

ENVIRONMENTAL LAW IN VANUATU

A DESCRIPTION AND EVALUATION

**Being a report prepared on behalf of
the IUCN Environmental Law Centre**

**At the request of the
Asian Development Bank**

by

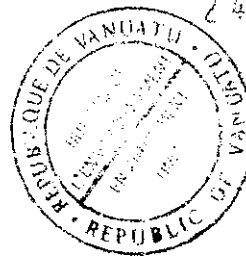
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**The World Conservation Union
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INTRODUCTION

This report has been drawn up as a result of country visits carried out by the author¹ in July 1989 and September 1990.

The existing environmental law of Vanuatu is reviewed and assessed and recommendations are made as to the modifications and additions which would appear to be necessary in order to transform the existing law into a modern legal regime for environmental and natural resource conservation and management. No detailed drafting has been included at this stage, as it would appear premature for this to be done prior to the acceptance in principle by the government of Vanuatu of such amendment as are proposed. Drafting suggestions for those proposals which are so approved will form part of the final report.

In the course of the preparation of this report, one of the most significant circumstances to have come to light was the extent to which the path to be trodden had been travelled in the recent past by a number of other consultants, who had also been instructed to prepare reports or draft legislation for submission to the government of Vanuatu. This was of particular importance in the fields of fisheries, agricultural chemicals, public health law and the regulation of water resources. In each case, a major report had either already been received in recent times or was in the process of being prepared. In the former cases, those reports have been commented upon in the relevant chapters of this report and in the latter case the comments made herein are to be regarded as provisional until such time as sight of the reports has been obtained. This has been done in order to avoid wasteful duplication of effort and possible confusion among the responsible authorities in Vanuatu.

Furthermore, in some fields (particularly those of physical planning and the establishing of protected areas), details were obtained of proposals which are currently being formulated by the responsible officers in Vanuatu. As these proposals are the products of highly-qualified individuals (albeit not lawyers) with extensive knowledge of local conditions, these proposals have also been examined and commented upon extensively as representing what would appear, *prima facie*, to be a viable basis for reform.

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II. CONSTITUTIONAL AND ADMINISTRATIVE STRUCTURE

A. National Government

The Republic of Vanuatu is a parliamentary democracy. The fundamental law of the Republic is contained in the Constitution, adopted on independence in 1980. This Constitution provides for universal suffrage among citizens over 18 years of age¹ in a "universal, equal and secret" franchise². Political parties may be freely formed and are subject to no proscription³.

The President is the Head of State⁴ and is elected for a term of five years⁵. The Prime Minister is elected by the Members of Parliament and, together with the Council of Ministers, makes up the executive branch of government⁶. In number, the Council of Ministers must not exceed 25% of the membership of Parliament⁷.

Parliament is subject to re-election at intervals not exceeding four years⁸.

The Constitution provides for the institution of a judiciary, including the Chief Justice, whose position is expressly affirmed as being subject only to the Constitution and the law⁹.

Among the distinctive features of the Constitution is the significant role which is accorded to the traditional representatives of the people. Thus, the Constitution establishes a National Council of Chiefs (Malvatumauri), made up of the custom chiefs from the component islands and districts of the Republic. The members of the National Council of Chiefs are elected by their peers¹⁰ and, in addition to their important functions with regard to the preservation and interpretation of custom, they may be consulted on any question and especially on

¹. Constitution of Vanuatu, Article 4(2).

². Ibid.

³. Ibid., Art.4(3).

⁴. Ibid., Art. 31.

⁵. Ibid., Art. 34.

⁶. Ibid., Art.37(1).

⁷. Ibid., Art.38(2).

⁸. Ibid., Art.26(1).

⁹. Ibid., Art.45(1).

¹⁰. For provisions relating to the composition of the Council of Chiefs and rules relating to its quorum, methods of voting, settlement of rules of procedure, etc., see generally the National Council of Chiefs (Organisation) Act (No.13 of 1985).

matters arising in Parliamentary proceedings¹¹. Despite the inclusion of provisions relating to the Council in the Constitution and the fundamental importance of custom in the national life of Vanuatu (as to which, see below), there is some ground for asserting that the National Council of Chiefs remains a somewhat under-used resource. It is extremely willing to take on new business and references of matters to the Council are always welcomed by it. Furthermore, it is difficult to overstate the respect in which it is held by ni-Vanuatu.

B. Distribution of ministerial competences in environmental matters

Responsibility for environmental and natural resources matters is concentrated in the Ministries of Agricultural, Forestry and Fisheries, the Ministry of Health, the Ministry of Home Affairs and the Ministry of Lands, Geology, Minerals and Rural Water Supply. Some scattered environmental and natural resources responsibilities are exercised by other Ministries¹².

Formerly, the Ministry of Agriculture, Forestry and Fisheries was generally responsible for matters relating to natural resources, their conservation and exploitation and for the "primary industries" of Vanuatu. Among its Departments are the Departments of Agriculture, Livestock and Horticulture; Forestry; and of Fisheries, along with the Plant Quarantine Station¹³. It also oversees industrial forestry plantations and is responsible for promoting and supervising research in agricultural, forestry and fisheries questions. It also has responsibility for forest and marine reserves and for the development and management of the exclusive economic zone.

The Ministry of Health includes amongst its responsibilities the protection of public health and the promotion of traditional medicine.

Among the established Departments of the Ministry for Home Affairs is the Department of Physical Planning and the Environment. The Department combines the functions formerly discharged by the Physical Planning Unit and the Environment Unit of the Ministry of Lands, etc. The Environment Unit has become the Environment Division, Department of Physical Planning and the Environment (hereinafter referred to as the "Environment Division"). This Division comprises two ni-Vanuatu professionals.

¹¹. Ibid., Arts.29(1),30(2).

¹². See generally, Circular on Ministerial Portfolios, Prime Minister's Office, March 10th.,1989.

¹³. In April 1990, a governmental reorganisation effected a division of the Ministry's former competences. The Department of Forestry was established as a Department separate from the Department of Agriculture, Livestock and Horticulture. The Ministry also has responsibility for providing extension services and education in the agricultural and fisheries sectors.

Despite its modest establishment, the Environment Division has achieved an astonishing amount of responsibility. It advises the Government on the environmental impacts of proposed projects (having devised, on an informal basis, quite sophisticated guidelines for the conduct and content of environmental impact studies), carries out monitoring and surveys of the status of the environmental and natural resources (such as the distribution of dugong and salt-water crocodiles, the environmental effects of logging, and the status of and customs relating to sea-turtles in Vanuatu), the promotion of environmental education and the raising of environmental consciousness, promotes the adoption of international agreements and conventions on conservation matters (e.g. the recent accession of Vanuatu to the Convention on International Trade in Endangered Species), advising the Ministry of Foreign Affairs and Judicial Services on such matters. The Environment Division also provides a focal point for environmental affairs in the government structure. A proposal is currently under consideration which would involve a merger between the Environment Division and the Physical Planning Unit. This proposal, which is welcomed by the staff of the Environment Division and by the Ministers concerned, would involve a transfer of Ministerial responsibility for the Environment Division from the Ministry of Lands, etc. to the Ministry of Home Affairs. The Ministry also has responsibility for cultural and religious matters and oversees the operations of the Vanuatu Cultural Centre, National Archives and Museum. It is also the Ministry responsible for maintaining liaison between the Government and non-governmental organisations.

The Ministry of Lands, Geology, Minerals and Rural Water Supply is generally responsible for matters relating to land, natural and mineral resource and for their conservation and exploitation. The Ministry counts among its Departments the Lands Department; the Department of Land Surveys; the Lands Records Office; the Department of Geology, Mines and Rural Water Supply; and the Environment Division. As well as supervising the rural land councils, the Ministry is also specifically responsible for the management of land in rural areas and for mineral exploration and exploitation.

Among the other Ministries having some responsibilities touching on the environmental and natural resources fields are the Ministry of Finance and Housing (the Vanuatu shipping registry and the Development Bank of Vanuatu); the Ministry of Foreign Affairs and Judicial Services (judicial affairs, Land Referee's Office, relationships with international organisations, treaties and international agreements, co-ordination of non-governmental organisations); the Ministry of Trade, Commerce, Co-operatives; Industry and Energy (the Energy Unit, urban and rural business development, rural electrification); and the Ministry of Public Works, Communications, Transport, Civil Aviation and Tourism (ports and harbours, urban water supply, tourism, road construction, the Meteorological Department).

Some inter-Ministerial co-ordination in environmental matters is provided by the National Environmental Advisory Committee (NEAC). This body, which has about 15 members, is made up of the First Secretaries from the Ministries by and the Directors of the

Departments principally concerned. It is a somewhat informal grouping, whose primary function is to advise the National Planning Office¹⁴, which is responsible for reviewing projects which might have an environmental dimension. The NEAC also acts as a negotiating committee when the Government is in discussion with the grantees of major concessions with a view to deciding upon the terms of contracts, leases, etc., in which context the purpose of the NEAC is to ensure that environmental factors are introduced into the discussions along with the more familiar economic and other elements.

The Secretariat functions for the NEAC are discharged by the Environment Division.

C. LOCAL GOVERNMENT

Despite the fact that local government is entirely a post-independence feature in Vanuatu public life, the Constitution does not contain detailed provisions as to the organisation of local government in Vanuatu, but it does impose upon the national Government an obligation to introduce legislation to promote the decentralisation of governmental functions¹⁵. This obligation, which appears indeed to have been very influential in determining local administrative competences, was discharged by the passing of the Decentralisation Act¹⁶.

This Act provides for the designation by the President of local government regions and for the establishment of local government councils in each region so designated¹⁷. In addition to the two municipalities of Port Vila and Luganville, there are currently eleven local government regions.

Local government councils are made up of elected representatives, together with members appointed to represent groups such as women, young people and the chiefs.

Each local government region is

"generally responsible for the good government of its local government region and for the welfare of the

¹⁴. The National Planning Office is a unit established within the Office of the Prime Minister.

¹⁵. Constitution of Vanuatu, Art.82.

¹⁶. No.11 of 1980, as amended by the Decentralisation (Amendment) Act No.29 of 1983, the Decentralisation (Amendment) Act No.4 of 1984 and the Decentralisation (Amendment) Act No.19 of 1985.

¹⁷. Ibid., s.2.

people therein"¹⁸.

The powers which it exercises in the discharge of this responsibility are classified into two categories, those powers which are exercised by the council in its own right (known as "direct" powers) and those powers which it exercises in co-operation with and as an agent for the national government ("indirect" powers). The former include planning and land-use functions connected with the provision and maintenance of civic amenities, such as schools, clinics and bridges, and the provision of water supplies is expressly included. Other "direct" powers include the supervision and control of the subordinate tier of area and village councils and the regulation of fishing within the local government region and for a distance of one nautical mile seaward of the low-water mark on any coastline in the region. A number of "indirect" powers are also environmentally-related. These include the preparation and implementation of regional development plans, the allocation of agricultural priority areas, the provision of agricultural extension services and the protection of public health¹⁹. In addition, a local government council may, if requested to do so by a Minister,

"act as an agent for and perform and do such other acts, matters and things on behalf of the Government as may be agreed between the Government and the local government council"²⁰

A significant difference between these areas of direct and indirect responsibility lies in the far more extensive competence of the local government council to make local bye-laws in the field covered by its direct powers, where it enjoys privileges absent in respect of matters where its authority is only indirect. The Decentralisation Act permits local government councils to make "regional laws" for the good government of the region and the welfare of its people²¹, but requires that these laws shall be

"such as may be necessary for and incidental to the carrying out of the direct powers referred to in Part I of the Schedule"²².

Within this compass, the council has very wide discretion. Furthermore, although the Act provides that, as a matter of general principle, where a regional law is incompatible with a

¹⁸. Ibid., s.23(1). The Council must meet at least three times in each year - s.12(1). The Act also provides for the establishment of committees and the appointment of officers.

¹⁹. Ibid., s.23(2) and the Schedule to the Act.

²⁰. S.24(b).

²¹. Ibid., s.26(1).

²². Ibid., s.26(2).

national law of Vanuatu, the latter shall prevail²³, this is subject to a potentially important exception, namely that the national law shall not take precedence if the effect would be to prevent the local government council from exercising its power to make laws in respect of its direct powers²⁴. The effect of this provision would appear to be to attempt to "entrench" the provisions of the Decentralisation Act as to the enjoyment by the local government councils of their direct powers and effectively to hamper attempts by the national legislature to pre-empt local legislation in these fields. In theory, this might appear to present a considerable difficulty (especially in view of the political and cultural importance attached to local autonomy), but in practice the danger may be more apparent than real, as there is a substantial history of national legislation dealing with matters which might arguably fall within the scope of the direct powers of local government councils and the exact of those powers is fairly closely circumscribed by the Act. Nonetheless, the provision represents a powerful argument for involvement of local government councils, at least on a consultative basis, on conservation-related issues, especially as they may also provide a convenient avenue for negotiation with the custom-owners of land²⁵.

It should be noted that there is a mechanism for Ministerial review of regional laws promulgated by local government councils under the provisions of the Act. In principle, regional laws require the approval of the Minister having responsibility for local government²⁶. If the Minister is unhappy with the form or content of a proposed regional law, he may refuse to approve it, but in such a case the local government council has the right to resubmit it to the Minister with a statement of the reasons for its insistence on seeking approval for the measure. If it proves impossible for the matter to be resolved between the Minister and the council, the Minister may refer the question to the Supreme Court, which may give such directions in the matter as it shall think fit²⁷.

Each local government region is subdivided into area council divisions, defined by the Minister²⁸. There are presently 64 area councils in the Republic.

The position of the two municipalities is a little different to

²³. S.27(1).

²⁴. S.27(2).

²⁵. Among those who sit on the local government council ex officio are the local chairmen of the councils of chiefs.

²⁶. Currently, the Minister of Home Affairs. See Circular on Ministerial Portfolios, Prime Minister's Office, March 10th, 1989.

²⁷. S.28(3)-(6).

²⁸. S.3.

that of the other local government councils. The municipalities of Port Vila and Luganville are regulated by the Municipalities Act 1980²⁹. This Act provides that among the duties of the municipal council are:-

- to control, manage and administer the municipality;
- to safeguard public health; and
- to develop, control and manage land taken on lease from any statutory land authority³⁰.

The municipal council is also given powers in respect of the provision of sewers, drains, dams, culverts and open spaces³¹ and power to make bye-laws in respect of:-

"all such matters as are necessary or expedient for:-

- (a) the safety of the inhabitants of the municipality;
- (b) the maintenance of the health, well-being and good order and government of the municipality; and
- (c) the prevention and suppression of nuisances in the municipality³².

The financial base of all local government in Vanuatu is a head-tax levied on all inhabitants aged between 18 and 60. The amount of the standard charge varies from district to district, within the range VT500-VT1600. Women are assessed at 50% of the applicable rate for males. Local government councils also derive some revenue from charges for water supply, motor vehicle licensing, business licences, dog taxes, etc. Some regions also impose a property tax. The total income of local government councils for 1985/6 was VT186.4 million³³.

²⁹. (No.5 of 1980), as amended by Order No.7 of 1982 and the Municipalities (Amendment) Act 1983 (No.30 of 1983).

³⁰. S.25(1). As to statutory land authorities, see below.

³¹. S.32(3).

³². S.36(1).

³³. Although VT40.2 million of this took the form of grants from the national government. See Second National Development Plan. para.10.11, at p.165.

III. THE IMPORTANCE OF CUSTOM

The importance of the role played by custom in the national life of Vanuatu is hard to exaggerate. Major areas of law and administrative practice, not to mention social, cultural and political life, are dominated or, at least, shaped by traditional or customary practices. Among the most important of these areas is the law relating to land and its uses, which is discussed in more detail in the next following section, but there are many other illustrations.

Perhaps the most striking of these illustrations is the provision in the Constitution that:-

"Parliament may provide for the manner of the ascertainment of relevant rules of custom and may in particular provide for persons knowledgeable in custom to sit with the judges of the Supreme Court and the Court of Appeal and take part in its proceedings"³⁴

There is also a constitutional requirement for the establishment of customary law courts³⁵.

Traditional practices, as reflected in the customary law, are also of immense potential importance in the management of natural resources in Vanuatu, especially (but not exclusively) in connection with the preservation and management of protected areas. In fact, although there are only a handful of protected areas officially designated as such under the appropriate legislations, there are throughout the islands many thousands of sites which are preserved by the custom-owners, by virtue of their sacred or cultic nature or because of the presence on those sites of trees, plants, minerals or other items of cultural or traditional significance. The custom-owners have a long experience and tradition of sound and sustainable management of these sites and their obvious qualifications as site managers should not be discounted in evolving a strategy for natural resource management in the Republic nor in ensuring the effective implementation of such a strategy.

One of the matters on the agenda of the National Council of Chiefs is to attempt to carry out a description or codification of custom, but this is a very substantial task, as customary rules may vary markedly from island to island and from area to area on the same island³⁶. Furthermore, the proposed codification

³⁴. Article 51.

³⁵. Article 52

³⁶. Despite the apparent attractions of codification in the form of certainty and accessibility, opinion on the utility of such an exercise is not unclouded by doubt. Some authors argue that an attempt to codify custom may even accelerate its fossilisation - see Mere Pulea, Customary Law Relating to the Environment, SPC/SPEC/ESCAP/UNEP Topic Review No.21, (SPREP,

will at best be merely a "snapshot" of the content customary law at the time when the codification is completed. Although the broad general principles of custom may not change radically over time, it is equally clear that custom is not a fossilised system devoid of development or growth, but a living organism which is constantly evolving in such a manner as to permit the application of the fundamental customary principles to new or changed conditions. "Current custom usage", the phrase used in the Solomon Islands, more accurately reflects this dynamic nature of custom³⁷.

Customary law thus provides the background against which all other forms of law-making in Vanuatu must be set. Customary law will of course yield place to legislation, where this impinges on matters formerly regulated by custom³⁸, but where there has been no legislative action as to those matters, they remain governed by custom. In effect, it represents the "common law" of the Republic, from which legislation or judicial decision based on non-custom precedent represents a departure. Customary rules thus represent a sort of "default value" among sources of law.

It has been written that, in some other countries, recognition and application of customary law has little impact on the legal system itself:-

"..custom still regulates many people's lives in the Pacific, even if it does not affect the formal legal system, which may be largely irrelevant or ignored".³⁹

To some extent, this observation appears to be true of Vanuatu, but it requires at least two qualifications. First, while it may indeed be the case that many matters are resolved at village level between the parties by reference to customary rules mediated through traditional procedures, this may more accurately be regarded, not as an alternative method of adjudication to which the formal legal system is irrelevant, but as constituting one element of a rather more sophisticated legal structure, of which the "formal legal system" referred to is only an element. This view may be reinforced by a second

Noumea 1985) at pp.50 (hereinafter cited as Customary Law). Such fossilisation would thus result (at worst) in the custom system losing its immediacy and vitality and (at best) failing accurately to reflect the real practice and thus becoming entirely redundant.

³⁷. Customary Law, p.43.

³⁸. There may be other instances in which customary rules will not now be applied by the courts. Examples of such instances may be where the rule of custom is thought to be "repugnant to natural justice, equity and good conscience" - see Customary Law at p.49. As to the position in Vanuatu, see s.10, Island Courts Act 1983 below.

³⁹. Customary Law, at p.49.

qualification, namely that in Vanuatu a concerted effort has been made to ensure that custom is integrated into the "formal legal system" through the Constitutional provisions as to the appointment of custom assessors in the superior courts, through the establishing of custom courts and of the National Council of Chiefs.

A. Customary Law Courts

The most obvious manifestation of the intrusion of custom into the "formal legal system" of Vanuatu is the provision in the Constitution for the setting up of customary law courts, known in the Republic as village or island courts. Such courts are not unusual in South Pacific jurisdictions⁴⁰. The Constitution requires that:-

"Parliament shall provide for the establishment of village and island courts with jurisdiction over customary and other matters and shall provide for the role of chiefs in such courts"⁴¹.

The legislature has accordingly passed the Island Courts Act 1983⁴². This empowers the Chief Justice to establish Island Courts and to nominate the supervising magistrates⁴³. Thereupon, the President of the Republic (after obtaining the advice of the Judicial Services Commission) appoints for each Island Court no fewer than three justices, whom the Act requires to be knowledgeable in custom. At least one of these appointed justices must be a custom chief residing within the area covered by the territorial jurisdiction of the Court⁴⁴. The Islands Courts exercise jurisdiction, within their areas, over both civil and criminal causes⁴⁵. Island Courts:-

"...shall administer the customary law prevailing within the territorial jurisdiction of the Court so

⁴⁰. Mere Pulea, surveying the role of such courts throughout the region, that they "do not limit their jurisdiction to solely to lands and chiefly or noble titles, but also to compensation, local adoptions, maintenance and divorce and, in some cases, minor offences" - see Customary Law, at para.22. Such courts in Vanuatu do exercise both a criminal and civil jurisdiction (see infra), but for the purposes of this report their functions in determining interests in land is of especial importance.

⁴¹. Article 52.

⁴². No.10 of 1983.

⁴³. Ss.1,2.

⁴⁴. S.3(1). The extent of the territorial jurisdiction of each Island Court is set out in the Chief Justice's Warrant establishing the Court - see ss.1(1),6.

⁴⁵. Ss.7,8.

far as the same is not in conflict with any written law and is not contrary to justice, morality and good order"⁴⁶.

Island Courts have limited powers in imposing sentences or awarding compensation⁴⁷, but they possess a number of other powers which may be of particular significance in the natural resources context, such as the power to authorisation or prohibit the use or occupation of land which forms the subject-matter of a dispute and the power to make orders restraining interference with lawful user of land⁴⁸.

At present, in Vanuatu, the Island Courts appear not to be fulfilling their very considerable potential. Among the reasons for their institution was to facilitate the resolution of some of the land disputes which were seen as being a major obstacle to rural development. In principle, they provide an ideal vehicle for this task, but in practice they have been starved of resources, particularly of technical (and perhaps moral) support.

The shortcomings of the Island Courts are not attributable to the personnel by which they are staffed. The pool of elders who make up the members of the Courts are of very high quality, chosen as they are from among men of established standing in their communities. They are, however, given very little guidance or assistance in the discharge of their tasks. They receive as little as three or four days training in what is expected of them and then are immediately required to begin to adjudicate on matters brought before them. In addition to the justices, the Courts enjoy the services of a Court Clerk, whose training is somewhat more extensive, but still far from adequate. The Clerks are also responsible for maintaining the records of the Courts, which are, on the whole, maintained to an acceptable standard.

As a result, the Island Courts are not achieving the results which might be expected of them and which the quality of the justices ought to be able to provide. The Courts are thought of as performing badly and their public image has suffered somewhat as a result. This is a highly undesirable situation, as the Courts represent a unique mechanism for the systematic implementation of customary law rules, which can then be harnessed to provide an efficient and socially acceptable vehicle for the promotion of conservation in the Republic. One method of redressing the defects of the Island Courts which is presently in prospect is the appointment of Island Court Officers, who would be professionally qualified, and who would undertake to continue and extend the training of justices, provide them (when necessary) with further advice and assistance and generally provide support for the justices of the Courts.

46. S.10.

47. Ss.11,12.

48. S.13.

The Chief Justice has ruled that no cause can be tried in an Island Court until an attempt has been made to settle the dispute by mediation on the village level. The Chief Justice has also ruled that, when a dispute concerning a particular piece of land is brought before the Island Court, ALL claims in respect of that site must be argued and adjudicated upon at the hearing, and NOT MERELY the claims of the individual parties to the particular dispute. The Island Court conducts hearings on site, and appropriate publicity is given to enable all interested parties and potential claimants to be present and to participate in the proceedings of the Court.

When a judgement is reached by the Island Court in a land dispute, the justices are supposed to reach a conclusion as to the identity of the owners of the land and, if the land is found to be in the ownership of two or more persons or groups, to determine where the boundary lies. The Clerk (who has received some elementary training in this respect) is required to draw a sketch-plan on the Court record of the decision. Subsequently, a proper surveyor's plan is to be prepared for the Land Registry.

A particular difficulty arising out of the present quality of the Island Courts is that every land dispute decided upon in the Island Court goes on appeal to the Supreme Court. In view of the immense importance attached to land rights in Vanuatu, not even a steep increase in Supreme Court fees has stemmed this tide of appeals. If the quality of the Island Courts were higher, it is thought that there might be fewer appeals to the Supreme Court (where the Chief Justice sits with assessors knowledgeable in custom), but at present the performance of the Island Courts is such that it is always possible to find some grounds for an appeal.

At present, therefore, the Supreme Court is faced with the prospect of a substantial burden of time-consuming and complex litigation⁴⁹. The practice of the Chief Justice, on hearing a land appeal from the Island Court, is to enquire (in the case of alienated land⁵⁰) who sold the land to the original purchasers and then to trace descent from the vendors. This enquiry requires an extensive search for evidence in the registers of land sales and the taking and assessment of a vast body of oral evidence, much of it technically hearsay evidence. The procedure is therefore unavoidably long-drawn out, and the difficulty is increased by the infrequent employment of counsel in land appeals⁵¹. As a result, the procedure is of an inquisitorial

⁴⁹. To date, some ten or twelve land appeals have come to the Supreme Court - The Hon. Mr. Justice Cooke, Chief Justice of Vanuatu, personal communication.

⁵⁰. As to alienated land, see below.

⁵¹. Land appeals are also held on site, and there is a certain reluctance on the part of counsel to spend perhaps several weeks conducting a land appeal in a remote area of the Republic.

nature and by far the greater part of the enquiry, not to mention the evidentiary research among the documents, falls upon the Chief Justice himself. Clearly, this is an undesirable burden upon the Supreme Court and some steps should be taken to resolve the difficulty. Following proposals to appoint a suitably-qualified Judicial Officer to sit as President of the Island Court when that Court was dealing with a land dispute, the Senior Magistrate in Santo has been appointed a puisne Judge. His function in a land case is first to ensure that a full and proper record of the proceedings and evidence is taken and secondly to conduct the hearing in such a manner that it will be more difficult to find grounds, whether in the evidence or on the face of the record, for an appeal to the Supreme Court⁵².

In addition, there exists a system of village courts, administered by chiefs dispensing communal justice, according to custom. These courts exercise a jurisdiction both over criminal and civil matters, including familial and domestic disputes. Their remit also covers matters which are not strictly law, extending to administrative and social issues arising within the village. The courts sit fortnightly, on average, and dispose, e.g., of almost all small crimes the effects of which do not extend beyond the village. The chiefs have the power (which is not shared by the legally-constituted magistrates) to order the payment of fines in the form of pigs, mats, kava, etc., which is often more appropriate in communities where the cash economy is weak. The courts proceed on an accusatorial system, but disputes are resolved usually by requiring exchange of payments (including by the "victim").

Outside Efate and Santo, almost all matters are decided by the village courts and the magistrates do not go on circuit there, except to try very serious cases. The police will not normally enter a village (even on Efate) unless invited to do so. Such an invitation may be given, for example, when the chief feels that a persistent offender is not responding to communal justice. In some cases on Efate, especially in Vila, there is a feeling that chiefly authority is being eroded⁵³.

B. Impact on Custom of Settlement and Development

Undoubtedly, custom still remains a potent force in Vanuatu, not only in respect of private rights, but as an immensely important influence on public affairs.

Clearly, the relics of the colonial legal system and the pressures of Western-style development have diluted the customary law in many important areas, particularly in land law and other aspects of economic life. Throughout the South Pacific

⁵². The Hon. Mr. Justice Cooke, Chief Justice of Vanuatu; personal communication, 11.7.1989.

⁵³. In principle, when a villager comes to Vila, he will be responsible to the chief's representative in Vila.

region:-

"...the introduction of the concept of public land developed by Colonial administrations has overridden customary rights and practices in some areas, whilst in others the erosion of rights and practice have (sic) been influenced by commercial emphasis on cash cropping, wage employment, increased urbanisation and migration"⁵⁴

Furthermore, the National Council of Chiefs is intensely concerned at what it sees as the erosion of the place of custom in the scheme of things in modern Vanuatu⁵⁵.

Nonetheless, while to ni-Vanuatu eyes the role of custom may be marginally reduced, to a foreign observer, it is immediately clear that custom remains of the utmost significance. For example, proposals to provide for the acquisition of land for public purposes are put forward with great tentativeness because of the immense political sensitivity of any interference with customary rights in land, one of the matters which has figured prominently in recent political unrest in Vanuatu. Furthermore, the whole of the land tenure system is founded on the recognition and reassertion of customary law rights, in which context the paramountcy of custom is recognised in the Constitution⁵⁶.

C. The Possibility of Constitutional Reform

In the wake of the celebrations marking ten years of independence, there has been established a Commission to review the national Constitution. The Constitution was drafted in a very hurried manner immediately prior to independence and in an atmosphere of pronounced uncertainty. It is now being questioned whether the Constitution as at present drafted adequately reflects the needs of Vanuatu society. The Prime Minister has recently outlined two areas of potential change which may be of significance in the context of this report:-

"I think it is possible to redefine the relationship that we have between central and local government Also the authority which the customary chiefs have. How our legal system and our police can actually help to uphold that chiefly authority in the village. At the moment, there is confusion between the legal and constitutional rights that the chief and every person has and the distinct authority of the chief, which doesn't have the support of the Constitution or

⁵⁴. Customary Law, at para.67.

⁵⁵. Chief Willie Bongmalur, Chairman of the National Council of Chiefs; personal communication, 13.7.1989.

⁵⁶. Article 74.

the legal system.⁵⁷

The Constitutional Review Commission is expected to report during the course of 1991.

IV. THE LAND TENURE SYSTEM IN VANUATU

The law relating to land tenure in Vanuatu is now of no little complexity, starkly reflecting the successive developments in the social and political history of the islands.

During the pre-contact period, of course, the title to and use of land was exclusively governed by customary law principles. Then, following the arrival of European settlers, there was imposed on the customary background a new tenure system based upon purchase or settlement, giving rise to tenurial forms unknown in the customary law, such as rack-rent leases and freeholds.

On Independence, the title of the former customary owners was reinstated in a manner which is arguably the most extreme and radical adopted in any South Pacific country. The Constitution provides that:-

"All land in the Republic belongs to the indigenous custom owners and their descendants."⁵⁸

and that

"Only indigenous citizens of the Republic who have acquired their land in accordance with a recognised system of land tenure shall have perpetual ownership of their land."⁵⁹

Furthermore, the Constitution insists that

"The rules of custom shall form the basis of ownership and use of land in the Republic."⁶⁰

The enactment of such a sweeping and far-reaching change in the law relating to titles to land was recognised by the draftsmen of the Constitution as being productive of problems of a number and complexity which would be incapable of full treatment in the Constitution itself. Thus, in order to provide for the resolution of the anticipated difficulties, Article 76 of the

⁵⁷. The Hon.Fr.Walter Lini, Pacific Islands Monthly, September 1990, pp.22-23.

⁵⁸. Article 73.

⁵⁹. Article 75.

⁶⁰. Article 74.

Constitution requires that:-

"Parliament, after consultation with the National Council of Chiefs, shall provide for the interpretation of [the Articles of the Constitution quoted in the preceding paragraph] in a national law and may make different provision for different categories of land, one of which shall be urban land."

The Constitution also imposed strict controls over land transactions by persons other than ni-Vanuatu. Land transactions between indigenous citizens of Vanuatu and either non-indigenous citizens or foreign nationals may only proceed with the consent of the Government, although this consent will normally be forthcoming, unless it can be shown that the granting of the consent would be prejudicial to the interests of:-

- the custom-owners of the land;
- the indigenous citizen concerned (should he happen not to be one of the custom-owners);
- the community within which the land is situated; or
- the Republic⁶¹

This reallocation of land titles posed at least two major problems⁶²:-

- how to deal with the legitimate requirement of the Republic and its governmental and other public agencies to hold land; and
- how to regulate the position of those persons who held title under grants made during the colonial period (not only in the urban areas referred to in the Constitution, but also in rural areas, where farms and plantations were commonly to be found on what is known as "alienated land", i.e. land subject to colonial titles.

⁶¹. Article 79(1), (2).

⁶². It also contributed significantly to the difficulty of many other aspects of the land law. Customary law is no more static in the area of rights in land than in any other area and it is exceedingly complex, while also displaying extreme regional variation. Furthermore, traditional land rights (unlike those in Western countries) tend not to be exclusive, but to allocate different resources to different custom-owners, with the result that a single site may be subject to a complex mesh of rights. See generally, Peter Eaton, *Land Tenure and Conservation: Protected Areas in the South Pacific*, SPREP Topic Review 17, SPREP, Noumea 1985 [hereinafter cited as *Land Tenure*].

A. The Public Land Question

The insistence on the vesting of land rights in indigenous ni-Vanuatu and the sensitivity of interfering with those rights is not unique to the Republic, but reflects a major political problem through the South Pacific region. A learned commentator has surveyed the practical difficulties and concluded:-

"In most countries [in the region], the acquisition of customary land tends to be a lengthy procedure. There is a need for investigation to determine land ownership, something which may require the compiling of genealogies. Negotiations require consensus approval and may be delayed by absentees. The land has to be valued and surveyed; the need for the latter is frequently the cause of long delays in land transactions.....[G]overnments are very reluctant to use their powers in this respect. This is not only due to the legal and constitutional restraints, it is also politically unpopular....."⁶³

The latter point is of particular significance in Vanuatu, where any incursion on traditional land rights is deeply resented by the population and where custom land issues have been eagerly seized upon by opponents of the government.

The Constitution does provide that the Government may own land acquired by it "in the public interest"⁶⁴, but this power has been used only with the utmost discretion.

The Land Reform Act 1980⁶⁵ recognises a narrow category of "State land"⁶⁶, which is vested in the Republic as "public land for the benefit of the people of Vanuatu". The Minister of Lands may declare land to be public land, but may only do so after an elaborate procedure involving consultation with the custom-owners and the advice of no less elevated a body than the Council of Ministers⁶⁷. Nonetheless, the statutory provisions are cast in a manner which unmistakably demonstrates the exceptional nature of the concept of public land. Thus, the Act provides for

⁶³. Land Tenure, at p.11.

⁶⁴. Article 80.

⁶⁵. Joint Regulation No.31 of 1980, as amended by Acts No.6 of 1981, 10 of 1983 and 32 of 1985.

⁶⁶. "State land" is all land in Vanuatu owned in freehold or in perpetual ownership by the British and French Governments, the Condominium of the New Hebrides or a Municipality - see s.1, Land Reform Act 1980.

⁶⁷. Ss.9(1),12. By a declaration of January 26th.1981, all land in the urban areas of Port Vila and Luganville were designated public land. The former custom owners are entitled to compensation and the hearing of the petitions is still to be concluded.

land to be declared no longer to be public land and to be vested in indigenous citizens or communities⁶⁸. Even while public land remains so, the Government must permit it to be used by the custom-owners for whatever purpose they think fit, although (in order to avoid tying the Government's hands too tightly) the consent of the Minister is required before any buildings can be constructed, any crops other than annual crops planted or any other improvements of a permanent nature established⁶⁹. Should the Government decide that public land is required "for development or other public purposes", the Act provides that the custom-owners must be given not less than six months notice of the fact and that compensation must be paid to the custom-owners in question. The Act provides further that such compensation may take the form of a share in the income which is derived from the development or other activity carried out on the land in question, or the transfer to the custom-owners of other public land⁷⁰.

The Land Reform Act is thus far from endowing the Government with expropriatory powers. Indeed, one of its most important perceived defects is that it permits the Government to acquire "land", but not "interests in land". Thus, if the Government wished to acquire under the Act land which was subject to a lease, it would not take free of that incumbrances, but subject to it.

As mentioned above, compulsory acquisition of land interests is an acutely sensitive matter in Vanuatu, but the Government has concluded that an attempt must be made to provide for greater powers in this respect. There is, therefore, a Bill in preparation to provide for compulsory acquisition, which would enable the Minister to acquire land for public purposes. A "public purpose" within the meaning of the Bill, would be:-

"..the utilisation of lands necessary or expedient in the public interest and includes and purpose which under any other written law is deemed to be a public purpose"⁷¹.

Furthermore, the Bill defines land extremely widely:-

"land includes any estate, any interest in or benefit to land, all things growing on land, houses, buildings, improvements and all other things on land, land beneath water, the sea bed extending to the sea side of any offshore reef but no further and the

68. S.9(2), (3), citing Article 81 of the Constitution.

69. S.10.

70. Ss.10,11.

71. Compulsory Acquisition of Land Bill, cl.1.

subsoil thereof"⁷².

Despite this broad definition (which would certainly be wide enough to include easements, easements are referred to separately throughout the Bill, in order to make it clear beyond doubt to the lay reader that it is open to the Government to acquire only a limited interest in the piece of land in question.⁷³

The Bill would require the Government, if it should wish to acquire any land or interest therein, to serve a thirty-day notice, specifying the public purpose in respect of which the acquisition is sought to be made and describing the form of the investigation of the land to be conducted. The Minister's decision to acquire the land would also have to be published in the Official Gazette. The Bill also contains provisions for assessment of compensation, with an appeal to the Lands Referee for dissatisfied owners. Compensation would take into account the market value of the land, the damage caused by the investigation, the value of crops lost, damage arising out of the severance of the land or the use to which the severed land is put by the Government, etc. Similarly, compensation would be payable in respect of loss of rents, etc. arising out of the land. If at some future date, the need for the acquisition of the land ceases, the Bill makes provision for a revocation of the acquisition order, upon which the vesting of the land in the

⁷². Ibid. Note also that the term "improvements" is defined as including:-

"...the reclaiming of land from the sea, clearing, levelling or grading of land, reclamation of swamps, surveying and making boundaries, erection of fences of any description, landscaping of land, planting of crops, trees and shrubs, laying out and cultivation of nurseries, buildings and structures or descriptions (sic) which are in the nature of features, fixed plant and machinery, roads, yards, gates, bridges, culverts, ditches, drains, soakaways, cesspits, septic tanks, water tanks, water, power and other reticulation systems, dips and spray races for livestock".

⁷³. The definition of easement in the Bill seems to envisage that there must be in each case a dominant and a servient tenement, presumably in order that the easement may be said to accommodate the former. This is in accordance with the English common law of land, which requires the existence of a dominant tenement as essential characteristic of any easement - see *Re Ellenborough Park* [1956] Ch.131. Although the English common law has accepted that the dominant tenement may be wholly incorporeal or partly corporeal and partly incorporeal - see *Hanbury v. Jenkins* [1901] 2 Ch.401; *Re Salvin's Indenture* [1938] 2 All E.R.498, some difficulties might be avoided in respect of, e.g. wayleaves for electricity or water supply, if the possibility of recognising an easement in gross (i.e. without an identifiable dominant tenement) was included, as has been done in some United States jurisdictions.

Government is deemed never to have taken place and the custom-owners and other persons interested in the land at the time of acquisition would forthwith be restored to possession of the land.

B. The Dedication of Custom Land

There have been some scattered examples of custom-owners voluntarily dedicating custom land for non-custom purposes, such as churches and schools. Although this is in no sense analogous to public acquisition of land, it does represent a similar overriding of custom use. The obvious and fundamental difference, of course, is that it is the result of a consensus among the custom-owners themselves who, at least in some systems, have the competence to "alienate" custom-land.

On the face of it, this seems a promising precedent for conservation uses, particularly in respect of protected areas. It would appear, however, that too much can be made of the readiness of custom-owners to dedicate custom land in such a manner. It would appear that, in Vanuatu, the only examples of such dedications have concerned land made available to the Church for the construction of places of worship and their associated buildings, and that the essential motivating factor was not merely a common resolution of the custom-owners, but their reverence for the Christian faith⁷⁴.

There have, however, been some occasions in recent years on which some such proposals have been made. Thus, the custom-chiefs on Ambae Island, who had been involved in custom disputes as to rights in a mountain lake which was thought to be the abode of the spirits of their ancestors, have suggested to a representative of the Ministry of Lands that they should give the lake to the Government, with a view to bringing to an end the unseemly squabbles about rights to it⁷⁵. Another example, perhaps less persuasive, formed part of the judicial settlement of a dispute over custom rights over the volcano on the island of Tanna. In that case, the Chief Justice decided that the volcano and a zone surrounding it half a mile in width did not belong to any of the individual or groups of claimants, but to all the chiefs of Tanna as a sort of national monument. On this basis, the chiefs agreed that any visitors' fees or other such income would be paid into a trust fund for the common good of all the communities⁷⁶. It must, however, be stressed that this arrangement was imposed by the Chief Justice as part of the determination of a disputed case, and whether a similar

⁷⁴. Chief Willie Bongmalur, Chairman of the National Council of Chiefs; personal communication, 13.7.1989.

⁷⁵. Dr. Marcus Chambers, sometime Adviser to the Environment Unit, Ministry of Lands; personal communication, 14.7.1989.

⁷⁶. The Hon. Mr. Justice Cooke, Chief Justice of Vanuatu; personal communication, 11.7.1989.

arrangement would be acceptable to custom-owners voluntarily is another matter entirely.

C. The Treatment of Non-Custom Titles

At Independence, something in the order of 20% of the land area of Vanuatu was "alienated land", i.e. held under titles deriving from the colonial land registration system rather than from custom. The vesting in the indigenous custom-owners of all land in the Republic effected by Article 73 of the Constitution is clearly incompatible with the continuance of these titles in their original form.

This problem is addressed by the Land Reform Act 1980 (as amended) and the Alienated Land Act 1982⁷⁷.

The Land Reform Act identifies as "alienators" (sic) any natural or legal person who, immediately prior to Independence, held:-

- a freehold or perpetual title to any land;
- a title in succession to any land;
- a life interest in any land;
- a remainder limited after a life interest in any land; or
- a beneficial interest in any land⁷⁸.

The Act provides that every alienator was entitled to remain on any land which was occupied by him at the date of Independence, until such time as he entered into a lease of that land with the custom-owners (or, alternatively, until he received payments from the custom-owners in respect of any improvements which he may have effected on the land)⁷⁹.

The mechanism for the carrying out of this revolution in land ownership in Vanuatu is contained in the Alienated Land Act,

⁷⁷. Act No.12 of 1982, as amended by No.18 of 1982.

⁷⁸. Land Reform Act (hereinafter cited as LRA), s.1. Note that certain owners of these interests are not entitled to be treated as alienators and to share in the privileges accorded to them. Such persons are owners who were not in possession of the land in question, whether in person or through a tenant or licensee, owners whose land or improvements were not in good condition, and owners of land in respect of which rates and taxes due were six months in arrears at Independence.

⁷⁹. LRA, s.3. Note that an alienator was not in principle entitled to remain in possession of his land, if that land had not been "developed", presumably because it could then revert to custom use without more ado. Such an alienator, however, was not to be prejudiced in his rights to enter into a lease with custom-owners simply by virtue of the act that he had not developed the land in question.

which provided for the setting up of a register of alienators to be compiled by the Minister of Lands. Each alienator was required to apply for registration within three months of the Act having come into force. When making his application, an alienator was to describe the land of which he claimed to be in possession, to provide evidence that he was indeed the alienator of the land, stipulate his preference from among a number of options available to him in respect of the land spelled out in the Act, and to provide such other information as the Minister might think necessary for the determination of the issue⁸⁰. If the alienator failed to make an application for registration in accordance with the Act, he lost his rights as an alienator "in respect of any land"⁸¹.

A registered alienator⁸² is entitled to enter into negotiation with the custom-owners of the land to arrange:-

- a lease of the land of which he is registered as being the alienator;
- a lease of a part of that land;
- a lease of that land together with other land;
- payment for improvements which he has carried out on that land; or
- a lease together with payment for improvements which are not included in the lease⁸³.

⁸⁰. Alienated Land Act 1982 (hereinafter cited as ALA), ss.2,3(1),(2).

⁸¹. ALA, s.9. This section, as drafted, seems to provide that failure to register as an alienator in respect of one of a number of properties would have the effect of depriving the alienator of his rights in respect of all those properties, even if he had registered in respect of the others. It is questionable whether this would have reflected the intention of Parliament; it does not reflect the practice of Government. Note that the ALA provides for an appeal to the Supreme Court if the Minister refuses to register an alienator - see ALA, s.5.

⁸². No alienator may enter into negotiations with custom owners in respect of land unless the Minister has certified that he is a registered alienator. In the absence of such a certificate the Minister may refuse to approve the lease or other agreement made with the custom-owners - see LRA, s.6(1),(3).

⁸³. ALA, s.16(2),(3). "Improvements" in this context means substantial improvements to the land of a permanent character, but does not include reclamation from the sea or the clearing, levelling or grading of land, drainage or irrigation of land, reclamation of sewages (sic), or the surveying and making of boundaries, if such works were completed prior to July 30th., 1970 - see s.1. Substantial improvements may confer a very sizeable increase in the value of the land. Accordingly, the ALA provides that, where the value of the improvements exceeds one million Vatu and the custom-owners are unable to raise such a sum, they may pay for the improvements over a period not exceeding ten years in equal instalments - s.17.

The Minister may stipulate a period within which these negotiations must come to fruition and at the expiry of which the alienator and the custom-owners must submit the draft lease or other agreement to him for approval⁸⁴. The Minister may approve the lease or agreement, refuse to do so, or may approve it subject to the alienator or the custom-owners accepting modifications proposed by the Minister.

If negotiations are proceeding and the Minister thinks that they will result in the eventual conclusion of a lease, he may ask the Lands Referee to assist in hastening that result⁸⁵. If he feels that a successful outcome of the negotiations is unlikely, he is under a duty to refer the matter to the Referee.

If no lease or agreement is submitted for approval by the date set by the Minister⁸⁶, the alienator is confined to recovering the value of any improvement which he has undertaken. The value of improvements is assessed by the Lands Referee at a sum fairly representing the market value of the improvements to a purchaser of the land, taking into account "such other factors as the Minister may specify", but deducting from that sum a reasonable rent for the use the land between the Independence and the date of the vacation by the alienator⁸⁷. If there is no timely application to the Minister for approval of a lease or agreement, or if the custom-owners are only willing to negotiate in respect of compensation for improvements (i.e. if they wish to occupy the land themselves), the alienator must vacate the land⁸⁸.

Where the custom-owners can not be identified within a reasonable time, the Minister may appoint a representative to act as trustee for them, while under moneys due to such unidentified custom-owners as a result of the provisions of the Act are to be paid into the Custom Land Owners Trust Account, a special fund held by the Accountant-General on behalf of the custom-owners and operated by the Ministry of Lands⁸⁹.

Agreements involving alienators who are not indigenous citizens of Vanuatu are subject to further restrictions. Any such agreements relating to land are void and unenforceable at law unless they are approved by the Minister and registered at the

⁸⁴. ALA, s.18(1).

⁸⁵. Ibid., s.21.

⁸⁶. Or if the custom-owners don not agree to enter into negotiations with the alienator.

⁸⁷. ALA, ss.21,22(1),(2).

⁸⁸. ALA, s.24(1)(a),(d).

⁸⁹. ALA, ss.25(1),26. If the identity of the custom-owners is in dispute, the matter must be settled by the Island Court - see LRA, s.5(1).

Land Records Office⁹⁰.

The Land Reform Act confers upon the Minister a general power to manage alienated land in certain circumstances. These are:-

- when the land is occupied by an alienator, but there has been no agreement or the ownership of the land is in dispute;
- when the land is no longer occupied by an alienator, but its ownership is in dispute; or
- when the land is no longer in the occupation of the alienator and is not being adequately maintained⁹¹.

These powers are little used, as the Minister is hesitant even to permit himself this limited interference with the rights of the custom-owners. In the past, he has only exercised the powers if all the claimants consent to his doing so. If there is deadlock over a proposal for a lease, Lands Officers from the Ministry of Lands will be sent out to try to resolve the issue at least to such an extent that it is possible to secure interim consent for the Minister to take over the management of the land as prescribed by the Act. Hitherto, the Lands Officers have been generally successful in this limited role.

THE LEASING SYSTEM

It will therefore be seen that most land which has not remained in unbroken custom use by custom-owners will be held by those entitled to occupy it under a derivative title from the custom-owners, through the medium of the provisions of Article 73 of the Constitution and of the Land Reform Act and the Alienated Land Act. Typically, such a title will take the form of a lease entered into by the occupier of the one part and the custom-owners (acting through the Ministry of Lands) on the other part.

The negotiation of these leases, as has been seen, is a matter for the Ministry concerned, usually (but not exclusively) the Ministry of Lands, etc. It is not usual for the custom-owners to be professionally represented in the negotiations for a lease (although the lessee, especially if it is a commercial forestry or farming concern, often is so represented). The Ministry, thus, has the important task of satisfying itself that the interests of the custom-owners are not prejudiced by the terms of the lease.

The leases which are granted fall into a number of general

⁹⁰. LRA, s.7. "Land" for this purpose includes improvements thereon and affixed thereto and land underwater, including land extending to the seaward side of any offshore reef, but no further - see s.1. The Land Records Office is established under s.14 of the Act.

⁹¹. LRA, s.8(1).

categories - tourism development, forestry, mining, agricultural, etc. The terms of each lease in the several categories follow a certain broad pattern, some clauses being almost standard, but particular obligations will be included in each individual lease to take account of specific features of the agreement, the parties, or the property subject to the lease. The details of some of these provisions will be examined further when each of the sectors in which the leases are granted are discussed below.

At first glance, these leases may appear to be merely private agreements between individual parties and to have little relevance to conservation or environmental matters. This view, however understandable, is fundamentally incorrect. The terms and content of the covenants imposed on the parties in such leases can exert an extremely powerful influence on the management of important natural resources and ecosystems. Indeed, in some cases, they may represent the only readily deployable legal mechanism for their protection.

The Land Leases Act provides for a system of enforcement to be applied where the covenants contained in a lease are not respected by the lessee. Section 42 of the Act provides for the service of a notice⁹², specifying the breach complained of and (in an appropriate case) seeking forfeiture of the lease⁹³. This is an extremely severe sanction, and it is not by any means an illusory one, as there have been occasions on which leases have been forfeited for breach of covenant. The effect of forfeiture in Vanuatu (as elsewhere) is a complete destruction of the lessee's interest in the land.

Superficially, in view of the considerable sophistication of some of the environmental and natural resource conservation covenants commonly imposed in leases in Vanuatu, the provisions of section 42 of the Land Leases Act appear to afford a major opportunity for enforcement. In principle, this is incontrovertible, but there is a practical difficulty. Take the example of an agricultural lease which contains the not unusual covenant on the part of the lessee that he will not fell trees, clear bush or cultivate land within seven metres of the bank of a river or stream⁹⁴. If this covenant is breached, there is a

⁹². The notice is to be served on all persons having an interest in the land, including mortgagees - s.44.

⁹³. The section also provides for the seeking of compensation as an alternative, but it is usual for the lessor to seek forfeiture. The procedure follows closely the familiar pattern of forfeiture for breach of lessee's covenants, well-known in jurisdictions whose landlord and tenant law is derived from that of England, where the relevant provisions are currently to be found in s.146, Law of Property Act 1925.

⁹⁴. This covenant is usually qualified, in practice, by an exception in cases where the prohibited activities are approved by the Department of Agriculture on the grounds that they are essential for drainage purposes. See *infra*.

prima facie case for the operation of s.42. The difficulty, however, is that the custom-owners, who have (as lessors) the right to complain and who are apparently the parties damaged by the breach, may be either disinterested or actually unwilling to bring an action in forfeiture, perhaps because they do not see their property interests as being significantly affected by the breach. The Ministry of Lands (or of Agriculture, as the case may be), which negotiated the lease (including the covenant in question) on behalf of the custom-owners, may have included it, not purely to protect the custom-owners, but also in the public interest in order to ensure a sound management of natural resources. Be that as it may, while the Government may take action to support a claim for forfeiture brought by or on behalf of the custom-owners, it would appear that Vanuatu law does not recognise a separate cause of action in the Government independent of that of the custom-owners. Thus, in such a case as that described above, it is not clear that the Ministry would have the right to intervene. In view of the widespread insertion of conservation-related covenants in leases, it would appear that an amendment of the Land Leases Act to confer such a cause of action on the responsible Ministry, acting in the public interest, would be a highly desirable step, especially as it introduces an element of regulatory control with the least possible encroachment upon the rights of the custom-owners, which encroachment might be further reduced if the amendment were to provide that the Ministry might seek mandatory injunctions, rather than forfeiture, with power to carry out abatement actions itself with power to recover costs from the party in default under the lease.

The compilers of the Second National Development Plan estimate that:-

".... approximately 60% of properties in rural and urban areas expected to be affected by the *Land Leases Act* have now been registered ... [but] ... fewer rural leases, which are often in remote areas and need extensive surveys, have been granted in the recent past⁹⁵."

The problems caused by the complexity and finality of the leasing process is perceived as a serious issue. While it must be stressed that a leasehold title is a title guaranteed by the law and therefore a thorough investigation is called for, the Second National Development Plan stresses that

"Disputes over land ownership, rather than land availability, are the largest single obstacle to the development of the rural areas of Vanuatu..... Lease negotiations become deadlocked because the parties fail to reach agreement at the first attempt. These situations mainly exist in rural areas where the

⁹⁵. Second National Development Plan, para. 9.09 and para. 9.10, both at p.151.

potential lessee is already in occupation of the land. The continuing insecurity is not conducive to development....⁹⁶".

The problem is partly one of manpower, but now new leases or agreements for leases stipulate a timetable for the conclusion or negotiations or the commencement of the development envisaged⁹⁷.

⁹⁶. Paras. 9.17 and 9.22, at pp.154 and 155.

⁹⁷. B.J.E.Russell, personal communication, 2.10.1990.

V.

PHYSICAL PLANNING

Existing law

The principal statute presently governing physical planning in Vanuatu is the Physical Planning Act 1986¹.

The Act provides that any Municipal or Local Government Council may declare a Physical Planning Area (PPA) within its jurisdiction². Once such an area is declared, no person may carry on development in the PPA without the prior written permission of the Council³.

A. The designation of a PPA and the area plan.

The Act provides that, when declaring a PPA, the Council must have "due and proper regard" for the rules of custom. Furthermore, the Council shall consider the welfare both of the people in the area affected by the proposed declaration and of the people of Vanuatu generally. It must also ensure that the people affected by the proposed declaration have been given sufficient notice of the proposals and have had an adequate opportunity to make representations to the Council on the matter⁴. The PPA will then be published in the Official Gazette. Any person who is aggrieved by its declaration may, within sixty days of the declaration, object in writing to the Minister, who may (after consideration of the objection) require the Council to make appropriate amendments to the declaration⁵.

Once the PPA has been declared, the Council must then draw up a plan for that area. The preparation of the plan itself must take account of the same matters (custom, etc.) as those which fell to be considered when the declaration of the PPA was proposed and the same public information and consultation procedures must be followed. The Act contains little detail of what must be contained in the plan, beyond requiring that it shall specify areas in which the Council is "prepared to consider applications for specified kinds of development"⁶.

1. Act No.22 of 1986.

2. Section 2(1).

3. S.4.

4. S.2(2). All designations, when made, must be published in the Official Gazette - s.2(4).

5. S.9(4).

6. S.3(3). Thus, it would not seem that the Act provided for a rigid "zoning" scheme. It would appear that applications for the type of development proposed for area A in respect of sites in zone B, or for other types of development in zone A. Although, in the latter case at least, there may be a presumption against

Once the plan has been prepared, it must be published in the Official Gazette, which must also provide information as to where the plan can be inspected by the public⁷.

The Department of Physical Planning and the Environment has identified a particular problem posed by the "patchwork" PPA approach, which is absent from systems which apply a blanket control over all areas, namely the impossibility of controlling activities in the immediate vicinity of the area but beyond its boundaries. The Department would favour the introduction of a concept similar to that of the "buffer zone" familiar in protected areas legislation in the field of species and habitat conservation. The declaration of such zones would probably require primary legislation in Vanuatu.

B. The Need for Planning Permission

As mentioned above, no development can be undertaken within a PPA except in accordance with a valid planning permission.

"Development" means:-

"the carrying out of building or other operations in, on, over or under the land or the making of any material change in the use of buildings or land, or the subdivision of any land"⁸.

A material change of use is one which so alters the character of the building or land concerned that the new use no longer falls within the specified class of use to which that land or building formerly belonged. The boundaries of these use classes are set out in extenso in the Act⁹. Thus, a building may be changed from one form of office use to another without the need for planning

such a permission being granted, there appears to be nothing in the Act to prevent its being granted, as s.3(3) does not say that the Council must indicate that it is ONLY prepared to accept certain types of development.

⁷. S.3(4). This subsection refers, of course, only to public information about the plan subsequent to its adoption, by way of reference, and not to the making of representations as to its contents, as to which see ss.2(2), 3(2). Area plans may also be the subject of objections to the Minister, who may order the Council to make such amendments as are appropriate to relieve persons aggrieved - see s.9(4).

⁸. S.1. The definition bears a close resemblance to the definition contained in what is now the British Town and Country Planning Act 1971, s.22, although that section does not refer to subdivision. The British Act also refers expressly to engineering and mining operations, a reference not reproduced in the Vanuatu statute. As to such operations, however, see infra.

⁹. In s.1.

consent¹⁰, as all office uses fall within use class 6. On the other hand, even though no structural alterations were required, a single dwelling-house (use class 10) could not be changed to use as a boarding-house (use class 12) without permission, as this involves a move to a different use class which is, by definition, a material change of use.

A Schedule to the Act provides that certain types of activity which otherwise would technically fall within the definition of development may not require planning permission. These exempt activities are:-

Maintenance, improvements and repairs which affect only the interior of the building and do not materially affect its external appearance;

extensions of buildings by up to 10% of its existing floor area¹¹;

the carrying out of works by a public authority required for the maintenance or improvement of a road¹²;

the carrying out by any public authority of works for the purpose of inspecting, repairing or renewing any sewers, pipes, cables or other apparatus, including the breaking up of land for that purpose;

the use of land or buildings within the curtilage of a dwelling-house for purposes incidental to the enjoyment of the dwelling-house;

the use of land and associated buildings for the purpose of livestock keeping, agriculture, fishing or forestry¹³;

any other operations or uses of land prescribed by Regulations¹⁴.

10. Unless, presumably, the conversion requires the carrying out of building operations. If the conversion required the addition of another storey to the building, then it would seem that planning permission would be required, not because of the change of use (as that is within the same use class) but because of the "operations".

11. This exemption can only be used once (i.e. the extended building does not also benefit from the same right), and the right can only be claimed in respect of buildings which have been lawfully erected.

12. This exemption only applies to works to be carried out within the areas occupied by the road itself.

13. Living accommodation is not included, even if incidental to one of these purposes, but always requires planning consent.

14. Schedule 2, 1986 Act.

The Act simply provides that these classes of activity need not be subject to planning control. The decision as to which, if any, of them are to be so exempt in each PPA depends upon the Council, which must specify (when declaring the PPA) which of them are to be exempt from planning control¹⁵.

Non-exempt development, however, must be the subject of an application to the Council for consent¹⁶. It is not necessary that the applicant be the custom-owners, alienators nor the possessors of any interest in the land. Applications are entered on a register maintained by the Council and open to inspection by the public¹⁷.

The Council must consider applications for consent within the context of the prepared plan and "any other material considerations"¹⁸. Applications may be granted, refused, or granted subject to conditions¹⁹. Planning permissions only remain valid for two years, during which time the development must have been completed²⁰. Normally, planning permissions are open-ended, but there is power for the Council to issue temporary

¹⁵. S.2(3).

¹⁶. The form and content of the application is a matter for the Council - s.5. The Act makes provision for the grant of outline consents, with details reserved for later decision - s.6.

¹⁷ S.8.

¹⁸. This phrase is also borrowed from British practice, where it has been productive of much litigation as to what is a legitimate planning concern. Only such legitimate planning matters can be properly taken into account in deciding whether or not to grant permission, and consideration of extraneous matters may lead to the decision of the planning authority being overturned on appeal. Nonetheless, it must be said that the category of legitimate planning concerns is a very broad one. In England, it has recently been held that the fact that the financial benefits of development planned for site A will be used for a beneficial planning purpose on site B is a material consideration in respect of site A - see *R. v. Westminster City Council, ex p. Monahan* [1989] 2 All E.R.74.

¹⁹. S.7(1). The section says that the Council may impose such conditions as it thinks fit. In other jurisdictions, however, and notably in Britain, this liberty has been much constrained by requirements that the conditions must relate to a planning matter, be related to the development for which consent is required and not be unreasonable - see *Newbury District Council v. Secretary of State for the Environment* [1981] A.C.578.

²⁰. S.7(2). If the decision of the Council is appealed, time runs from the determination of the appeal. The Council may, if so minded, extend the validity of the permission - s.7(4).

permissions in appropriate cases²¹.

If an application is refused by the Council (or granted by it subject to conditions which the applicant thinks to be unsatisfactory), the applicant has forty days in which to appeal to the Minister against the Council's decision. The Minister has power to allow the appeal (in whole or in part) and to alter any part of the Council's decision (e.g. by severing or varying a condition). The Minister also has power to deal with the appeal as if it were being presented to him de novo²².

C. Enforcement of planning control

The Act sets out extensive provisions for the enforcement of planning control. An entire Schedule, Schedule 2, is given over to the definition of an elaborate system of enforcement notices. Broadly, these provisions permit the Council to commence enforcement action in respect of unauthorised developments or where conditions attached to permissions have not been observed. There is an extremely short limitation period, in that enforcement action must be taken within one year of the breach of planning control²³. Enforcement action takes the form of the service on the occupier and all other persons having an interest in the land or the permission a notice which:-

specifies the breach of planning control; and

require specified steps to be taken to remedy the breach; and

specify the date by which these steps must be taken.

It is expressly provided that the steps which may be required may include the demolition or alteration of buildings and the discontinuance of any use of the land²⁴. The notice will also specify the date at which it is to take effect, which period shall not be less than twenty-eight days, during which time an application for permission may be made to the Council. If such an application is made, time ceases to run under the enforcement notice until the application is disposed of²⁵. Alternatively, the person on whom the notice is served may appeal to the magistrates on the grounds either:-

that permission was either not required for the

21. S.7(6).

22. S.9(3).

23. Schedule 2, para.1(1). The one-year time limit contrasts extremely starkly with, e.g. the four-year period provided for under English law.

24. Schedule 2, para.1(1), (2).

25. Schedule 2, para 1(4).

development or that such permission had been granted;
or

that the requirements set out in the notice are
excessive²⁶

Where an enforcement notice is not complied with, the Council has power to enter upon the land and execute the works themselves, recovering their costs as a civil contract debt from persons "having beneficial occupation" of the land. These persons commit an offence by failing to comply with the notice, punishable by a fine of up to 50,000 vatu coupled with a day-fine for each day during which the non-compliance continues²⁷.

There are no provisions which require the Council to pay compensation to those persons in beneficial occupation of the land if an enforcement notice is discharged on appeal. Magistrates have the power to quash the notice or to vary it, but not to award compensation. Presumably, this is a reflection of the short time-scales involved, both in respect of the "limitation period" and the period of grace before the notice takes effect.

It should also be noticed that, if an appeal is lodged or permission applied for, the service of the notice is suspended. There does not appear to be any provision to enable the unauthorised development to be discontinued pending the hearing of the appeal or the consideration of the application for permission. It is not difficult to imagine cases in which such a power would be extremely valuable, and its inclusion in any amendment of the Act should be seriously considered. The introduction of such a "stop notice" procedure, however, (which would have the potential seriously to disrupt the enjoyment of the land, would necessitate the introduction of some provisions as to the liability of the Council to pay compensation in cases where its power has been misused. In other jurisdictions, the necessary inclusion of such a provision for compensation has had the undesirable effect of hampering Councils in the issuing of stop notices, even in cases where it might have been thought that the notice was appropriate. Consequently, it is important that any amendment should seek to protect the Council in cases where it is made a genuine mistake or error of judgement in the exercise of this function, confining the duty to pay compensation to cases of gross negligence or bad faith.

D. The present operation of the planning control system

At the present time, the physical planning system envisaged by the Act only exists in its fully-developed form in the two municipalities of Port Vila and Luganville, and not in the other

²⁶. Schedule 2, para.2(1).

²⁷. Schedule 2, para.3(1),(3).

eleven local government districts.

Even in the municipalities, the functioning of the system is far from satisfactory. The principal reason is the absence of properly-qualified staff. Although there is a Physical Planning Unit in the Ministry of Home Affairs, this presently consists of an expatriate adviser (who is a qualified town planner) and three graduate ni-Vanuatu staff, who are of high quality but none of whom are qualified planners. The local staff have no great store of professional experience of planning, so every task they undertake represents a learning experience. The absence of expertise is even more marked in the Councils, some of which are unable to discharge their functions under the Act for want of qualified officers²⁸.

Each of the municipalities has a Planning Committee, which has taken over the functions of the Town Planning Commissions established under the Joint Regulations. At one time, the Committees played a fairly quiescent role, merely rubber-stamping applications. Recently, however, the Committees have begun to exercise more judgement in planning matters and to assert their views more frequently. When an application is received by a Council, the advice of the Physical Planning Unit is sought. At present, the Unit's role is purely advisory, the decision lying entirely with the Council. Feed-back from the Councils is infrequent and inadequate, with the result that the Physical Planning Unit may not discover for some considerable time whether or not its advice was followed.

Outside the municipalities, the absence of planning control is almost total and no PPAs have been declared. In the island districts, major projects are government buildings (which are not covered by the Act) or buildings sponsored by aid donors. Although there is no provision in the Act exempting such buildings from planning control, the Attorney-General has advised that buildings by aid donors for Government purposes also fall outside the Act.

E. Proposed amendment of the Act

The Physical Planning Unit itself is proposing a set of modifications to the Act.

Broadly, these modifications would shift the responsibility for planning control from the Councils to the Physical Planning Unit itself, subject to the supervision of a National Planning Board, upon which local interests would be represented.

²⁸. For example, the Act provides (in s.8) for the keeping of registers of planning applications and decisions. The Act envisages that this register should be kept by the Council. In fact, the register is maintained by the Physical Planning Unit, as the task proved to be beyond the capacity of the municipalities.

Applications would be made to the Unit, although they would be addressed through the medium of the Council, which would have the right to comment on the proposal when forwarding it to the Unit. The decision would be made by the Unit and communicated to the Council by letter. Communications about decisions would thus be centred in the Unit, with obvious advantages to the Unit in terms of record-keeping. Although it is acknowledged that this proposal appears to conflict with the decentralisation principle, this departure is more apparent than real, as each local government council would retain its own planning committee through which it could make representations with a view to influencing the decision.

The proposed amendment would also introduce some other changes to the present law, either in the nature of improvements or of supplying defects which have become apparent in practice. These other amendments include:-

the introduction of the principle that, if no action is taken on an application by the planning authority within a specified period, the application is deemed to have been refused. This is a common provision in land-use planning legislation and has the advantage of enabling the developer to set a term to the period of uncertainty following the submission of an application, enabling him, for example, to proceed straight to an appeal to the Minister (see *infra*). It would appear to be a sensible addition to the law in Vanuatu, although it is recommended that the provision should be made subject to an express power to extend the stipulated period by consent between the parties, in order to allow mature consideration of complex applications (which will benefit both parties in the long run);

the introduction of tree preservation orders. There was some parallel to these orders under the old Joint Regulations, but they do not appear in the Act. The preservation of trees, for amenity, shade and other purposes (especially in urban areas) is not easily achieved by general planning powers and blanket legislation to protect all trees may be unwieldy and undesirable for other reasons. It is proposed, therefore, to enable the planning authority to designate trees specified in the orders as protected, with the result that they can not be felled or damaged except in pursuance of a prior consent from the authority. Provision should be made in the legislation for mandatory replacement of such trees, in addition to any other sanction available;

the introduction of building preservation orders. Vanuatu has at present no legislation which provides protection for historic buildings (other than the *Protection of Sites and Artifacts Act 1965*), which is not entirely appropriate for urban buildings of the colonial period, several striking examples of which exist in the towns. It is therefore proposed to introduce a classification of protected buildings which would prevent these being demolished or substantially altered;

the introduction of a formal procedure of appeals to the Minister. At present, the lack of any such formal mechanism may on occasions place the Minister in a somewhat embarrassing position. There should at least be a requirement that both the applicant and the planning authority file a written statement of their case with the Minister for his decision. Although this is not presently a problem of great magnitude²⁹, it is a matter which should be regulated, especially if the recommendation to provide for deemed refusals is adopted;

the introduction of a power in the Minister to revoke or modify a planning permission which has already been granted. This power does not presently exist and, although it must of course be hedged about with qualifications, it would represent a sensible addition to the planning code. Obvious qualifications would include a requirement that planning consents should only be revoke for grave breaches of conditions or other cause shown, and that modifications should be capable of being made in the light of changes of circumstances, including changes in scientific knowledge.

F. Planning and the leasehold system

It is the view of the PPU that it is wise for an applicant for planning permission to negotiate a grant of a lease of the application site with the Lands Department prior to making an application for planning consent. The mere fact that the lease has been granted will not, however, sway the planning authority in its determination of the planning application, which is seen as entirely self-standing with the authority concerned with matters of broader public import than those which can properly be taken into consideration in negotiating the lease. Furthermore, there is some evidence that the planning committees of local councils are becoming more ready to refuse to accept applications by lessees as *faits accomplis*. There is even some feeling that, for the removal of doubt, leases involving development should contain a provision to the effect that the conduct of activities constituting development will be subject to the conditions imposed by the planning consent.

G. Planning and Building Control

Although not strictly an environmental matter, it is of some relevance that there presently exist no building standards for Vanuatu. As Vanuatu is subject to cyclones, this omission may have implications for, e.g. the storage of dangerous materials.

After Cyclone Uma, in which the insurance companies covering the

²⁹. There have only been three appeals to the Minister to date - Mr. David Blaikie, Physical Planning Unit - personal communication.

property risk market suffered large losses, they insisted on the adoption of Australian cyclone and New Zealand earthquakes standards for replacement buildings. A building code is now in the process of development, but this is a slow process and Vanuatu still has no properly-qualified building control officer.

In Port Vila, the application for a building control permit is being treated as an issue separate from the planning application, being submitted to the Ministry of Public Works for comment.

H. Environmental Impact Assessment

At present, there is no formal requirement contained in the law of Vanuatu for the preparation of environmental impact assessments (EIA) in respect of any project whatsoever.

In practice, however, such EIAs are required for certain classes of projects under the terms of "guidelines" prepared by the Environment Unit of the Ministry of Home Affairs. These guidelines are contained in a series of technical papers produced by the Unit and are published and publicly available³⁰.

The general guidelines, contained in the first of these technical papers, does not set out a list of those types of projects which are to be subjected to an EIA requirement, this being a matter which is reserved to the discretion of the Environment Unit. They do, however, envisage that the requirement may extend to public, as well as private, proposals. It should also be noted that, however, that there is no provision restricting the application of the guidelines to PPAs established under the *Physical Planning Act 1986*.

The guidelines suggest that preparation of an EIA should be founded upon a "systematic analysis of all phases of the project on all the environmental characteristics of the area", which they group under four main headings:-

- physical resources;
- ecological resources;
- human use; and
- demographic and cultural³¹.

³⁰. The papers are General Guidelines for the Production of Environmental Impact Statements - Technical Paper No.1. 1987; Specific Guidelines for Coastal Tourism Environmental Impact Statements - Technical Paper No.2. 1987; Specific Guidelines for Mining Environmental Impact Statements - Technical Paper No.3 1987, hereinafter cited as "Technical Paper No... 1987.

³¹. The full scheme in relation to which these matters should be addressed is set out in Table 1 at the end of this section of the report.

The guidelines require that all EIAs should be clearly understandable by non-specialists and "by a wide range of administrators, politicians and members of the public". Applicants are specifically warned that their submitted EIAs must not:-

- be excessively formal or complex, nor contain information which is superfluous or confusing³²;
- contain insufficient information to permit a full appraisal of the environmental effects to be undertaken;
- over-emphasise the positive results predicted to flow from the proposal in question;
- omit any information relevant to the application; nor
- employ analytical techniques which are "subjective or excessively complicated".

The guidelines envisage that the EIA report should be divided into a number of sections. The first of these is an introductory chapter, which should aim to describe not only the objectives of the project but also the applicant's ability to carry it out properly. Thus, it will describe the nature of the project and its relation to "the Constitution, national objectives and environmental philosophy". More precisely, the opening chapter should define the location and size of the project and the resources available to the developer, as well as giving a brief overview of the remainder of the EIA. It should also state who compiled the EIA and the methodology adopted.

This should then be followed by a detailed project description, including detailed location information and maps, discussion of the land tenure and the terms of any leases granted or being negotiated, site layout plans, descriptions of the operations to be conducted in the course of the project and the machinery and plant to be used, hours of operation, access arrangements and traffic predictions, quantities of materials to be produced on site and rehabilitation proposals for after-use.

This should be complemented by a description of the existing environmental characteristics on the site, as defined by reference to Table 1 (see end of this section). In connection with the preparation of this baseline survey, the guidelines warn that:-

"Descriptions must not be superficial and should be quantified by amounts or rates wherever possible. For major developments, the proponent may need to conduct his own original environmental studies in addition to information already available in reports or publications".

This must be followed by the statement of environmental impacts

³². A separate paragraph of the guidelines warns that appendices should not contain large amounts of scientific or other data (this being more properly summarised in the text), although such appendices are indicated as the appropriate repositories for the information on which the summaries are based.

themselves, which must be evaluated for each stage of the project in accordance with a matrix set out in the guidelines. Both direct and indirect impacts must be considered and methods of mitigating adverse impacts should be discussed. Any irreversible loss or damage to resources must be specifically referred to.

Consideration must also be given to the capacity of the project to withstand a number of emergencies. These not only include operational risks, such as fire or explosion, but also the natural hazards to which Vanuatu is particularly susceptible, such as cyclones, earthquake and volcanic activity.

There should then follow an examination of the feasible alternatives to the manner in which it is proposed that the project be carried out. In particular,

"the advantages and disadvantages with respect to cost and environmental protection must be fully considered".

From this discussion of alternatives, there should flow a reasoned justification of the applicant's conclusion that the project should proceed in the manner proposed.

The guidelines insist that:-

"the developer must design and implement a monitoring programme specifically designed to investigate predicted adverse impacts. This programme must continue for as long as the impact is predicted - if necessary, beyond the end of the project itself".

Finally, the EIA must have a brief summary of the report and its major conclusions. This will be required to be printed separately from the EIA itself, as it will be widely circulated to stimulate public discussion. For this reason, the summary should be submitted in Bislama, French and English³³

³³. There are no requirements that the bulk of the EIA be submitted in all three languages.

TABLE 1

SUMMARY OF ENVIRONMENTAL CHARACTERISTICS TO BE CONSIDERED IN ENVIRONMENTAL IMPACT STATEMENT REPORTS³⁴Physical Resources

Water resources	Surface water - hydrology, quality
	Ground water - hydrology, quality
Air resources	Climate
	Quality - radiation, odours, noise, etc.
Land resources	Soils - erosion, fertility
	Geology
	Seismology
	Mineral resources

Ecological resources

Aquatic resources (freshwater and marine)	Fisheries Aquatic biology
Terrestrial resources	Plant communities Animal wildlife
	Endangered/rare species Protected areas

Human use

Water Supply	Methods of supply
Transportation	Roads, boats.
Agriculture	Traditional, plantation, ranching, forestry
Flood control/drainage	Methods adopted
Power supply	Generation, transmission
Recreation	Types, location
Mining	Types, location
Industrial	Manufacturing, agro (sic), mineral processing
Land Uses	Other land uses

³⁴. Source: Technical Paper No.1. 1987, Environment Unit, Ministry of Lands, Energy and Rural Water Supply.

Demographic and Cultural

Socio-economic

Population numbers, location, health,
education, languages, religion,
political and economic

Cultural

Historical, archaeological, aesthetics.

I. Specific controls over the littoral zone

No doubt in view of the importance of the coastal area as a site for settlement (at least in the post-contact period), there has long been some recognition in the law of the special problems of development control in the littoral zone, although this is far from comprehensive. The Environment Division has recommended that:-

"..the coastal regions of the country should be zoned and specific activities designated for particular areas"³⁵.

The *Physical Planning Act 1986* makes no special provision for development control in the littoral zone, although its provisions would of course apply to any part of that zone falling within a PPA designated under the Act.

J. The Foreshore Development Act 1975

Thus, for example, by the terms of the *Foreshore Development Act 1975*³⁶, no development may take place on the "foreshore of the coast of any island in Vanuatu" without the written consent of the Minister³⁷. The "foreshore" for the purposes of the Act means land lying below the mean high water mark and the sea-bed underlying Vanuatu's territorial waters (including its ports and harbours). Land lying below the mean high water mark of any lagoon having direct access to the open sea is expressly included³⁸. The Act prescribes the form in which applications for the Minister's consent must be made, but this requires only brief details of the nature of the proposed development (in addition to plans of buildings, etc.)³⁹. Development on the foreshore without such a consent constitutes a criminal offence⁴⁰.

It should be noted that the 1975 Act is of general application throughout the Republic and is not confined to PPAs declared under the terms of the *Physical Planning Act 1986*. Nonetheless, the definition of the "foreshore" is fairly narrow and would not, for example, have the effect of controlling beachfront development which lies entirely above the mean high water mark.

³⁵. *Technical Paper No.2. 1987.*

³⁶. Act No.31 of 1975.

³⁷. S.2. The definition of "development" is similar to that set out in s.1, *Physical Planning Act 1986*, although there are some minor differences, including a provision in the 1975 Act that development may take place land whether or not such land is covered by water.

³⁸. S.1.

³⁹. S.3(1) and the Schedule to the Act.

⁴⁰. S.6.

K. Leasehold covenants relating to coastal development

There are, however, some constraints on shoreside development. Perhaps the most effective of these are to be found among the standard conditions which are introduced into leases by the Ministry of Lands. The Ministry has developed a standard form of lease for tourism development, for example, which contains a number of covenants of particular relevance to projects to be constructed on the shoreline. Thus, lessees are required:-

"to carry out all construction in such a manner as to cause minimum interference with the flow of seawater around the leased land and in particular not to construct any groynes or other solid barriers;"⁴¹

while another covenant obliges the lessee:-

"to take appropriate measures to control erosion of the leased land by the sea"⁴².

Other obligations by commercial lessees include agreements not to fell or otherwise destroy mangroves growing on the demised land or in the sea contiguous thereto nor to destroy or interfere with any reefs or corals (living or dead) in the sea adjacent to the land⁴³.

Leases normally include covenants by the lessor to permit the lessee to use sand, gravel and rock (traditional building materials) found on the demised land in the fulfilment of the purpose envisaged by the parties to the lease⁴⁴. The right, however, is subject to the important proviso that:-

"(i) there shall be no destruction of or interference with any living or dead reefs or coral in the sea adjacent to the leased land;

"(ii) there shall be no removal of sand from the beaches or the seabed on or adjacent to the leased land; and

"(iii) any improvement⁴⁵ to the shores or beaches

⁴¹. Standard form of commercial lease (under the *Land Leases Act 1983*) for tourism projects, clause 2(b)(v).

⁴². *Ibid.*, clause 2(b)(vi).

⁴³. *Ibid.*, clauses 2(b)(viii), (ix).

⁴⁴. In its usual form, this covenant also permits the lessee to bring such materials onto the demised land from other sources in order to improve the demised land - see *ibid.*, clause 4(c). This additional liberty is however also subject to the proviso mentioned in the text.

⁴⁵. Although the lease clearly envisages that the natural state of a beach may be changed by the lessee, this could only be undertaken in accordance with the terms of the lease and, to

fronting the leased land shall be done in such a manner as to cause no interference with the natural movement of the sand or the flow of water"⁴⁶.

L. Environmental Impact Assessment Requirements for Coastal Tourism

The Environment Division has promulgated a set of special guidelines for the use those planning to establish tourism facilities on the coast. The guidelines do not attempt to define what is meant by "coastal tourism", although the guidelines refer to developments in places of outstanding natural beauty offering the prospect of attractive beaches by clear waters, but it would appear beyond doubt that this description appears by way of illustration and not of definition. Thus, although the guidelines appear to envisage that a coastal tourism project to which the EIA requirements attach would have some frontage to the shore, there is no definitive statement as to the landward extent of such a project site.

It should also be noted that, in common with the general guidelines on EIA referred to above, there is no provision restricting the application of the guidelines to PPAs established under the *Physical Planning Act 1986*.

As mentioned above, the Environment Unit see the imposition of EIA procedures on coastal tourism as a substitute for strict zoning requirements in the littoral zone, which it sees as enjoying a natural, unspoilt environment which represents an important national resources.

The coastal tourism guidelines amplifies the general EIA requirements in a number of respects. Thus, the matters to be addressed with particular attention are expressly to include the presence of mangroves, corals, beaches, water courses and communities of rare or endangered plants and animals (turtles and dugongs being cited as examples of the latter). In view of the importance of custom land rights in the reefs and foreshore, special regard must be had to existing land-use patterns, historic monuments and sites and settlements in the area. Similarly, the demography of neighbouring villages must be considered and the "expectations of nearby villages as regards the projects", on the assumption that potential conflicts may be avoided if the aspirations of the local people as to employment or other "entrepreneurial opportunities" can be gauged and satisfied. The guidelines also call attention to the need to establish whether any serious diseases (such as dengue fever) or vermin persist in the locality of the project site.

The specific guidelines dwell especially on the need for the

the extent that it would involve an "operation" below the mean high water mark, subsequent to the written consent of the Minister under the *Foreshore Development Act 1975*.

⁴⁶. Ibid., clause 4(c)(i)-(iii).

scale of the development to be geared to the project site in such a manner as to avoid over-stretching resources available there⁴⁷.

The discussion of site clearance in the EIA must, for a coastal tourism project, have regard to a number of specific features. These include the retention of large trees, to provide shade and prevent erosion; the protection of rare and unusual plants (which are not only frequently found in coastal areas but also contribute to tourist interest); the need to minimise damage or disturbance to bird and mammal communities; protection of mangroves, because of their role in promoting the stability of the beach and shoreline; and the need to protect all vegetation cover in sandy areas.

A coastal tourism EIA must also focus much more closely upon the impact of buildings on the project site. Partly this is for aesthetic purposes, to ensure that buildings adopt (or at least do not conflict with) local styles and materials, to avoid visual impact on the landscape, etc. Partly attention is focused on risk minimisation, requiring consideration to be given to the importance of construction to government-approved earthquake and cyclone survival standards or to avoid the danger of flooding by tidal waves. Other facets of the impact of buildings must be examined too, and these include ensuring that buildings are sited on those parts of the land which are least valuable for wildlife or recreational uses, ensuring that siting and storage of any flammable or noxious substances on the site is adequately provided for, and once again (as in the lease covenants) to ensure that there is no interference with currents or tidal flows.

Applicants are required to give particular attention to the impacts of the recreational activities which are envisaged for the site, in order to avoid killing the goose which lays the golden eggs. Thus, proposals must be made to secure the protection of any coral reefs, such as forbidding tourists to walk on them at low tide, prohibiting collecting of corals and other marine life or to carry spear-guns, and preventing the anchoring of boats among the coral. Attention must also be given to the protection of the sea-grass beds on which the dugong and other species depend and to the protection of other "areas of biological interest" (such as turtle nesting-beaches). Among the other matters which must be considered is the prevention of the excessive use of noisy speedboats, especially in enclosed waters (such as lagoons)⁴⁸.

⁴⁷. This is done by a fairly rough-and-ready, rule-of-thumb method, allocating one metre of beach to the maximum number of daily visitors and 15 square metres of recreation space per visitor behind the beach.

⁴⁸. There is a general power to control navigation by motor-boats under the *Motor Boats (Control) Regulations 1970 (No.12 of 1970)*. In Port Vila, there are additional local controls under the *Control of Motor Boats (Port Vila) Regulations 1970 (No.3 of 1970)*. See further at chapter... below.

Further pollution issues are addressed in the guidelines. Applicants are advised that it is their responsibility to provide a wholesome water supply and are warned that, on small islands (at least), this may not be derived from the island itself, as to draw enough water for a large hotel might lower the local water table, with consequential salt-water intrusion, sewage pollution, etc. Similarly, careful thought must be given to the disposal of sewage (which must not be permitted to foul beaches or to affect corals) and to the disposal of solid waste, a particular problem in Vanuatu where much of the rock is extremely porous and groundwater contamination an ever-present threat.

M. Marine reserves

The *Fisheries Act 1982*⁴⁹ provides for the establishing of marine reserves, but these appear to consist only of designated areas of the waters of Vanuatu and their subsoil and not adjacent land territory.

N. Development pressures in Vanuatu

During the period intervening between the first and second country visits, it appears that development pressures on Vanuatu increased markedly. During this time, increased accessibility of the islands by air and a significant upturn in investment interest (especially in the hotel and leisure sector), largely financed by foreign companies, highlighted the potential danger to the environment in the absence of more rigid planning and environmental controls. There may also be an environmental cost to be paid for Vanuatu's increasing prominence as a commercial and business centre, although the environmental impact of this is likely to be lower and to be felt at first remove.

The fiscal climate in Vanuatu is extremely favourable to overseas investment in development projects. The additional costs of acquiring land are low. Stamp duty is levied at 5% of the purchase price. Legal transfer fees and legal costs are also calculated *ad valorem*, being 2% and 1% of the purchase price respectively. These costs can be substantially reduced if the lease is taken by a company and the purchaser, instead of acquiring the lease itself, merely acquires the share capital of the company. This method reduces stamp duty to 0.6% of the market value of the shares, while the legal transfer duty remains the same. Legal fees are billed on a time employed basis. Annual municipal taxes are levied 5.5% of the rateable value of the land. In addition, the lease stipulates a small percentage of the gross turnover of hotels to be paid. There is no capital gains tax or inheritance or transmission duty.

⁴⁹1. Act No.37 of 1982. See s.20.

CONCLUSIONS

The present legislative arrangements for physical planning in Vanuatu are fundamentally sound, as far as they go. There are, however a number of amendments and additions which would materially increase their effectiveness in environmental protection.

Despite the importance of the principle of decentralisation in Vanuatu's public life, it should be recognised that physical planning is one of the areas in which a legitimate exception might be made. It is a prime example of a function which requires the deployment of the kind of technical skills which can not at present be marshalled in each of the local government districts. This lack of technical resources will become even more glaring if the recommendations as to environmental impact assessment set out hereunder are to be accepted. Furthermore, there are matters of a physical planning nature which, in a country the size of Vanuatu, are better tackled at a national, rather than a local level - waste management and water protection form obvious examples.

It is therefore recommended that an amendment to the *Physical Planning Act* be drafted which would vest physical planning functions in the PPU, which shall be under an obligation to consult with the local district planning committee for the area in which the development is proposed to take place. The amendment should make it clear that, while the decision as to whether the development is to go ahead or not is a matter for the PPU, where a decision is made which is contrary to the wishes of the local committee, the PPU shall publish the reasons for its decision and the local district council may (if it so wishes) take the matter on appeal to the Minister.

Some consideration should be given to increasing the powers of the PPU to control development which is unauthorised. This could be done by introducing a system of stop notices (as referred to in the text) and providing that the PPU is only to be liable to compensate the addressee of such a notice if it has been grossly negligent or has acted in bad faith. It may be that there may also be benefits in instituting a system of "contravention notices", which would enable the PPU to obtain from addresses information relating to a development which is thought to be unauthorised. This would enable the PPU, if such information revealed a breach of planning control, to have the necessary knowledge to negotiate a solution through co-operation rather than by means of formal proceedings.

The Act should perhaps be amended in order to make it quite clear that the Minister may correct or vary an enforcement notice on appeal.

It may be of value for the amendment to the Act to confer

expressly upon PPU the right to apply to the Court for an injunction against a threatened or continuing breach of planning control, thus adding a more formidable weapon to its enforcement armoury.

The proposals referred to above in connection with:-

- deemed refusal of planning consent;
- the introduction of tree and building preservation orders;
- the introduction of a formal procedure for appeals to the Minister; and
- the granting to the Minister of a power to modify or revoke already existing planning consents

should also form part of the proposed amendments.

The requirement that an environmental impact assessment should be prepared for certain classes of development should be placed upon a statutory footing. Among the classes of project which should require the preparation of an EIA are all forms of commercial and industrial development (unless the PPU, after consultation with the Environment Division, certifies that no significant environmental impacts are to be envisaged⁵⁰); all major agricultural development; forestry projects (including plantations); all mining operations; all operations taking place within a specified distance of the foreshore (as defined); any activities touching upon any site already classified under the *Protection of Sites and Artifacts Act 1965* or which are listed in the survey of cultural sites to be undertaken in the near future; any activities which will have an impact upon any protected areas, whether established under the terms of a statute or under the terms of a lease which is expressed to be entered into for the purpose of conserving or protecting the natural or cultural heritage; the establishing of a waste disposal facility; any activities taking place within a water protection zone designated under the legislation proposed later in this report; etc.

Consideration should also be given to providing that certain areas should automatically be declared to be PPAs. Examples might be water protection zones, the expanded foreshore area, any protected areas (whether established by statute or otherwise), etc. The upsurge of interest in hotel and leisure development in Vanuatu is naturally centred on the coastal areas. It is therefore recommended that, as a minimum and urgent measure, a zone of adequate width around the coasts of Efate and Santo (and perhaps other islands as well) be declared a PPA.

⁵⁰. The actions of the Units in the discharge of this function would be judicially reviewable in the normal way.

VI. AGRICULTURE

Agriculture in Vanuatu falls into two distinct categories:-

- traditional subsistence agriculture, frequently involving a shifting pattern of cultivation, with long periods of fallow between periods of utilisation; and
- commercial agriculture, principally for copra and cocoa, with some large-scale ranching (especially on the island of Santo).

These two systems are potentially in conflict. Commercial agriculture is of enormous importance in economic terms¹, and there is real danger that expansion in this sector would impact very markedly on the land available for traditional usage². One writer has observed that a combination of factors has so increased the pressure on traditionally-cultivated land that fallow periods which used to last for fifteen years have now been telescoped to three years³.

In the view of the Department of Agriculture, prime farming land is now becoming scarce. There has been a rapid development of ni-Vanuatu plantations in recent years. Pressure is also increasing for land suitable for large-scale pastoral development.

Thus, although Vanuatu has hitherto escaped soil erosion or degradation on the scale experienced in other countries, there is evidence of problems arising in some areas.

It is clearly of importance, therefore, to ensure that there is in place an effective method of controlling the development and conduct of commercial agricultural operations.

¹. Dahl calculates its contribution to exports at 95%, equivalent to 29.5% of Gross Domestic Product (year of assessment not cited) - see IUCN World Conservation Union, *National Conservation Strategy : Vanuatu - Phrase I (Prospectus)*, Gland 1988 [hereinafter cited as "Dahl"], at p.11.

². There appear to be some doubt as to the amount of potential farmland which is not presently in cultivation. Recent assessments of such land which is already in use vary between 27% and 43% - see Dahl, *op.cit.*, at p.11. Dahl concludes that if the latter figure is correct "and the amount has since increased with the growing population and new agricultural development projects, the country is getting close to an agricultural crisis." The Second National Development Plan estimates land in use as being about 31% of that with average to optimum agricultural potential - see para. 11.54, at p.192.

³. J.Challacombe, *Agriculture, Forestry and Environment In Vanuatu*, in Chambers & Bani, at p.51.

A. The Agricultural Lease

As with every other form of land-use entered into by persons other than the custom owners of the land in question, commercial agriculture is carried on under the terms of a lease. A standard form of such a lease exists, which contains a number of covenants of relevance in respect of environmental and natural resource protection.

The lessees covenant that they will not use the land otherwise than for the purposes of agriculture (including primary processing) and activities which are incidental to that use⁴. Furthermore, there is a covenant to the effect that the lessees are to "farm and manage the land in such manner as to preserve its fertility in accordance with good soil management practice, as determined by the Department of Agriculture"⁵. Other important covenants are taken in the following terms:-

- "not to fell trees or clear or burn off bush or cultivate any land within a distance of 7 metres from the bank of a river or stream, unless it is essential for drainage purposes and is approved by the Department of Agriculture;

- "not to clear, burn off, cultivate or permit excessive grazing at the top of any hill or slope exceeding 25 degrees unless permission is granted by the Department of Agriculture"⁶.

There are also covenants relating to the secure fencing of stock, and leases contain obligations to avoid voluntary and permissive waste and to keep the land free of vermin, refuse and nuisances, similar to those imposed by other standard form leases discussed above⁷. Lessees also covenant that they will:-

"....ensure that no person shall cause or permit the discharge of any rubbish, dirt, effluent or hazardous waste into any watercourse"⁸

The lease will also contain stipulations as to the method and rate of development of the demised land. In particular, the lessee is required to covenant that he will:-

"...endeavour to cultivate and plant the land in a

4. Standard form of agricultural lease, clause 3(a).

5. Ibid., clause 3(d).

6. Ibid., clauses 3(i),(j).

7. Ibid., clauses 3(e),(g). The covenant not to cause permissive or voluntary waste is subject to the qualification that it is only to have effect insofar as the avoidance of such waste "does not conflict with normal agricultural practice".

8. Ibid., clause 2(b)(ii).

productive manner and land suitable for cultivation should be developed at a rate agreeable to the lessor and/or the Department of Agriculture"⁹.

As in the other standard form leases, there are extensive reservations of rights to the custom owners. Among the more important are reservations of minerals¹⁰, water rights¹¹, game rights¹² and forest produce.

In addition to the controls exercised through the leasehold system, the Department of Agriculture exert additional, administrative controls over those entering farming. Applicants for agricultural leases are required to complete a form on which they must enter details of their experience, their plans for the development of the land, who is to work it, how finance is to be arranged, etc. The form is reproduced at the end of this chapter. From this form, some impression can be gained of the knowledge and abilities of the applicant and of the extent of the resources (including financial resources) available to him. The requirement that a fairly detailed development plan be filed provides an opportunity for negotiation with the Department.

If finance is required from the Development Bank, the application must be accompanied by an equally detailed statement of the proposed development of the land. Such a statement will typically contained a description of the topography of the site; an analysis of its soils and vegetation: hydrology and water supply; a breakdown of the development plan, concentrating on the financial aspects, in terms of assumptions made as to production, foreseeable investment required (fencing, etc.); a description of the proposed style of management (whether a professional manager is to be employed, etc) and a statement of environmental factors to be taken into account.

⁹. A similar covenant is taken in respect of livestock.

¹⁰. Those mentioned are sand, gravel, coral, stone, lime and other minerals not reserved to the Government. There is a proviso that these shall not be worked in any area which is or may be used for a valuable agricultural crop and compensation is payable to the lessee for any damage. Lessees may also take minerals for making roads or for other purposes incidental to the lease, with the lessors' consent - see *ibid.*, clause 2(a)(i), (ii).

¹¹. The lessors reserve rights similar to those reserved in forestry leases (see above). Lessees also have rights to extract, but not to restrict or change the course of natural watercourses, etc. These rights are, with only minor variations, similar to those granted to forestry lessees - *ibid.*, clause 2(b).

¹². This covenant is also is similar terms to that contained in other leases, the prior consent of the lessees being required. The custom owners agree not to hunt on land under cultivation or which is developed or stocked with cattle or other livestock (including undeveloped land which is fenced and blackbush areas containing cattle).

Applications for agricultural leases are often assessed by the Department of Agriculture. By late 1988, these assessments were being required at a rate which was beginning to cause some pressure on the Department and, at that time, the Department proposed to the Department of Lands that there should be established some guidelines for these assessments and for the according of priorities among agricultural uses of land. It was proposed that the following land-use issues should be addressed:-

- that the size of the unit to be leased should be large enough to be viable;

- that consideration should be given to considering any extensions of areas leased in the context of meeting development targets;

- consideration should be given to alternative land-uses, including the long-term requirements of ni-Vanuatu for food-gardens;

- a requirement that the development will be carried out in compliance with environmental guidelines as to erosion control, shade preservation, bush maintenance, logging practice, maintenance of water quality and or the integrity of watercourses¹³.

In order to prevent damage to natural resources being caused by agricultural activities which are inconsistent with their preservation, the Department of Agriculture have issued guidelines on bush clearance. These guidelines have no statutory backing and are not even incorporated into lease conditions. They owe their force to an insistence that exemption of agricultural undertakings from the obligation to pay duty on diesel fuel is dependent on their adherence to and proper implementation of the development plan for the site. Observance of the guidelines on bush-clearing is regarded as being an integral part of such proper implementation.

The guidelines propose that, when an area is cleared for agricultural use, "where possible" 10% of the total area is allowed to remain undisturbed, either as strips of forest 50-100 metres in width or as clumps of shade trees, with a view to maintaining the ecologically viability of the remaining tree-cover. Strips are preferred, as providing wildlife corridors of native vegetation. Primary rainforest where the canopy is undisturbed should not be disturbed while other types of vegetation exist which could be cleared first. So, if may be necessary, e.g. to exclude cattle from primary rain-forest. Areas with thin soil-cover (less than 25cm) should not be cleared. Roads and tracks should be laid along the lines of ridges wherever possible, on gradients of less than 10 degrees and should not concentrate rain-water run-off in such a manner as to cause an unacceptable degree of erosion.

¹³. Letter of Principal Veterinary Officer to Department of Lands, 22nd.November 1988.

A number of specific conditions are also attached to the diesel duty exemption. Bulldozers shall only be used for clearing slopes no steeper than 18 degrees, unless specific authorisation has been given. On slopes ranging between 7 and 18 degrees, developers must consult the Department before clearing lengths greater than 100 metres and must then comply with the Department's recommendations on, among other things, erosion control. If clearing is carried out by chain-saw, of by manual or chemical means, this must be limited to areas with slopes not exceeding 25 degrees (unless the Department has agreed otherwise following a site inspection).

Clearing is not to take place within 20 metres of the banks of temporary water courses or 50 metres of the banks of permanent ones¹⁴. Ploughing is to take place along the contours, rather than across them, land prepared for cultivation shall be seeded as soon as practicable after preparation and access roads should also have grades of less than 10 degrees, be located on ridges and have sufficient lateral road drainage lines into surrounding vegetation to avoid erosion. No native vegetation is to be cleared within 60 metres of the high-tide mark along coastlines and clearing of mangroves is prohibited in all cases.

Observance of these guidelines, together with the other controls exercised by the Department, while they have not altogether avoided soil erosion problems, have nonetheless confined them to fairly small proportions. This achievement, however, must be set in context. Most clearing takes place in order to provide livestock pasture. Presently, clearing of primary rain-forest for this purpose is too expensive to be economically attractive. Much of the clearing which does take place involves a fairly low level of machinery use, for a number of reasons. First, it is cheaper to clear by hand or chain-saw; secondly, such simpler methods produce fewer weeds than clearing with bull-dozers which churn up the soil to a greater extent; and also lower levels of technology reduce the impact of technical problems encountered.

At present, as mentioned above, the guidelines referred to (although influential) are not formally binding in a legal sense. It is the feeling of the Department that they should be. Clearly, it is hard to imagine that they should be cast in a statutory form, as they are complex and may be susceptible to change or amplification, and it would equally clearly be cumbersome if such changes or amplifications required legislation (although that could be of a subordinate kind). It would appear desirable, however, that the guidelines should be introduced into the covenants entered into under the agricultural lease, perhaps by way of a schedule. This would require some modification of the terms of the lease to permit amendments from time to time, a power which might need to be confined within some limits in order to avoid the suggestion that such amendments represent a derogation from the grant. It may be that this doctrine is modified in Vanuatu, in view of the enormous and rather unusual

¹⁴. It should be noted that this requirement is markedly more strict than contained in the standard agricultural lease.

significance of the lease in the land law of the country, but, if that were not the case, the point may be met by the insertion of some method of arbitration mutually acceptable to the parties to be triggered in cases where the lessee feels that the alterations to the schedule go beyond what is reasonable.

The usual qualification must, of course, be added to the effect that, if the lease covenants are to be utilised as a means of regulation by the government, it is essential that a separate right of action, distinct from that of acting on behalf of the custom owners, be established in order that the Department may intervene in its own right.

The Second National Development Plan identifies delays and disputes over leases as the major constraint on agricultural development. In 1986, no fewer than 46 leases in Santo/Malo could not be finalised, because of the shortage of survey staff. Those drafting the Plan criticise the weakness of the structure of the responsible departments in the Ministry of Lands, which they see as having discouraged investment in agricultural enterprises in the area¹⁵.

B. Control of Agricultural Chemicals

The control of agricultural chemicals, in common with the rest of the law relating to the use, handling, storage and disposal of dangerous materials, is singularly under-developed.¹⁶

Recently, a consultant from the Food and Agriculture Organisation of the United Nations visited Vanuatu in order to investigate, among other things, the regime of pesticides (as defined in the FAO Code of Conduct). This consultant had concluded that the treatment of pesticides was better dealt with in the context of health and safety at work, along with other dangerous substances which have implications for employee health. The consultant apparently proposed that the appropriate Ministry to assume responsibility for this extensive field (which, of course, extends far beyond agriculture) is the Department of Home Affairs, rather than the Department of Agriculture¹⁷. Although the report of the FAO consultant was received in Vanuatu in September 1990, the author of the present report has not had the opportunity to see it, and consequently no opinion can be offered thereon.

It is clear, however, that there is a serious lacuna in the law of Vanuatu as to the introduction into the market, labelling, storage, transport, use and disposal of pesticides, fertilisers

¹⁵. Second National Development Plan, paras.11.58 and 11.106, at pp.194 and 205 respectively.

¹⁶. See further the chapters of this report dealing with waste management, dangerous substances and public health.

¹⁷. R.Weller, Principal Quarantine Officer, Department of Agriculture - personal communication.

and other agricultural chemicals. Pending sight of the FAO consultant report, the recommendations of this report on this matter are presented in outline only¹⁸.

C. Biological Control of Pests, etc.

Controls over the use of biological agents in pest control, etc. are presently exercised through a research committee within the Department of Agriculture. Imports of organisms are regulated through the ordinary system of controlling imports and exports of animals and plants.

In view of the potential for the introduction of biological control in Vanuatu and of the absence of existing legislation within which that control may be exercised, it is recommended that there be introduced a framework of licensing and control for such operations. This view is shared by the Senior Plant Quarantine Officer.

D. Import of Animals and Plants

The old Joint Regulations from the Condominium, which became Acts at Independence, were remarkably inflexible. They were superseded by the enactment of the *Animal Importation and Quarantine Act 1988*¹⁹. This Act provides that no person shall import or introduce any animals, animal or biological product or any related article into Vanuatu, otherwise than in pursuance of a permit granted under the Act or in accordance with any regulations which may be made under it²⁰. For the purposes of the

¹⁸. It should be noted, furthermore, that a consultant report on the state of public health law in Vanuatu prepared for the World Health Organisation in the early part of 1989 proposed a number of sets of regulations, one of which dealt with the regulation of a whole range of dangerous preparations including pesticides. This proposal is discussed further in the chapter relating to dangerous substances. Its comprehensive coverage (including medicines, cosmetics, etc) appears, on the surface, to attempt to achieve too much, but in the light of the limited technical and administrative resources available in Vanuatu, it may present an acceptable avenue for development.

It should also be noted that controls exist, under the system being established under the *Animal Importation and Quarantine Act 1988*, over the import of veterinary drugs. These include procedures for approvals and registration, controls of supply and record-keeping, etc.

¹⁹. Act No.7 of 1988. Other legislation deals with controlling diseases of animals and regulates other livestock matters, such as fencing, liability for trespass, etc.

²⁰. 1988 Act, s.2(1).

Act, "animal" means:-

"...any living stage of any member of the animal kingdom except human beings and includes arachnids, birds, crustacea, fish, insects and reptiles and also any fertilised egg or ovum"

while "animal product" means:-

"...any part of the animal including the flesh, wool, hair, skin, hide, bones, horns, hooves, feathers, and other portions of the carcass and viscera, blood, milk, fluids, semen, excreta and any product that is wholly or partly derived from an animal or any part of an animal"²¹,

and "biological product" means:-

"...any substance, chemical, organism or micro-organism having a biological effect on animals or their products, and includes drugs, medicines and remedies, hormones, growth promotants, antibiotics, protozoa, fungi, bacteria, viruses or parasites capable of causing any disease in animals (or, if dead, was so capable when living);

and "related article" means:-

"...any fitting, utensil, appliance or package used on any vessel in connection with any imported animal, animal product or biological product, or any vehicle, equipment, clothing or other article in contact with animal, animal products or biological products, whether through design or accident"²².

In order lawfully to import such material into Vanuatu, application for a permit must be made to the Principal Veterinary Officer, who may attach conditions to the permit, if he decides to grant it²³. The Act does not specify what matters may be addressed by these conditions, but it would appear doubtful whether they could lawfully extend to the control of uses and applications following import. So, the power to impose conditions

²¹. It might be questioned whether the draftsman of this definition actually intended to confer to almost limitless scope of application which the definition seems to confer, namely a control mechanism over anything which is not entirely derived from vegetable or mineral sources. Presumably, what is in practice intended is that the product should be directly (and perhaps also primarily) derived from animals or parts thereof.

²². Ibid., s.1. "Disease" means any departure from normal health or production, from diagnosed reasons or not, and caused by any infectious, parasitic, hereditary or toxic agent, and "vessel" includes aircraft.

²³. Ibid., s.4(1), (2). If the application is refused, the Principal Veterinary Officer must notify the applicant of the reasons for the refusal - ibid., s.4(3).

would not, e.g. supply the lack of specific laws on the use of biological control agents within the country. No animals, etc. may be landed, even in pursuance of an import permit, until they have been examined by a veterinary officer or a quarantine officer and permission has been given to land the items²⁴.

Special provisions surround the import of biological products. The exact origin, method of preparation, nature or action must be made known to the Principal Veterinary Officer and no such products may be imported at all if they have been prohibited by the Minister²⁵

There is at present a proposal to issue a number of Regulations under the Act. The principal draft Regulation²⁶ provide a framework, detailed provisions being fleshed out in other instruments. One of these is the draft *Animal Importation and Quarantine (Miscellaneous Provisions) Order 1989*. This would prohibit the import into Vanuatu of animals, animal products, biological products or related articles, unless the country of export had been approved (under the provisions of the principal Regulations). Similarly, imports would be prohibited from countries where certain scheduled diseases were rife. The draft Regulations would also prohibit the import of any animals "not naturally occurring in Vanuatu"²⁷. These animals could only be imported subject a consent of the Minister, who is to take the advice not only of the Chief Veterinary Officer, but also of the Environment Unit and "any other relevant body". Some animals may not be imported under any circumstances, and these are listed in a Schedule to the draft Regulations²⁸. Imports could only enter the country through designated ports.

The new Regulations do not refer to imports of plants.

There are, however, some provisions from preventing the spread of certain weeds. The *Prevention of the Spread of Noxious Weeds Regulations 1966*²⁹ prohibits the importing of various noxious weeds into Vanuatu and their propagation, sowing, sale or distribution³⁰. The Regulations list those species which are to

²⁴. Ibid., s.8.

²⁵. Ibid., s.16(1), (2)

²⁶. Tentatively entitled the *Animal Importation and Quarantine Regulations 1989*.

²⁷. An animal would be naturally occurring in Vanuatu if it occurs, is present or has been recorded in Vanuatu at the date on which the Order comes into force.

²⁸. The prohibited animals include all members of the cat and dog families, mongooses, weasels, deer, cattle, squirrels, rats and mice, snakes, birds, etc.

²⁹. No.8 of 1966.

³⁰. Ibid., reg.2.

be regarded as noxious weeds and places specific obligations on occupiers of land in certain defined areas to keep their land "entirely free" of such of the scheduled species as shall be determined in respect of the areas in question³¹.

Clearly, the institution of some controls over the introduction of species of plants and animals is of great importance. The proposed system envisaged under the *Animal Importation and Quarantine Act 1988* appears, on its face, to represent a substantial step forward towards achieving that goal. It is, however, essential to ensure that a similarly effective control exists in respect of plant material.

It is, however, proposed to add to the existing senior manpower by the appointment of a Principal Plant Protection Officer as from April 1991.

E. Conclusions

The existing system of controls over agricultural operations in Vanuatu appear to be working smoothly, but it depends entirely upon sensitive manipulation of the system by expert regulators who are anxious to maintain environmental quality. Informal or administrative controls which are not based upon or reinforced by legal requirements are at the mercy of any change of personnel or policy. It is also less than clear that the present system is entirely effective in preventing ill-considered agricultural expansion. It is therefore recommended that the following matters be considered:-

(a) That the existing guidelines on bush-clearing and any other such guidelines to be developed by the Department of Agriculture be introduced into the covenant obligations contained in agricultural leases.

(b) That legislation be introduced to require that, before an agricultural lease or loan can be executed, the Departments of Agriculture and Lands are satisfied that the proposed unit is economically and agriculturally viable and that, where (after consultation with the Environment Unit) the Department consider it appropriate, specific provisions relating to erosion control, shade preservation, etc. are included in the lease covenants, if necessary by way of a schedule.

(c) Urgent consideration should be given to the introduction of legislative controls over the introduction, marketing, storage, transport, use, application, labelling and disposal of agricultural chemicals. The detailed consideration of this matter should await the submission of the report presently being prepared by the Food and Agriculture Organisation.

³¹. Ibid., ss.5,6 and Schedules 1 & 2.

(d) Legislation should be introduced specifically to govern the introduction, application, storage, use, application, etc. of biological controls for agricultural pests.

(e) Legislation should be introduced to deal with the import of plant species and materials. In the interim, consideration should be given to establishing a Quarantine Committee to vet imports for which there is no precedent.

(f) Some amendments to the weed control legislation should be enacted to avoid the transmission of noxious weeds by trucks, barges and other means of transport, requiring proper cleansing of these in order to remove seeds, etc.³²

³². It should be noted, however, that, although the Senior Plant Quarantine Officer approves of this proposal in principle, he draws attention to the shortage of staff resources for its implementation.

STANDARD FORM OF APPLICATION FOR AN AGRICULTURAL LEASEREPUBLIC OF VANUATUAPPLICATION TO LEASE LAND

Name :
 Address : School attended
 Age : Other training

2. Name of land:
 Title No. (if any)
 Island

Are you already working on the land you are applying for (or have you previously done so) ?

3. a) Previous experience in farming
 b) State number of years experience in plantation management
 c) Previous experience in business
 d) Present occupation

4. Are you the custom owner or claimant of the land or connected with any of the custom owners or claimants of the land ?
 YES/NO

If "yes", what is your relationship ?

5. What development is already on the land ?

- a) 1. Pasture
 2. Cattle
 b) Coconuts
 c) Coffee
 d) Cocoa
 e) Is there
 i) Water system
 ii) House
 iii) Copra drier
 iv) Other buildings and machinery ?

6. What is your plan for development of the land:

First year

Second year

Third year
Fourth year
Fifth year
Later years

FINANCE

- A. How do you plan to pay for the development of the land ?
- B. Do you have any savings for these purposes ?
Will your family or partners be contributing ?
Do you plan to raise a loan from the Development Bank ?

LABOUR

Do you plan to work the land yourself ?
Will your family be helping you ?
Will you be employing a manager ?
Will you be employing other labour ?

VII. MINING AND MINERALS

A. The Statutory Background

The principal statute governing mineral resources in Vanuatu is the *Mines and Minerals Act 1986*¹.

This Act proceeds from the basic proposition that all minerals existing in their natural state in land are vested in the Republic². For the purposes of the Act, a mineral is:-

"...any substance, whether in solid, liquid or gaseous form, occurring naturally in land, formed by or subject to a geological process, but does not include:-

- (a) water; or
- (b) petroleum"³

This vesting of minerals in the Republic represents something of a departure from, rather than a restatement of, legal tradition, as the customary law conferred minerals rights on the custom owners⁴.

The Second National Development Plan identifies a number of mineral prospects in Vanuatu. These include gold prospecting and

¹. Act No.11 of 1986.

². Ibid., s.2(1). Rights as to minerals on the continental shelf and within the exclusive economic zone are also vested in the Republic - s.3(1),(2).

³. Ibid., s.1. The exclusion of water and petroleum from the definition is explained by the fact that, when the 1986 Act was being drafted, it was expected that specific legislation on both these topics would shortly be prepared. In the event, neither has been the subject of legislation. A draft water law has been prepared by a consultant, but no progress has been made towards enacting legislation. Nor is there yet any legislation on petroleum exploration and exploitation. An interesting by-product of this latter position is that it remains an open question to whom petroleum in Vanuatu belongs. The new Director of Geology, Minerals and Rural Water Services has asked the Minister to put petroleum legislation in place. Six offshore proving wells are to be drilled around Santo, with a view to providing scientific information for appraisal by the industry.

Note that radio-active minerals, as defined, may not lawfully be exported from Vanuatu except under a special permit from the Minister. Contravention of this requirement attracts severe criminal penalties - see s.81.

⁴. Chief Willie Bongamalur, Chairman, National Council of Chiefs - personal communication, "Minerals belong to the government by statute, but to the land-owner by custom". Hence the need for the consent of the custom-owner (in addition to governmental licences) before mining operations can be conducted.

field evaluation on Santo, Malekula and Efate; some small deposits of manganese on Erromango; some offshore oil and gas prospects; manganite-bearing sands; volcanic ash and pumice; ralsed ~~PROTECTED AREAS AND NATIONAL PARKS~~ limestone; and geothermal resources⁵.

B. The Licensing System

While neighbouring Pacific nations such as Tonga, Vanuatu, Papua New Guinea, the Cook Islands and persons seeking to carry on mining operations must obtain the appropriate permit from the responsible officer, the Commissioner for Mines and Minerals in the aspect of development, the Commissioner for Mines and Minerals in the Pacific is demonstrably the best authority to issue licences to bodies incorporated in Vanuatu and to companies formed in other jurisdictions which are particularly active in the mining industry. Individuals, by contrast, may only hold licences if they are indigenous citizens of Vanuatu⁷.

The reason for the absence of national parks or equivalent areas is in no way because of a lack of suitable sites.

C. Exploration Licences

Apart from the link with tourism, there is an obligation to the Act provides for the grant of licences for representative purposes. Such licences permits the holder to explore for minerals by means of geophysical, geochemical and photogeological surveys or other means, sampling responses, and by associated surface geology. Applications for such licences must contain a description of the area in respect of which it is made⁸ and a statement of the programme of exploration to be carried out. The Act does not require that any environmental information be included in the application for such licences are issued for a term not exceeding 12 months and contain a compulsory work-programme to be fulfilled in the period of the licence⁹.

Fiji faces a formidable problem in setting up a protected area system principally because it lacks all but a rudimentary system of parks and reserves which was not selected on ecological grounds and whose legislative backing is insufficient to ensure the appointment of the Commissioner, see *ibid.*, s.6. The Commissioner is assisted in the discharge of his functions by the Department of Geology, Mines and Rural Water Supply. Existing reserves and protected areas

7. *Ibid.*, ss.1(1), 12. There are provisions for joint exploration licences, provided each member of the consortium is qualified in the terms mentioned in the text - see s.12. In early 1988, the Cabinet of the Fiji Government decreed the Sigaoka Sand Dunes as Fiji's first National Park. An area of 150 hectares of outstanding landscape and biological interest, the Sand Dunes (Nov 1986) require that the application be accompanied by a plan of sufficient scale to enable the area to be properly identified. The Pacific Reg 2, a burial ground of more than a 100 people dating back nearly 2000 years. Administration of the Park has been delegated to the National Trust for Fiji, but to date there has been no infrastructural development, and no control application, but only on one occasion and for a further term not exceeding 12 months - see s.17(1)(3). The work programme is an immensely important element in the licence as failure to comply with the Sigaoka Sand Dunes does not as failure to comply the international definition of a National Park prospecting or mining licence - see ss.20(6), 35(1)(b). Similar provisions apply to the work-programmes attached to prospecting licences, but in addition a defaulting licence is in that case exposed to the additional liability to pay damages to the government - see s.30.

Holders of exploration licences are obliged to submit a report to the Minister containing an evaluation of the mineral prospects, accompanied by all the charts and maps, reports, analyses, etc. produced by the holder during the currency of the licence, together with a statement of the direct costs incurred¹⁰.

It should be noted that exploration licences do not confer any exclusive rights in respect of the area¹¹.

D. Prospecting Licences

Prospecting licences are the next step in the mineral-permitting process. They permit holders to undertake any works necessary in searching for mineral deposits and determining the extent and economic viability of those deposits¹².

Applications for prospecting licences are subject to rules broadly similar to those imposed in respect of exploration licences, but there are some differences. Prospecting licences should specify the minerals being sought and should not be made in respect of areas greater than 100 sq.km¹³. No express reference is made in the Act to the submission of environmental information surrounding the application or the work-programme which must be submitted with it, although there is a provision stating that the Minister may require further information¹⁴. The Minister must be satisfied on certain points before he can grant a prospecting licence, but the matters on which he can refuse to issue the licence are operational rather than environmental¹⁵.

Prospecting licences are issued for an initial term of not more than three years. They may be renewed on not more than two

¹⁰. Ibid., s.19.

¹¹. Ibid., s.16(2). No exploration licence, however, will be granted over areas in respect of which a prospecting or mining licence has been issued or which is subject to a registered claim - s.15(3).

¹². Ibid., ss.1(1), 25.

¹³. The *Mines and Minerals (Licences) Order 1986* requires that these blocks have boundaries which take the form of straight lines running North-South and East-West - see Reg.3(a).

¹⁴. S.20(2)(g). There is a similar provision relating to exploration licences in s.15(2)(f).

¹⁵. Thus, lack of financial resources, inadequate work-programmes or unsatisfactory proposals for employment of ni-Vanuatu may justify a refusal, but there are no grounds specifically related to the environmental impact, although lack of technical competence (which is a sufficient ground) might have relevance in this context - see *ibid.*, s.20(6).

occasions, but on the first renewal at least 50% of the original licence area must be surrendered¹⁶.

Holders of prospecting licences are obliged to keep records of boreholes drilled, resulting analyses and interpretations, minerals discovered and other works undertaken and to report these to the Commissioner on a quarterly basis. At the end of the licence term, the holder must submit a final report, similar to that required of exploration licensees¹⁷. The Commissioner must be informed of discoveries of minerals and steps must be taken promptly in order to ascertain whether the deposit is commercially workable and the Commissioner must then be informed accordingly¹⁸.

E. Mining Licences

A prospecting licensee who has discovered minerals in commercially recoverable quantities may apply for the grant of a mining licence¹⁹. Mining licences are granted in respect only of those minerals which are cited in the application²⁰. The licence gives the holder exclusive rights to carry on exploration, prospecting and mining operations in the area²¹. It also permits the holder:-

"..to sell or otherwise dispose of any mineral product recovered and stack and dump any mineral or waste products in a manner approved by the Minister, and

"..to carry on such operations and execute such works in or in relation to the mining area as are necessary [for mining, disposal or dumping]"²².

The application for a mining licence requires the submission of rather more information than lesser licences. Among the operational matters which must be addressed in the submission

¹⁶. Ibid., ss.22(1)-(3), 23(1).

¹⁷. Ibid., s.26.

¹⁸. Ibid., ss.31,32.

¹⁹. Ibid., s.33. Note that it is not possible to "leap-frog" up the system by proceeding straight to the grant of a mining licence.

²⁰. Exploitation of other minerals, if discovered, requires the express consent of the Minister - *ibid.*, s.41. For the procedure to be followed in such a case, see s.51.

²¹. Ibid., s.40(1)(a). Thus the grant of a mining licence excludes the possibility of lesser licences being granted in the area covered by the licence, even (it would seem) for minerals other than those stipulated in the mining licence.

²². Ibid., s.40(1)(b),(c).

are:-

"...a detailed programme for the progressive reclamation and rehabilitation of lands disturbed by mining and the minimization of the effects of such mining on adjoining land and water areas"²³.

Details of expected infrastructure needs must be provided, but there is, no statutory requirement for an environmental impact assessment to be prepared.

Mining licences may be issued subject to conditions, but there is presently no statutory requirement that these conditions include references to the mitigation of environmental impacts nor to restoration or aftercare of the land²⁴.

Mining licences are granted for an initial term of not more than 25 years and may be renewed, on one occasion only, for a further period not exceeding 25 years²⁵.

Mining licences will only be granted to applicants who can ensure the most "efficient, beneficial and timely use of the mineral resources" and who have adequate financial resources, industrial and technical competence and experience²⁶.

F. Quarry Permits

The Act²⁷ provides for the grant by the Commissioner to any person of a permit to prospect for and extract building materials, which are defined as:-

".....mineral substances and rocks commonly used for building, road making or agricultural purposes"²⁸.

²³. Ibid., s.33(4)(j)(v). There is also the usual liberty for the Minister to require further information - s.33(4)(o).

²⁴. s.36(2) does mention that conditions with respect to the processing, disposal or sale of minerals may be included, but goes no further.

²⁵. Ibid., ss.37,38. There is no requirement for the surrender of part of the area on renewal of a mining licence. Mining licensees, like other licensees, may if they wish surrender part of the licensed area under the provisions of ss.44-47.

²⁶. Ibid., s.35(1)(1),(ii).

²⁷. By s.62.

²⁸. Ibid., s.1(1).

Quarry permits normally last for 10 years and may be renewed at two-yearly intervals thereafter²⁹. Quarry permits are not to be issued in respect of areas covered by prospecting or mining licences or by other quarry permits unless the Commissioner is satisfied that the exercise of the rights granted by the permit would not "substantially prejudice" the rights of the holder of the prior licence or permit³⁰.

The Minister has power to include or exclude materials from the definition of "building materials"³¹. He has recently exercised this power in order to exclude sand and coral aggregate from the definition. Originally, it had been intended to introduce some specific quarrying regulations to govern the widespread use of these materials, but these regulations are now unlikely to be forthcoming in the short term. Accordingly, the Minister decided to remove coral aggregate and sand from the definition of "building materials" in order to dispense with the formal requirement for quarry permits in respect of their extraction. The temptation to do this is understandable, in order to legitimise the widespread use of these materials, but it is in other respects deeply regrettable that their extraction escapes the controls imposed by the 1986 Act³².

The new Director of Geology, Minerals and Rural Water Supply has written to the Minister requesting that this exemption of sand and coral aggregate be reviewed. Its uncontrolled use is causing coastal erosion in some places and, on Santo, there is concern over the exploitation of deposits of gravel in stream-beds.

The Present Licensing Position

At present, no exploration licences or mining licences have been issued. Only prospecting licences have been granted hitherto. In practice, the only activities which have taken place in Vanuatu up to date have been fairly basic exploration operations (although these have been carried on under prospecting licences, as these open up the possibility of using a wider range of techniques, including deep drilling). In view of the extremely hostile nature of the terrain in the interior of most of the islands, it is not envisaged that anything more advanced than exploration will take place in the next 6/7 years. There is, however, some interest in exploration offshore.

Currently, applicants for licences have been fairly co-operative in consulting and explaining their proposals to the Department of Geology. The Department insists on notice of proposals being

²⁹. Ibid., s.65(1)(a), (b).

³⁰. Ibid., s.62(2).

³¹. Ibid, s.1(2).

³². These include a register for quarry permits, which would enable some monitoring of use to be achieved - see s.66.

posted in the offices of the local District Council (although there is no statutory requirement that this should be done). Objections are invited, but the Department has never hitherto received any objections to a mineral application.

Other Environmental Provisions in the 1986 Act

1. Restrictions on areas in which mining may be carried on

Operations under any mineral licence require the consent of the responsible Minister if they are to be conducted on public land or on any land dedicated as a burial site or which is a "place of religious significance"³³. The consent of the lawful occupier of the land³⁴ is needed if operations are to take place within 200 metres (or any greater distance as may be prescribed) of any occupied house or building or on any land within 50 metres (or any greater distance as may be prescribed) of land which has been cleared, ploughed or "otherwise bona fide prepared for the growing of, or upon which there are growing, agricultural crops"³⁵. Similar restrictions apply in respect of mining operations near towns and villages³⁶.

2. Surface rights

The Act is silent on whether or not a mining licence would confer a right to let down the surface of the land. It does, however, provide that lawful occupiers of land subject to licences retain their right to graze stock on the land and to cultivate the surface, "except in so far as the grazing or cultivation interferes with prospecting or mining operations in such land"³⁷.

Mineral licensees are required to exercise their rights reasonably and "so as to affect as little as possible the interests of any lawful occupier....consistent with the reasonable and proper conduct of [mining or prospecting operations]" and there are special provisions protecting the occupiers rights as to navigation and fishing³⁸. Compensation must be paid in respect of disturbance of the occupier's rights

³³. Ibid., s.73(1)(a).

³⁴. I.e. the alienator or custom owner or person occupying the land with the lawful consent of the custom owner - s.72.

³⁵. Ibid., s.73(1)(b).

³⁶. Ibid., s.73(1)(d),(e).

³⁷. Ibid., s.74(1). The occupiers are also obliged not to construct buildings without the consent of the licensee - s.74(2).

³⁸. Ibid., s.74(3),(4).

and for damage to crops, trees, buildings, stock or works on the land³⁹.

3. Power to make regulations

The Act confers upon the Minister power to make regulations in respect of the following matters, *inter alia*:-

"...the prevention of pollution and the dispersal of pollutants and the conserving, and preventing waste of, minerals;

"...water rights and the use of water;

"...cutting and use of timber and fuel for purposes connected with mining"⁴⁰.

No such regulations appear to have been made.

I. Exploitation of Geothermal Resources

Following some exploratory work carried out by a team of researchers from New Zealand into the potential for exploitation of geothermal energy in northern Efate, the *Geothermal Energy Act 1987*⁴¹ was passed.

This Act closely mirrors the regime established for hard minerals by the *Mines and Minerals Act 1986*, in that it provides for prospecting and production licences (but not exploration licences), which are subject to very similar requirements as to work-programmes, etc.

Geothermal energy is defined as:-

"...energy derived or derivable from within the ground or thereunder by natural heat, and includes all steam, water or other fluid and any mixture of all or any of them that has been heated by such energy, and every kind of matter derived from a bore and for the time being with or in any such steam, water, fluid or mixture, but does not include water that has been heated by such energy to a temperature not exceeding 70 degrees Celsius"⁴².

All such resources are vested in the Government, whether they are to be found on the land territory or in the continental shelf or

³⁹. Ibid., s.75.

⁴⁰. Ibid., s.88(2)(f), (w), (y).

⁴¹. Act No.6 of 1987

⁴². 1987 Act, s.1(1).

the subsoil of the exclusive economic zone⁴³.

There are no specific statutory requirements for the submission of an environmental impact statement in connection with any geothermal application, although the Act reproduces the provision in s.33(4)(j)(v) of the 1986 Act that applications for production licences must be accompanied by a detailed programme for the progressive reclamation and rehabilitation of lands disturbed and for the minimisation of effects on adjoining land and water spaces⁴⁴.

There are restrictions on the conduct of operations close to habitations and cultivated land in terms similar to those in the 1986 Act⁴⁵.

J. The Informal Environmental Impact Assessment Procedure

As in the case of coastal tourism projects, there is in operation an extra-statutory practice of requiring environmental impact assessment of mining projects.

The Environment Unit of the Ministry of Lands, Energy and Rural Water Supply has issued *Specific Guidelines for Mining Environmental Impact Statements*⁴⁶.

These guidelines amplify the general guidelines for the preparation of environmental impact statements⁴⁷. They stress that among the peculiarities of Vanuatu which must be taken into account in assessing any minerals project are the seismological and social conditions:-

"Earthquakes pose the possibility of massive releases of stored toxic compounds and waste materials into the environment, as well as damage from landslides. Additionally, mining developments may take place in areas in which careful consideration must be given to social and other impacts on local population."⁴⁸

The guidelines require examination of:-

Geological and Soil Conditions

Matters to be addressed in this context include the structure of the overburden; the formation of surface areas

43. Ibid., ss.2,3.

44. Ibid., s.20(2)(h)(iii).

45. Ibid, ss.32,33.

46. Technical Paper No.3, 1987.

47. Technical Paper No.1, 1987 - see chapter on Physical Planning.

48. Technical Paper 3, para.1..

which it is proposed to overlay with waste, overburden or soil dumps; the amounts and nature of waste materials to be generated; predictions as to the effects of weathering on waste dumps, tailings, etc.; soil restoration and reuse proposals.

Data from these studies will be used to site buildings so that they will be able better to withstand earthquake/landslide shock. Also, impacts on water quality and potential for after-use can be assessed.

Hydrology

Matters to be addressed include location of surface waters (including temporary watercourses); nature and flow of groundwater; rainfall infiltration; predictions of pollution levels in these water sources under low, median and high flow-rates; potential for flooding; effect of operations on groundwater resource levels.

Meteorology

Matters to be addressed include temperature; insolation; evaporation; humidity; and wind speeds and directions. The guidelines warn that it is unlikely that such data exists for many mining sites in Vanuatu and field work will usually be required. The guidelines also suggest that the mining site should establish its own weather station for monitoring purposes.

Biology

In addition to those matters referred to in the general guidelines, special notice should be taken of terrestrial and aquatic fauna used by local peoples for food, housing, medicinal and ceremonial purposes; communities of rare or endangered plants and animals; and the possibility of mining activities promoting the incidence of "noxious animals", such as mosquitoes and rats.

The guidelines suggest that it might be appropriate for mining concerns to prohibit use by their employees of guns, nets, traps, etc., not only to protect wildlife in itself but thereby to avoid conflict with local people.

Land use

The EIS should contain an inventory of land-use and "land capabilities" in the mining area and areas which will be lost or degraded should be identified.

This information will be used to plan location of buildings, dumps, processing facilities, etc. in the areas of lowest wildlife value.

Mining operations

Details should be provided of the types of machinery to be used; methods of processing of ore; waste disposal plans; noise and vibration to be expected. Tailings dams must be earthquake-resistant. Toxic materials treatment should be

described and shapes and slopes of dumps and mine workings fully considered.

Sociological impacts

Consideration must be given to disruption of traditional ways of life through employment opportunities, loss of traditional resources and breakdown in traditional ways of life, and rapid exposure to new social conditions, as well as the effects of large influxes of mine employees unfamiliar with local traditions and practices.

K. Mineral Leases

Although the Department of Geology does not insist upon the grant of a lease before it considers an application for a minerals licence, such a lease must be granted before operations can take place.

The Department of Lands has developed a standard form of mineral prospecting lease, which contains a number of provisions of relevance in the environmental context.

The parties to such a lease agree that (except for those minerals reserved to the Government of Vanuatu) all "sand, gravel, coral, lime and other substrate" on the demised land remain vested in the lessors (usually the custom owners), who have the power to enter onto the land to search for, win and remove substrate, provided that they do not, in doing so, interfere with the mineral prospecting activities envisaged by the lease. The mineral lessee, for his part, is entitled to take sand, gravel, coral, stone lime and other substrate in order to make roads or for "any other purposes consistent with the uses permitted by the granting of" the lease⁴⁹.

Lessees are also entitled to extract water for the purposes of proper exploitation of their prospecting rights, but they are not permitted to restrict or change the course of surface watercourses by means of dams, channels, etc, except with the written consent of the Departments of Agriculture and Rural Water Supply⁵⁰.

The lessees covenant only to carry out prospecting activities on the land (in which activities the construction of camps and roads and the removal of vegetation for site clearance are expressly included). The lessees may not, however, use any land within 200 metres or any occupied or temporarily unoccupied building or within 50 metres of any cultivated land, unless the owners

⁴⁹. Standard form of mineral prospecting lease, clause 2(a)(i), (ii).

⁵⁰. Ibid., clause 2(b)(i).

consent⁵¹.

The lessees also covenant that they will fill up:-

"...all shafts, pits, holes and other excavations in such manner as to ensure that the topsoil is replaced on the surface to enable effective cultivation or early recovery of natural vegetation within six months of the termination of the digging of such shafts, pits, holes and other excavations.." ⁵²

Lessees also enter into a covenant to ensure that no person shall cause or permit the discharge of any rubbish, dirt, effluent or hazardous material into any watercourse⁵³.

As in all standard form leases prepared by the Department of Lands, certain rights are reserved to the lessors. These include rights to fish and bathe in the watercourses and (on giving reasonable notice) to carry away water for domestic use⁵⁴; rights to game living on undeveloped or black bush land⁵⁵; and forest produce and naturally regenerated trees⁵⁶

⁵¹. Ibid., clause 3(a). These covenants parallel the provisions of s.73(1)(b), *Mines and Minerals Act 1986*.

⁵². Ibid., clause 3(f).

⁵³. Ibid., clause 2(b)(ii).

⁵⁴. Ibid., clause 2(b)(iii).

⁵⁵. Ibid., clause 2(c). Game includes wildfowl, flying foxes, wild pigs and coconut crabs.

⁵⁶. Ibid., clause 2(d). Lessors also have a right to grant rights under the *Forestry Act 1982* to third parties, but the lessee's consent is required for this purpose (although that is not to be unreasonably withheld. Note also that the lessee covenants that he will pay compensation to the lessors for the loss of any crops, economic trees and other improvements damaged by the prospecting operations - see clause 3(e).

L. Conclusions

Although there is some consideration of environmental factors in the mining legislation, there is room for improvement. Among the amendments which might be considered are:-

(a) The introduction of the requirement that an environmental impact assessment be introduced for every proposed mining operation. It is recommended that such an EIA be prepared prior to the issue of each of the licenses described above.

(b) A legislative requirement that aftercare and rehabilitation provisions be included in all mineral leases should be introduced, as this matter is presently left to the parties to include in the lease covenants. The fundamental principles (e.g. as to the various standards to be achieved for differing types of after-use and the method by which compliance with these requirements is to be measured) should be spelled out in legislation. The legislation should also require that such programmes be carried out on a rolling basis, except where the Department of Geology and the Environment Unit agree otherwise.

(c) The removal of the provisions relating to quarry permits for sand and coral extraction is regrettable and ought to be reversed.

(d) In view of the special conditions operating upon mining undertakings, it is regrettable that no regulations have been promulgated on the subjects of mineral wastes and water pollution from mining operations. It is recommended that such regulations be prepared as a matter of urgency.

(e) In view of the increased interest in offshore exploration around Vanuatu, consideration should be given to the introduction of legislation governing the exploration for and exploitation of oil and natural gas, both onshore and offshore.

VIII. FORESTRY

A. Forestry in Vanuatu

Forestry has occupied an important place in both the First and Second Development Plans drawn up by the Government.

Some 75% of the land surface of the country is under forest, but most of this is too steep for commercial forestry. Also, a combination of shifting agriculture, cyclone damage and the geological youthfulness of the country have resulted in a rather poor natural stock¹. Furthermore, no full inventory of the forest resources has been carried out, although it is understood that this defect may be remedied in the near future, due to the funding of such a study by the European Economic Community.

B. The Statutory Background

The principal legislation governing forestry matters in Vanuatu is the *Forestry Act 1982*². The forestry legislation is yet another of those many areas of the environmental and natural resources law of Vanuatu which is the subject of one of the apparently rather unco-ordinated projects of reform. There is some possibility that the matter may be taken in hand in the near future by the Food and Agriculture Organisation of the United Nations³.

This Act places political and much of the administrative responsibility for forestry in the hands of the Minister for Agriculture, who is charged with the proper management and development of the country's forest resources⁴. In practice, this responsibility is exercised through forest officers⁵.

¹. See, generally, P. Neill, *Forestry Resources and Policies in Vanuatu*, in *Vanuatu - Resources, Development, Environment*, M.R. Chambers & E. Bani eds., Port Vila 1988 [hereinafter cited as Chambers & Bani], at p.59.

². Act No.14 of 1982, as amended by Act No.14 of 1985 and Act No.5 of 1986.

³. Adrian Barrance, Dept. of Forestry, personal communication.

⁴. 1982 Act, s.2(1).

⁵. To whom the Minister may delegate most of his powers - see s.2(2). There are, however, some powers which can not be delegated, especially the signature of forest plantation agreements on behalf of the government [see s.4(2)] and the suspension or revocation of timber licences under s.17.

C. The Planting of Forest Trees

The Act provides for the encouragement of afforestation by land-owners through a system of Forest Plantation Agreements (FPAs). The wooded areas resulting from the application of this system are known locally as Local Supply Plantations. The Government may enter into an FPA with any custom owner⁶ of land.

The FPAs are rather complex documents, whose compilation is not without its difficulties. Each must contain a sufficiently detailed identification of the land in respect of which the agreement is made. Furthermore, each FPA must also contain a forestry management plan for that area. This management plan must set out:-

- the species of trees to be planted;
- the measures which must be taken in order to ensure that the plantation is properly established and maintained;
- the extent to which any grazing or agriculture is to be permitted within the plantation; and
- any measures which may be necessary to protect any places of sacred, national or cultural importance in the area covered by the agreement.

Furthermore, the Act provides that these management plans must be reviewed by the Minister every five years⁷.

The custom owners of the land are obliged to covenant that they will permit the forest officers to plant the land with the trees referred to in the management plan and do such work as the Minister may from time to time require to promote the growth of the trees and to protect them. They are also required to undertake not to lease or otherwise dispose of the land (or the trees) without the Minister's prior written consent. Also, if the trees should be accidentally destroyed, they must permit the Minister to replant the area. Finally, they agree that, when the trees are felled and the timber is sold, they will repay to the government all its expenditure incurred in establishing and maintaining the plantation and that they will also pay the

⁶. The Act, in s.4(1), refers simply to "owners", but this words is defined in s.1. as meaning:-

"owner" in relation to land includes a number of owners and one or more persons with a right in custom to exclusive use of land and any association, corporation, co-operative or other body of persons representing such number of owners or such persons.

Considerable difficulty is experienced by the Dept. of Forestry in identifying owners of land in respect of which it is sought to enter into an FPA. The matter is of particular importance in this context, as s.8 of the 1982 Act insists that the government is not to enter into an FPA unless it is satisfied that the other party to the agreement "properly represents" the custom owners.

⁷. 1982 Act, s.4(3)(a), (b).

"reforestation charge"⁸. This is a levy payable on all timber cut during the course of utilisation operations (as defined in the Act), and it is calculated on a percentage of the market value of timber cut, sold or used⁹.

The proceeds of sale are to be applied first to the payment of the reforestation charge and then to the repayment of governmental disbursements in respect of the plantation or the part of it which has been felled in order to provide the proceeds of sale. Similar provisions apply if the timber is not sold but used by the owner himself¹⁰.

In practice, this statutory scheme is lagging a little in terms of implementation. Although a number of FPA schemes are operating and planting has taken place, no formal agreements have been concluded and they are functioning on the basis of "gentlemen's agreements". Although this course was adopted with the laudable aim of making progress with reforestation, it is recognised that the informality of the arrangement presents some dangers, as it is not entirely clear (for example) to whom the trees planted by the government on the custom owners' land actually belong. As some thinning and consequent timber processing will shortly have to be undertaken, this matter will have to be resolved.

Indeed, the Second National Development Plan recognises that the system is now operating on a "care-and-maintenance basis, no new Local Supply Plantations being envisaged during the currency of the Plan"¹¹. On the other hand, the Plan speaks of the establishing of new Community Forest Plantations, to satisfy local demand for fuelwood and to play a role in conservation functions such as emission controls and the provision of windbreaks. It is also intended that the new Community Forest Plantations will increase community involvement in forestry and protect the environment in the vicinity of densely-populated villages¹².

⁸. The covenants demanded of the custom owners are set out in s.3(c) of the 1982 Act. The reforestation charge was originally calculated as 50% of the market value of the timber sold cut or used at stump, but presently it is set at 75% of that value, subject a rebate for local processing of the timber, which is said to work out at an effective rate of about 40% - see *Regulation, 11(1), Forestry Regulations 1984 (No.10 of 1984, as amended by No.56 of 1985; Dr.Adrian Barrance, Dept. of Forestry, personal communication.*

⁹. S.28(1),(2). The valuation is carried out by the Ministry, see s.28(3).

¹⁰. 1982 Act, s.6(1),(2). In the latter case, the value to the owners is not be calculated as exceeding the market value of the timber at stump.

¹¹. Para.12.12, at p.234.

¹². Para.12.29, at p.234.

D. Utilisation of Forest Products

The basic principle of the 1982 Act is that no "utilisation operations" may take place without the grant of a timber licence¹³. Utilisation operations are:-

"...the felling of trees for sale as logs, for saw-milling, wood-chipping or fibre board manufacture or any other operations prescribed as utilisation under this Act"¹⁴.

Any such operations carried on without a timber licence constitute a criminal offence¹⁵, unless the custom owner is felling timber on his own land for his own use¹⁶. Also, the Minister has the power to grant exemptions from this liability if it appears that neither the extent of the operations or their effect on the interests of Vanuatu merits the application of the licence system¹⁷.

The Minister has the power to grant a timber licence to anyone who applies¹⁸, but these are not transferrable without the Minister's consent¹⁹.

Special provisions take effect when the applicant for the timber licence is *not* the custom owner. These require that, even before he makes the application, the applicant must enter into an agreement with the legally authorised representatives of the custom owners²⁰. This agreement is conditional upon the approval

¹³. S.9(1). Applications for timber licences must be in a prescribed form, accompanied by the agreement with the custom owners (if the applicant is not the owner but, for example, a logging company) - s.10(5).

¹⁴. 1982 Act. s.1.

¹⁵. Ibid., s.9(2)

¹⁶. Ibid., s.10(1).

¹⁷. Note that both the extent and the effect must be considered. Thus, the mere fact that only a few trees are to be felled would not be sufficient to come within the provision if those trees were, for example, of a rare species or of cultural or historic importance. The exemptions are only granted on a case-by-case basis, not generally, and provision is made for them to be made on a temporary basis - see s.11(3).

¹⁸. Ibid., s.12(1).

¹⁹. Ibid., s.13.

²⁰. Ibid., s.11(1). The agreement must be in a language acceptable to all the parties and must take a prescribed form. The agreement is co-terminous with the timber licence in respect

of the Minister, who must satisfy himself that it "adequately protects the interests of the owners of the land". If he is not so satisfied, the agreement will have no legal effect²¹.

Such an agreement will specify the species of trees which the applicant may cut and the size of trees which may be taken (usually by reference to a minimum trunk diameter measured at a stipulated height from the ground). The agreement will also contain an undertaking by the applicant not to cut fruit or food trees and may stipulate a further list of species which are not to be felled without the express consent of the custom owner. The agreement will also oblige the applicant to pay damages (in cash) to the custom owner in respect of a number of events, including:-

- pollution or siltation of water for human or animal consumption;
- damage to food trees or gardens; and
- loss of pasture caused by excessive logging debris.

The applicant also agrees to apply "sound logging practices to minimise environmental disturbance and minimise damage to the remaining timber stand"..

In addition to these general conditions (which are virtually standard), such agreements will also contain special conditions tailored to the particular application in question. These may require, for example, that operations should not take place within a certain distance of dwellings or food gardens or that special care should be taken to prevent damage to standing trees from falling or skidding logs. A common requirement is that operations should be stopped in wet weather in order to minimise erosion damage to roads and tracks. Timber stands are usually worked in blocks, rather than haphazardly and a work-plan showing the order of utilisation of these blocks is bound into the agreement. Special conditions as to replanting of cleared blocks are also routinely included.

Such timber licences are valid for a certain period specified in the licence, not exceeding ten years, and they are subject to general conditions set out in subordinate legislation²² and to

of which it has been negotiated and comes to an end when the licence ceases to have effect - s.11(4). The Minister keeps a register of such agreements - s.11(3).

²¹. Ibid., s.11(2).

²². E.g., Regulation 5, *Forestry Regulations 1984* (as amended) requires that, except in respect of coconut trees, each timber licence must contain a condition to the effect that the licensee must keep a record of the species felled. It must also contain a covenant not to fell any species notified by the Minister (by way of special condition) in the licence as a reserved species nor any tree (even when not so notified by special condition) marked or branded by a forest officer as a seed tree.

such specific conditions as the Minister shall impose on that particular timber licence²³. It is a criminal offence to contravene the conditions attached to a timber licence and, on conviction²⁴, any cut timber together with any equipment used in the commission of the offence may be forfeited²⁵. Furthermore, if the holder of a timber licence is convicted of an offence under the 1982 Act, his licence may be suspended or even revoked²⁶.

The *Forestry Regulations 1984* require the licensee to keep a felling register in which, not later than the day following the felling of any tree, certain particulars as to the logging operations must be entered. Logs must also be marked and the register kept available for inspection²⁷.

Licence conditions of general application require that annual reports of operations carried out in the previous year and a work-plan for the coming year must be filed with the Minister by January 31st of each year and quarterly reports as to the same matters must also be filed²⁸. Special conditions may require that certain species must not exceed a specified percentage of the logs extracted, may prohibit the felling of shade trees, etc.²⁹.

Licences routinely provide for the imposition by the Minister of penalties in respect of specified wrongdoings. These transgressions vary from carrying out utilisation operations in land other than that approved by the Minister to failing to submit work-plans. The penalties impose may be fairly substantial³⁰.

²³. Ibid., s.12(3).

²⁴. The same penalties apply to those carrying out utilisation operations without a timber licence, in contravention of s.9(1).

²⁵. S.16(1),(2). Where the offence consists of non-observance of a timber licence condition, however, the offence may be compounded on payment of a penalty of VT10,000 plus a sum equal to twice the market value of the timber cut - s.18(1).

²⁶. Ibid., s.17.

²⁷. It is also a routine provision in the agreement between the custom owner and the applicant that the latter keep the register available for inspection by the former.

²⁸. *Forestry Regulations 1984*, regulation 9(1),(2).

²⁹. Some of these matter may also be covered by the agreement between the custom owner and the licensee. This is not exactly a duplication, as breach of a term of the agreement renders the licensee open to the obligation to pay damages to the custom owner, while breach of the licence condition may result in the imposition of administrative penalties or suspension or even revocation of the licence.

E. Financial aspects of utilisation operations

As mentioned above, a reforestation charge is paid on all cut timber. The licensee is obliged to account to the Minister for this reforestation charge in respect of all chargeable timber felled in any month by the last working day of the following month³¹. The 1982 Act requires that each licensee shall establish and maintain a banker's guarantee to ensure that he can comply with the financial terms of the licence and this guarantee must be approved by the Minister³². Defaults in payment of the reforestation charge or any penalty imposed by the Minister are recouped from the guarantor and, if the amount of the guarantee is exceeded, the timber licence is automatically suspended³³.

The agreements between the custom owners and the licensees stipulate that royalties should be paid to the former in respect of the volume of trees felled (subject to a minimum annual payment). Royalty rates may be renegotiated at five-yearly intervals. The agreements commit the licensee to recognise the payment of royalty as the first charge on any payments received for cut timber.

In the public sector, the 1982 Act establishes a Forestry Fund, which receives every year from the Treasury a sum equal to the gross receipts from:-

- repayments made under FPAs;
- reforestation charges; and
- penalties for contraventions of licence conditions.

The Fund may also receive other monies voted by Parliament or the Government³⁴.

³⁰. Thus, logging on land not approved by the Minister attracts a penalty of VT5,000 per tree felled. Failure to produce the felling register may involve a penalty of VT2000 and penalties for false or missing entries vary between VT500-2000. Cutting undersized trees costs VT500 per tree and cutting seed or reserved species VT2000.

³¹. *Forestry Regulations 1984*, regulation 5(k).

³². S.14(1), (2). The Minister may stipulate the amount of the guarantee at "not less than a sum estimated by the Minister to be equal to the fees and other charges payable....in the first year of operations under the licence". The form of the guarantee is specified in the *Forestry Regulations 1984* - see regulation 6 and Schedule 5.

³³. *Forestry Regulations 1984*, regulations 7,8.

³⁴. S.27(1), (2).

The purposes of the Fund are to establish and maintain forest plantations under FPAs and to carry out other afforestation and reforestation projects.

F. Conservation of forest resources

The 1982 Act contains a number of general provisions on the conservation of forest resources.

Thus, by virtue of s.34, the Minister, as part of his general powers in connection with the proper management, development and utilisation of the forest resources of Vanuatu, may make orders, *inter alia*, for:-

- the protection of valuable species of trees, including the forbidding of the felling of specific trees or species of trees; and
- the banning or control of the import or export of logs or timber³⁵.

Thus, the Minister may forbid or restrict utilisation operations or clearing³⁶ operations if he considers that such activities should not take place on the land in order to:-

- prevent soil erosion or serious interference with the flow of any stream³⁷;
- preserve the ecology of the area in which the land is situated;
- conserve the land as an area or part of an area of particular scenic, cultural, historic or national interest; or
- preserve the land for use by the public for recreation.

Once the Minister forms the conclusion that intervention is necessary to achieve one or more of these objects, he may make such provision as he thinks fits to provide for the management, control and protection of the land³⁸.

Where the Minister is of the opinion that clearing operations (whether actually in progress or which he believes are about to

³⁵. S.34(2)(f),(g).

³⁶. Clearing operations means the cutting down of trees or the clearing of native vegetation. "Trees" includes any tree, palm, bush, sapling, seedling or reshoot of any kind or age - see, *ibid.*, s.1..

³⁷. "Stream means any part of any watercourse which at any time contains running water more than one half of one metre in width - see *ibid.*, s.1.

³⁸. *Ibid.*, s.21. Clearing or utilisation inconsistent with the Minister's prohibition or restrictions is a criminal offence - *ibid.*, s.23.

be undertaken) are likely to cause serious soil erosion or to interfere seriously with the flow of any stream, he may give directions in writing to any person undertaking (or believed to be about to undertake) such operations:-

- to cease those operations forthwith;
- where the operations have not been commenced, not to commence such operations; or
- only to carry out those operations in accordance with the conditions laid down by the Minister in the direction³⁹.

The 1982 Act also contains a provision which makes it an offence to use a "bulldozer, tractor or similar machine" to carry out any clearing operations within ten metres of a stream, unless the Minister's written authority has been obtained⁴⁰.

The Act also forbids any person in rural land⁴¹ to light or keep alight any fire or to leave any fire burning or to permit such things to be done so as to create a likelihood of damage to land or property⁴².

G. Forestry Leases

In common with all other activities conducted by persons other than the custom owners, forestry operations can only be carried on within the terms of a lease. These leases are compiled in a standard form and contain a number of covenants of significance in the environmental context.

Among the matters covered by such covenants are:-

Land-use The lessee covenants that he will only use the land for forestry (including agroforestry), including primary processing and the construction of the necessary roads and tracks, buildings, plant, etc.⁴³.

Soil protection The lessee covenants that he will "manage the land in such a manner as to preserve its fertility in accordance with good soil management practice as determined by the Department of Agriculture"⁴⁴.

³⁹. Ibid., s.22(1). There is an appeal to the courts against the imposition of such a direction, but the direction takes effect pending the hearing of the appeal - s.21(2). Failure to comply with such a direction is a criminal offence - s.23.

⁴⁰. Ibid., s.20.

⁴¹. "Rural land" means any land outside the boundaries of a municipality - ibid., s.1.

⁴². Ibid., s.24.

⁴³. Standard form of agricultural lease, clause 3(a).

⁴⁴. Ibid., clause 3(d).

Pollution The lessee covenants that he will "keep the land clean of all refuse, noxious weeds, vermin and rubbish"⁴⁵. There is also a covenant not to commit any wilful or voluntary waste⁴⁶, spoil or destruction of the demised land or permit anything to be done on the land which may become a nuisance or annoyance to the lessors or the owners or occupiers of adjoining land⁴⁷.

Fire protection There is an obligation to take all reasonable precautions to protect trees and plantations on the demised land from injury "by fire or otherwise", which appears to be very substantially wider than its marginal title would suggest, being (on its face) an obligation to protect trees from all perils against which reasonable steps may be taken⁴⁸.

Water Lessees are granted the right to extract water for all usual domestic, agricultural and forestry purposes (including primary processing), but this does not extend to restricting or changing the natural course of surface waterways (e.g. by dams or channels) unless the consent, not only of the owners, but also of the Departments of Agriculture and Forestry, have been obtained⁴⁹.

The standard form of forestry lease also reserves a number of important natural resource rights to the custom owners. Thus, the custom owners retain the right to fish and bathe in waters on the demised land and, on giving reasonable notice, to extract water⁵⁰. Similarly, hunting rights are retained⁵¹, as are

⁴⁵. Ibid., clause 3(g). The term "noxious weeds" is not defined in the standard form of lease and thus may be a matter for construction. There is, however, (albeit for other purposes) a list of noxious weeds contained in the *Prevention of the Spread of Noxious Weeds Order 1966 (No.8 of 1966)* - see regulation 5 and Schedule 1.

⁴⁶. These terms derive from the common law of land. Wilful waste presumably corresponds to the concept more familiarly known as "permissive" waste, i.e. the failure to do things which ought to be done, such as failure to keep drainage ditches clear - see e.g. *Sticklehorne v. Hatchman* (1586) Owen 43. Voluntary waste, on the other hand, is the doing of things which ought not to be done, such as "spoil or destruction in houses, lands, etc." - see *Bacon's Abridgement*, 7th.Edit., viii, 379. It will be noted that these evocative words also appear in the covenant under consideration.

⁴⁷. Standard form of forestry lease, clause 3(e).

⁴⁸. Ibid., clause 3(j).

⁴⁹. Ibid., clause 2(a)(i).

⁵⁰. Ibid., clause 2(a)(ii), although the exercise of this right must not interfere with the right of the lessee.

"naturally regenerated trees and the products thereof including coconut trees growing in unimproved areas of the demised land"⁵². Furthermore, the custom owners retain the right, subject to the consent of the lessees, to plant gardens on the land, although they are not to grow "long-term plants such as cocoa or coconut trees"⁵³..

H. Forest reserves

Somewhat unusually, the *Forestry Act 1982* makes no express provision for the declaration of forest reserves. There is, however, currently an attempt to establish such a reserve in relation to a remaining stand of kauri timber on the island of Erromango. Although this is customarily referred to as a reserve⁵⁴, it is so not because of the existence of any definitive legal status, but by virtue of the rather special provisions of what is fundamentally a forestry lease.

As the proposals for the reserve are intimately bound up with proposals, presently circulating in governmental departments, for the institution of a structure for the declaration and management of protected areas, the details of this proposal are postponed to the chapter dealing with protected areas.

I. Environmental Impacts of Logging Operations

Early in 1989, the Environmental Unit of the Ministry of Lands, etc. undertook a survey of the effects of logging on the environment. The study⁵⁵ concluded that little was known about the effects of felling operations, and the exercise was at least partly carried out in order to monitor compliance by the logging companies with the requirements of forestry lease and timber licences.

The study showed that there were, in the areas visited at least,

⁵¹. "All game living on undeveloped or dark bush, including wildfowl, flying foxes, wild pigs and coconut crabs" is reserved to the custom owners, although the exercise of the right depends upon the lessee's consent and will not extend to cultivated areas - see *ibid.*, clause 2(b).

⁵². *Ibid.*, clause 2(c).

⁵³. *Ibid.*, clause 2(g)(i), (ii).

⁵⁴. Its status, perhaps unsurprisingly, gives rise to much confusion. Dahl even refers to it on one occasion (probably by oversight) as a National park - see IUCN World Conservation Union, *National Conservation Strategy - Vanuatu; Phase I Prospectus*, 1988 [hereinafter cited as "Dahl"].

⁵⁵. *Appraisal of the Environmental and Social Effects of Logging on Santo, Flore and Efate*, Environment Unit, 1989 (in press).

no large-scale environmental impacts, as most logging operations were themselves rather modest in size. Nonetheless, the replacement of primary forest by shrubs and weedy plants produced a significant impact on the flora and fauna⁵⁶. Some erosion was noticed, even in flat areas and there was considerable evidence of damage along roads, caused by the continuous use of bulldozers and skidders and by reckless driving of vehicles. There were also instances of trees being felled less than 20 metres from the coastline in contravention of lease requirements⁵⁷.

J. Conclusions

In principle, the present structure of the law relating to forestry in Vanuatu is satisfactory. It may be that the principal change which may be beneficial is not legislative, but administrative (or perhaps political). The Act contains powers for the Minister to take action in the interests of conservation and these have been described above. The ambit of the powers is quite extensive, but there is evidence that there is some reluctance on the part of the government to be too assiduous in their exercise. It is important that there should be no excessive reluctance to take action under these conservation powers, as the absence of any provision in the Act for the declaration of reserved forests means that these provisions are the only ones available for conservation purposes in the law as it stands at present.

The desirability of amending the Act in order to make express provision for forest reserves depends to a large extent on whether the Vanuatu government accepts the proposals made elsewhere in this report for the institution of an integrated system of protected areas. If so, the necessity to make separate provision in the forestry legislation is much reduced, perhaps to vanishing point. If not, then it would be recommended that specific powers be introduced to enable the declaration of areas of forest to be set aside in order to preserve forest ecosystems, watershed protection, soil conservation, etc.

If a system of environmental impact assessment is to be introduced in Vanuatu as recommended elsewhere in this report, it is proposed that the felling or replanting of areas of forest above a certain size (to be determined) should be preceded by such an EIA.

The contribution of forest products to the satisfaction of energy demand in Vanuatu is a matter of some concern. It is recommended that consideration should be given to the designation of areas close to settlements for the planting and maintenance of woodlots

⁵⁶. Ibid., para.4.1.0. Weed intrusion in the wake of felling is also identified as a serious problem by Chambers & Bani - see *Wildlife and Heritage Conservation in Vanuatu*, in Chambers & Bani, *op.cit.*, at p.129.

⁵⁷. Environment Unit, *op.cit.*, at paras.4.1.1., 4.1.2.

intended primarily for fuelwood, with a view to reducing the dependence of local peoples upon other sources of forest products. Such a system may require some amendments to the present legislation, as the present system of utilisation licences would be inappropriate for such use.

IX. WATER QUALITY

The preservation of water quality is another area in which the present law of Vanuatu is almost entirely defective.

There is at present no water protection legislation worthy of the name. Insofar as any control exists in the areas where water quality is most likely to be prejudiced (i.e. in the areas of greater population density in the municipalities), the struggle to ensure adequate water quality is a function of planning control, in that planning officers strive to ensure that the existence of a sound water supply is a precondition for the grant of planning consent. This is, however, less than entirely satisfactory, as, not only is this a rather imprecise method, but it is by its very nature entirely reactive, when water quality and supply ought to be matters which are the subject of forward planning. In Port Vila and elsewhere, water quality problems have been exacerbated immensely by the fact that most houses operated septic tank drainage systems for foul waters and these have produced in recent years a serious long-term ground-water pollution problem, which is already beginning to cause severe deterioration in the quality of the waters of the Port Vila lagoon. There is, moreover, at present no statutory authority for the declaration of water protection zones (whether under the planning code or otherwise), although the planning authorities in Port Vila have managed, hitherto, to do so informally. The zone which is the subject of this unofficial action, however, is coming under pressure from squatters who are moving into it and whose presence is inimical to the function which the zone is intended to perform.

In rural areas¹, the problems are perhaps less pressing (although chronic local pollution may occur). Rural water supply is a responsibility of the Ministry of Lands, etc. Water supplies to villages in rural areas are usually effected by impounding dams in watercourses at a level above the village to be supplied and running water into the village by gravity-feed. The Department's second preference is to provide boreholes with indirect gravity feed driven by diesel pumps, although hand-pumps (at a ratio of about one pump to every fifty inhabitants) are often used. The site of the borehole is always determined by the Department of Geology, which is frequently obliged to resist demands for siting the borehole in the village centre where it would be at considerable risk of contamination from sewage percolation, etc.

Water is one of the few minerals which does not vest in the Government by operation of law². Thus, rights in it remain at the disposal of custom owners of land, who may grant extraction and other rights to lessees and third parties. Where land is leased

¹. The Department of Geology is putting considerable effort into providing adequate water supplies in rural areas. Dahl notes that 70,000 people had been provided with such a supply in 1986 and plans exist to complete the service by 1990 - *op.cit.*, at p.13.

². *Mines and Minerals Act 1986*, ss.1(1),2(1). The Second Development Plan notes the need for recognition of water as a national resource, citing the difficulties caused by land disputes in experienced in the course of installing rural water schemes - see para.31.22, at p.541.

under one of the standard forms used by the Department of Lands, the custom owners retain rights to bathe, fish and abstract water for domestic purposes provided that the exercise of these rights does not interfere with the purposes for which the lease was granted. Customary law principles governing the use which custom owners may make of water and the extent to which they are obliged to ensure that it passes to lower riparian owners undiminished in quality or flow-rate seem to be highly variable and little-documented, even in respect of water-courses running on the surface and scarcely to exist at all in respect of groundwater flows. At any rate, it would appear that, perhaps untypically, in this area custom rules are unlikely to supply the defects in formal legislation. Even if there were to do so in rural areas, however, it would appear beyond question that custom rules would be unequal to dealing with the control of water quality and supply in urban concentrations.

Conclusions

This is yet another area in which advice has already been sought by the government of Vanuatu. A major report has been prepared on behalf of the Food and Agriculture Organisation by Professor Sandford Clark of the University of Melbourne³. This report was prepared in 1987, but no steps appear to have been taken towards its enactment.

This is odd, because the report appears to supply, in a masterly and comprehensive fashion, the defects in the existing legislation as to water supply referred to above. The draft law aims to promote the rational and co-ordinated management of water resources and watershed areas, the provision of clean, safe and sufficient supply for domestic purposes, for preservation of the rights of custom owners to continue to exercise their traditional rights and to provide a climate for the further and progressive development of the water resources of the country. While declaring that water belongs to the Republic, the draft tries to strike a balance between public and private rights. It also seeks to establish an administration which, although directed centrally, seeks to employ local officers and other government officials to the maximum extent compatible with an integrated management pattern for the resource. It provides for the acquisition of adequate knowledge of the water resources of Vanuatu and provides for the planning and execution of the works which are needed for the sound exploitation of those resources.

In addition, the report contains detailed regulations on rural and urban water supply and regulations governing drilling procedures.

Although the draft is extremely impressive on the management of water resources generally, it does not deal in detail with pollution control matters (although the draft regulations for

³. *Assistance in Drafting Water Resources Legislation - Vanuatu - Final Report - Draft Water Resources Act and Regulations* FAO Rome 1987 (Ref.RAS/78/034).

water supply in urban areas do address the discharge of trade effluent and the control of private sewerage installations). Thus, it is proposed that, whatever fate overcomes the draft report, some consideration should be given to expanding the pollution control provisions to provide for a system of individual discharge consents, together with such incidental matters as the procedure for applications, matters to be considered by the granting authority, the imposition of conditions, variation and revocation of consents, the effect on consents of changes in circumstances, etc.

It may be that the draft report referred to was regarded as being too encyclopedic for immediate enactment in Vanuatu. If that is indeed the case, then urgent consideration should be given to the enactment of framework legislation which would enable a start to be made (perhaps on an area-by-area basis) on providing a legal regime for water resources. The indispensable elements of such a framework would appear to be:—

- vesting water resources in the Republic;
- establishing the sanctity of customary rights for existing purposes;
- empowering the central government to draw up plans for the management of water resources (taking into account traditional rights);
- empowering the central government to declare water protection zones, within which activities likely to have an adverse effect on the quality or utility of water resources could be prohibited or controlled;
- establishing a system of discharge consents regulating discharges of pollutants into fresh or coastal waters;
- providing a framework for the introduction or acceptance of sewerage and water treatment systems and of regulating the methods by which domestic sewage is presently discharged.

The importance of water legislation is recognised in the Second Development Plan, which identifies the absence of such laws as a constraint on development⁴.

⁴. See para.31.17, at p.539.

X. WASTE MANAGEMENT

While there are some areas of environmental law in which Vanuatu can claim to have a respectable body of legislation or practice, there are other areas where an adequate legal regime is almost entirely lacking. Waste disposal and management is one of these latter fields, where there is an urgent need for an integrated waste management law to be introduced.

The present standard of waste management, at least in Port Vila, borders on the catastrophic. Most wastes are disposed of by landfill, where they are dealt with indiscriminately. Thus, for example, therapeutic wastes (such as contaminated dressings and used hyperdermic needles) are presented for disposal along with domestic, commercial and industrial waste. The operation of the landfill leaves an enormous amount to be desired - wastes are not covered quickly and the landfill has caught fire on a number of occasions. In addition, the obvious available sites in the vicinity of Port Vila are running out and very few new candidate sites have been identified. Even if such sites existed, very serious problems are foreseen in persuading the custom owners to permit their use for waste disposal sites, partly at least because of the very unsavoury rumours about the bad management of the municipal sites in Port Vila. In the absence of a developed land-use planning system, there is a severe danger of waste disposal being conducted on the line-of-least-resistance model, with the possibility of ill-selected sites which may pollute potential ground-water supplies or be situated in areas which should be designated as water protection zones.

It is, therefore, particularly regrettable that the areas of environmental control in which the laws of Vanuatu are most deficient (namely, waste disposal, water pollution and quality control, and physical planning) should all combine in the waste management field.

Some effort, however, is being made to address the technical aspects of waste management in Vanuatu. Consultant assistance has been sought as to potential relocation of the landfill. The objectives of the project include the selection and design of a new landfill site which is technically and environmentally suitable; ensuring the efficient and environmental sound development, management and operation of the new landfill; the closure of the existing site at Fres Wota within twelve months; the mitigation of adverse surface environmental and groundwater impacts; and the reclamation of the site for suitable long-term end uses. It is envisaged that the new site will be in operation before the end of 1991.

Conclusions

In modern conditions, it is clearly unsatisfactory for the management of waste to be left entirely to generally-worded and imprecise provisions in public health legislation, which are essentially reactive rather than proactive.

It is therefore recommended that, as a matter of urgency, legislation is introduced along the following lines.

Waste management is a matter of such importance that is hard to escape the conclusion that its administration should be centralised. It is therefore proposed that the planning and supervision of waste management (if not its day-to-day execution) should become a matter for the central government. It may be that it is a function which should be assumed by the Ministry of Home Affairs, if only because that Ministry is the parent of the PPU, but there should also be close involvement of the Environment Unit in all aspects of waste management.

A new law should be introduced which would place on the appropriate governmental body a duty to prepare a waste management plan for the whole country. While it is important that this matter should be looked at on a national basis, it is recognised that this is a daunting task on the operational level. Therefore, this national waste management plan should aim at producing a strategic outline only, identifying the major areas of concern. It is to be expected that the municipalities will fall within this class, so the new statute should contain a specific duty on the responsible agency to prepare local waste management plans for Port Vila and Luganville, in close consultation with the municipal councils. The statute should set out in some detail the matters which are to be taken into account and addressed in the plan - matters such as the volume and nature of waste arising, the geographical pattern of arisings, different types of waste to be expected, proposed sites and methods of disposal, particular plans for wastes requiring special attention (dangerous wastes, bulky wastes, therapeutic waste, etc). It should also provide outline powers for the regulation of waste disposal sites. In view of the shortage of such sites in the immediate neighbourhood of Port Vila, it should also provide for the inclusion of considerations as to transport of waste and of its disposal otherwise than by landfill, such as the role which could be played by incineration (as in some other South Pacific countries, such as Papua New Guinea). Consideration should also be given to the increased use of other waste disposal or reduction techniques, such as composting or re-use and recycling.

The statute should establish separate categories of waste, especially to arrive at a definition of hazardous waste which should be subjected to specially stringent operational or documentary controls. A further classification based upon the source of the waste might also be helpful (e.g. in connection with the imposition of handling charges).

The statute should insist that all waste management operations should be subject to EIA requirements. There may be some advantages in declaring PPAs around some (if not all) waste disposal sites, in order to avoid development too close to the site. In principle, waste disposal sites should not be located in water protection zones. Even if there is no agreement on this latter point, there should be a system of licensing the operators of waste disposal facilities, and the licences should be subject to revocation and modification.

The statute should impose requirements for monitoring and inspection of waste disposal sites. If possible, it should also provide for regard to be had to technical advice, which might take the form of codes of practice, etc., possibly drawn from experience elsewhere in the region.

As to industrial and trade waste, the statute should impose on the generators of such waste a duty to ensure that it is disposed of in an environmentally sound manner. Furthermore, it should require that undertakings proposing to establish operations in the industrial, commercial, tourism, or large-scale agricultural sectors should be required, when applying for planning consent or for the grant of a lease or other permission, to produce a statement of their plans for waste management as a part of the approval process and that operations can not lawfully be undertaken until the authority responsible for waste management has approved the plan. The plan should thereafter be reviewed periodically and must also be reviewed prior to any major expansion or modification of the plant or operation concerned. Such undertakings must also undertake such monitoring and record-keeping as the responsible authority may direct.

XI. DANGEROUS SUBSTANCES

With a few isolated exceptions (such as petroleum), the Law of Vanuatu makes no provision for the control of dangerous substances.

This is a serious omission, for a number of reasons:-

- the local meteorological and seismic conditions are such as to demand that care be taken as to the storage of such substances, in order to avoid or mitigate the damage which might flow from a sudden and catastrophic release in case of, e.g. cyclone or earthquake;
- the presence of such materials is a legitimate planning consideration;
- the presence of such substances may present a particular concern for those responsible for waste disposal;
- it might be thought necessary to impose restrictions on the introduction or use of such substances for public safety reasons;
- there should be some mechanism for regulating the sale or other commerce in and the classification and labelling of such substances;
- such substances frequently present particular difficulties in transport;
- there may be employee health implications in their use.

Conclusions

Steps should be taken at the earliest possible moment to introduce a legal regime relating to hazardous substances. This should deal with their import; entry into the Vanuatu market; manufacture; classification; sale and distribution; transport; storage; use and application; labelling; and disposal.

One of the sets of regulations drafted by the WHO consultant as an appendix to the draft public health code makes reference to the control of a wide range of substances prejudicial to health, proposing the amalgamation of controls over all these substances. While there are obvious practical difficulties in ensuring that a single administration can field the technical competence across such a wide range, it may be that some such integrated regulatory system is more appropriate for Vanuatu. Further treatment of this matter is postponed to the final report, by which time it is hoped that some reaction to the WHO proposals might be forthcoming.

XII. PUBLIC HEALTH

Although there are a few scattered regulations which touch on matters concerned with public health and the suppression of nuisances prejudicial to health, there is at present no comprehensive public health legislation in Vanuatu¹.

This is not for want of effort, as several attempts have been made to prepare such legislation since Independence. A draft law was prepared in 1983 and circulated to Ministries for comment. In 1985, a consultant for the World Health Organisation (WHO) produced a massive draft *Health Services Bill*, which ran to nine sets of subordinate legislation. For reasons variously described as changes in personnel and reorientation of programme emphasis, no further action has been taken on either of these two initiatives.

The most recent activity in this connection has again been stimulated by the WHO, this time through the Regional Office for the Western Pacific, who have produced in May 1989 a consultant report entitled, *Development of Health Legislation - Vanuatu*².

The report takes the form of an enormously detailed draft *Public Health Bill* together with a number of sets of draft regulations. As a public health measure, its ambit is far wider than strict environmental health matters, as it includes provisions on standards of sanitation, vector control, smoking, seat-belts in vehicles, notifiable diseases, etc.

Nonetheless, the draft Bill does contain a number of proposals of

¹. It must be recalled, however, that the municipalities and local government councils have responsibilities as to public health imposed upon them under the local government legislation. In pursuance of the decentralisation policy, the functions of the Environmental Health Service of the Department of Preventative Medicine in the Ministry of Health is largely devolved to designated officers in the local councils. Locally-trained "village sanitarians" carry out local public health control functions in the council districts. There were 29 of them in 1987. The two municipalities each have Environmental Health Officers who are fully-trained and professionally qualified. See generally, E.S.Bovu, *Health and Environment in Vanuatu*, in Chambers & Bani, *op.cit.*, at p.95 et seq. In Port Vila, the authorities rely extensively on Municipal Bye-Law No.4 of 1981 (Public Health Nuisances), but reference is also made to old Joint Regulations because, despite their age, these contain more specific obligations in matters relating to environmental health - letter from Tony Masieu Ata, Environmental Health Officer, Municipality of Port Vila, April 26th. 1990.

². The report (hereinafter cited as "WHO 1989") was prepared by Dr. Dayanath C. Jayasuriya, Executive Director, Institute of Comparative Health Policy and Law, Nawala, Sri Lanka.

profound significance for environmental quality. These include:-

A. Abatement of Public Nuisances

The Bill, betraying its paternity by a very close reflection of the provisions of the United Kingdom *Public Health Act 1936*, would establish a control procedure for statutory nuisances, which are defined as including:-

- premises kept in such a state as to be prejudicial to health or a nuisance;
- animals kept in such a place or manner as to be prejudicial to health or a nuisance;
- accumulations or deposits which may be prejudicial to health or a nuisance;
- dust or effluvia caused by a trade, business, manufacture or process which is prejudicial to public health or a nuisance to the inhabitants of the neighbourhood;
- workplaces which have insufficient ventilation or light or which are not kept clean or free from noxious effluvia which may be prejudicial to health or a nuisance; and
- noise and vibration which constitutes a nuisance³.

The draft proposes a system of abatement notices in respect of such nuisances, by which the responsible officer⁴ would require the necessary steps to be taken to remove the nuisance. These notices would be served on the person whose act or default gave rise to the nuisance or, if he can not be found, on the owner or occupier of the premises (which would include a ship or boat)⁵. If the notice is not complied with or a nuisance seems likely to recur, the draft would permit the Commissioner to seek an order from the Magistrate which could either order the abatement to take place, prohibit certain activities or close the premises concerned, with power to appeal from the Magistrate's order to the Supreme Court⁶.

B. Public cleansing

The Bill would enable the Commissioner to require "accumulations of noxious matter" to be removed, by serving a notice on the owner

³. WHO 1989, cl.24.

⁴. The draft proposes the appointment of a Commissioner of Health, to be appointed by the Minister of Health and the designation of officials of the municipalities and local government councils who would have power to exercise functions delegated by the Commissioner - see WHO 1989, cls.2-7.

⁵. Ibid., cl.25.

⁶. Ibid., cls.26, 27(1)-(3), 28.

of the accumulation or on the occupier of the premises on which it is to be found requiring its removal and, if it is not removed within 24 hours, the Commissioner would have the power to remove it and to recover his expenses from the defaulting addressee of his notice⁷.

Furthermore, the draft would empower the Commissioner to undertake or contract for the performance of a number of public cleansing services:-

- the removal of house or trade refuse from any premises and the collection of such refuse;
- the disposal of refuse so as not to be prejudicial to health;
- the provision of receptacles for the temporary deposit and collection of refuse; and
- the collection, removal and disposal of night-soil.

It also would promote the provision of dustbins, either by the public authorities or by the owners or occupiers of premises⁸.

C. Avoidance of litter

The draft would penalise those who:-

"...deposit, drop, place or throw any dust, dirt, paper, ash, carcass, refuse, box, barrel, bale or any other article or thing in a public place"

and those who:-

"...keep or leave any article or thing whatsoever in any place where it or particles therefrom have passed or are likely to pass into a public place".

The same provision would also impose penalties on those dropping any articles of food or other things in public places and those placing, scattering, spilling or throwing any "blood, urine, noxious liquid, swill or other offensive or filthy matter of any kind" in such a manner as to run or fall into any public place⁹.

There are special provisions to prevent contractors, carriers and others from spilling or spreading dirt, sand, clay, earth, refuse, stones, etc. in public places, whether from vehicles or otherwise, and to require that contractors carrying on construction or earth

⁷. Ibid., cl.19. There is no definition of "noxious".

⁸. Ibid., cls.21,22.

⁹. Ibid., cl.32(1).

works to cleanse their vehicles to prevent soil, etc. being deposited from them onto roads or other public places¹⁰.

D. Protection of water supply

There is a separate provision in the draft to penalise persons who:-

"...drop, deposit or throw any refuse or other matter or thing into any channel, drain, lake, reservoir, river, stream or watercourse or upon the bank of any of the same or in any part of the sea abutting on the foreshore"¹¹.

Provision is also made for a specific offence which consists of defiling or polluting, or permitting drainage or refuse from land to flow into or be deposited in, any watercourse, stream, lake, pond or reservoir forming part of the water supply¹².

E. Provision for regulations

The draft would also empower the making by the Minister of regulations which would, among other things:-

- secure the keeping of land and premises of all kinds clean, free from refuse and material of all other kinds whatsoever which are conducive to nuisances;

- govern the construction, maintenance, cleaning and inspection of drains and sewers; and

- provide for the declaration and enforcement of standards for the purity of effluent from trade premises¹³.

F. Conclusions

It is clear that the general law of public health in Vanuatu is less than satisfactory and ought to be substantially revised. The draft discussed above is undoubtedly an extremely thorough attempt to do this. It might indeed be wondered whether it does not attempt to be too comprehensive in its approach, as some of the provisions proposed (especially in some of the sets of draft subsidiary

¹⁰. Ibid., cl.34.

¹¹. Ibid., cl.32(2).

¹². Ibid., cl.51.

¹³. Ibid., cl.94(1).

legislation) are immensely detailed, which may to some extent mitigate against its early enactment.

Furthermore, the adequacy of otherwise of public health legislation of this sort is of peripheral relevance to the matters addressed in this report, as public health law fulfils an essential residual role in modern environmental law. In many respects, it operates on a level subsidiary to that of the specific, sectoral laws relating to pollution of water or air or to waste management. That is not to say that it may not, on occasions, play an important role. The concept of statutory nuisance, for example, may be of real value where the activities complained of do not technically offend against the sectoral provisions but are nonetheless inimical to amenity.

Nonetheless, there are some aspects of public health law which it is important (from an environmental point of view) to ensure are well-regulated. Matters such as public cleansing form obvious examples of matters which are quintessentially matters of local government law which have substantial environmental importance on a broader scale. Some pollutants (noise is a prime example) can probably be dealt with best, insofar as it can satisfactorily be dealt with at all, in a public health or nuisance-related context.

It must, however, be said that public health law is no substitute for developed sectoral legislation of a modern pattern in areas such as water quality and waste disposal. It would be a serious error for Vanuatu to yield to the temptation to enact a public health code (however highly developed) of the pattern described above and fail to recognise the essentially limited character of its potential contribution to environmental quality.

XIII. MARINE AREAS

A. Maritime Jurisdiction

The extent of the maritime jurisdiction of Vanuatu is set out in the *Maritime Zones Act 1981*¹. This statute adopts the now familiar classification of maritime jurisdiction into internal waters, territorial seas, exclusive economic zone, etc.

Internal waters are defined as those which lie on the landward side of the baselines from which the territorial sea and the archipelagic seas are measured² and, as usual, they remain under the exclusive jurisdiction of Vanuatu; Vanuatu claims a territorial sea twelve nautical miles in breadth³, a contiguous zone which is twenty-four miles broad⁴ and an extensive archipelagic sea⁵. The national sovereignty of Vanuatu extends both to the territorial and the archipelagic seas, their seabed and subsoil and to the superjacent airspace⁶.

Vanuatu has declared an exclusive economic zone of two hundred miles⁷ and a continental shelf consisting of the natural prolongation of the land territory of Vanuatu up to the outer edge of the continental margin or up to 200 miles from the baseline from which the territorial sea is measured, whichever is the greater⁸. In both the continental shelf and the EEZ, Vanuatu exercise sovereign rights as to exploration for and exploitation of all resources and their conservation and management and exclusive jurisdiction to preserve and protect the marine environment and especially to prevent or control marine pollution⁹.

B. The Management of Shipping

Vanuatu is becoming of some significance as a registry of shipping.

¹. Act No.23 of 1981.

². Ibid., s.2.

³. Ibid., s.7.

⁴. Ibid., s.7.

⁵. Ibid., s.4 & Schedule to the Act.

⁶. Ibid., s.3.

⁷. Ibid., s.9.

⁸. Ibid., s.8.

⁹. Ibid., s.10.

At the end of 1986, there were 141 ships entered on the registry. In recent months, following the uncertainties surrounding the political stability of Panama, a marked upturn in transfers of tonnage to the Vanuatu flag has been experienced. An influential commentator has remarked:-

"The marine administration is very small for the rapidly increasing size of the register and Vanuatu is frequently criticised as being on of the most "open" of the open registries."¹⁰

Vessels are registered by the Deputy Commissioner of Maritime Affairs, who has an office in New York. In principle, vessels entered on the registry must be not more than twenty years old, but this requirement can be waived if the other registrations requirements are fulfilled. The *Maritime Act 1981*¹¹ requires that a vessel on the registry must be owned by a national of Vanuatu, but:-

"...this requirement is very easily fulfilled by establishing an exempted Vanuatu company, i.e. a company designed for operations exclusively outside Vanuatu and on which all information is protected by stringent security laws"¹².

The Act also provides that Vanuatu registry may be granted to a vessel on bareboat charter, provided that the original flag-state consents and the owners and mortgagees also agree. Such registration is usually for a period of five years, although this may be extended.

The maritime law of Vanuatu is, basically, that of the United States of America, except insofar as that is inconsistent with

¹⁰. *Guide to International Ship Registers* - International Shipping Federation, London 1987 (hereinafter cited as "ISF"). Vanuatu is considered to be a flag of convenience by the International Transport Workers' Federation.

¹¹. Act No.8 of 1981, as amended by Act No.36 of 1982. The Act, in addition to the matters referred to in the text, also deals with certification of vessels. mortgages and maritime liens, carriage of goods, limitation of liability, crew standards and manning, etc.

¹². The company must have a registered office in Vanuatu and file a return annually with the Registrar of Companies. According to the ISF, the total initial payment required is US \$1,575.00 with a subsequent annual charge of US \$900.00. Formation of the company takes two or three days - see ISF, *passim*.

Vanuatu statute law¹³.

C. Marine Pollution in Vanuatu

Vanuatu is a member of the International Maritime Organisation (IMO). Prior to its joining the Organisation, IMO sent a mission to Vanuatu, which produced a report touching on, *inter alia*, pollution matters¹⁴.

This report concluded that there was little evidence of pollution from passing traffic. Furthermore, although there was potential for spillage from discharges to the tank-farms in Port Vila and Luganville, those discharges only took place in daylight. There was some history of pollution from small discharges in the ports, but this did not amount to a grave problem. There were greater problems at Palekula Port on Santo.

In the Port Vila area, the principal difficulty arose from discharges of sewage from yachts and inter-island craft¹⁵.

Vanuatu is a party to the following international conventions dealing with marine pollution:-

- International Convention on the Prevention of Pollution of the Sea By Oil 1954, as amended (OILPOL);
- International Convention for the Prevention of Pollution from Ships 1973/8 (MARPOL);
- International Convention on Civil Liability for Oil Pollution Damage 1969 ("CLC");
- 1976 Protocol to the CLC;
- International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage 1971 ("the Fund Convention");
- 1976 and 1984 Protocols to the Fund Convention¹⁶

The *Maritime Regulations*¹⁷ incorporate into Vanuatu law the requirements of OILPOL as to discharges of oil and the keeping of

¹³. *Maritime Act 1981, as amended, s.11.*

¹⁴. *International Maritime Organisation: Mission Report - Republic of Vanuatu, IMO 1985*

¹⁵. *Ibid.*, pp.12-13. The Report stressed that the most serious source of severe pollution was effluent from septic tanks seeping into the Port Vila lagoon - p.18.

¹⁶. *Maritime (Conventions) Act 1982 (Act No.29 of 1982), as amended by Act No.29 of 1984 and Act No.17 of 1987.*

¹⁷. *Orders No.104 of 1981, No.42 of 1982 and No.27 of 1986, regulations 18-20.*

oil record books.

The *Shipping Act*¹⁸ requires that no dangerous goods may be shipped unless the owner, master or bosun has been notified of the proposed shipment and that any such goods should have their description marked upon them¹⁹. If the owner, master or bosun of a vessel believe that goods tendered for loading are dangerous, he may refuse to load them on board the vessel and may require them to be opened for inspection²⁰. Where dangerous goods have been loaded, the owner, master or bosun may in a proper case caused them to be thrown overboard²¹.

D. Conclusions

Although there are some detailed amendments which could be made to the existing law relating to marine pollution in Vanuatu (such as a specific ban on discharges or transshipment of oil or other noxious liquid substances otherwise than in daylight and the introduction of reception facilities for sewage in Port Vila and perhaps in other harbours, the principal recommendations for change in the existing law must be addressed on a rather higher level.

There is little doubt that the possibility exists that Vanuatu might become quite an important shipping registry. It is fully appreciated that the attractiveness of the Vanuatu flag to ship-owners is not unconnected with the country's pattern of ratification of major maritime conventions. On the other hand, however, conventions relating to marine pollution control probably constitute an area of international maritime law where ratification or otherwise by a state of registry makes relatively little impact on flag choice. This is because many of the states to which vessels flying that flag may trade apply the provisions of the Convention to vessels entering their ports anyway.

It is therefore strongly recommended that Vanuatu take under urgent consideration the ratification of a number of major marine pollution Conventions. The most obvious candidates are:-

- the non-oil, "voluntary" Annexes of MARPOL;

¹⁸. Act No.1 of 1968, as amended by Acts No.8 of 1983, No.7 of 1985 and Order No.15 of 1987.

¹⁹. S.35.

²⁰. Ibid., s.36(1).

²¹. Ibid., s.36(2). this power extends not only to dangerous goods, but to other goods which are likely to become dangerous (perhaps by reason of deterioration).

- the International Convention relating to Intervention on the High Seas in Cases of Oil Pollution Casualties and its Protocol Relating to Intervention on the High Seas in Cases of Marine Pollution by Substances Other than Oil;

- the London Dumping Convention; and

- the Convention for the Protection of the Natural Resources and Environment of the South Pacific (the Noumea Convention), and its Protocols for the Prevention of Pollution of the South Pacific by Dumping and concerning Co-operation in Combatting Pollution Emergencies in the South Pacific Region.

Of these, the first is a natural concomitant of acceptance of Annex I of MARPOL. There would be imposed an additional requirement in terms of reception facilities for noxious liquid substances, but there would be immense value in Vanuatu's imposing the MARPOL controls over the discharge of garbage and sewage from vessels flying its flag.

The second (the "Intervention convention") forms a part of the network of international obligations relating to management of pollution emergencies which is accepted by a growing number of coastal and maritime states and which confers on Vanuatu a number of valuable rights.

The third is perhaps more controversial, because of the provisions in the Convention which envisage that nuclear waste may in certain circumstances be dumped at sea. The intensity of the feeling in the South Pacific on this issue is appreciated, but failure to ratify the Convention on the grounds that to do so would in some sense endorse the principle of nuclear disposal at sea would appear to be misconceived. Some South Pacific states (Nauru and Kiribati, for example) have played an extremely effective role in turning the tide in the LDC against nuclear dumping at sea. It would appear that Vanuatu would have little to lose and perhaps something to gain from membership.

It would appear that Vanuatu ought to move quickly to ratify the Noumea Convention. The Convention has a number of provisions which ought to be introduced into Vanuatu law at the earliest opportunity. These include provisions as to the reduction of pollution from land-based sources (although it is probable that this would be better effected by waste disposal and water protection laws), disposal of wastes at sea and the storage of toxic and hazardous wastes. There are also provisions relating to protected areas and species and on the introduction of environmental impact assessment, none of which would present any particular difficulty to the government of Vanuatu if it also accepts the recommendations set out in this report.

XIV. FISHERIES

Fisheries are of considerable importance in Vanuatu. They are of three kinds. First, subsistence fisheries on the inner reefs and lagoons, which is calculated at something in the order of 2400 tonnes per annum¹. Secondly, there is an inshore commercial fishery mainly for deep-sea snapper and groupers. Thirdly, there is an oceanic fishery, based at Palekula on Santo, mainly fished by foreign-based vessels having licences to fish in Vanuatu waters.

Fisheries management inshore requires that attention be paid to traditional rights exercised by custom owners, which frequently extend to the beach, reefs and lagoons. Rights to fish around the reefs and to land canoes on beaches may be determined by where one's ancestors landed or the rights which they negotiated, or by how much land one owns above the high-water mark. The local customary law is extremely complex and varies widely. Some groups claim rights as far out to sea as one can fish or dive for shells². There are even some groups who claim traditional fishing rights out to the horizon as seen from the land, but the fisheries legislation proceeds on the basis that the outer edge of the reef represents a realistic limit for customary claims³, as laid down in the lands legislation.

A. Fishery Management

The principal statute governing the management of fisheries is the *Fisheries Act 1982*⁴. The Act requires the Director of Fisheries to prepare and keep under review plans for the management and development of fisheries in Vanuatu's waters. These plans are to assess the present state of exploitation, determine the objectives to be attained in respect of the fishery, and to set out the management and development measures which need to be adopted, in particular to design a licensing system and the division of fishing

¹. See Dahl, p.12.

². See *Customary Law Relating to the Environment - SPC/SPEC/ESCAP/UNEP Topic Review no.21, SPREP, Noumea 1985*, by Mere Pulea, at p.79, citing Taurakoto, *Customary Rights to Reefs and Landings*, in *Land Tenure in Vanuatu, 1984*, P,Lamour (ed.) at pp.14,15.

³. Dr.Wycliffe Bakeo, Director of Fisheries, personal communication.

⁴. Act No.37 of 1982. Fish, for the purposes of the Act means:-

"any aquatic animal, whether piscine or not, and includes any mollusc, crustacean, coral, sponge, holothurian (beche-de-mer), and reptile and their young and eggs and includes coconut crabs"

See s.1.

effort between national and foreign vessels⁵.

In practice, the vast majority of offshore fishing effort in Vanuatu waters is carried on by foreign-flag vessels. The 1982 Act provides for the granting of licences to these vessels, which are only eligible for such a grant if their flag-state has entered into an access agreement with Vanuatu⁶.

There are extensive provisions in the Act for the licensing of fishing vessels⁷, provisions which apply both to foreign vessels and to local fishing vessels⁸ of 10 metres or more in length. Conditions attached to the licences may deal with open and close seasons, prohibited areas for fishing, mesh sizes, methods of fishing and target species⁹. Fishing licences are valid for a period of one year¹⁰.

The Act empowers the Minister to make regulations on a number of matters with environmental significance, including:-

- conservation measures, such as mesh sizes, fishing seasons, closed areas, etc.;
- measure to prevent or reduce the accidental catching of marine mammals;
- licensing and controlling fish aggregating devices, and for rights to fish aggregated by the use of such devices¹¹;
- taking of coral;
- taking of aquarium fish;
- aquaculture development; and

⁵. 1982 Act, s.2(1), (2). The preparation and revision of the plan is to involve consultation with local fishermen and councils and with other ministries concerned. Some consultation with other states within the region is also envisaged, at least where fishing activity is directed to shared stocks - see s.2(3)-(5).

⁶. Ibid., ss.3,4(1), (3). There is an exception for locally-based foreign-flag vessels, i.e. those which land all their catch in Vanuatu - see s.1.

⁷. Ss.9, 11-17.

⁸. I.e. vessels owned by the Government or a public corporation, or wholly owned by citizens of or companies incorporated in Vanuatu - s.1.

⁹. Ibid., s.13.

¹⁰. Ibid., s.15(1).

¹¹. A fishing aggregating device is defined as any floating device, man-made or otherwise, whether anchored or not, intended for the purpose of aggregating fish, and includes any natural floating object to which such a device has been attached - s.1.

- conservation measures for the protection of turtles¹².

Regulations for only a few of these purposes have been made.

In early 1989, the South Pacific Forum Fisheries Agency and FAO were asked to review the *Fisheries Act* and the South Pacific Forum legal officer has made a country visit to Vanuatu for this purpose. This review, however, confined its attention to fishery management (stock control, foreign fishery activity, catch-quota enforcement, etc), rather than to environmental issues.

B. Controls over Destructive Fishing Methods

The Act also contains a prohibition on the use of explosives or poison to kill or stun or disable fish in such a manner as to enable them more easily to be caught and of possessing such poison or explosives intended for such a use.

The Fisheries Department identified the use of destructive fishing methods as one area where further action was needed. It would appear, however, that the present provision (which imposes a fine of one million Vatu for offences under it) is sufficiently widely drawn. It would seem, therefore, that the problem is rather one of implementation than of legislation.

C. Protection of Particular Harvested Species

Marine mammals

The 1982 Act provides that no person may fish for marine mammals in Vanuatu waters and requires that any marine mammal which is accidentally caught shall be released immediately and returned to the waters from which it was taken with the least possible injury. Contravention of this provision attracts a fine of 10,000,000 vatu¹³.

¹². Ibid., s.34(2)(i),(j),(l),(m),(n).

¹³. Ibid., s.18. Although they do not primarily relate to Vanuatu waters, mention should be made of the *Maritime (Protection of Mammals) Regulation 1988* (No.33 of 1988), made under s.46, *Maritime Act 1981*, the purpose of which is to minimise accidental catches of marine mammals by Vanuatu flag vessels used in commercial tuna fishing in the Eastern Pacific. The Regulations require that the owner, agent or bare-boat charterer of such vessels must advise the Minister when he is fishing tuna associated with marine mammals, allow observers from the Inter-American Tuna Commission aboard, fit dolphin safety panels to purse-seine nets

Trochus shell

The Fisheries Regulations 1983 introduced new controls¹⁴ over the collecting of *Trochus niloticus*. It is now an offence to harm, take, have in one's possession or to sell or buy any trochus shell which is less than 9 centimetres in diameter, measured across the base of the shell¹⁵. Furthermore, written permits are required (from the Minister of Fisheries) before any trochus may be exported¹⁶.

The purpose of the export permit system is to enable the government to impose quotas for the exploitation of shell. At present, the quota for trochus is 75 tonnes per annum, which is largely exported to France and South Korea¹⁷.

Green snail

The 1983 Regulations also control the taking, killing, collecting, possession, etc. of green snail (*Turbo marmoratus*). The prohibitions are similar to those applied to the trochus, but the minimum size permitted is 15 centimetres, measured over the longest dimension of the shell¹⁸.

The present quota for green snail is 20 tonnes per annum, which is largely exported to Korea.

In some places, customary owners of fishing rights have introduced a custom ban on the collection of green snail.

and perform backdown manoeuvres (going astern in order to allow the net to re-open and release trapped mammals) if any mammals should be caught and to carry out whatever further rescue operations as may be needed.

¹⁴. They replace earlier controls dating from the *Sea Shell (Control) Regulation 1957* (No.11 of 1957), as amended by the *Sea Shell (Control) (Amendment) Regulations 1982* (No.40 of 1982), which imposed similar size limits to the 1983 Regulations.

¹⁵. 1983 Regulations, reg.17.

¹⁶. *Ibid.*, reg.17(4). The 1982 Regulations prohibited the export of any trochus or green snail, but contained an exemption for "a person departing from Vanuatu to take a small number of such shells intended as souvenirs or presents and carried in the accompanied luggage of such a person" - reg.2, 1982.

¹⁷. Dr.Wycliffe Bakeo, personal communication.

¹⁸. 1983 Regulations, reg.16.

Beche-de-mer

Quotas have also been established for beche-de-mer, the sea cucumber (*Holothuria edulis*). This is presently established at 40 tonnes per annum, mostly exported to Hong Kong and Singapore.

Trumpet shell

Similar controls to those imposed as to trochus and green snail apply to the trumpet shell (*Charonia tritonis*). The minimum size referred to in the Regulations is 20 centimetres, measured along the outside of the shell from one end to the other¹⁹.

Rock lobster

The 1983 Regulations make it an offence to harm, take, possess, sell or buy any rock lobster of the genus *Panulirus* which is less than 22 centimetres in length when measured from immediately behind the rostral horns to the rear edge of the telson. Rock lobsters may not be taken by spear-fishermen.²⁰

Slipper lobsters

These crustaceans (*Parribacus caledonicus*) are subject to the same kind of protection as rock lobster, except that the minimum size is 15 centimetres, measured from the front of the carapace to the telson²¹.

Coral

In view of the predations of scuba-divers and others, the 1983 Regulations provide that no person may take more than three pieces of living coral in any period of 24 hours, unless he has a permit from the Director of Fisheries²².

Turtles

The 1983 Regulations make it an offence to disturb, take, have in possession or to sell or buy any turtle eggs belonging to any

¹⁹. 1983 Regulations, reg.18.

²⁰. Ibid., reg.13.

²¹. Ibid., reg.14.

²². Ibid., reg.19(1).

species of turtle or to interfere with any turtle nest²³. Furthermore, it is an offence to buy or sell any hawksbill turtle (*Eretmochelys imbricata*) or its shell²⁴.

Coconut crabs

The coconut crab (*Birgus latro*) is an important traditional food-source throughout the South Pacific. The population of coconut crabs in Vanuatu is one of the few populations which are large enough to continue harvesting. A recent researcher, however, has commented:-

" [The crabs'] unique flavour has made them popular with tourists in local restaurants. Consequently, during the last 20 years, increasing levels of exploitation and changing land-use in areas where coconut crabs used to be common have contributed to a decline in local stocks.....Since 1983, improvement in transport and increased marketing facilities have seen a significant increase in the number of crabs being collected for sale, resulting in increased pressure being applied to a number of crab stocks."²⁵

Extensive research has been carried out on the recruitment of coconut crab stocks in Vanuatu, and the indications are that this is very slow.

The 1983 Regulations prohibit the taking of crabs measuring less than 9 centimetres from immediately behind the rostral horn to the rear edge of the carapace. There is also a ban on the collection of females with eggs²⁶.

The same commentator has concluded that the 1983 Act has been "ineffectual in halting [the] decline" of the crab in Vanuatu, because "it has rarely been enforced (e.g. sale of undersized crabs at markets) and in many cases it is impossible to enforce (e.g. local consumption and direct sales to restaurants)". He proposes

²³. Ibid., reg.21(1)(i),(ii). Earlier Regulations, the *Turtles (Protection and Conservation) Regulations 1974*, made it an offence under the *Prevention of Cruelty to Animals Act* to keep live turtles out of the water for 72 hours or to cause them unnecessary suffering or sell or expose for sale any turtle which had been embalmed - reg.1.

²⁴. Ibid., reg.21(1)(iii).

²⁵. R.W.Fletcher, *Coconut Crab Resources In Vanuatu*, in *Chambers & Bani, op.cit.*, at p.33.

²⁶. Reg.15, reproducing earlier controls, most recently contained in the *Coconut Crab (Protection) Act 1981 (Act No.27 of 1981)*, repealed by the *Fisheries (Consequential Repeals) Act 1983*.

a number of steps to be taken to protect remaining stocks, including strengthening the legislation and providing for the re-seeding of areas with artificially reared juvenile crabs²⁷.

It has been suggested that consideration is being given to making Natai (the Vanuatu Government fishery company) the only lawful outlet for commercial sales of coconut crab, with a view to enable a closer check to be kept on sales. There should also be introduced quotas for each production area. Provision should also be made for the restocking of some areas, with the local government councils declaring sanctuaries and supervising the re-seeding. It is suggested that there should then be an embargo on taking within those areas and, once the embargo had been lifted, the local people could once again take crabs, but only for their own use and not for commercial sale²⁸.

D. Marine Protected Areas

The Fisheries Act 1982 provides²⁹ that the Minister may declare "any area of Vanuatu waters and the seabed underlying such waters to be a marine reserve". Such a reserve can only be declared after consultation with the local government council and with custom owners of the adjoining land. It does not seem that any land, not even the littoral zone abutting the waters themselves, can be included in the area designated under this provision.

Within a marine reserve, it is a serious criminal offence (punishable by a fine not exceeding 1,000,000 vatu) to fish, take or destroy coral, dredge or take away sand or gravel, otherwise destroy or disturb the natural habitat or to take or destroy any wreck or part of a wreck.

Only one such reserve has been established, presently the only

²⁷. R.W.Fletcher, *loc.cit.*, at pp.45,46. Other proposals include public education (largely aimed at school-children, but perhaps having an impact on local consumption) and yearly monitoring of populations. Coconut crabs were regular features on the menu at tourist hotels in Port Vila in the summer of 1989 and the manager of one of these hotels was fined for serving crabs which did not come within the legal limits. Some evidence of public awareness, such as the sale of T-shirts proclaiming the endangered status of the crab, were observable.

²⁸. Naika, the journal of the Vanuatu Natural Science Society, December 1988, at p.29 et seq.

²⁹. By s.20.

protected area properly so-called in Vanuatu³⁰.

E. Reseeding and "Nursery" Areas for Depleted Species

The Department of Fisheries has indicated that, for a number of species (such as trochus, green snail and coconut crabs), there is a need to establish programmes for reseeded areas of reef where these species have been depleted by exploitation, but which remain suitable habitat. Although the 1983 Act contains some provisions for the declaration of close seasons, etc., it does not seem that it is adequate to establish the necessary legal framework for these "recovery areas", nor perhaps is it sufficiently precise to enable suitable harvesting regimes once the areas are reopened. It would seem, therefore, that any amendment of the fisheries legislation should include measures to achieve these objectives.

F. Conclusions

Pending the submission of the report of the South Pacific Forum Fisheries Agency on fishery management, the following recommendations are made:-

(a) Consideration should be given to the introduction of controls over sport-fishing. At present, there is little evidence that this represents a real threat to any species in the country, but as tourism is likely to play an increasingly important role in the development of the economy in the short- to medium-term, the introduction of some system of control should be considered.

(b) It may be that some further legislation should be introduced to secure the protection of the country's coral reefs. These appear to be in fair conditions, although they have suffered from the depredations of the Crown of Thorns Starfish and other damage. In some countries, specific legislation governs anchoring, mooring, fishing operations, and other activities which may impact adversely upon the well-being of coral reefs. Such legislation might dovetail with any protected areas legislation which would extend to or include coral reefs.

(c) Consideration should be given to co-ordinating the declaration of marine reserves with that of other protected areas. It might be thought advisable to provide that such

³⁰. The President Coolidge and Million Dollar Point Reserve. For a full description, see J.R.Paine, *Vanuatu - An Overview and Description of its Protected Areas*, IUCN/WCMC, Cambridge 1988 (in draft), hereinafter cited as "IUCN/WCMC 1988".

reserves should be declared by the mechanism referred to in the next following chapter, subject to the involvement and consent of the Department of Fisheries. Such a system would facilitate the declaration of reserves which combine sea-areas with the adjoining littoral and hinterland, which would appear at present to be achievable only by the declaration of two protected areas.

(d) Specific legislation should be introduced to stem the decline of the coconut crab. Essential elements of such a regime would see to include:-

- limiting the outlets through which the crabs could be offered for sale, perhaps concentrating sales exclusively on Natai (thus eliminating all direct sales, except perhaps for a limited exception for local use), with associated requirements for documenting the sources from which the individuals are taken;
- the imposition of catch-quotas on individual areas;
- the imposition of a ban on the taking of all females (not just those carrying eggs);
- the introduction of areas for reseedling of suitable habitats, the prohibition of any taking in those areas until such time as the populations was adjudged to have recovered sufficiently to enable some exploitation to take place without endangering the viability of that population, the imposition thereafter of strict controls on harvesting, perhaps with a requirement (in some areas at least) that such harvesting should be only for local use.

(e) There should be introduced legislation which would enable the Department of Fisheries to declare restricted areas of suitable habitat which would be designated as reseedling or nursery areas for harvested species which have begun to suffer as a result of exploitation. These areas would not be protected areas in the fullest sense, as they would be principally concerned with the well-being of a particular species or group of species, but powers would be taken, not only to prohibit taking or disturbance of the species, but also to regulate other activities in and around the designated area which might be inimical to the recovery of that species. These might include controls over other fishing, tourism, sport-diving, navigation, etc and would therefore probably be confined to the territorial sea.

XV. WILDLIFE

In some respects, the wildlife of Vanuatu appears somewhat impoverished. It has been described as "not particularly exciting or exotic"¹. The relatively small total number of species found in the country is due to the oceanic origin of the islands, which have never been joined to any continental land mass, and the archipelago lies at a substantial distance from neighbouring groups. Thus, there has been little opportunity for colonisation by animals and plants.

Nonetheless, the wildlife of Vanuatu is of very real importance for a number of reasons. First, there is a high incidence of endemic species, which occur in all groups of terrestrial animals and plants². Secondly, some species, such as the dugong (*Dugong dugon*) and the estuarine crocodile (*Crocodylus porosus*), are not only rare or threatened, but occur in Vanuatu at the extremes of their range³. Thirdly, and perhaps most significantly, wildlife represents an immensely important resource for the people of Vanuatu. This importance consists both in the dependence of village communities on many wild species for food, clothing, housing materials, etc. and in the cultural and religious significance of many species for ni-Vanuatu tradition and cultic use.

The Existing Law

Therefore, it is perhaps a little surprising to find so little statutory control over the treatment of wildlife. The special provisions relating to marine mammals and harvested marine species have been described at length in the chapter on fisheries, to which reference is made⁴.

Thus, the principal piece of legislation dealing with wildlife protection is the *Wild Bird Protection Regulation 1962*⁵. These Regulations make it unlawful to kill, wound, capture or take the

¹. *Wildlife and Heritage Conservation in Vanuatu*, M. Chambers & E. Bani, in Chambers & Bani, at p.124.

². *Ibid.*, p.125.

³. The dugong population may be particularly important, because the Environment Unit's recent survey seems to suggest that it is in a comparatively healthy state, in contrast to many other populations in the South Pacific - see also, Dahl at p.10.

⁴. These controls are contained largely in the *Fisheries Act 1983*, replacing earlier legislation, and in the *Fisheries Regulations 1983*.

⁵. No.5 of 1962, as amended by Regulations No.10 of 1970 and No.13. of 1971.

eggs of a number of named species of wild birds unless a permit to do so has been granted by the Department of Agriculture⁶. The Regulations also impose a close season for Black Duck (*Anas superciliosa pelewensis*)⁷ and for some ten other species, including doves, other ducks and the megapode (*Megapodius freycinet*)⁸. As for these latter species, the Regulations also provide that hunting of those species may be prohibited on certain islands in order to permit the species to re-establish their populations and insofar as hunting is permitted, even outside the close seasons hunters are limited to a generally applicable bag-limit of ten specimens per species in any one day⁹. The sale, attempted sale, purchase or export of any of the species mentioned above is unlawful¹⁰.

It is unlawful to hunt for any species of bird at night¹¹, and no traps, nets or other devices designed for the capture of birds may be purchased or imported without a permit from the Department of Agriculture¹².

Even within its somewhat narrow compass, however, it would appear that these Regulations are less than effective. A recent commentator has observed:-

"...the law is not widely regarded and hunting and egg collecting are major activities in rural areas.....There is, however, little sale and no export of birds."¹³

Vanuatu has very recently become a party to the *Convention on International Trade in Endangered Species (CITES)*. Following a decision by the Council of Ministers in June 1988, approval was given in principle for the introduction of an *International Trade (Flora and Fauna) Act*. Vanuatu finally ratified the Convention in

⁶. Regulation 2. The 16 species of birds include waterfowl, lorikeets, kingfishers, four parrot-finches, the Sooty Rail (*Porzana tabuensis*), the Santa Cruz Ground-Pigeon (*Gallinula sanctucrucis*), the Vanuatu or Buff-bellied Flycatcher (*Neolage banksiana*), and the White-bellied Honey-eater (*Phylidonyris notabilis*), some of which species are endemic to Vanuatu.

⁷. Regulation 3.

⁸. Regulation 4(1).

⁹. Regulation 4(2), (3).

¹⁰. Regulation 6.

¹¹. Regulation 7.

¹². Regulation 8.

¹³. M.R. Chambers, *Environment, Wildlife and Conservation in Birds of Vanuatu* (in press).

July 1989. Guidelines for drafting the necessary legislation were sent to the Attorney-General's Office in August 1988. These guidelines follow the general outline of CITES, but they do not contain any provisions relating to specimens bred in captivity or artificially propagated. The accession to CITES is seen as particularly important for the conservation of turtles (although the hawksbill is already extensively protected in Vanuatu) and of the coconut crab, which may be proposed by Vanuatu for inclusion on Appendix III.

B. Conclusions

Clearly, the law on the conservation of wildlife in Vanuatu is in an embryonic state. Consideration should therefore be given to the introduction of a comprehensive legal regime, containing the following elements:-

- a general provision which would prohibit the taking or disturbance of all or most species of birds and animals. This would change the fundamental legal status of species from being unprotected to protected. The impact of the provision could be tempered by making exceptions for some species of economic or cultural importance or which are genuinely pest species, the "reverse listing" approach. If necessary, further exceptions could be made for traditional use by custom owners or groups.
- the introduction of some provisions to provide a regime for the protection of plants and invertebrates. These may involve limitations on the uprooting or destruction of certain species of plants or the control of the application or use of damaging preparations, such as pesticides or insecticides.
- the introduction of some element of habitat protection. Laws which simply prevent the taking of species are an incomplete method of seeking to ensure the survival of the species. Consideration should be given to legislation which would promote the maintenance of important habitat types (such as wetlands) or the preservation of vegetation cover.

XVI. CULTURAL HERITAGE

Religious, cultural and historical tradition in Vanuatu plays a role the importance of which it is impossible to over-emphasise. As might be expected of a pastoral and hunting people, much of this tradition is intimately bound up with observation of and reverence for the natural world.

"A further major reason for natural resource protection in Vanuatu is the close identification that all ni-Vanuatu feel with the land, their own custom land in particular.....[N]i-Vanuatu living in a degraded environment will suffer a spiritual or cultural loss with a consequent lowering of the quality of life."¹

This preoccupation with custom pervades all aspects of environmental management in Vanuatu:-

"Everywhere there are taboo areas, cemeteries, old village sites, important rocks and other custom places that need to be protected against damage from development.....This heritage of Vanuatu must receive adequate protection from both accidental and wilful destruction, if necessary through legislation."²

This imperative is rooted, not only in the desire to preserve material of supreme archaeological or anthropological interest, but also (as is pointed out, for example, in the Environment Unit's impact statement guidelines for mining projects) in order to secure the acceptance, let alone the active support, of most ni-Vanuatu.

It should be realised that the distribution of custom sites is not related solely to present-day settlement patterns. A massive depopulation of the islands took place during colonial times. Estimates of the pre-contact population of Vanuatu vary. Some scholars calculate that it might have been as high as 2.5 million, but there seems little reason to doubt that it certainly reached a figure between 500,000 and 700,000³. During the early parts of the colonial period, this was drastically reduced, owing to a number of factors. Prominent among these were the introduction of exotic diseases to which the islanders had no natural immunity, the widespread availability of firearms and the misuse of alcohol. In addition to the reduction in population, there was a major

¹. M.R.Chambers & E.Bani, *Wildlife and Heritage Conservation in Vanuatu*, in Chambers & Bani, *op.cit.*, at p.128. The close inter-relation of custom and the natural environment is also noted by Dahl, *op.cit.*, at p.22.

². Dahl, *op.cit.*, at p.22.

³. The present population of Vanuatu is 140,200.

geographical redistribution of surviving communities. Many of these abandoned their former village sites in the interior and moved to the coastal strip. Thus, the islands are rich in sites of custom significance, which are associated with settlement patterns which have long been abandoned, but which themselves have not been so abandoned and which indeed continue to have immense importance to communities which may now be physically comparatively distant.

Some efforts have been made to document many of these sites, but hitherto no comprehensive survey has been made, despite the fact that some (at least) of the sites are unquestionably of regional, if not of international, importance. This omission is, however, shortly to be rectified. A survey of important sites was commenced in October 1990. There are, nonetheless, fears that there may be sites which are so sacred that the local people will not permit the survey team to visit them and which will have to be registered without inspection or description. In addition, the survey team will only confine itself to terrestrial sites and it will not catalogue sites on the reef which are protected by local custom because of the presence there of shells which possess high cultural value.

A. The Statutory Background

Cultural affairs in Vanuatu are overseen by the Vanuatu National Cultural Council, established by the *Vanuatu National Cultural Council Act 1985*⁴. Among the Council's objects are:-

"to support, encourage and make provision for the preservation, protection and development of various aspects of the cultural heritage of Vanuatu"⁵.

The Council has powers which include the holding and acquisition of real property⁶.

Operational management of the cultural heritage, however, is governed by the *Preservation of Sites and Artifacts Act 1965*⁷. This Act deals with the classification, protection, sale and export of cultural sites and treasures.

B. Protection of Sites

The 1965 Act established a system for the classification of any

⁴. Act No.30 of 1985.

⁵. Ibid., s.5.

⁶. Ibid., s.6(a).

⁷. Act No.11 of 1965.

site of historical, ethnological or artistic interest which is in the possession of any person or body corporate. It further provides that any artifact of local manufacture which is fixed to the soil on a classified site (such as a standing stone or grave marker) is to be considered to be immovable and thus becomes classified as a natural result of the classification of the site⁸. Once a site is classified, the persons in possession of it:-

"...shall be bound to prevent such site being modified or undergoing any deterioration"

and they must inform the competent authorities of any change in its condition or of the ownership of the site⁹. This provision appears, if interpreted strictly, to be wide enough in its terms to impose upon persons in possession of classified sites to avoid deterioration of the monument by natural forces, e.g. by taking steps to avoid its erosion by wind, rain, etc. In theory, this might enable the authorities to impose positive duties on occupiers. While this might be unusual in the case of custom owners, it may be that, in a proper case, a commercial lessee for forestry, agricultural or other purposes may be required to shield or shelter or otherwise protect the monument or site from the effects of the activities envisaged under the lease, even if this required the outlay of money or resources. Other provisions of the Act go some way toward reinforcing this interpretation, in that there are provisions for financial assistance to occupiers and owners to enable them to comply with the obligations placed on them in this connection¹⁰.

As classification of a site has these potentially burdensome consequences for the owners and occupier, the 1965 Act requires that they be given written notice of the proposal to classify the site, after which they have three months in which to make any representations. If there is no response to the notice, the owners and occupier are deemed to have consented to the classification. Classification is always carried out in consultation with the National Cultural Centre¹¹. It should be noted that, as at present drawn, the Act does not confer any protection on a site between the date on which the notice of intention to classify is issued and the formal classification. While it is perhaps unlikely that custom owners would intentionally damage or deface a site during this period, it may be that the same could not be said of the more

⁸. 1965 Act, s.1(1), (2).

⁹. Ibid., s.3. Such changes in condition, etc. do not affect the validity of the classification, so the owner of a monument can not secure its "de-classification" by damage or neglect.

¹⁰. Ibid., s.4. Subventions are available at the request of the owner or occupier of the classified site.

¹¹. Ibid., ss.1(1), 2(1), (2).

unscrupulous lessee. It would appear, therefore, that it might be advantageous to introduce a measure of interim protection on a provisional basis.

C. Protection of Objects

The Act places restrictions on the sale of objects¹² manufactured by the indigenous people of Vanuatu and which are of historical, ethnological or artistic interest and which possess a "special value". This special value may derive either from any ceremonial use which has been made of the object or by the fact that it is more than ten years old¹³. Any intended sales of such objects must be notified to the competent authorities, who then have a period of 14 days in which to decide whether they should exercise a right of pre-emption over the object. Failure to respond within the 14-day period is to be regarded as a declaration by the authorities that they do not intend to exercise their statutory right of pre-emption¹⁴.

Furthermore, no such objects can lawfully be exported from Vanuatu. The only exception to this principle is that they may be exported without the consent of the authorities (after consultation with the Cultural Centre), provided either:-

- the objects are destined for a body of a "genuine cultural nature", or
- the exporter can certify in writing that the object is his or her "own personal property and will not be sold"¹⁵.

If an application for an export permit is made in respect of any such article, the authorities may decide that the article should be retained for the benefit of the Cultural Centre, but they may only do so on payment of compensation¹⁶.

The Cultural Centre may also be the beneficiary of any offences

¹². In fact, the same restrictions apply *mutatis mutandis* to classified sites. They are here discussed in relation to objects for purposes of convenience only.

¹³. Ibid., s.5(1).

¹⁴. Ibid., s.5(2)-(4). No reference is made in the Act to the method by which the objects are to be valued. As the authorities would here be purchasing the objects as an exercise of public power, it would appear that constitutional principles would require that the right of pre-emption be exercised at full market value. It may be, however, that this should be spelled out.

¹⁵. Ibid., s.6(1).

¹⁶. Ibid., s.7(1), (2).

committed under the Act, which also provides that, in addition to any other sanctions which it imposes, the court may order the confiscation of any objects concerned for the benefit of the Centre¹⁷.

Hitherto, the Act has worked well, although there are a few minor amendment which should be made.

The restriction of the protection of the Act to objects which are more than ten years old, although reasonable on its face, does in fact hamper the acquisition of artifacts of great importance. Custom confines the right to make certain artifacts to individual masters or groups of masters. Thus, an artifact made yesterday may be of enormous importance if it was made by such a man, particularly one approaching the end of this career. These traditional "copyrights" are jealously guarded and rigorously respected. If those entitled to such a "copyright" die out, then the production of those artifacts will be lost for ever, unless the applicable custom law permits someone else to acquire them, whether by purchase or descent.

The classification of sites, as provided for in the Act, is also basically sound as a legal regime. It has been suggested, however, that the Act might be improved by the insertion of a provision which puts beyond doubt the competence of the authorities to classify a site merely by reason of the presence there of timber or minerals which have significance for ritual purposes. Such minerals might include clays, etc. for the manufacture of paints and dyes, and certain particular types of timber are required for the carving of masks, etc. These may exist on a site which has no other cultural features, such as monuments or objects.

Hitherto, there has been little need to focus on the financing of the preservation of cultural sites. Merely to inform the owners and occupiers of the nature of the site has been sufficient to ensure their survival. There are indications, however, that this may no longer be true in all cases. Some sites have been threatened by hitherto unexpected sources - some of the more fundamentalist Christian churches have encouraged their adherents to destroy sacred stones, etc. as being works of darkness. While the solution to this particular problem might be found in the inculcation of a rather less narrow theology, there may be value in considering the introduction of a separate offence of inciting others to damage the cultural heritage and (perhaps with a view to catching the senior management of lessee companies) of procuring the damage of destruction of that heritage by others.

¹⁷. Ibid., s.8(3).

D. The World Heritage Convention

Allusion is made elsewhere to the advantages to Vanuatu of adherence to a number of international conventions in the environmental field, but the UNESCO *World Heritage Convention* deserves a special mention at this point.

Vanuatu possesses a number of sites which are of unparalleled importance as part of the world's cultural heritage. Among these is an area on Malekula which has been described in the following terms by an eminent archaeologist:-

"Most known recent megalithic traditions are concentrated to South-East Asia and the Pacific, but in almost every area the Stone-Age traditions were destroyed by European influence already in the 19th. century. In fact, the only area in the world where a megalithic tradition can be found within a living, strong cultural survival is on Malekula in Vanuatu. The cultural heritage of Malekula is therefore of an enormous importance, both in the perspective of the pride of this heritage for the People of Vanuatu in the future, but also for the scientific importance in an international perspective. Further, this concerns not only the megalithic tradition, but also many other aspects of unique ethnographical, anthropological and archaeological survivals on the island, still very much of importance to the people and their societies..."¹⁸.

This area of Malekula is one in which there is some fear that logging may take place in the future. It would therefore seem of the utmost importance that the area be inscribed on the World Heritage List at the earliest possible opportunity, both in view of the possibility that some funding may be available from the World Heritage Fund to preserve the area and also because the cachet associated with a listed site may not only strengthen the hand of the Environment Unit, the Department of Forestry and others in Vanuatu who are anxious to prevent avoidable damage to the cultural heritage, but might also make it easier to attract funding from other sources.

¹⁸. Letter of 21st. November 1988 from Professor Goran Burenhalt, University of Stockholm, Sweden, to the Government of Vanuatu. The original text of the letter has been quoted, despite its occasionally wayward syntax, in order to preserve the sense of the writer's conviction.

E. Conclusions

The following amendments should be made to the law relating to the cultural heritage in Vanuatu:-

- (a) The 1965 Act should be amended to confer protection for sites between notification and classification.
- (b) The present requirement that objects must be 10 years old before they can be subject to the provisions of the 1965 Act should be repealed.
- (c) The 1965 Act should be amended so as to make it clear that sites may be classified by reason only of the presence thereon of minerals, timber or other materials of significance for traditional, cultural or ritual purposes.
- (d) It may be that, in order to avoid further damage to sites, a new offence should be created of incitement to destroy or damage a site or artifact or of procuring or inciting others to do so.
- (e) There may be value in including or expending the obligations presently imposed on lessees to preserve sites of cultural importance, as a more immediate and effective method of ensuring compliance than prosecution.
- (f) Vanuatu should consider urgently the possibility of ratifying the World Heritage Convention and of inscribing the Malekula area referred to above on the World Heritage List.

XVII. PROTECTED AREAS

In formal terms, the law of Vanuatu as it stands at present makes little provision for protected areas of any kind. As has been noted, the *Fisheries Act 1982* provides for the creation of marine reserves in the national waters of Vanuatu and the subjacent seabed¹, but other similar examples are strikingly absent. This is so even in sectors where the law is far from being insensitive to environmental concerns. Thus, the *Forestry Act* contains no express reference to the establishing of protected areas properly so-called in forested land², although the Minister does have powers to control activities which are potentially damaging to the forest resources. Classification under the *Preservation of Sites and Artifacts Act 1965* confers protection only against direct physical damage or permissive deterioration of narrowly-defined sites.

There is, however, some potential for using the leasing system to establish something equivalent to a protected area in effect, although there is nothing intrinsically special in law about land demised in such terms.

A. The Use of the Leasehold System to Stimulate Protected Areas

An inventive use of the leasehold system underlies the efforts of the Department of Forestry to create a "reserve" on Erromango in order to protect the principal remaining stands of kauri trees in the country. This attempt, by reason of its opportunistic and perceptive awareness of the pivotal role of the lease in regulating land-use in Vanuatu, deserves careful attention. It should be noted, however, that at the time of the country visit upon which this report is based, the final version of the lease for the Erromango kauri area had not been negotiated, and the following remarks are based upon earlier drafts and consultations in the Department of Forestry.

It was thought that the lease would contain a declaration by the parties that "by the signing of the lease the Erromango Kauri Reserve is established". The lease would spell out the objectives of the reserve, which would be-

- to safeguard the kauri by allowing undisturbed natural regeneration of the trees within the demised area;

¹. Although the power has only been used on one occasion, see *supra*.

². Apparently, the earlier legislation did make some provision for forest reserves, but it may be doubted whether the draftsman had in mind protected areas in the modern sense - see *Forestry Regulation 1964 (J.R.No.30 of 1964)*, and *IUCN/WCMC op.cit.*, at p.7.

- to secure the life-styles of ni-Vanuatu in the region from further erosion and their custom land from further degradation;
- to provide opportunities for scientific study; and
- subject to the foregoing, to ensure a secure source of kauri seed of sufficient genetic diversity.

The lease would also contain a provision that, notwithstanding any other provision in the lease, the parties would not carry out any activity which conflicts with these objectives. This clause, however, while apparently simple in its effect, contains the potential for extremely complex questions of interpretation. Indeed, it might even be wondered whether it is sufficiently certain in its effect to be enforceable.

The custom owners retain their usual rights of hunting, water rights, rights of way and of entry, etc., but they would also enter into a number of other covenants of a more specific kind, such as covenants:-

- not to carry out commercial activities;
- not to light fires;
- not to use or permit the use or introduction into the area of power saws, bull-dozers, motor vehicles or other mechanical apparatus;
- not to bring into the area any livestock (except saddle-horses used in the exercise of reserved rights);
- not to erect any constructions other than small ones made of bush-material, nor to do anything likely to cause erosion, disruption or pollution of stream flow or to diminish the cultural or scenic value of the land

Most of these covenants may be waived with the consent of the lessee.

The lessee, for its part, would covenant to use the land in accordance with the agreed objectives; to control access by third parties; not to permit the felling of trees; to prevent erosion; to prevent the entry of squatters; to keep the land free of waste, rubbish, etc.

Although this initiative is unusual in form and doubtless has many imperfections, it should not be rejected out of hand in favour of a statutory system of a more familiar kind. There are a number of reasons for this hesitation:-

- (a) The leasehold system is familiar to custom owners and to the appropriate government Departments in Vanuatu. Therefore, although it displays features which undeniably appear cumbersome to outsiders, it is likely to meet less resistance and to function more smoothly than an exotic regime imposed by legislation.

(b) This approach involves the least incursion upon the rights of the custom owners. Where these are reduced (as indeed they are in some respects), this is effected by agreement and may thus be presented, not as an expropriation of their rights by the Department of Forestry, but as a voluntary exercise by them of one of the rights of ownership, namely the waiver of rights to which they are entitled.

(c) The approach is of particular importance in Vanuatu, because of the intense sensitivity surrounding any suggestion of public acquisition of land.

(d) There may possibly (although the matter does not seem to have been addressed specifically in the draft lease) be a greater potential for flexibility in negotiating amendments to the terms of the lease than if the reserve was a statutorily-established protected area.

These considerations are entitled to great weight, but on the other hand it must be noted that:-

(a) The underlying concept involves what is essentially a perversion of an existing legal instrument designed for another, quite different purpose. Experience of such techniques in the past has revealed that they are subject to a number of constraints, inherited from their original function, which may hamper the efficacy of the device in its new role. The law of leases is liberally provided with doctrines which, if strictly applied to "reserve leases" might well substantially reduce their effectiveness in a disputed case. The reference of disputes to the Land Referee (as proposed by the draft lease for Erromango) would not solve this difficulty, as he (and any court to which his decision might be appealed) would be obliged to apply the law of Vanuatu (including the general principles of its law of leases) to this agreement, which is in essence only another, albeit rather special, lease.

(b) Partly as a reflection of the slightly exotic use to which the instrument is being put, lease agreements of this sort will be exceedingly difficult to draft. They will, of necessity, involve concepts and obligations which it might be difficult to reduce to language which would be sufficient precise to avoid a determined challenge by a recalcitrant party. This is in itself not an insuperable objection, as it is the business of lawyers to do their work competently, but it adds a further element of difficulty to the widespread use of the device and might militate against the advisability of the preparation of such agreements without legal assistance.

(c) Leases are agreements which are limited in terms of time. That provided for in the draft documents does not stipulate the term of the lease, which thus appears to be cast in the form of a tenancy from year to year. That would hardly be

thought adequate to protect the investment of effort and resources required of the conservation lessee. Clearly, a much longer term would be desirable, but it may be that a more substantial alienation might not be acceptable to the custom owners except at a substantially higher rent. If that were to be the case, it would strike at the heart of the device.

(d) Furthermore, leases (although they may have in Vanuatu some of the attributes of regulatory instruments) are, at bottom, consensual. The draft documents did not address the question of the possible determination of the lease, except by way of re-entry by the lessors in case of breach of covenant. Even if the lease is taken for a term of years, there is still an immense dependence on the goodwill of the parties. Although in principle the lessees should be able to perform their covenants, any conveyancing counsel will testify that it is not usually an insuperable task to discover a breach. This problem is heightened by the question of certainty already alluded to.

(e) Leases only produce obligations as between the parties. They have no effect whatsoever on the position of third parties³, who may with impunity commit within the demised area acts which would undoubtedly place the parties in breach of covenant. It may be that these acts amount to trespass against one or other of the parties, but that is a matter not governed by or dependent upon the existence of the lease. Nor is the problem overcome merely by seeking to make the parties covenant that they will prevent third party interference. Such a covenant can only be a "best endeavours" obligation and still does not operate directly on the "offender". In order to secure blanket protection against all comers, it is necessary to look beyond the lease as a vehicle of control.

Although these are substantial objections, it may be that they can all (except the last, which is based on a fundamental principle of liability) be matched, if not overcome, with ingenuity and goodwill. What certainly can not be denied is that the device of using the leasehold system displays the single most important, indeed the indispensable, element in effective protected area management in the South Pacific region, namely the supervening necessity of involving the local population in what is an essentially local concern.

³. It may be (although it does not necessarily follow) that this point is recognised by the proposal that the Kauri "reserve" and its buffer zone should be designated a PPA under the *Physical Planning Act*.

B. The South Pacific Approach to Protected Area Management

The intensity of the sympathy felt by the people of the South Pacific for their custom land and their traditional way of life, with its close intimacy with the natural world, has had a profound impact upon successful protected area management in the region.

Some distinguished commentators have been highly critical of the disruptive effects of attempts to apply in the South Pacific protected areas concepts developed elsewhere. One such commentator has questioned the applicability of many of the more fundamental tenets of traditional protected areas thinking, pointing out that some of the IUCN definitions hammered out in New Delhi in 1969 are inappropriate in the South Pacific. He is particularly critical of the national park as a suitable mechanism in the region, because "relatively large areas" are unlikely to be available and because of the need to accommodate customary land ownership and traditional use patterns. Similarly, the usual principle that protected areas be designated by the highest competent authority of the country might raise hackles in the South Pacific, where folk-memories of "land grabs" by European settlers has left a legacy of deep-seated reluctance to accept long-term government projects on land. The commentator concludes:-

"...to a certain extent, in the Pacific island countries, the involvement of the highest authority..... may not be necessary to achieve protection of suitable areas and that were it is enforced (*sic*), it could create more problems than it can solve. Alternatively, village authority could generate the interest and support that is desirable to ensure the success of national parks and reserves programmes".⁴

He develops this theme at some length:-

"...it might even be desirable or even necessary for villagers to undertake conservation projects such as national parks as village projects with limited authority being assigned to government or conservation bodies. After all, with the villagers having complete authority over the land, it is unlikely that its protected status would be revoked without severe recriminations."⁵

⁴. I. Reti, *Resolving Conflicts Between Traditional Practices and Park Management*, in Proceedings of Third South Pacific National Parks Conference, SPC, Noumea 1985 (hereinafter cited as "SPC 1985"), p.154, at p.156. His basic thesis is summed up in a sentence early in the paper:-

"...it is high time to consider how the concept of national parks could be adapted to accommodate traditional styles rather than vice versa." - *ibid.*, at p.154.

⁵. *Ibid.*, at p.158.

This sort of consideration has led some writers to think of protected areas in the South Pacific in terms of very small, almost minute areas. R.Thaman has identified this concept as a reaction against western-style development and the consequent "under-development" of rural areas and as fundamentally out of tune with the ethos of the region. This has caused him to advocate the development of "micro-parks", which he defines as:-

"any small-scale, local-level park or conservation area which does or could serve the purpose of preserving important natural and cultural resources for the long-term sustainable use of local people. The protection of cultural as well as natural resources is stressed."⁶

Thaman identifies a number of instances of such small-scale conservation areas being used for:-

- community reef and lagoon reserves;
- preservation of community freshwater resources;
- forest reserves;
- wildlife reserves, such as the "resource islands" which exist in various parts of the Pacific, which are uninhabited but which are visited from time to time by those with custom rights to do so, in order to take turtles, etc. to be found there;
- water quality reserves; and
- sacred reserves⁷.

Thaman is careful to point out several drawbacks and obstacles to the widespread adoption of the micro-park approach. These include:-

- the persistence of colonial-pattern, centralised governmental mentality;
- the pervasiveness of economic development ideology, calling for large-scale projects;
- the impact of modern technology which so severely modifies the environment that traditional practices lose their effectiveness;
- land alienation which has enabled development to take place in such a manner as to interfere fundamentally with the exercise of traditional rights;
- the disinterest of urban, governmental elite in traditional values; and

⁶. R.Thaman, *Micro-parks in the Pacific Islands - The Relevance of Traditional and Modern Small-Scale Conservation Areas In The Pacific Islands*, in SPC 1985, p.215, at p.217.

⁷. Ibid., at pp.218-228. Other examples include community aquaculture reserves, woodlots and fuelwood plantations, subsistence agriculture reserves and urban garden reserves. He also proposes the use of the system for the establishing of germ plasm reserves.

- the insensitivity or lack of awareness of foreign aid donors who, even in conservation fields, have favoured overfunded, over-scale national park-type development⁸.

It is questionable whether any of these obstacles have established themselves deeply in Vanuatu.

There are some practical examples in the region of the institution of protected areas on a local basis with the close involvement of the local population.

Of these, perhaps the best known and the most instructive is that established in Papua New Guinea under the provisions of the *Fauna (Protection and Control) Act 1966*. This statute provides, *inter alia*, for the establishing of Wildlife Management Areas (WMAs), but the manner in which this is done is dependent, not only upon the initial consent of the custom owners, but also on their continued co-operation in the implementation of the legal regime of protection and the management of the area on a day-to-day basis.

One limitation is that a WMA can only be declared if the custom land-owners request that it be established. The declaration does not affect the custom ownership of the land in any respect. The uses to which the owners may put the land are certainly restricted, but by virtue of the custom owners themselves choosing to place limitations upon the human activities which will be tolerated in the area.

In practice, the process is initiated at the instigation of the government, who will propose to the custom owners that a WMA should be established. Discussions then centre on the particular issues which have led the government to recommend that the WMA be set up, e.g. because of over-harvesting. The aim of this discussions is to identify the cause of the problem and, once this has been done, to try to investigate which traditional laws and practices could contribute towards a solution to the problem. A strategy for the management of the area is then worked out, based on the conclusions from these discussions, and the parties settle on the precise outlines of the area in which this strategy is to be applied. Finally, a WMA management committee is formed, on which the local population form a majority, and decisions are taken as to who is to sit on the committee.

Once all these preliminaries have been completed and the area is ready for designation, a final, formal meeting is held with the local custom owners to settle boundaries, management committee membership and the precise content of the regulations for the management of the area. The resolutions of this meeting are then finally embodied in a formal declaration by the Minister.

Thereafter, day-to-day management of the area and implementation

⁸. Ibid., at pp.233-236.

of the management plan lies in the hands of the local population, acting through the management committee. Provision is made for the committee to meet every so often (usually every six months) in order to review the success or failure of the rules and to change them (by consensus) if need be, informing the headquarters of the conservation service if this is done⁹.

The principal operational (not to mention, political) merit of this model is not far to seek:-

"The great advantage would seem to be that the people become involved in the conservation of their own wildlife; it is not something which is being forced on them from the outside."¹⁰

and there are technical benefits, from the legal point of view:-

"There are no problems of transfer of land, all rights are retained by the customary owners. Traditional methods of management and hunting are encouraged....."¹¹.

A number of these WMAs have been established. In one such area, quite strict controls on hunting were imposed with the agreement of the custom owners and outsiders were obliged to pay licence fees for the right to take game from the area and a royalty per head taken. Under the agreement, this income is subject to a fairly sophisticated distribution pattern. The licence fees and half the royalties were collected and paid into a bank account on trust to be used to promote the development and welfare of the whole area¹², while the other half of the royalties goes to the individual owner of the land in question¹³.

⁹. See generally, *Case Study: Wildlife Management Areas in Papua New Guinea*, in SPC 1985, pp.253 et seq.

¹⁰. P.Eaton, *Land Tenure and Conservation: Protected Areas in the South Pacific*, SPREP Topic Review 17, Noumea 1985 [hereinafter cited as "*Land Tenure*"], at p.33.

¹¹. *Ibid.*, at p.42.

¹². P.Eaton, *Protected Areas in the South Pacific - 1. Tonda Wildlife Management Area*, (1985) 1 PLES 4, SPC Noumea [hereinafter cited as *Tonda*, at p.10

¹³. Eaton recognises that, "To some extent, this represents an individualisation of land tenure, as traditionally hunting rights tended to be collective over the group territory. In an area where land disputes are rare, mainly due to the low pressure of population on land, it is interesting that the payment of royalties has in one case led to a dispute which was settled by mediation. Not all the people benefit directly from these royalty payments." - *ibid.*, at p.10.

It must be said, however, that in reality some difficulties have been experienced and the system does not work as smoothly as might be hoped. It is essential that the framework of regulations agreed with the custom owners is sufficiently comprehensive¹⁴ and the more comprehensive the conservation agency wishes to make them the greater the danger of provoking the custom owners into having second thoughts! Clearly, the proper discharge by the management committees is essential to the implementation of the rules, and the evidence is that the regularity of the committees' review meetings soon breaks down¹⁵.

Another difficulty experienced in WMAs is also described by Eaton:-

"One limitation would seem to be that, although they may be effective in restricting the activities of outsiders, they do not always provide rigid enough controls over hunting by members of the group themselves."¹⁶

Although the Papua New Guinea WMAs are perhaps the best-known and most fully-documented system of local control of protected areas, there are other examples throughout the region. Thus, in Fiji, for example, the device has even been institutionalised in a statute. The Fiji Fisheries Act has taken over the customary system of honorary fish wardens (appointed now by the Permanent Secretary of the Ministry of Agriculture and Fisheries, exercising powers delegated by the Minister). These community wardens are responsible for the prevention and detection of offences under the Act¹⁷.

There may also be considerable scope for negotiated agreements for

It might be questioned whether the far greater tendency towards disputes over title to land in Vanuatu might not represent rather less fertile soil for the establishing of such a system.

¹⁴. Eaton, *Land Tenure*, at p.33.

¹⁵. See Eaton, *Land Tenure*, at pp.55,57; *Tonda*, at p.13. N.B., Eaton points out that this is partly because of the scale of the WMAs established in Papua New Guinea means that distance and transport difficulties loom very large. Tonda WMA covers 5900 sq.kms.! Such problems would not be present on such a scale in Vanuatu.

Eaton also points out that there is little effective governmental support for the Tonda project, as the parks officer responsible for overseeing it has no funding, no training facilities and little other material support of any kind.

¹⁶. *Land Tenure*, at p.42.

¹⁷. *Fiji Fisheries Act*, s.3.

the conservation of environmental values on an occasional basis. Thus, in a well-known case in Fiji, a conservation body (the Fiji National Trust) was able to negotiate an agreement with the custom owners in order to establish a reserve for the conservation of a threatened species of iguana, when the legislative structure had proved inadequate to overcome (*inter alia*) customary law difficulties¹⁸.

Other methods of establishing protected areas by the use of mechanisms familiar to customary law have been suggested from time to time. There are instances, in some parts of the region, of land being dedicated by the custom owners for purposes other than exploitation or traditional reasons. The most usual example of this is the dedication of land as the sites of churches. The Chairman of the Vanuatu National Council of Chiefs, however, is of the opinion that, in Vanuatu practice, this is a case entirely without parallel. The motivation for the dedication, and the absence of dispute between the custom owners in connection therewith, was entirely the effect of their deep adherence to the Christian faith and their reverence for the Church. He felt that it would be impossible to expect a similar devotion to a conservation objective, however benevolent¹⁹.

Dahl has ingeniously suggested that one solution to the problem of establishing protected areas on custom land would be:-

"...something akin to the traditional taboo system.

¹⁸. This is the Yadua Taba case. For a full description, see Biranda Singh, *Owner Involvement in the Establishment of Parks*, in SPC 1985.

Eaton has pointed out, however, that there were many special factors surrounding this case, which (in view of its notoriety) should perhaps be spelled out. These included the fact that there was no permanent settlement on the island subject to the agreement, which was relatively inaccessible with no special resources to make it attractive for settlement, and the particular species, the crested iguana, had importance traditional significance for the local people as a totem and thus was not hunted, but rather feared and avoided. He also points out that a integral part of the deal was a payment to the custom owners of \$1500 per annum, funded by international conservation organisations. Indeed, in another similar case (that of the Waisala Forest Reserve on Vanau Levu), the Fiji National Trust were unable to repeat their success when the logging company offered to surrender part of their concession area for conservation purposes. In that case, the proposal was that the custom owners were to receive not only a premium and annual rent, but they also sought compensation for timber royalties forgone, which they assessed at \$32,000 - see *Land Tenure*, at pp.64-66.

¹⁹. Chief Willie Bongmalur, personal communication.

Legislation could be passed allowing the government, whether national or local, to place a kind of taboo on certain areas of land limiting the kinds of development that can take place on it, apart from traditional custom uses, where that limitation is necessary to protect the common interest. A similar protection could be placed on specific resources, say a grove of trees providing seed for forestry projects, or a stream supplying a microhydroelectric generator for a village or school."²⁰

This is an attractive and inventive idea, and it would seem that (in principle, at least) it would be possible to establish new taboos of this type, provided that the proper ceremonies were observed. It is fair to say, however, that the Chairman of the National Council of Chiefs was somewhat dubious as to the extent to which such a device could with propriety be used and the degree to which it would recommend itself to custom chiefs²¹

The utilisation of mechanisms such as these represents a delicate balancing-act. On the one hand, there is the inestimable advantage of securing the committed support of people to whom conservation principles are intensely familiar (albeit in a slightly different context), but who are uneasy about the implications of formal protected area systems:-

"...village rule can be called upon to enforce the conservation measures and ensure that the village people abide by them. Furthermore, the villagers' suspicions that they may eventually lose their land to the government can be eliminated and the long-term protection of the area is therefore assured."²²

On the other hand, it is possible to paint too rosy a picture of the readiness of custom owners to abide rigidly to sound conservation practices or even to the agreed management measures. Of the Papua New Guinea WMAs, Eaton has written warningly:-

"...their effectiveness will depend on the consistency with which protective measures are applied and also on continued support and assistance from government"²³.

Thus, it would seem that, while the close involvement of custom owners is an essential constituent part of an appropriate protected areas system for Vanuatu, it would probably be unsatisfactory to rely upon voluntary compliance alone.

²⁰. *Op.cit.*, p.15.

²¹. Chief Willie Bongmalur, personal communication.

²². I.Reti, *op.cit.*, at p.159.

²³. Tonda, at p.4.

It would appear, therefore, that the most promising model for protected area legislation in Vanuatu would be one which combined direct responsibility of the custom owners with an element of governmental involvement which ensured sound management and observance of conservation principles while not trespassing to an unacceptable extent on the rights and sensibilities of local populations.

A number of government departments in Vanuatu have begun to discuss the creation of a regime of protected areas which may go some way towards meeting this apparently daunting criteria. It proposes the setting up of a National Parks Board, which would propose to the Minister of Home Affairs areas as candidates for designation as protected areas. This Board would be made up of representatives of the government departments concerned, such as:-

- the Department of Physical Planning and the Environment;
- the Department of Agriculture, Livestock and Horticulture;
- the Department of Local Government;
- the Department of Geology, Mines and Rural Water Supply;
- the Department of Fisheries;
- the Department of Rural Lands; and
- the National Tourism Office.

Provision would also be made for representation of the National Council of Chiefs and others. It is suggested that Local Advisory Committees (LACs) should be established for each of the areas proposed for designation and that these Committees should be represented on the Board. There may be some logical difficulty about this, particularly as the proposal recommends that the LAC should only be established at the time of the proclamation of the proposed area. Nonetheless, it is desirable that some formulation should be found to ensure that the population of the designated areas should have some voice in the deliberations of the Board, although it may be doubted whether it is obligatory for each such area to be so represented.

The proposal also envisages the creation of a Management Authority, to be made up of the Physical Planning Unit, the Environment Unit and other Departments to whom day-to-day management of the area will be delegated.

In each area, the LAC would represent the custom landowners, the local Council of Chiefs, the Local Government Council and the village communities.

The formal procedure would begin with the Board suggesting an area to the Minister for proclamation. The Minister's proclamation would list the activities which would be controlled in the area and would have immediate effect. There would then follow a three-month period during which appeals might be lodged, for consideration by the Board, which would not be obliged to adjust its proposals to

accommodate them. After a further period (perhaps six months after proclamation), the area's status would be affirmed by the Council of Ministers. Thereafter, the status could only be derogated by a resolution of Parliament.

The proposal is a little hazy about the extent, nature and timing of the consultations with the local population. As has been mentioned, it would appear that the formation of the LAC is seen as only taking place after the proclamation. It is therefore to be hoped that extensive consultation and discussion, both as to the principle of the area's proclamation and as to the precise details of the activities to be controlled and the management of the area, will be carried on prior to the consultation. It might be thought that this matter is sufficiently important to merit express and quite precise treatment in the statute introducing the system. This point deserves to be stressed, as one possible criticism of the proposed regime is that it has the appearance of being designed very much from a central government perspective. While that is perhaps unavoidable, it is essential that this inevitability is softened by a particular delicacy about local sensibilities. At present, the proposals (by only providing for an LAC formed *ex post facto* and whose composition is subject to approval by the Board, which is itself dominated by government departments) may appear a little insensitive.

It appears that, at one time, the proponents of the new regime envisaged a classification or hierarchy of protected areas, with precise definitions and criteria for each of the categories, but that this idea has now been abandoned. It might be thought that this decision was a wise one, as it may be that so sophisticated and complex a system was inappropriate to the needs of the government of Vanuatu.

On the other hand, the present proposal (namely, that the "legal provisions for each reserve should be made in subsequent regulations attached to the Act") may not in itself be sufficient, either for operational or for constitutional reasons.²⁴

The constitutional point hangs on the fact that the declaration of

²⁴. Indeed, the formulation itself is a little opaque. It is presumed that what it meant is that, on each occasion on which the proclamation of an area is confirmed by the Council of Ministers (presumably this is the appropriate moment, as it is that step which formally establishes the reserve), the Minister will issue by delegated legislation which will effect such changes as may be required in the pre-existing rights of the custom owners and others which may be necessary to give effect to the objectives for the attainment of which the area was proclaimed. Presumably, in view of the formality attached to such regulations, these provisions would not include the management plan, which may need to be amended from time to time, but it is not entirely clear what other matters would (or would not) appear in the "regulations" referred to.

a protected area will impact powerfully upon the rights of the custom owners. Therefore, it is axiomatic in constitutional practice that the government's powers to make such declarations should be spelled out with some precision. In this respect (and perhaps also for conservation reasons), it would appear that the criteria upon which the decision to make a proclamation is to be based should be set out rather more fully than would be possible in the:-

"...statement ...concerning the broad reasons why any Protected Area might be established (i.e. to protect environmental, scenic, ecological, cultural, archaeological, recreational, etc. values)"

to which reference is made in the proposal. Some such broad definition of what features a protected area might be expected to display might be appropriate in a general empowering section in the legislation, but it would appear that some further specificity will be required.

The importance of this point might be heightened by the recommendations that the types of protected areas which might be established in Vanuatu are somewhat varied. The proposed areas have included ones which would protect the major types of forest, grasslands, swamps, lakes and marine habitats; forest reserves for vegetation and birds; cloud forest reserves; and reserves to protect the raised coral reefs on some coasts²⁵, as well as reserves for recreational purposes²⁶.

This requirement for greater certitude need not mean that one need return to the difficult and tedious task of spelling out in the legislation all the criteria (scientific and operational) which should be met by each category of protected area. All that is necessary is that each category of reserve be separately described in the legislation by reference to its determining characteristics.

When drafting the provisions in which these characteristics are to be described, it should be remembered that the purpose of their inclusion is legal rather than scientific, as a justification for the interference with custom or individual rights rather than the defence of a conservation thesis in a scientific paper. The purpose is not to provide a full ecological survey of the proposed protected area, but to enable counsel for the owners (with technical assistance, if necessary) to form a view as to whether the area does or does not fall within the powers conferred upon the government under the law.

Although there are some aspects of the present proposals for

²⁵. Dahl, *Regional Ecosystems Survey of the South Pacific*, (1980), cited in IUCN/WCMC at p.11.

²⁶. IUCN/WCMC, at p.10.

protected areas legislation which could perhaps be improved (as outlined above), it is undeniable that some legislation is needed in this field and the substratum of the present proposal (at least) is sound. It is recommended that work should be carried forward on this proposal, with a view to refining it further and taking into account the improvements herein referred to.

STATUS OF VANUATU ENVIRONMENTAL LAW

The foregoing analysis has already revealed that there already exists a substantial body of environmental law in Vanuatu. This consists not only of sectoral legislation specifically referring to environmental issues, but also other parts of the general law which have considerable potential for use in ensuring the protection of the environment and the wise use of natural resources. Prominent among the latter is the use of covenants in leases granted under the Land Lease Act, in which connection the recognition by statute of a separate right in the appropriate Government authority (entirely independent of that vested in the custom owners) to enforce compliance with the covenants might be almost as productive of good environmental effects as any other single legislative change.

In the field of specific environmental law, there are major gaps in the sectoral coverage. The most striking are in the areas of waste management, water resources and dangerous substances. Recent escalation of development pressure in Vanuatu, especially in the coastal zone, has also rendered urgent the extension of planning control to the littoral zone and the setting of environmental impact assessment for all major projects on a statutory footing. Other, less fundamental, defects exist in almost all sectors and proposed remedial action is outlined at the end of the appropriate section of this report.