerable leeway to those doing an environmental impact assessment, usually a consultant, who is thus in a position to suggest to both developer and the Fijian bureaucrat processing the application, what may be acceptable. Peer review is hardly ever used.

Second, the recommendations of environmental impact assessment have only been translated into consent conditions in recent years (see Ward 1996, 98-106, regarding failure to do this prior to 1994; also Premila Kumar and Maraia Ubitau, *pers. comm.*, August 2001). Even when environmental conditions are set, these are not monitored. Since the majority of environmental impact assessments are for rural developments, under Fijian government arrangements their monitoring is the responsibility of rural authorities. These authorities come under the jurisdiction of the Ministry of Health (not Local Government) and they receive only \$200 a year for monitoring. They have neither the funds, the vehicles

²² In New Zealand, for example, there is the New Zealand Coastal Policy Statement, regional policy statements, regional and district plans, policy in legislation such as the Conservation Act 1987 (for freshwater fish for example) and the Wildlife Act; for development on conservation lands there are also conservation management strategies and plans plus a national parks and reserves policy to consider. This is not a complete list, just an example of the extent of policy guidance available for environmental impact assessments.

nor the staff with skills needed to monitor either compliance or the environmental impact of developments (Premila Kumar, Department of Environment, *pers. comm.*, August 2001). The Native Lands Trust Board does not monitor these either, although if someone reports a major problem to them, Board staff can require a leasee to undertake an environmental audit (Pio Manoa, Native Lands Trust Board, *pers. comm.*, May 2001). In the urban areas, any such monitoring is the responsibility of the urban authorities which must cover the cost from rates. As a consequence there is no regular monitoring of environmental impacts of developments. Aid agencies in Fiji do not monitor the subsequent impact on the environment of the projects that they have funded, after those projects have been completed (Premila Kumar, Department of Environment, *pers. comm.*, July 2001).

If the Department of Town and Country Planning wishes to prosecute someone for non-compliance with consent conditions the fine is only \$100 (Town Planning Act 1946 s7(7)). The Native Lands Trust Board can threaten to terminate a lease for environmental reasons but has not done so (Pio Manoa, Native Lands Trust Board, *pers. comm.*, May 2001). Both the Department of Mineral Resources and the PWD have more effective powers. The Department of Mineral Resources can temporarily shut a mine for non-compliance (and once did) (Ifereimi Dau, Department of Mineral Resources, *pers. comm.*, August 2001). The Public Works Department can withhold payment to its contractors who breach contract conditions (Alan Mackinlay, Public Works Department, *pers. comm.*, August 2001).

What really drives the quality of the environment, in regard to most developments for which environmental impact assessment are done, are the consultants' views. With mining proposals, a combination of government staff and their regular Australian advisers probably shape environmental assessments. Many of the projects for which environmental impact assessment are done are carried out by local or overseas engineering or architect firms, often working in conjunction with other engineers or environmental consultants (Dick Watling also Premila Kumar. *pers. comm.*, July–August 2001). Some of these consultants are foreign (mainly Australasian), and some are local, such as Dick Watling, who has been involved in a several environmental impact assessments in Fiji, and various staff at the University of the South Pacific. If the projects are aid funded it is often the consultants employed by the aid agency who prepare the environmental impact assessment – NZODA funded projects for example (Heather Riddell, MFAT, *pers. comm.*, July 2001). With bilateral aid, these consultants are often from the country providing the funds. These then are the people who decide on environmental quality for hotels, coastal developments, mines and those industrial developments for which EIA are done.

Benefit to Fiji

There is a big question mark over the benefit that Fiji has derived from the environmental impact assessments done. This relates mainly to lack of monitoring but also to the infrequency with which environmental impact assessment have been translated into consent conditions. Because of the lack of follow up, the Acting Director of Town and Country Planning expressed the view that many of the environmental impact assessments done had not benefited Fiji (Maraia Ubitau, Department of Town and Country Planning, *pers. comm.*, June 2001). On the positive side, the practice of requiring environmental impact assessment had helped develop government thinking about environmental management. For

instance when they required and environmental impact assessment for a chip mill, Department of Environment staff thought not just about the impacts of the mill itself but also about the wisdom of chipping forests (Bhaskaran Nair, Ministry of Local Government, Housing and Environment, *pers. comm.*, July 2001). But the Department of Environment has no legislative powers through which to address any concerns they may identify.

In sum, environmental impact assessment practice in Fiji today, as regulated and required by the state, suggests that the state is not sending out strong signals about the value of keeping the environment unpolluted, attractive, natural, or a pleasant place in which to live, despite the efforts of some staff to ensure developers prepare quality environmental impact assessments. The Native Lands Trust Board sends out weak signals. It has stated that it does not have the resources to enforce conditions on the leases designed to protect the environment (Kaitu 2001, 3; Pio Manoa, Native Lands Trust Board, *pers. comm.*, May 2001). It does not include the costs of monitoring in its leases charges, nor does it receive any external (government or foreign) funding to monitor environmental impacts of developments. Yet its environmental charter states that 'working in partnership with government it will ensure that all native lands are regularly monitored in the interests of promoting resource conservation, sustainable development and protection of the Fijian environmental heritage' (NLTB c. 1993). This inconsistency could be explained as a lack of co-ordination within Native Lands Trust Board, or as a change in stance after restructuring and hiring of new staff in the late 1990s.

5.5 OVERVIEW: THE STATE'S USE OF THE SELECTED METHODS

The political and social relationships connected with protecting areas are still evolving in the post-colonial Fijian state. In the first decade after independence, they evolved slowly – the state had other preoccupations – and this gave aid agencies, non-governmental agencies, and those interested in working directly with communities, the opportunities to explore approaches other than the alienation and formal protection of land by the state. In the late 1980s, SPREP and various non-governmental organisations stated, as justification for changing to a community conservation area approach, that protected areas are an inappropriate concept for the South Pacific and will never eventuate there in post-colonial times (see section 4.1). As Majid Cooke (1999, 202) pointed out in relation to Malaysia, stating that western models of protected areas are an inappropriate form of 'eco-imperialism' is a convenient excuse for continuing to exploit natural resources, through logging for example. Third World countries such as Fiji depend upon income from resource extraction, especially logging, to promote industrialisation and to make debt repayments (see Bryant, R. 1999, 358 regarding a similar situation in Burma)²³.

Fijian institutions with different agendas are still exploring their approach to protected areas in Fiji. The communities with conservation areas and eco-tourism businesses are proud of their endeavours (Dave Bamford; Elizabeth Erasito, *pers. comm.*, August 2001). Successive Fijian governments have wanted Fiji to be seen as an environmentally conscious member of the international community of sovereign states,

²³ Fiji's external debt in 1999 was US\$14.3 million (World Bank 2000a, Annex A, 3).

and have continued to sign up to international environmental treaties. The Native Lands Trust Board is still deciding where it stands, whether it can make money from protecting native land, and whether this will strengthen or weaken its role in relation to the state. The relationship between state and the Native Lands Trust Board is critical, for it determines if the Board can benefit financially from protected areas by the way that trust funds are administered, and whether compensation is paid through, or bypasses, the Board.

The environmental plans prepared in Fiji have largely been unconnected initiatives, mostly done by expatriates or foreign advisers. Different sections of the state have initiated several. Only some of these plans have been linked to external events or processes. There has been not, however, been any attempt to prepare a high level policy or plan specifying what environmental quality is desirable in Fiji, to guide the policy content of all other Fijian government environmental plans. The national environment strategy did not fill this role, largely being concerned with organisational matters and projects for which aid funding could be sought. Although the majority of environmental plans prepared in Fiji are intended to manage or provide for development, they contain little or no policy about appropriate environmental quality that could guide government, local government or statutory agencies in their subsequent work or decision making. This lack of policy has also constrained the effectiveness of the environmental impact assessments done in Fiji.

Various government departments have evolved their own, largely uncoordinated, approaches to environmental impact assessment. The only common link occurs when assessments are referred to the Department of Environment for comment, either at the scoping stage, or when complete. Environmental impact assessments are only done for selected activities, mostly in rural areas, either for legal reasons or because it is long-standing practice not to apply the full discretion in various statutes. The activities of indigenous Fijians on native land have not been subject to environmental impact assessment. Completed impact assessments are not followed up nor is any attempt made to enforce compliance with consent conditions. The Fijian legislation that provides for leases and licences of both native and Crown land is several decades old, a legacy of the colonial administration, and provides sufficiently wide discretion to cover all environmental concerns for a wide range of activities; but the state has not used the full extent of its own legislative powers. The state only uses those parts of the environmental impact assessment process in which the agencies funding development have expressed an interest, ignoring other parts of the process such as assessing alternatives, monitoring outcomes and enforcing consent conditions. Although environmental impact assessment and environmental planning are used within the state sector, they are rarely used voluntarily outside it.

6 THE HYPOTHESISED PROCESSES: ANALYSIS OF EVIDENCE

In previous chapters I described how South Pacific regional organisations have promoted environmental planning, environmental impact assessment and protected areas and how these techniques are practised in Fiji. I also described the way that international institutions influence Fijian environmental management both directly, and through regional organisations. In this chapter, I assess the extent to which certain macro theories of socio-political processes (the four hypotheses on page 12) account for these dynamics.

6.1 CULTURAL MODERNITY

Fiji is still largely an agricultural and fishing society (on both a commercial and subsistence basis). There are, however, signs that it wants to develop more industry based on knowledge and information technology (Fijilive 2001; Kubuabola 2001; New Labour Unity Party 2001). This accords with the ongoing urban migration and with the general process of cultural modernisation, especially the idea that, in progressing, societies reduce their dependence on nature. In section 1.3.1, I described other manifestations of cultural modernisation: (1) increasing rationality as a means of mastering nature; (2) increased bureaucratisation; and (3) the centrality of science. In this sub-section I assess the evidence that these are driving the institutionalisation of modern methods of environmental management in Fiji.

6.1.1 RATIONALITY

The paucity of government policy concerning what environmental quality is desirable (described in section 5.3.2) indicates that the state's environmental management has not become increasingly rational in terms of the values (basic considerations of human purpose) on which it has been based. Although the state's environmental management may be value based, this base has not changed or advanced as a result of attempts to use modern environmental methods in recent years. Furthermore, despite their basis in rationality (discussed in section 2.2), the selected methods of environmental management are not applied in a rational manner, as I discuss below. There is a general lack of rationality of means in its environmental management (for rationality of means, see section 2.1.1).

Protected areas

In efforts to protect areas in Fiji, there is little evidence of any technical rationality of effort, scientific rationality, rationality of values (regarding what to protect), political rationality, or indeed any type of rationality. The approach is more of a wish list advanced by those with a conservation or natural history interest and an opportunity to suggest areas that should be protected (see section 5.2.1), a list which the state has done little to implement. There have been recurring suggestions about the need for a system of protected areas, including the suggestion in the national environmental management strategy, which Cabinet endorsed in 1993. This is presumably still government policy since subsequent governments have

not rescinded it¹. Despite such policies, the state has not developed a rational approach to deciding which areas to protect, using either the various lists compiled over the years or starting yet another list.

There are good grounds for using a rational approach. Some proposals may be easy to achieve than others. Some may merit more urgent protection because of specific risks. Areas could be ranked using ecological criteria (as suggested in IUCN 1993, 50). There has not, however, been a systematic assessment of the constraints and difficulties associated with each of areas proposed for protection in the various lists nor their relative ecological merits. The most recent effort, the draft national biodiversity strategy, does not take any such rational approach. It recommends a list of priority sites (without supporting justification) and sets the objective of securing these through 'appropriate arrangements' with the current landowners or authorities (Department of Environment 1999, Focus 3).

Environmental planning

SPREP plans

Even though SPREP action plans and nature conservation strategies are modelled on a strategic mode of planning which in itself entails a form of political rationality in the way it specifies goals and objectives and spells out tasks designed to achieve these, there is little evidence that they are based on either technical rationality or on (substantial) rationality of environmental values (cf. Meijer (1984, 74, 78). Despite repeated mention in these SPREP plans of the need for a rational approach to environmental management and rational management of available resources (e.g., SPREP 1996c, 7-8; SPREP 1997a, 7 for instance; also table 4 on page 57), the plans themselves are not a rational form of planning for three reasons.

First, according to the norms of rational planning, if strategic plans are to be effective they must heed matters that may significantly affect how their aspirations and visions are achieved. Strategic environmental plans in the Pacific should therefore consider (amongst other matters): (1) the security (strategic) concerns of major powers that may have significant environmental effects (nuclear testing for instance); (2) the effects of trade, industrialisation and economic growth on the environment; and (3) catastrophic natural events such as cyclones and floods and the way that these affect people's behaviour towards the environment. These are not mentioned, or given only cursory attention, in the environmental plans produced by SPREP for the region.

Second, rationally based planning involves setting goals, identifying issues and needs, and alternative approaches to these, weighing up the costs, benefits and risks of each, and choosing a path forward

¹ To the contrary, the environment chapter of the People's Coalition Government draft strategy included the objective of implementing the national biodiversity strategy and setting up two nature parks and three marine parks by 2004. That government was in power for one year, mid-1998 to mid-1999, until parliamentarians were taken hostage and the president appointed a caretaker government. Robin Yarrow supplied a draft of this strategy in the form it had reached before that government's members were taken hostage in mid-2000.

(Smith, L. G. 1993, 78; Meijer 1984, 80-1). It requires identifying possible conflicts, looking at possible trade-offs and deciding on which ones are acceptable. SPREP plans do not do this. Instead of being comprehensive, analytical, rational determinations of alternatives and preferred options, the regional environmental plans have been vehicles for certain messages: the need for governments to manage the environment in their countries and for intergovernmental organisations and donor agencies to be involved, and the various story-lines listed in section 1.3.3.

Third, the way in which very few provisions have ever been implemented or monitored is another indication that SPREP's environmental planning processes have little basis in rationality. AusAID reviewers found that the 1997–2000 SPREP action plan had 'received little attention or use ... Knowledge in countries of SPREP's current strategies, plans and activities has been poor' (AusAID 2000, 7). At SPREP, monitoring of previously planned activities has also been poor, although recently some thought has gone in ways to improve this in the future (see section 4.2.2). This inattention to monitoring the outcomes of its efforts may, in part, be because the activities in SPREP plans are intended to be implemented by range of agencies including national governments, non-governmental and intergovernmental organisations, not just SPREP itself. The various regional nature conservation strategies specify multiple tasks that a diverse range of organisations are expected to implement. To ensure these are implemented effectively, there would need to be to be sub-strategies specifying who was doing what, plus a means of checking that this actually occurred. Only two of these strategies, the 1994–1998 and the 2001–2004 ones, contain a framework or mechanisms to enable progress in implementing them to be monitored and reported (and these are two different frameworks). Each SPREP plan makes only a superficial assessment of progress in implementing the previous strategy. The introduction to the 1999–2002 strategy (SPREP 1999a, 2-3) contains a brief, non-quantitative summary of progress that is not based upon the performance monitoring framework set out in the previous strategy. This makes it hard to gauge the extent to which the planned actions have been implemented, let alone whether the objectives were achieved. One can but guess that little has been implemented, or that it has been inadequately implemented, since the planned activities are repeated in succeeding strategies.

This is not a problem confined to SPREP plans. Few of the provisions in the various national environmental management strategies have been put into effect. 'In many countries there was insufficient follow-up, proposals were dismissed as wish lists and few resources materialised for implementation ...[they] produced few useful outcomes' (AusAID 2000, 4, 7). Most of the Fiji national environmental management strategy has not been implemented (as discussed in section 5.3.2).

The Fiji national environmental management strategy

The planning process followed when preparing this strategy was not a rational, logical argument identifying alternative means of achieving the objectives, spelling out the likely costs, benefits and risks of each and choosing the 'best' alternative in the circumstances. It did not identify the alternatives, potential conflicts, or possible trade-offs, typical of a technically rational plan. Collectively, the five objectives of the strategy are intended to ensure that development in Fiji is sustainable, but their

relationship with other provisions in the strategy is not clear (for these objectives, see IUCN 1993, 19). The connection between the objectives and the various issues, risks and threats mentioned in parts of the plan is a very loose one. The end result is a plan that appears to be driven by the projects and institutional arrangements that it suggests, rather than by objective endpoints, as I discussed in section 5.3.2. Because of this, and because of the limited local involvement, the planning process differs from the notion of a politically or technically rational plan described in section 2.1.1.

Environmental impact assessment

The practice of environmental impact assessment in western countries is based heavily upon instrumental and scientific rationality. In theory, by requiring developers to prepare environmental impact assessments, the Fijian government has a rational process by which to manage the quality of the environment, and can exercise some control over the impacts these developments may have. In practice, the rationality associated with the practice of environmental impact assessment has been eroded by the way it has been used in Fiji. Rebekah Ward's (1996) analysis of the way 18 environmental impact assessments had been carried out clearly showed this (these were almost all the environmental impact assessment done in Fiji up to that time). Few of the developers and consultants assessed alternatives and, when they did, they concentrated on easy options that would not alter the original design or location (Ward 1996, 77-8). Only three of the 18 assessments addressed the potential impacts in anything more than a superficial manner (Ward 1996, 80-2). Instead of looking at ways to prevent adverse impacts, the majority of environmental impact assessments recommended reactive measures to ameliorate short-term direct impacts but not long-term impacts or indirect ones (Ward 1996, 84-5).

This is similar to what Onorio (2000, 245-6) found when researching the effectiveness of different types of organisational controls on four environmental impact assessments elsewhere in the South Pacific. The four types of control he investigated were: (1) procedural control when centralised administrative units promulgate the assessment procedures in the expectation that the lead agency or developer will adopt these voluntarily; (2) evaluative control when the centralised administration unit issues sanctions after appraising the lead agency or developers' actions regarding the assessment; (3) professional control that relates to professional standards and codes of practice that project planners may apply to environmental impact assessment; and (4) instrumental control that occurs when funding agencies offer material incentives in return for carrying out certain tasks including environmental impact assessment (Ortolano *et al.* 1987, 287). Onorio (*ibid*) found procedural and evaluative controls were ineffective in his case studies, mainly because the government environmental agencies could not enforce compliance. When an environmental impact assessment had been implemented, it was motivated either by professional controls or (more often) instrumental controls, or both.

In Fiji, different agencies have different guidelines (PWD, Mineral Resources Department and Department of Environment). There is no centralised procedural control. Only the PWD and Mineral Resources Dept have evaluative controls and some but not all development assistance agencies exert instrumental control (see section 5.4.1). There is some professional control, when those preparing

environmental impact assessments have learnt about its use as part of their planning or engineering degrees for instance. The practice of environmental impact assessment is most rational (with respect to means) when all these four types of control are present. The Fijian state has not adopted as rational an approach to environmental impact assessment as the technique itself allows. It could have installed more procedural, evaluative and professional controls. Furthermore, the state have not used environmental impact assessment to make better predictions next time around, and to improve development planning, which is an inherently rational way to use the technique.

6.1.2 USE OF SCIENCE IN ENVIRONMENTAL MANAGEMENT

SPREP is recognised as a technical agency, providing technical advice based on scientific understanding of expert knowledge or skills (Hunnam and Tuioti 2000, 5, 10-1). SPREP does not undertake scientific research, and relies instead on the knowledge of its staff, and consultants. These staff have a background in management and policy rather than in scientific research. The secretariat supplements its in-house scientific knowledge by commissioning reviews on specific subjects. This leads to SPREP overlooking recent scientific research and advances in scientific thinking. I mentioned in section 4.2.2 that advances in ecological thinking have not influenced on SPREP action plans and nature conservation strategies.

In Fiji, scientific concepts are used in preparing environmental impact assessments and environmental plans and in choosing protected areas, but not to the extent found in New Zealand. The type of science used in both environmental plans and impact assessments in Fiji is general scientific knowledge – an awareness that a species that may be endemic or considered rare by IUCN standards, and of ecological processes such as the role of mangroves in maintaining fisheries and protecting shores from erosion. This scientific knowledge is being applied at the level of general principles and processes, although in some environmental impact assessments such as those done for mines, and those which overseas scientific agencies and University of the South Pacific staff have prepared, there are some scientifically based calculations of predicted impacts. The use of science does not extend to applying scientific method to environmental impact assessment. In such an approach, research and monitoring is designed to disprove null hypotheses about the predicted impact of the proposed development, in order to better understand what is happening, especially any relationships involving cause and effect rather than mere coincidence². Such approaches are needed when the impacts of certain activities are regulated, allowing only a certain level of emissions or other types of pollution, for instance. But there is no such regulation in Fiji and therefore no need to prove that activities breach regulatory standards.

The Ministry of Fisheries and Forests and the National Trust, both responsible for existing protected areas, do not manage these scientifically. Since independence, science has played only a minor part in the selection of protected areas in Fiji. Global iconisation and international pressure to preserve tropical

² There is a body of literature concerning experimental approaches and monitoring designs for assessing environmental impacts in different situations (e.g., Fairweather 1989; Sampson and Guttorp 1991; Stewart-Oaten, Bence and Osenberg 1992).

rainforest, plus pragmatic threats such as pressure to log an area have had more influence upon the choice of areas, such as the blocks of relatively undisturbed rainforest at Wabu and Sovi Basin³. This contrasts with the actions of the colonial government which set up almost all existing reserves because of scientifically-based concerns such as potential soil erosion (section 2.1.1).

6.1.3 BUREAUCRATISATION

Introducing these methods of environmental management to Fiji has had little impact on the extent of bureaucratisation in Fiji. At government level, little effort is put into environmental impact assessment, apart from one officer in the Department of Environment. Working on environmental impact assessment is only a minor part of the work in other departments – PWD, Mineral Resources, Lands, and Town and Country Planning (various interviews). There has not been any increased bureaucratisation as a result of environmental planning – either in preparing or implementing plans, the latter because few provisions are subsequently implemented. Neither the establishment or management of protected areas has increased the degree of bureaucratisation in Fiji, given the low degree of effort put into these. Furthermore, a desire for increased bureaucratisation is not driving the use of these selected methods of environmental management in Fiji. On the other hand SPREP has been able to increase its staff by working on protected areas and, to a lesser extent, on environmental impact assessments, both through aid funded programmes.

6.1.4 SUMMARY: CULTURAL MODERNITY

There is some evidence that the increasing pre-eminence of rationality and science in modern western states led to the introduction of these methods in the regional organisations (the bureaucracy associated with these organisations and their provision of technical advice based on simple scientific notions). There is little evidence to suggest that Fijians are using these because they want to be more scientific, rational, or bureaucratic. They are, instead, using them in ways that are far less rational than the methods themselves allow for, and in ways that have only a limited scientific basis, overlooking scientific method. Although it may have influenced the introduction of the selected methods of environmental management to Fiji, the process of cultural modernisation has not provided any impetus for increasing the extent to which these are used, or the way in which the techniques have evolved through practice. Nor has the process of political modernisation, the creation of institutions supporting public participation, been extended to environmental matters in Fiji.

³ Hviding and Bayliss-Smith (2000, 1-2) observed that '[t]he tropical rainforest has emerged as one of the most potent symbols of the North-South debate...[It] has become an icon for the environmental movement, and its fate is in the form of a moral discourse with the power to unite or divide the people's of the planet. In the mass media and across the World Wide Web, the rainforest is ... discussed in terms of wonder and mystery.'

6.2 GLOBAL PROBLEMS, INSTITUTIONS AND SOLUTIONS

6.2.1 A GLOBAL PERSPECTIVE IN ENVIRONMENTAL MANAGEMENT

The hypothesis about global environmentalism contains several assertions:

- that a globalist perspective on environmental conservation has reached the South Pacific;
- that the words and actions of central institutions that operate in the international arena have brought about this perspective;
- that this perspective is based upon the ideas that:
 - the environment is a global problem; and
 - this global problem can only be solved or managed by global institutions;
- that global institutions are seeking to institutionalise the selected methods of environmental management in order that they can then manage the South Pacific environment and impose common goals and standards.

In chapters 3, 4 and 5, I described the ways that global institutions (United Nations agencies, treaty agencies, multilateral aid agencies and non-governmental organisations such as IUCN and WWF) all try to draw the South Pacific states into a globalist perspective on environmental management and conservation. In doing so, they work both directly with the Fijian government and through regional organisations such as SPREP.

Fiji has been drawn into this global perspective through its participation in aid projects, international conferences and meetings, negotiations of international treaties, and contributions to international databases and state of the environment reports. The way that the government has used environmental planning and environmental impact assessment, and has created protected areas suggests, however, that it has not wholeheartedly adopted this perspective. It has adopted it only partially, and amended it to suit local circumstances.

6.2.2 CREATING OPPORTUNITIES FOR GREATER EXTERNAL INVOLVEMENT

Section 3.3.2 described the way that the discourse emanating from SPREP depicts the environment as a problem to be solved, a problem requiring global intervention (table 6 on page 61), and necessitating help from external advisers (table 5 on page 60). Although the discourse creates the space for outsiders to come and solve the South Pacific's environmental problems, it does not, however, contain an argument that only global institutions can solve these. Instead it seeks to place outsiders within local institutions and countries, in various capacities: technical advisors (experts) funded by aid agencies, expatriates working in regional agencies, volunteers working government agencies, and consultants. Even so, the transnational network of specialists with scientific knowledge working in policy positions in national and intergovernmental agencies, which Peter Haas (1993, 178-80) suggested exists (discussed in section 1.2), is not an accurate description of the result. Apart from some specific projects producing model legislation,

guidelines or having standard formats (such as national environmental management strategies), SPREP does not directly advise member states on what form their national environmental policy should take.

The extensive use of projects, whether or not co-ordinated by regional agencies, regularly invents opportunities for donors involved in South Pacific environmental management. Donors can work with states either directly or through one of several regional organisations that run environmental projects (described in Appendix 2). The use of projects also allows donors to place consultants in countries to shape a particular approach to environmental management. A good example is the Asian Development Bank consultant involved in drafting the Sustainable Development Bill, mentioned in section 5.1.2.

On environmental matters, Fiji reacts to donor priorities rather than the other way around, partly because of the low level of government funding for the Department of Environment which prompts departmental staff to look for external aid funding (section 5.1.1). This creates opportunities for external involvement. In using the three selected methods of environmental management, the Fijian government has created other opportunities for external input into its environmental management, since use of these methods depends upon experts, both for technical advice and for executing the techniques – preparing plans, assessing potential environmental impacts, judging what flora and fauna is threatened, and so forth. The pool of such expertise in Fiji is small. Foreigners and expatriates have been involved in many of the Fijian environmental plans and impact assessments, often as consultants (described in sections 5.3 and 5.4). There has been some external involvement in the proposals that have led to further areas being protected (described in section 5.2.1).

There is little evidence that global institutions have had any interest in the environmental impact assessment decisions made in Fiji to date, but if environmental impact assessment becomes better institutionalised this could happen, as postulated in section 2.2.4. Making environmental impact assessment mandatory and routine (as proposed in the Sustainable Management Bill) will increase opportunities for outsiders to be involved in Fijian environmental management, through public consultation. So too will creating Ramsar and World Heritage sites, because the convention secretariats can then become involved in matters connected to the sites. Creating further community conservation areas based around tourism will also have this effect. Eco-tourism ventures need to meet certain overseas expectations or tourists will not come. Furthermore, tourists can be vocal in telling the locals when they think they should be better looking after the environment (Dave Bamford, Tourism Resource Consultants, *pers. comm.*, August 2001).

The contents of environmental management plans – the activities they suggest – often provide opportunities for outsiders to become involved in South Pacific environmental management. Many planned activities necessitate outside help; many are specifically shaped to allow donors and non-governmental groups to be involved, e.g., the 1999 nature conservation strategy, which listed who should work on what, and the Fiji national environmental management strategy, which listed projects for aid donors to fund ((SPREP 1999a; IUCN 1993, respectively).

6.2.3 CONTROL OVER THE ENVIRONMENTAL AGENDA

The globalist perspective on the environment and conservation centres on certain issues and excludes others. It creates a particular global agenda for environmental management. In the South Pacific, the regional agencies help aid donors apply this agenda. SPREP's agenda is largely shaped by global institutions funding its work. This aid donor influence on SPREP has been happening since at least the mid 1970s when an ex-IUCN employee and a UNEP consultant prepared the written document proposing to set up SPREP, using ideas as such ecodevelopment that were part of global environmental discourse at that time. This shaped SPREP's initial work programme (SPC and SPEC 1977).

There is no evidence of any rigorous analysis or broad participatory process undertaken to define the truly important issues affecting the South Pacific environment (section 4.2.2). I described, in Section 3.3.2, the way that the regional environmental management discourse has failed to mention the big issues that threaten the South Pacific environment such as mining and nuclear testing. This is another form of control over the environmental management agenda. Environmental planning efforts both at SPREP and in Fiji accept the way that liberal capitalist political-economic system and the way it depicts environmental issues. Those plans do not question the way in which Fiji is being drawn further into global exchanges of goods, expertise and ideas, even when these adversely affect the environment.

Intergovernmental organisations have also controlled the South Pacific environmental management agenda by specifying the format in which Pacific island states may report problems. This, in turn, determines priorities for donor funding. UNEP's influence on the 1982 SPREP workplan was mentioned in section 3.2.2. The form of reports to UNCED was based upon IUCN guidelines (Thistlewait and Votaw 1992, vi). The global institutions influence the regional agenda in yet another, less direct way. Documents such as *The Pacific Way* represent a negotiating position as much as they represent an objective assessment of environmental concerns (Gerald Miles, SPREP, *pers. comm.*, August 2001). But the documents remain long after the negotiations and are subsequently used for other purposes, including setting donor priorities.

Within the Fijian government departments, there is a belief that it is locals that 'make the play'. Several people made this point when I asked them about the influence in Fiji of SPREP, and international intergovernmental organisations. It is noticeable that almost all the environmental planning efforts in which expatriates have been involved have not come to fruition. There are significant examples: section 9 in Development Plan 7 (Government of Fiji 1975); the National Trust's proposal for a system of parks and reserves (National Trust 1980), the Maruia Society's suggestions for a simpler system of these (Lees 1989); the National Environmental Management Strategy (IUCN 1992), the Sustainable Management Bill drafted in 1995-6 (ESCAP 1999, I-C), the National Council for Sustainable Development in this Bill (ESCAP II - H), and the planned Environment Commission mentioned by Stuart Chape in 1992 (SPREP 1992a, 2). Reading these documents, one forms the impression that changes are inevitable and the proposals are shortly to be implemented. Yet, to date, virtually none of these proposals have been

implemented. It is not clear, however, whether this would be any different had they been entirely prepared by indigenous people trained in the techniques involved.

The environmental issues on which the Fijian government chooses to work are largely restricted to those promoted and funded by aid agencies (Bhaskaran Nair, Ministry of Local Government, Housing and Environment, *pers. comm.*, July 2001). Any apparent leeway may be illusory. The International Waters programme that SPREP recently began with GEF funding, appears to give countries a choice about what they can do with the funding they receive (SPREP 2001). In reality, the allocation of funds is so well defined and proscribed, that individual countries will have little choice about what issues they can address.

There is another way of looking at this. The Fijian government seriously acknowledges the environmental problems, as defined by the global institutions. Documents such as the state of the environment report (Fiji Ministry of Housing and Development and IUCN 1992), the national environmental management strategy (IUCN 1993), report to UNCED (Chape and Watling 1992b), and report on the status of biodiversity (Department of Environment 1997) attest to this. But when the state is expected to provide its own funds and resources then any acknowledgement of environmental problems is minimal (section 5.1.1).

6.2.4 THIRD WORLD RESPONSIBILITY FOR SAVING THE EARTH

In section 3.3.2, I showed how the Pacific islands are depicted as vulnerable and how this is used to justify external involvement in environmental management. Such depiction can be challenged on scientific grounds⁴. But an equally important issue concerns the way it frames the South Pacific and the power it accords to external organisations and countries.

The assertion that 'Pacific islands biodiversity is amongst the most critically threatened in the world today' (SPREP 1999a, 9) implies that this is where international effort should be placed and therefore justifies external involvement in these islands. The reason why it is now critical to protect Pacific island biodiversity is largely because in western countries including those recently colonised by Europeans, the critical point has already been reached. A lot of biodiversity (whole ecosystems, species and genetic combinations) has already been lost in these countries. In New Zealand there are wildlife breeding programmes to save species such as the kakapo and active programmes to maintain national parks and reserves in as natural a state as possible, to save what is left. In section 2.2.2, I discussed the way in which global institutions have allocated the responsibility for conserving biodiversity (and therefore for establishing protected areas) to Third World nations. In failing to recognise that the reason why things are critical in Third World areas such as Pacific islands is because, in industrialised countries, nature has been

⁴ See Whittaker (1988, 245-7) regarding lack of evidence to substantiate the view that island ecosystems are by nature fragile in the sense of being susceptible to invasion by exotic species; also Nunn (1993) regarding the underestimation of non-human factors on environmental changes on Pacific Islands.

detrimentally and massively altered, the global organisations avoid having their self-assigned parental role challenged.

The World Bank's Pacific biennial economic reports have laid the blame for environmental problems (apart from natural disasters) at the feet of Pacific islanders; these reports do not acknowledge the extent of the role that people and countries outside the region may have in causing or exacerbating environmental degradation. In a similar vein, Greg Fry (1996, 23-4) also noted that in framing its foreign policy, Australia fails to acknowledge that it has the very failings of which it accuses Pacific islanders. 'Environmental problems in areas such as coastal management, coral reef, and land degradation are at least as serious within Australia as in the Pacific islands' (ibid). These practices all help normalise the role of developed countries in supplying environmental management experts to Pacific island countries framed as needing help in protecting their environments.

Pacific island states intend to use the environmental vulnerability index that SOPAC is developing to argue for more development assistance funds (Craig Pratt, SOPAC, *pers. comm.*, June 2001)⁵. In doing so, they will be perpetuating dependency, not just materially but psychologically. They will in effect be accepting the responsibility for saving the Earth and according outsiders the right to tell them how their citizens should interact with nature and how they (Pacific island states) should control these interactions.

6.2.5 SUMMARY: GLOBAL ENVIRONMENTALISM

Global environmentalism has aided the introduction of these environmental management techniques to the South Pacific including Fiji (partly through the regional agencies). It does not, however, explain why the environmental management techniques used in Fiji diverge from the way global organisations intend them to be used – incomplete use of the environmental impact assessment process; plans not implemented; protected areas not managed to protect the plants and animals within them, and so forth. The environmental impact assessments and plans that the government has been involved with have not been guided by, or served to develop, any common global standards or policy on appropriate environmental quality.

⁵ SOPAC has been developing an index for assessing the relative environmental vulnerability of different countries, starting with those in the South Pacific but extending worldwide eventually. The idea for this was expressed at the GCSDSIDS and included in the Barbados Programme of Action. New Zealand and several other countries fund this project which was initiated when Simon Upton, New Zealand National Government Minister for Environment, was head of UNCSD, and wanted to fund parts of the Barbados Programme of Action that remained unactioned (Craig Pratt, SOPAC, *pers. comm.*, June 2001. The index is a composite of quantified risks to the environment (both natural and anthropogenic), the ability of the environment to cope with these (its resilience) and the health or condition of the environment as a result of past impacts (termed ecosystem integrity) (Kaly *et. al.* 1999, iii).

6.3 THE SEARCH FOR SUSTAINABLE DEVELOPMENT

6.3.1 THE SUSTAINABLE DEVELOPMENT STORY-LINE IN THE SPREP DISCOURSE

Searching for a way to balance the economic growth desired by both North and South, with human impacts on the environment that could threaten this growth is the basis of the third hypothesis. In both SPC and SPREP plans, the concept of sustainable development appears for the first time in the 1985 nature conservation strategy. It does not appear in SPREP action plans until 1991. The 1991–4 and 1997–2000 SPREP action plans and the 1994–8 nature conservation strategy are all centred around sustainable development. Introducing the sustainable development story-line does not, however, represent a discontinuity in the SPREP environmental management discourse (for discontinuity in discourse, see section 1.4). The parts of the sustainable development concept that appear in SPREP plans under the sustainable development label, had already occurred in previous plans, e.g., the idea of local community participation occurred in the 1991–4 plan as a way of achieving sustainable development (principle 3, SPREP 1993f, 6). This idea had earlier been used in the 1977 document that proposed a South Pacific environmental management programme, which predates the sustainable development story-line. The 1991–94 SPREP action plan focuses on a single aspect of sustainable development, environmental improvement, which was also the focus of previous SPREP plans.

The SPREP plans utilise only part of the Bruntland report's concept of sustainable development – a vision of a simultaneous mutually reinforcing pursuit of economic growth, environmental improvement, population stabilisation, peace and global equity, all of which could be maintained in the long-term. The concept of sustainable development in the 1985 document merely links the need for protected areas with the sustainable development of resources through conservation. The concept of sustainable development used in these South Pacific plans is a narrower version of the Bruntland report concept (see chapter 2). Although the words in the preamble to the SPREP 1991–94 action plan speak of the need to integrate environmental and development concerns to sustain long-term economic growth, the plan itself does not address this. It neglects the aspects of human settlements that the 1977 document proposing an environmental management programme in the South Pacific discussed, for instance. Only in a few instances does it seek to guide economic growth in ways that are environmentally benign and it ignores the idea that this should be socially just. None of the SPREP action plans mention social equity and distributive justice, part of the concept of sustainable development and part of the worldwide debate about how it can be achieved (Harvey 1999, 167–8).

6.3.2 SUSTAINABLE DEVELOPMENT IN FIJI

A search for sustainable development – a way of combining further economic growth with the management of human impacts on the environment, or even a way of involving the citizenry in decisions about the quality of the environment in Fiji – is not driving the state's use of the environmental management techniques under study. The Fijian state has not shown that it is serious about preventing environmental damage before it occurs, through proactive state regulation and ecological controls, a fundamental characteristic of the ecological modernisation discourse of which sustainable development is

part (cf. Harvey 1999, 164-5). It has not shown that it is attempting to achieve a win-win solution in regard to both economic growth and environmental controls, another fundamental characteristic of sustainable development (Harvey 1999, 166).

The way that successive Fijian governments have used protected areas, environmental planning and impact assessment does not suggest that they intend to ensure that the environmental effects of economic growth and development are well managed. First, because of their limited influence and budgets, the people who are trying to apply these methods along western lines (mainly in the Department of Environment, Forestry, Lands, Mineral Resources and Public Works Departments, and in the Native Lands Trust Board and National Trust of Fiji) have probably had little effect on environmental quality in Fiji generally, and on the way that Fijians affect the environment in particular. Second, apart from a few staff in the Department of Environment, neither the state (which includes the Native Lands Trust Board) or municipal authorities are promoting the idea that the environmental quality should be managed in an active way in order to ensure that Fiji is a healthy, pleasant place in which to live and work. Third, the idea that the state should monitor environmental quality, and the impacts of activities upon this, and use this information to manage environmental quality – the basic premise of sustainable development – is contrary to the way that the Fijian state has operated. Fourth, although there has been some rhetoric combining approaches to economic development with ways of managing human impacts on the environment, there has been little co-ordination between those dealing with environmental management matters and economic development planners in the finance ministry and prime minister's departments (ESCAP 1999, III-B). In theory, the state's use of environmental impact assessment should serve to combine economic growth with ways of managing human impacts. In practice, the way the state is using environmental impact assessment gives it little control over environmental quality. It places this control in the hands of consultants, as I argued in section 5.4.

Finally, state agencies do not encourage the public to participate in environmental management. They limit participation to the owners and users of land and other natural resources in the particular area under the spotlight. The democratic role that sustainable development accords to global civil society, described in Section 2.1.3, is not recognised in Fiji, nor is it used to address environmental degradation. The state has not demonstrated any interest in distributive justice on environmental matters, another aspect of sustainable development mentioned in the Bruntland Report.

6.4 THE STATE AND THE CONTROL OF NATURAL RESOURCES

6.4.1 CONTROLLING RESOURCES THROUGH ENVIRONMENTAL MANAGEMENT

This hypothesis postulates that in order to develop itself, the modern centralised state needs to control resources including land and this leads to a struggle with grassroots actors, foreign interests, and other local institutions for control of these resources; it also postulates that the state seeks to institutionalise the selected methods of environmental management to aid it in this struggle. In Fiji, the state's approach to environmental management is tied up with wider issues of allocation of land, which have been a key issue in Fijian politics for several years.

There are several manifestations of the conflict associated with this issue: non-renewal of agricultural leases held by Indo-Fijian sugar cane farmers and disputes over appropriate compensation for both tenant and landlord (Braddock and Symonds 2000; Veramu 2001); the idea of a land use commission first proposed by former prime minister Ratu Sir Kamisese Mara and revived by the Peoples' Coalition government before it was ousted in 2000 (Australian Broadcasting Corporation 2000; Braddock and Symonds 2000); and the land claims tribunal proposal which Native Lands Trust Board were investigating in 2001 (Fiji Government Online 2001). The state has concentrated more on matters concerning the allocation of land and natural resources (issuing leases and licences for native land through the Native Lands Trust Board, and for Crown land through various government departments charged with administering other legislation) than on concerns about environmental quality.

Protected areas

The Fijian state does not appear interested in protecting areas. It has not allocated responsibility for creating and managing conservation areas to a single state agency, even though the 1993 national environmental management strategy suggested this. Creating a single agency responsible for nature conservation, with appropriate legislative power and budget, would increase the effort put into protecting areas. The lack of centralised authority leads to much talk and interdepartmental committees but to little action on environmental matters.

Unlike other countries where the state has taken over land to create protected areas and has displaced the peasants using it (e.g., Thailand and Madagascar (Ghimire 1994, mentioned in section 1.1.1), in Fiji there is little evidence that establishing protected areas has increased the state's control of resources. The state's record suggests that it does not consider that declaring native land to be Crown land in the public interest, in order to protect biodiversity or certain habitats, is one of its roles. With the exception of one area gifted to the Crown, all the areas formally protected since independence in 1970 were either Crown land (Sigatoka Sand Dunes National Park), or were leased from native landowners through the Native Lands Trust Board. Native landowners still maintain an interest in their land when it is leased for conservation; this does not alienate them from their land. The state is interested in protecting native land only if the indigenous land-owning communities are compensated, and if they retain an interest in the land. This principle of compensating communities for the resources they lose the use of has shaped all efforts to formally protect areas in Fiji over the last ten years, including Sovi Basin which is being considered as a World Heritage site. In this, the state is treating formally protected land areas the same as it treats fishing grounds: when developers lease coastal areas, the state assesses the value of lost fishing and requires the developers to pay this to the fishing communities that use the area⁶.

⁶ There is a well-established state system for assessing and obtaining compensation from the developer. This is carried out for all developments that affect foreshore and sea, not just those for which an environmental impact assessment is required (Pumale Reddy, Department of Lands, *pers. comm.*, August 2001).

Environmental planning

The Fiji national environmental management strategy is based around the idea that environmental planning and management is the business of the state. It assumes that the government should be responsible for co-ordinating management of the environment and that environmental matters should be integrated into all aspects of the state's work (IUCN 1993, 1). If the strategy's recommendations were implemented, this would further cement the government's right to control natural resources. Eight years after it was completed, little of these recommendations have, however, been implemented (as discussed in section 5.1.1). The state has not chosen to use these recommendations to justify furthering its control of natural resources. Nor has it used other environmental plans to fill this purpose.

Environmental impact assessment

In theory, the act of requiring environmental impact assessment for (any) private development gives the state a measure of control over the type and level of impact that developers have on the environment. Given the limited extent that environmental impact assessment recommendations are translated into conditions of consent, and the equally limited amount of monitoring and enforcement carried out, this does not, however, seem to be a mechanism that the state, including the Native Lands Trust Board, has used to gain control over either resources or over environmental quality. The state, when considered as a whole, appears to have been more interested in encouraging investment than in avoiding, remedying or mitigating potential environmental impacts. This is despite the individual efforts of staff in the Departments of Environment, and Town and Country Planning to ensure the likely environmental impacts of developments are identified. If the Sustainable Development Bill becomes law and environmental impact assessment becomes mandatory this may change, but any such change will depend upon the way that environmental impact assessment recommendations are formulated as consent conditions and upon the resources allocated to monitoring and enforcement.

6.4.2 THE NATIVE LANDS TRUST BOARD AND ENVIRONMENTAL MANAGEMENT

By establishing the Native Lands Trust Board in 1940, the state removed from local communities their control over leasing, logging and mining their land (Volavola 1995, 50). At the same time, the state increased its income, through indirect tax derived from increased spending arising from leasing and investment, and to a lesser extent through income tax on rents and royalties. The income tax is not, however, a significant contribution to state income and in many cases may not be declared (Savenaca Siwatibau, University of the South Pacific, *pers. comm.*, September 2001). By taking control of this land, the state, through the Native Lands Trust Board, assumed moral if not explicit legal responsibility for the environmental, social and cultural impact of these activities. In preparing an environmental charter, the

Board acknowledged this⁷. But it has largely ignored this responsibility (Dick Watling, *pers. comm.*, May 2001; and as shown in the previous chapter).

The Native Lands Trust Board is wary of approaches to environmental management that might weaken its control over land, or its legal right to income. The Board opposed the provision in the Sustainable Development Bill for an environmental trust fund, viewing it as an effort to restrict administrative and decision-making powers connected with environmental management to the Department of Environment, limiting the Board's involvement and excluding the public (undated letter to Director, Department of Environment from S. Tabua, Research and Development section, Native Lands Trust Board files; Pio Manoa, Native Lands Trust Board, *pers. comm.*, May 2001). The Board believed parts of the Sustainable Development Bill could undermine its role with landowners and argued this before the Parliamentary Committee considering the bill (Pio Manoa, Native Lands Trust Board, *pers. comm.*, May 2001).

There is obviously some competition between the Native Lands Trust Board and other parts of the state, over the control of natural resources and the revenue from these. For example, in June 2001 the caretaker prime minister advised the Native Lands Trust Board to stay out of business, specifically out of trying to profit financially from the mahogany plantations originally planted by the colonial government, now ready for harvesting and worth millions of dollars. Some Native Lands Trust Board officials had apparently been trying to form alliances with prospective buyers (People's Coalition Government 2001). Competing interests in mahogany are widely believed to have contributed to the forced change of government in mid-May 2000 (World Rainforest Movement 2000; *pers. obs.*). Despite these conflicting interests, I did not find any evidence that either the state or Native Lands Trust Board is deliberately using certain approaches to environmental management to gain control of natural resources during this struggle.

6.4.3 SUMMARY: STATE CONTROL OF NATURAL RESOURCES

The state is not using the selected methods of environmental management to gain better control over land and resources. It has not marginalised rural Fijians through environmental management, in contrast to situations in other countries mentioned in chapter 1. In the final chapter that follows, I draw some conclusions about the lack of evidence supporting each of the four hypotheses discussed in this chapter, and explore alternative reasons why the state may have limited its use of these three techniques in the ways described in Chapter 5.

⁷ Sefanaia Tabua of the Board's land use planning section prepared this environmental charter c. 1993, with the assistance of Stefan Cabaniuk. The Board itself approved the charter. The idea of a charter was drawn from one the Public Enterprise Board was drafting for various organisations but the content of the charter was not copied from any particular source (Sefanaia Tabua, *pers. comm.*, May 2001). Some of the prompting for it may have come through the national environmental management strategy process; the strategy mentions the need for the Native Lands Trust Board to pay more attention to the environment.

7 CONCLUSION

7.1 THE MAIN FINDINGS

This thesis brings several matters to light. First, it has demonstrated the way that SPREP and other agencies working with it have created and perpetuated an environmental management discourse that normalises the involvement of outsiders in the South Pacific environment. These outsiders include both technical experts and agencies such as SPREP's funders: bilateral development assistance arms of countries such as Australia and New Zealand, Britain, France, United States, Japan and other largely western countries; large multilateral development banks; and the UNEP and UNDP. This discourse reinforces the appropriateness of the liberal capitalist socio-economic system for the South Pacific.

Second, although SPREP, and its funders have put considerable effort and money into trying to institutionalise modern methods of environmental management, this has not translated into their institutionalisation by the Fijian state. In Fiji, the state agencies require or conduct environmental impact assessments sporadically and selectively. Although they prepare or commission environmental plans, they virtually ignore their contents. Since independence in 1970, the Fijian state has added seven protected areas to the 22 that the colonial government created but it does not actively protect the plants, animals and habitats in any of these. Nonetheless, the Fijian state's approach to environmental management has not contradicted the messages in the SPREP discourse that reinforce the existing political-economic system and depict Pacific islanders as victims of geographic circumstances and their own actions and lack of expertise. It has not contradicted the messages that justify external involvement, and legitimate the role of western-trained experts. The state continues to involve external agencies and experts in environmental management, largely through bilateral and multi-lateral aid-funded advice and projects but also through consultancies.

The discourses of global environmentalism and cultural modernity both serve to normalise the role of outsiders and (scientific and policy) experts in environmental management. There are, however, strong arguments against the suggestion that these two processes are driving the Fijian state's practice of these selected methods of environmental management, as I showed in the previous chapter. Cultural modernisation and global environmentalism have helped introduce these environmental management techniques to Fiji, but they have not shaped the way that Fijians have subsequently used them, ways that deviate from both their theoretical models and from accepted practice in industrialised western countries. On the other hand, global environmentalism (and, to a lesser extent, cultural modernisation) are driving the efforts of those working in the intergovernmental agencies concerned with the South Pacific environment, including SPREP. Although these agencies are continually creating opportunities to impose their environmental philosophy on Fijians, this does not necessarily allow them to dictate the way in which Fijians manage their environment, or to prevent environmental degradation. Part of the reason for this is their staff have little direct involvement in environmental management in Fiji. Unlike religious organisations such as the Mormon church, they operate at arms length and do not have the channels through which to saturate communities with their environmental management message. They have no

equivalent of Mormon missionaries on bicycles, pedalling the word far and wide, and converting people to their ethos.

A quest for sustainable development, promoting further economic growth while at the same time finding ways to address the adverse environmental effects this produces, also serves to normalise the involvement of outside agencies and experts. Although sustainable development has ostensibly been a prompt for management attempts such as the national environmental management strategy, the quest for it has not motivated the Fijian state to use protected areas, environmental impact assessment and environmental planning, as I also showed in the last chapter. The Fijian state has not actively tried to control the adverse effects of economic growth. It has virtually ignored ongoing environmental degradation, and has used environmental planning, environmental impact assessment, and protected natural areas in only a token attempt to halt this.

These macro theories (the growth of cultural modernity and global environmentalism, and the search for sustainable development) are general views of socio-political history that originated in western society. They do not help us understand the intricacies of the politics of human interactions with nature in South Pacific societies. Nor does the suggestion that the state has used these environmental management techniques to increase its control over land and other natural resources. As theories of development, change processes resulting in greater similarity with the conditions prevailing in the United States, the great industrial countries in Western Europe and in Australasia, they do not explain how certain well-known techniques of environmental management, created and practised in these industrial countries, have been used in Fiji, a small, relatively undeveloped island state in the South Pacific. In purporting to be global explanations, they suggest processes that are of little or no importance in Fijian environmental management. This is the third key finding of this research.

In the remainder of this final chapter, I assess alternative explanations for the Fijian state's environmental management practices, and suggest further research that would improve our understanding of environmental management in Fiji. I conclude by pointing out two fundamental changes needed to improve this environmental management, including SPREP's role in assisting this.

7.2 EXPLAINING THE STATE'S APPROACH TO ENVIRONMENTAL MANAGEMENT

Twenty years of environmental impact assessment and environmental planning, and decades more of protecting natural areas have not arrested ongoing degradation of Fiji's natural environment. Environmental degradation continues in the rural areas as mangroves, rain forest, the plants and animals that live in these are gradually disappearing, steep land is eroding and rivers are becoming silted and polluted through logging and other disturbance associated with both settlements and commercial agriculture. In the urban areas of Fiji, environmental problems abound. Suva is a noisy, dirty, poorly planned city with overcrowded housing, squalid squatter settlements and few opportunities for outdoor recreation apart from a run-down botanical garden, some rough sportsfields and broken play equipment (*pers. obs.*).

The state has prepared environmental plans, required environmental impact assessments and set up protected areas sufficiently to gain some international approbation – and further aid funds – for attempting to be environmentally aware. It has met the basic expectations for a modern state. It has, however, limited the environmental impact assessment process to those parts required by funding donors. It does not require the environmental impacts of indigenous Fijian developments on native land to be assessed, even though this amounts to over 80 percent of the land. It has restricted its use of environmental planning and impact assessment so they do not compromise the notion that land in Fiji belongs to indigenous Fijians, and should be managed for their benefit. The Fijian state uses environmental planning in ways that reinforce the validity of its role in modern environmental management but do not threaten Fijians' rights to use native land. To the contrary, the Native Lands Trust Board plans prepared in the 1990s reinforced these rights. The state refrains from implementing plans that others prepare on its behalf, when these do not give adequate consideration to Fijians' rights to use native land - the national environmental management strategy, for example. In Fiji, environmental planning and impact assessment is not an opportunity to consider a wide range of public viewpoints. Consultation is limited mainly to state agencies and to Fijian landowners. In this, Fijian practice differs from the liberal democratic approach in countries like New Zealand and the United States.

Since 1982, the state has formally protected areas only if the native landowners are compensated and retain an interest in the land, although their continuing use may further degrade the land. It has used protected areas to financially benefit Fijians; much of this income goes to the chiefly élite who receive income from leases and royalties. Many of the formally protected forest reserves have been planted in introduced mahogany species and are due to be logged; others have already been so. The income when these are logged – and many are now mature – will benefit the state and the Fijian mataqali, and therefore mainly the chiefs. This approach to protected areas is consistent with the concept of the Native Lands Trust Board's role looking after native land for the benefit of the landowners, especially chiefs who inherit their titles and their right to rental income from leased lands.

The state has used these three methods of environmental management in a way which has been consistent with preserving Fijian's relationship to their land, and their parochial interests. It has used them in ways that do not threaten its power base amongst indigenous Fijian communities, a base is centred around the concept of native land managed primarily for the benefit of indigenous Fijians. Even though various parts of the state apply these three techniques in ways that are poorly co-ordinated, without any overall statutory framework for environmental management, there are common themes in the way they are practised that suggest this motivation. These include the way the state operates with virtually no policy on appropriate environmental quality, restricts and avoids public participation, and generally avoids assessing threats to the environment, native flora and fauna except in the context of hotel investments and some new industrial developments.

Fiji has a hierarchical, hereditary chiefly system promoted as the basis of collective identity and culture and a wise, unifying and stabilising influence (e.g., the caretaker prime minister quoted in Daily Post 2001). Powell (reported in Ho 2001, 5) has suggested the Fijian state resists ideas that would remove the

legality of the traditional ethos because this would undermine the ability of chiefly politicians and other Fijian leaders to manipulate public opinion within their own institutions and land-owning constituencies. This assumes that the state is a single entity, which of course it is not. This in itself, is not a very powerful explanation why the state has practised environmental management in such a limited way. Gerard Ward's (1995, 247) description of the vested interest that Fijian élites have in protecting the separate and even antipathetic discourse of modern economic development on one hand and communal land tenure and leasing on the other, strengthens it. Gerard Ward (ibid) concluded that the power of Fijian chiefs had been strengthened by the British colonial administration's codification of the land tenure system combined with their system of indirect rule and administration of Fijian affairs by appointed chiefs. Since 1940, the Native Lands Trust Board system of rent distribution has made many chiefs relatively wealthy. Many of these chiefly élite have also held political power in the post-independence state, and have used the wealth gained from rents to participate in commerce (ibid). Gerard Ward (1995, 247-8) argued that these élite have much to gain from promoting both the communal ideal on which the land tenure and rent distribution systems rest, and economic development. He suggested that it does not matter that these may be antipathetic, so long as the discourse is kept on separate levels – achievable provided the Fijian élite continue to control both the discourse and the political stage (ibid). In its approach to rural environmental management – refraining from providing policy on environmental quality, limiting public participation to immediate owners and users of certain areas, steering away from monitoring changes in environmental quality – the state has also avoided undermining the discourse of economic development and that of Fijian communal land tenure and leasing, and has avoided bringing these two discourses into conflict.

The state has promoted indigenous Fijian development through conservation. Throughout the 1990s the Native Lands Trust Board investigated ways of combining development and conservation for several areas including Kadavu, Ovalau, Taveuni and other parts of Cakaudrove, and Waikatakata in Viti Levu (see box 4). These initiatives, plus ongoing government compensation for three protected areas, and its investigation into the use of trust funds for this purpose (section 5.2.2), all suggest that the state has identified conservation as a route to 'development' for Fijian villagers. These development efforts all serve to normalise native village lifestyles (which are very different from those of political and economic élites in Fiji who increasingly take up residence in the large towns). By characterising the rural communities as underdeveloped, and finding ways in which villagers can seek to 'develop', the political and social élite in the Fijian state and Native Lands Trust Board can avoid addressing issues of social justice and equality – specifically questions about how they (the élite) can live as they do and collect the money they do. The differences between the two groups are characterised as being a case of 'underdevelopment', one of the possible solutions to which is development through conservation, using protected areas to generate income. Efforts at protecting areas in Fiji are as entwined with the discourse of development in Fiji as Majid Cooke described for Malaysia (1999; discussed in section 1.2). These efforts also avoid bringing the discourses of economic development and communal land tenure into conflict.

The state has ensured that the discourse of economic development and the communal ideal do not come into conflict through environmental management practices. It has achieved this by keeping the budget of

those parts of the state interested in modern environmental management small; disbursing environmental management effort throughout several parts of the state, which ensures that a single strong agency does not develop; and keeping regulatory control weak, almost non-existent.

There are other possible explanations for the limited way that the state has applied these environmental management techniques, and for the way it has avoided putting much effort into increasing their use in Fiji. I assess the utility of three of them here. One could interpret the limited way that the Fijian state practices environmental management, despite growing environmental degradation, as being the result of: incomplete understanding about how these techniques are intended to be used, owing to inadequate training of government staff involved in environmental management; people preparing environmental plans who are not professional planners and have not been trained in a range of planning techniques; lack of information about the extent of biodiversity being lost; lack of professional training in managing protected areas; and lack of expertise and experience in preparing policy, drafting legislation, or in preparing requests for assistance available under the international agreements which Fiji has signed. This is the interpretation used when development assistance agencies promote further, better targeted training (e.g., the environmental impact assessment training SPREP co-ordinated for the UNEP and AIDAB in the 1990s). To take the example of environmental impact assessment, it is not a lack of skills amongst state agency staff that impedes full the process of assessment, monitoring and enforcing compliance being implemented. Those involved in environmental impact assessment in Fiji are fully aware of the extent of the assessment process, as it is designed to be used (*pers. comm.*, various interviews). One could argue that a lack of skills among local council staff is impeding monitoring of developments once an environmental impact assessment has been done. That function could, however, be contracted out to agencies in Fiji with the appropriate skills (such as the Institute of Applied Science at the University of the South Pacific). The skills to apply environmental impact assessment do exist. On the other hand, there is a lack of rationality in decision-making. Environmental impact assessment and planning are rationally based tools, but Fijian environmental management decision-making is not. If government staff are to use these techniques as they are designed to be used, then their way of thinking and making decisions needs to become much more technically and scientifically rational, since these techniques require these types of rationality. This goes far beyond learning the mechanics of certain techniques and cannot be addressed merely by teaching the techniques themselves. This refutes the idea that better training and skill would necessarily alter the way the state uses these environmental management techniques. It does not explain why the state limits the way it applies them.

Alternatively, one could interpret the problem as institutional difficulties within an immature state, including a lack of co-ordination of different sections, leading to planned actions not being followed up, environmental impacts of developments not being monitored, or transgressors prosecuted. Aid agency' funding for institutional strengthening attempts to redress this (e.g., UNDP's Capacity 21 project in the 1990s). This is an overly simplistic assumption that does not accord any informed intentionality to those who control the workplans and budgets of various arms of the state, and its legislative programme. There have been plenty of opportunities for Fijian politicians and bureaucrats to make conscious decisions about the emphasis they put on environmental management. The extensive evidence of annual departmental

budget and corporate plan preparation, regular economic summits, government development plans (until late 1990s), and more recently government strategic plans, many of which mention environmental management, suggests there is some measure of intentionality in the way that state politicians and officials have chosen to largely ignore environmental degradation in Fiji. Again, this refutes the idea that altering institutional arrangements would alter the way the state uses these environmental management techniques and does not explain why the state limits the way it applies these techniques.

One institutional difficulty that has been mooted as the cause of the state's inattention to environmental management is the dominance of those parts of the state concerned with economic matters and development planning, resulting in environmental concerns being down-played, even ignored. The case is therefore made to integrate these. This argument is tautological: these matters are not integrated, they need to be integrated, this lack of integration is therefore the reason why modern methods of environmental management are not used properly and effectively; if we integrate them, then the problem will be solved. It is also a teleological argument, limiting explanation for environmental problems to this lack of integration. It portrays environmental management as an enterprise which can and is separated from other matters – economic, cultural, social and political – and practised in isolation from these contexts. This is a totally inaccurate representation of everyday life as Fijian people experience it. Fijians view their natural surroundings as things to be used in everyday life, and as a bank containing items that can be drawn upon when a large need for cash arises to meet education and health costs, to build a village meeting hall, or contribute to the church. Environmental management cannot be separated from the aspirations of Fijian villagers for development, to share in the lifestyles of their élite in the cities. This raises the question of whether, during the course of state business, environmental management is really separated from other aspects or if the opposite is true – is it merely one of a range of considerations, but not the dominant one?

Aid agencies and non-governmental agencies have over the last twenty-plus years, attempted to incorporate environmental considerations into development aid projects and strategies (Hardie-Boys 1999, 188). In their attempts, environmental matters have either been an 'add-on', in which case the links with other factors have often been overlooked, or they have been a specific focus such as in the environmental impact assessment training and community conservation area projects in the South Pacific. Both approaches have treated environmental management as something outside Leftwich's definition (1984, 64-5) of politics quoted in chapter 1: all the activities of co-operation and conflict within and among human societies, whereby people organise the use, production and distribution of human, natural and other resources in the course of the production and reproduction of human biological and social life.

When people attempt to use environmental management techniques, they do so within multi-faceted contexts within which they live, work and interact. Where there is little legal prescription and a high degree of legal and policy discretion as in the Fijian state, individuals use these techniques in ways they believe to be appropriate, subject to structural influences that either constrain individual discretion or cause people to move in frustration to other types of work (as happened with Alivereti Bogiva who used to work on protecting areas for the Department of Forestry and Sevanaia Tabua who did the same at

Native Lands Trust Board (respective *pers. comm.*, May–June 2001). My research has suggested that within the state, environmental management cannot be separated from the need for the state élite to keep the political support of rural Fijians. This suggests that environmental management and state politics are well integrated although not with the outcome that the aid agencies funding environmental management would like.

These three alternative explanations do not clarify why the state has used environmental planning, impact assessment and formal protection of natural areas to such a limited extent, despite the growing environmental degradation in Fiji. Of the explanations considered, the best is that it is the result of attempts by the élite who benefit from political power in the modern, post-independence state, the system of rents for native land, and the opportunities to participate in commerce, to apply environmental management methods in ways that satisfy the minimum requirements expected of a modern state in the international state system, without bringing the discourse of economic development and the communal land ideal into conflict, and thereby threatening their power and source of wealth.

Before deciding whether this is an adequate and sufficient explanation, we need to understand better the role that individual politicians and officials have in making decisions concerned with the environment. At the same time, we need to understand better the structural constraints preventing environmental degradation in Fiji being addressed. Constraints at village level, and amongst leaseholders could be as important as those in the various state agencies. Another issue worth examining is whether the patterns of land-use amongst the Indo-Fijian community have any affect on the state's environmental management practices. This calls for sociological research into the relationship between agency and structure, and for economic research. Prompts to start the research at state level are not hard to think of: How do the different parts of the state interact on matters that might affect environmental quality? Who actually makes decisions, and how? What are the constraints upon this decision-making? What matters are deliberately overlooked when decisions are made? Researching why so little attention is paid to the quality of the urban environment in Fiji, despite pollution and health problems impossible to overlook in everyday life, would probably yield insights. This would entail looking at municipal authorities, including the Fiji port authority, as well as various state agencies. A detailed examination of research into dialectic modernisation theory, mentioned in chapter 1, and recent neo-Marxist considerations of class, is also warranted, to determine whether they could offer any explanation.

Howe (2000, 55) has suggested that we should not overlook the role that nature may play in determining how humans perceive and manage environmental issues in the South Pacific. Nature itself may play a part in resistance to methods of environmental management. How much of the way that humans treat their environment can be attributed to specific types of environment in the South Pacific – or the climate or comparatively fast growth rates compared to temperate areas? Do catastrophic natural events such as cyclones overwhelm any attempts at managing the environment? This calls for an anthropological research approach.

7.3 IMPROVING ENVIRONMENTAL MANAGEMENT

There are two matters that would improve the effectiveness of environmental management in Fiji. The first concerns the issue of whether the institutional model upon which SPREP is based can ever succeed in helping states like Fiji halt environmental degradation. SPREP is a site of inherent conflict, caught among the objectives of its major funders, global institutions and First World countries, and those of its Pacific island members. It has attempted to avoid this conflict by adopting a non-political stance. As a result, it has become divorced from the Pacific island states it is ostensibly trying to help. Fijians trying to improve environmental management value SPREP only as an occasionally convenient source of funds. Furthermore, the perception of environmental management as something that can be boxed and addressed in isolation of other matters affects SPREP's effectiveness. SPREP staff work in a culture that is determinedly non-political and which largely ignores links between the way people use nature in South Pacific islands and the political, social, cultural and economic contexts in which they live. Many SPREP professional staff, the majority of whom have not worked for Pacific island governments, do not understand the linkages among environmental, political, cultural, social factors in Pacific island countries. They cannot, therefore, consider these when trying to improve environmental management practices. The design of successful environmental management programmes needs to explicitly take into account cultural attitudes, economic considerations, and political power relations at several levels from the target community to state and above. Although community conservation areas, hailed as one of SPREP's success stories (SPREP 2001a), attempt to address both local political and economic concerns, they have yet to explicitly address cultural attitudes to nature and therefore the cultural changes needed to conserve species and habitats and we have yet to see if they have done anything significant to ensure the survival of rare and endangered habitats and species.

But no amount of careful project design will get around the problem of SPREP trying to face in two directions at the same time. SPREP is a tool of global environmentalism, not a tool of Pacific island states or Pacific indigenous groups interested in environmental management. The critical issue is not a lack of accountability to Pacific island states, a matter of rationality. It is a moral issue. As well as most of its funding for staff, infrastructure and projects, SPREP derives much of its organisational values and its moral basis from developed countries, rather than from Pacific island states. The way that SPREP documents frame the Pacific environment, and Pacific islanders relationship to this, in the regional environmental management discourse is unwarranted. The messages in its discourse are both unhelpful and demeaning to Pacific islanders. The generalised vulnerability of the entire South Pacific environment, the belittling of expertise of Pacific Islanders, and the framing of them as victims of their own actions needing learned assistance, are unhelpful in addressing environmental degradation. If SPREP is to play a key role in halting environmental degradation in the Pacific island countries such as Fiji, it needs to change its organisational values, culture, and the discourse it produces. If it continues in its present form, it will be as a tool for achieving global environmentalism not as a servant of Pacific island people seeking control over the way they interact with their natural environment.

My second suggestion for improving the effectiveness of environmental management in Fiji recognises the political nature of environmental management. To improve it, one can either work within existing socio-political systems, or try and change these systems in the expectation that environmental management will also improve. It is important to make one's choice explicit, otherwise it is too easy to overlook important socio-political considerations. The suggestion that Pacific island countries should be given the space to develop indigenous approaches to sustainable management (e.g., Roger Cornforth, NZODA, *pers. comm.*, September 2001) overlooks the way in which any such indigenous mechanisms will be based on local power relationships. These power relations will not necessarily be acceptable to the developed countries that have an interest in the South Pacific environment (Australia, New Zealand, United States, and Britain for example). Because they disapproved of those taking parliamentarians hostage, and of the President appointing a caretaker government, these foreign governments imposed sanctions on Fiji in 2000 (Peace Movement Aotearoa 2000; The Age 2000). The power alliances in South Pacific island states that affect the way that they address questions of environmental quality are not necessarily any more acceptable to bilateral and multilateral donors than those behind the events in mid-2000 were. In Fiji, they probably involve some of the same people.

If SPREP, other regional agencies, and various non-governmental, intergovernmental agencies and development assistance agencies are to address environmental issues effectively, they need to decide whether they will work within, or change, socio-political systems. If they choose to work within them, then they need to understand how these systems affect both the environment and attempts to manage environmental issues. In Fiji, this means ascertaining ways of improving environmental quality that do not weaken the communal and native land systems. This is where much of the current effort falls short.

APPENDIX 1: INTERVIEWS, DISCUSSIONS AND CORRESPONDENCE

Table A: Formal (semi-structured) interviews conducted

| PERSON | ROLE/ ORGANISATION | MAIN TOPIC(S) COVERED | DATE |
|------------------|--|---|---------------------------------------|
| Dick Watling | Environmental consultant, Suva | Fiji national environmental management strategy process; environmental impact assessment, biodiversity strategy planning, and protected areas in Fiji | (1) 14 May 2001; (2) 29 July 2001 |
| Pio Manoa | Environmental/legal planning officer, Research and Development Section, Native Lands Trust Board, Suva | The Native Lands Trust Board's environmental focus | 21 May 2001 |
| Epeli Nasome | Director, Department of Environment, Suva | The Department of Environment's work; national environmental management strategy and Sustainable Development Bill | 22 May 2001 |
| Sevanaia Tabua | Formerly senior land use planner/ assistant manager with Native Lands Trust Board, Suva | The Native Lands Trust Board's environmental focus during the 1990s | 29 May 2001 |
| Jenny Bryant | Head of GEF Unit, UNDP, Suva | UNDP's work in the Pacific; SPREP; biodiversity strategy planning in Fiji | (1) 31 May 2001; (2) 3 August 2001 |
| Asenaca Ravuvu | Programme analyst, UNDP, Suva | Projects involving traditional methods of environmental management in Fiji | 7 June 2001 |
| Craig Pratt | Environmental scientist, SOPAC, Suva | The environmental vulnerability index that SOPAC is developing | 8 June 2001 |
| Alivereti Bogiva | Community development officer, Ministry of Fijian Affairs, Suva, formerly with Department of Forestry | Bouma eco-tourism projects and forest protection | 22 June 2001 |
| Mere Pulea | Pro-vice chancellor and director of Institute of Justice and Legal Studies, University of the South Pacific, Suva | Apia and SPREP conventions; Sustainable Development Bill; environmental law issues in Fiji | 2 July 2001 |
| Viane Amoto Ali | Acting director, National Trust of Fiji, Suva; formerly a planner with Department of Town and Country Planning, Suva | The National Trust's work; the Fijian government requirements for environmental impact assessment and the practice | 4 July 2001 |
| Sefanaia Dakaica | Lecturer, University of the South Pacific, Suva; formerly with Department of Town and Country Planning, Suva | Environmental impact assessment in Fiji including practice in the Department of Town and Country Planning | 18 July 2001 |

| PERSON | ROLE/ ORGANISATION | MAIN TOPIC(S) COVERED | DATE |
|--------------------|---|---|--------------------|
| Premila Kumar | Senior environmental officer, Department of Environment, Suva | Environmental impact assessment in Fiji; Fiji's participation in SPREP | 20 July 2001 |
| Elizabeth Erasito | Research and public relations officer, National Trust of Fiji, Suva; postgraduate student, Greenwich University, London | The National Trust; Sigatoka Sand Dunes National Park; research on eco-tourism and conservation in the South Pacific | 24 July 2001 |
| Maraia Ubitau | Acting director, Department of Town and Country Planning, Suva | Environmental impact assessment in Fiji and the development consent process | 25 July 2001 |
| Bhaskaran Nair | Permanent secretary, Ministry of Local Government, Housing and Environment, Suva | Environmental management in the Fijian government for the past twenty years | 26 July 2001 |
| Alan Mackinlay | Senior engineer, road design, Public Works Department, Suva | Public Works Department's environmental impact assessment and management planning for roading projects; ADB's requirements as donor | 1 August 2001 |
| Ifereimi Dau | Principal environmental officer and acting manager, Mining Division, Mineral Resources Department, Suva | Environmental management and impact assessment practice in the department | 3 August 2001 |
| Susana Tuisese | Principal extension officer, Department of Forestry, Colo-i-Suva | Government policy and management of forest and nature reserves; protected area proposals | 6 August 2001 |
| Robin Yarrow | Former member of the National Trust and former Permanent Secretary for Foreign Affairs, Suva | The National Trust; protected area and World Heritage proposals; urban environmental management | 6 August 2001 |
| Samisoni Matasere | Land use planner, Native Lands Trust Board, Suva | Environmental planning and environmental impact assessment at the Native Lands Trust Board | 7 August 2001 |
| Dave Bamford | Consultant, Tourism Resource Consultants, Auckland | Bouma and work undertaken under contract to NZODA | 14 August 2001 |
| Pumale Reddy | Chief surveyor coastal, Department of Lands, Suva | Department of Lands' environmental impact assessment process; Ramsar site selection | 17 August 2001 |
| Gerald Miles | Head of environmental planning and management, SPREP, Apia | SPREP environmental planning and impact assessment | 22 August 2001 |
| Samuelu Sesega | Nature conservation strategy co-ordinator, SPREP, Apia | Process of preparing South Pacific nature conservation strategies; SPREP's work on protected areas | 22, 24 August 2001 |
| Savenaca Siwatibau | Vice-chancellor, University of the South Pacific; formerly head of Pacific office, ESCAP, Vila | ESCAP; environmental management in the South Pacific; | 13 September 2001 |

Table B: Discussions on specific topics, which contributed to the research

| PERSON | ROLE/ ORGANISATION | MAIN TOPIC(S) COVERED | DATE |
|------------------|---|---|---------------------------------|
| Michele Lam | Project officer, International Waters Programme, SPREP, Apia | SPREP | June 2001, 22-24 August 2001 |
| Lionel Gibson | Geography lecturer, University of the South Pacific, Suva | Sustainable development in Fiji | 29 June 2001 |
| Rebekah Ward | Environmental lawyer, Beca Carter, Auckland; formerly a student at Auckland University | Environmental impact assessment in Fiji | 2, 3 July 2001 |
| Simoni | Tourist guide, Lavena village, Taveuni, Fiji | Eco-tourism and forest protection at Lavena | 6 July 2001 |
| Sala Apao | Waitabu village, Taveuni, Fiji | Eco-tourism and reef protection at Waitabu | 22 June, 9 July 2001 |
| Mika Colaudolu | Tavoro Visitor Centre, Taveuni, Fiji | Bouma eco-tourism project | 22 June, 10 July 2001 |
| Isaaki Tale | Bushwalk guide, Vindawa village, Taveuni, Fiji | Forest protection and gardening at Bouma | 10 July 2001 |
| Alex Nicholson | Director of corporate services division, Forum Secretariat, Suva | Process for getting environmental matters onto the Pacific Island Forum agenda | 18 July 2001 |
| John Low | Resources advisor, Forum Secretariat, Suva | Process for preparing CROP strategies | 17 August 2001 |
| Sue Miller | IUCN marine conservation project leader, Apia; formerly community conservation area project manager, SPREP, Apia | SPREP, community conservation areas | 23 August 2001 |
| Sefanaia Nawadra | Formerly acting Director, Department of Environment, Fiji; now at SPREP, Apia | Fiji Sustainable Development Bill | 24 August 2001 |

Table C: Correspondence conducted

| PERSON | ROLE/ ORGANISATION | MAIN TOPIC(S) COVERED | MONTH |
|-----------------|---|---|----------------|
| Heather Riddell | Deputy director, Development Cooperation Division, Ministry of Foreign Affairs and Trade, Wellington, New Zealand | NZODA environmental policy and requirements for environmental impact assessment | August 2001 |
| Sandra Lee | Minister of Conservation, New Zealand | Interaction between the Department of Conservation and SPREP | August 2001 |
| Marion Hobbs | Minister for Environment, New Zealand | Interaction between the Ministry for Environment and SPREP | September 2001 |
| Roger Cornforth | Environmental specialist, Development Cooperation Division, Ministry of Foreign Affairs and Trade, Wellington, New Zealand | NZODA and SPREP, and utility of environmental impact assessment and planning | September 2001 |
| Matt McIntyre | Project officer environmental assessment and reporting, SPREP, Apia | Environmental assessment and planning at SPREP since 1998 | September 2001 |
| Sue Erbacher | Program manager, environment, AusAID, Canberra | Monitoring of projects for which environmental impact assessment have been required | September 2001 |

APPENDIX 2: A SUMMARY OF THE REGIONAL ORGANISATIONS

In this appendix I describe the roles and membership of the South Pacific regional organisations.

Table D: South Pacific regional institutions

| SOUTH PACIFIC REGIONAL ORGANISATIONS | GOVERNANCE | FOCUS |
|---|-----------------|---|
| Secretariat of the Pacific Community (SPC) | 27 members | agriculture, welfare, health, fisheries |
| Pacific Island Forum (PIF) | 16 members | political issues, trade, economic development |
| South Pacific Regional Environment Program (SPREP) | 26 members | environment |
| South Pacific Applied Geoscience Commission (SOPAC) | 16 members | applied geosciences |
| University of the South Pacific (USP) | 12 members | tertiary education, training |
| Forum Fisheries Agency (FFA) | 16 members | tuna fisheries |
| South Pacific Tourism Organisation (SPTO) | 13 members | tourism development |
| Pacific Islands Development Program (PIDP) | 21 members | research, education, training |
| Council of Regional Organisations in the Pacific (CROP) | 8 organisations | co-ordination and harmonisation of regional initiatives |

(After Hunnam and Tuioiti 2000, 33)

The six colonial powers in the region established the South Pacific Commission in 1947. The Commission now has 27 members including Australia, New Zealand, France, United Kingdom and the United States of America. It provides technical, consultative and advisory assistance in certain spheres of development, and addresses some environmental matters as part of its agriculture, fisheries and community health programmes (SPC 1996, 26-7).

The Pacific Islands Forum (formerly the South Pacific Forum) is an annual meeting of the 16 heads of government of the independent and self-governing states in the Pacific. Australia and New Zealand are members along with 14 island states. Since its inception in 1971, the Forum has been the key political organisation in the Pacific. Although the annual meeting has always focused heavily on regional trade and economic development issues, in recent years it has paid increasing attention to the environment, including the issues of biodiversity, climate change, nuclear testing and the transport of radioactive waste, forest degradation and, latterly, whaling. There are several ways in which environmental issues reach the Forum’s meeting agenda, either from member countries or organisations which are entitled to contribute,

including SPREP which is also entitled to speak at the Forum's meeting, or through AOSIS¹ (Alex Nicholson, Forum Secretariat, *pers. comm.*, Suva, July 2001).

As well as being its administrative arm, the Forum Secretariat provides economic and policy advice to the Forum and its member countries (DFAT 2001b, 1-2) (but does not have staff with environmental policy expertise). In 1994 the Forum successfully applied for observer status at the United Nations (DFAT 2001b, 1); not all Pacific Island countries are United Nations members although Fiji is. At times, the Forum lends it seat at the United Nations to Pacific Island members who may be in New York, including SPREP representatives (Alex Nicholson, Forum Secretariat, *pers. comm.*, Suva, July 2001).

SPREP's members are the twenty-two Pacific island countries and Australia, New Zealand, France and the USA (see table 2 in main text). Its principal role is to promote cooperation and assist its members with issues of environmental management and conservation. Member countries express their needs for assistance through national planning mechanisms which are conveyed to regional planning forums including the annual SPREP meeting (AusAID 2000, 3-4).

SOPAC was originally set up in 1972, under the auspices of the United Nations to perform deep-water mineral resource evaluations. It became an intergovernmental organisation in 1984 and is concerned with applying geoscience to the management and sustainable development of non-living resources in the Pacific. It addresses some coastal development issues (SOPAC 2001, 1). Australia and New Zealand are both members of SOPAC along with various island states.

The University of the South Pacific is owned by 12 island states. It was established in 1967 to allow Pacific islanders to be trained in an island setting where problems of cultural alienation would be minimised, and was granted a Royal Charter in 1970. The governing body, the University Council, is composed of both university personnel and representatives from all island members states, Australia, New Zealand and regional organisations such as the SPC (University of the South Pacific 1971, 1-2). The university's main campus is in Suva and it has centres in all islands that are members.

Pacific countries established the Forum Fisheries Agency by convention in 1979, in reflection of the common concern of its Pacific island member nations with the conservation, optimum utilisation of, and sovereign rights over, the region's living marine resources. Australia and New Zealand are both members of FFA, along with various island states. FFA's functions include accumulating information on aspects of

¹ The Alliance of Small Island States (AOSIS) is a coalition of small island and low-lying coastal countries which share similar development challenges and concerns about the environment, especially the effects of climate change which stimulated its formation in 1990. There are 43 member states drawn from all regions of the world including the South Pacific. The alliance functions primarily as an ad hoc lobby and negotiating voice for small island developing states within the United Nations system. There is no regular budget or secretariat. Member states work through their New York diplomatic missions to the United Nations. Major policy decisions are taken at ambassadorial-level plenary sessions (Sidsnet c. 2001.).

living marine resources in the region, and evaluating and analysing data in order to advise its member countries (FFA 2001, 1).

South Pacific Tourism Organisation (SPTO), formerly known as the Tourism Council of the South Pacific, is dedicated to assisting any organisation, regional or international, involved in South Pacific travel and tourism. The SPTO promotes and develops the South Pacific as a tourist destination and has many country and industry members, which receive various services and benefits (SPTO c. 2001).

The Pacific Islands Development Program (PIDP) was established in 1980 as a forum through which island leaders could discuss critical development issues with a wide spectrum of interested parties, donors, non-governmental agencies and the private sector. Based at the East-West Centre in Hawaii, it is the secretariat to both the Pacific Islands Conference of Leaders and the United States/ Pacific Islands Nations Joint Commercial Commission. It also undertakes research on aspects of development, trade and investment, education and training and provides a news service. A standing committee comprising seventeen island leaders reviews its work annually (East-West Centre c. 2001).

The work of these agencies is co-ordinated through the Council of Regional Organisations (CROP), established in 1988 (formerly called the South Pacific Organisations Co-ordinating Committee). CROP's main objective is to promote harmonisation and collaboration between member programmes and to avoid duplication of effort and resources (DFAT 2001a, 1). The Forum Secretariat is the permanent chair of CROP (Forum Secretariat 1999, 1).

APPENDIX 3: FIJI AND INTERNATIONAL ENVIRONMENTAL TREATIES

Table E: International treaties on the environment and natural resources, which Fiji has signed

| YEAR ENTERED INTO FORCE | TITLE |
|----------------------------|---|
| 1963 | International Convention on Certain Rules concerning Civil Jurisdiction in Matters of Collision |
| 1968 | International Convention relating to Limitation of the Liability of Owners of Sea-going Ships |
| 1970 | Plant Protection Agreement for the Asia and Pacific Region |
| 1970 | Convention on the High Seas |
| 1970 | Treaty Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and other Celestial Bodies |
| 1970 | Treaty on the Non Proliferation of Nuclear Weapons |
| 1970 | Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects launched in Outer Space |
| 1970 | Treaty Banning Nuclear Tests in the Atmosphere, in Outer Space and under Water |
| 1970 | Charter of the United Nations |
| 1970 | Agreement establishing the Asian Development Bank |
| 1970 | Amendment of the Plant Protection Agreement for the Asia and Pacific Region |
| 1971 | Agreement establishing the South Pacific Commission |
| 1971 | Agreement extending the Territorial Scope of the South Pacific Commission |
| 1971 | Agreement amending the Agreement Establishing the South Pacific Commission |
| 1971 | Convention on Fishing and Conservation of Living Resources of the High Seas |
| 1971 | Convention on the Territorial Sea and the Contiguous Zone |
| 1971 | Convention on the Continental Shelf |
| 1971 | Agreement of the International Bank for Reconstruction and Development |
| 1971 | Constitution of the Food and Agriculture Organisation of the United Nations |
| 1971 | Agreement of the International Monetary Fund |
| 1972 | International Convention for the Prevention of Pollution of the Sea by Oil, 1954, as amended in 1962 and 1969 |
| 1972 | Convention and Statute on the Regime of Navigable Waterways of International Concern |
| 1972 | Convention on Road Traffic |
| 1972 | International Convention for the Safety of Life at Sea |
| 1972 | Constitution of the World Health Organisation |
| 1972 | Articles of Association of the International Development Association |
| 1973 | Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare |
| 1973 | Convention on International Liability caused by Space Objects |
| 1973 | Convention on International Civil Aviation Annex 16 Aircraft Noise |

| YEAR ENTERED INTO FORCE | TITLE |
|------------------------------------|--|
| 1974 | Constitution of the International Labour Organisation |
| 1975 | International Convention relating to Intervention on the High Seas in Cases of Oil Pollution Casualties |
| 1975 | International Convention on Civil Liability for Oil Pollution Damage |
| 1975 | Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (biological) and Toxin Weapons and on their Destruction |
| 1979 | South Pacific Forum Fisheries Agency Convention |
| 1980 | Convention of the World Meteorological Organisation |
| 1983 | Convention on the International Regulations for Preventing Collisions at Sea |
| 1983 | International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage |
| 1983 | International Convention for the Safety of Life at Sea |
| 1983 | Constitution of the United Nations Educational, Scientific and Cultural Organisation |
| 1983 | Convention on the International Maritime Organisation |
| 1985 | Constitution of the United Nations Industrial Development Organisation |
| 1986 | Third African/ Caribbean/ Pacific European Economic Community Convention |
| 1986 | The South Pacific Nuclear Free Zone Treaty |
| 1989 | Protocol on Substances that Deplete the Ozone Layer |
| 1990 | Convention on Conservation of Nature in the South Pacific (Apia Convention) |
| 1990 | Convention for the Protection of the Ozone Layer |
| 1990 | Convention for the Protection of the Natural Resources and Environment of the South Pacific Region (SPREP Convention) |
| 1990 | Protocol for Prevention of Pollution of the South Pacific Region by Dumping |
| 1990 | Protocol concerning Cooperation in Combating Pollution Emergencies in the South Pacific Region |
| 1991 | Fourth African/ Caribbean/ Pacific European Economic Community Convention |
| 1991 | Convention concerning the Protection of the World Cultural and Natural Heritage |
| 1991 | International Convention on Standards of Training, Certification and Watchkeeping for Seafarers |
| 1993 | Convention on Biological Diversity |
| 1994 | United Nations Convention on the Law of the Sea |
| 1994 | Convention for the Prohibition of Fishing with Long Driftnets in the South Pacific |
| 1994 | Framework Convention on Climate Change |
| 1995 | Agreement establishing the South Pacific Regional Environment Programme |
| 1995 | Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer |
| 1996 | Agreement for the Implementation of the provisions of the United Nations Convention on the Law of the Sea relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks |
| 1996 | Agreement relating to Implementation of Part VI of the United Nations Convention on the Law of the Sea of 10 December 1982 |
| 1997 | International Tropical Timber Agreement |

| YEAR ENTERED INTO FORCE | TITLE |
|------------------------------------|--|
| Signed 1995 | Convention to Ban the Importation into Forum Island Countries of Hazardous Wastes and Radioactive Wastes and to Control the Transboundary Movement and Management of Hazardous Wastes within the South Pacific (Waigani Convention) ^a |
| Acceded 1997 | Convention on International Trade in Endangered Species of World Flora and Fauna ^b |

^a The Waigani Convention is not yet in force

^b Fiji has not ratified this yet

Sources: Fiji Ministry of Housing and Development and IUCN (1992); CIESIN (c. 2001); Convention on International Trade in Endangered Species of World Flora and Fauna (2001).

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