WORKSHOP REPORT

Access to Genetic Resources and Benefit-Sharing (ABS) National Workshop 19-20 April 2001 Outrigger Conference Room, Melanesian Hotel Port Vila, Vanuatu

THURSDAY 18 APRIL 2001

1. OPENING SESSION

- 1.1 The National Workshop on Access to Genetic Resources and Benefit Sharing was held in the Outrigger Conference Room, at the Melanesian Hotel, Port Vila, Vanuatu.
- 1.2 The workshop was attended by twenty participants including government officials, representatives of the National Council of Chiefs, NGOs and university students. A list of participants is included as Annex 2.
- 1.3 The workshop was organised by the South Pacific Regional Environment Programme (SPREP), the World Wide Fund for Nature-South Pacific Programme (WWF-SPP) and the Foundation for International Environmental Law and Development (FIELD) and hosted by Vanuatu's Environment Unit.

Opening prayer

1.4 An opening prayer was given by Reverend Joseph Tagaro.

Official opening

1.5 The workshop was officially opened by the Acting Director General of the Ministry of Lands and Natural Resources, Mr. Michael Mangawai. Mr. Mangawai welcomed the workshop participants and thanked the workshop organisers. He highlighted Vanuatu's commitment to fulfilling its obligations under the Convention on Biological Diversity. He also stressed the importance of the issue to be discussed and wished all participants a fruitful workshop.

Welcome and opening remarks

- 1.6 There was a round the table introduction by all workshop participants.
- 1.7 Opening statements were made by the workshop organisers. The workshop was put in the context of the ongoing SPREP/WWF-SPP/FIELD Darwin Initiative project on "Access to Genetic Resources and Benefit Sharing in the Pacific Islands Region". The organisers outlined the objectives of the workshop, which were:

1.7.1 To raise awareness about regional and international processes and initiatives on access to genetic resources and benefit sharing, including traditional knowledge and intellectual property rights.

1.7.2 To consult on elements of a draft national access framework – Output: Revised national framework on Access to Genetic Resources and Benefit Sharing

Introduction of the agenda

1.8 The facilitator of the meeting, the Director of the Environment Unit, Mr Ernest Bani, introduced the agenda and documentation provided to the participants. The agenda was adopted by workshop participants without any amendments.

2. INTRODUCTORY PRESENTATION: EXAMPLES OF BIOPROSPECTING APPLICATIONS IN VANUATU

- 2.1 Mr Bani, introduced the issue of bioprospecting experience in Vanuatu. He highlighted the current lack of legislation and the proliferation of ad hoc arrangements put in place by different government departments. These include a standard application form, not legally binding, that has been used in the last year and a half to control researchers coming from abroad. He highlighted Vanuatu's draft Environment Act, currently under revision, which is to include specific provisions on bioprospecting and welcomed suggestions and recommendations from this workshop. Vanuatu has experienced the loss of genetic resources due to lack of control and records of materials taken. This is an issue of general concern and a mechanism is needed to assist in controlling the use of the country's resources.
- 2.2 Workshop participants highlighted the ongoing experience of foreign researchers coming to Vanuatu uncontrolled since the 1920s, and the variety of ad hoc arrangements including contracts and research agreements which are not binding.
- 2.3 Representatives of different government departments explained the lack of involvement of local researchers and institutions in access activities, such as the work of American researchers on marine sponges, with lack of follow-up once the researchers leave the country. Requests from researchers are received by different institutions which may not be the relevant body, including by the Ministry of Foreign Affairs. The current ad hoc system of dealing with applications raises a number of problems and difficulties that need to be addressed by this workshop.

3. SETTING THE BACKGROUND: INTERNATIONAL COMMITMENTS UNDER THE CBD

- 3.1 Andrea Volentras presented an overview of the Convention on Biological Diversity and the key provisions related to access to genetic resources. He stressed the relevance of the Convention and the need to address the issue of access to genetic resources and benefit sharing in Vanuatu.
- 3.2 Carolina Lasén Díaz gave an overview of the concept and interpretation of Prior Informed Consent (PIC) as a key element of any regime to regulate access to genetic resources and benefit sharing.

- 3.3 Clark Peteru gave an introduction to benefit sharing and mutually agreed terms under the Convention and also in the context of specific examples of bioprospecting activities in Samoa and Fiji. Mr Peteru also raised the issue of the need to protect traditional knowledge and the linkage with intellectual property rights. In this context, he mentioned the outcome of the recent meeting organised by the Secretariat of the Pacific Community, the Forum Secretariat and UNESCO, held in Noumea, to discuss model legislation to protect traditional knowledge in relation to expressions of culture in the Pacific region.
- 3.4 Mr Ralph Regenvanu, Director of Vanuatu's National Cultural Centre, gave an overview of the country's cultural research policy, applied since 1995. This policy covers research on traditional knowledge associated to biological resources. Although not legally binding, the policy is very comprehensive and includes the process for reviewing research proposals, which involves the prior approval by the affected local community, and subsequent approval needed by the National Cultural Council. Mr Regenvanu also presented a paper prepared by Mr Michael Wright, of Vanuatu's State Law Office, in the context of the Noumea meeting on the protection of traditional knowledge and expressions of culture. The paper gives an overview of the recently adopted Copyright Act, passed by Vanuatu's Parliament in December 2000. This Act includes provisions dealing with indigenous culture and traditional knowledge. There are currently two draft laws: a draft trademark act and a draft patent act, as a result of the advanced stage of Vanuatu's negotiations to accede to the WTO.
- 3.5 Copies of Vanuatu's Cultural Research Policy and Mr Wright's paper were distributed to workshop participants, as well as a list of 'Mechanisms for the protection of traditional knowledge and expressions of indigenous cultures in Vanuatu', prepared by Mr Regenvanu.

4. GENERAL DISCUSSION ON THE PREVIOUS PRESENTATIONS

4.1 There was a general discussion on the previous presentations where workshop participants and organisers expressed their pleasant surprise at the advanced state of Vanuatu's cultural research policy, as it was considered to be at the forefront of the issue in the Pacific. A recommendation was made that a statutory body should be set up to deal with ABS applications, as a government body lacks the necessary independence. It was suggested that a statutory council for biodiversity could be set up. Another suggestion made was to establish a scientific research council to deal with access applications. Another issue raised in the discussion was the need for regional co-operation and co-ordination, as most genetic resources in the Pacific are common or shared among island countries. The role of USP in screening and adding value to the region's resources was also discussed. The link between the Convention on Biological Resources and the WTO agreements was also raised in the framework of Vanuatu's imminent accession to the WTO.

5. THE REGIONAL CONTEXT: THE 1998 AND 2000 REGIONAL WORKSHOPS AND THE ABS REGIONAL GUIDELINES

- 5.1 Andrea Volentras presented the *Information Package on the Convention on Biological Diversity for Pacific Island Countries* prepared by SPREP, WWF-SPP, and FIELD and funded by the UK's Darwin Initiative. Mr Volentras drew the participants' attention to the chapter related to access to genetic resources and benefit sharing. Copies of the *Information Package* were made available to the workshop participants and Vanuatu's Environment Unit.
- 5.2 Mr Volentras provided the background and context to the national workshop by setting the regional framework of the two recent regional meetings held in 1998 and 2000 in Nadi, Fiji, to discuss this issue. Both the 1998 and 2000 Nadi Statements adopted at these regional workshops were circulated to the participants. In particular, the regional workshop on "Access to genetic resources and benefit sharing in the Pacific islands region" held in Nadi, Fiji, on 13-17 March 2000 adopted a set of regional guidelines on access to genetic resources in Pacific Island countries. Mr Volentras introduced and gave an overview of these guidelines to the workshop participants. Copies of the report of the March 2000 workshop were distributed to all participants.
- 5.3 The national workshop on access to genetic resources and benefit sharing in Vanuatu was placed in the context of the two pilot projects undertaken as a follow-up to the March 2000 regional workshop. The first national workshop on ABS was held in the Cook Islands on 15-16 February 2001.
- 5.4 Mr Clark Peteru, gave a short introduction to his "Issues Paper for Access to Genetic Resources and Benefit Sharing in the Pacific Islands Region" highlighting its section on regional co-operation. Copies of the paper were made available to workshop participants.

6. WORKING GROUPS SESSION I

- 6.1 The Plenary session broke into two small working group sessions that were asked to consider a "Questionnaire for a policy on access to Vanuatu's genetic resources and sharing of benefits derived from them". The questions covered the three main topics addressed in the morning presentations: prior informed consent; mutually agreed terms and benefit-sharing; and the protection of traditional knowledge. The questionnaire is annexed to this report as Annex [X]. The main ideas that emerged from the working groups are presented below.
- 6.1.1 The main objectives of regulating bioprospecting activities in Vanuatu should be to (i) raise awareness and educate about the importance of this issue and (ii) ensure that the commercial value obtained from genetic resources is a positive force for sustainable development and conservation of biological diversity
- 6.1.2 The question of ownership of biological resources was one of the most controversial issues debated at the workshop. There were two positions:
 - according to Vanuatu's Constitution, all land in the country is held following traditional systems of land tenure and therefore all biological and genetic resources are owned according to traditional customary systems. In this context, the role of the State should be to provide the overall framework to regulate access;
 - all genetic resources (marine and terrestrial) belong to the State. All activities concerning access must be undertaken at the national level but if benefits are derived from the use of biological or genetic

resources then a percentage of them must be granted to the local community, land-owners, etc. that claim ownership over those resources.

- 6.1.3 All workshop participants agreed on the need to establish a national Scientific Research Council (SRC) as the independent body that should regulate access to genetic resources and benefit-sharing. The establishment of the SRC is included in Vanuatu's National Biodiversity Strategy and Action Plan (NBSAP). The SRC should deal with all applications for access and there should be a legally-binding contract between the SRC and the user. The SRC should consult with those departments relevant for each specific application and should be the body granting the access permit.
- 6.1.4 All participants agreed that all genetic resources should be covered by the country's access system, including human genetic resources. There was also agreement on the need to exempt traditional exchanges of genetic resources from a regulated system, as well as on the need for an expedite process according to the intended use of the resources and the nature of the application.
- 6.1.5 Mutually Agreed Terms to be negotiated within the framework of an access agreement should include: capacity-building for the provider country in the area of research; all products of research to be deposited in provider country; collaborative research with relevant local agency; monitoring and tracking requirements during the course of testing; etc.
- 6.1.6 Benefits to be shared should include monetary and non-monetary benefits (as listed in the Questionnaire). They should be shared with the resource owners (community, individual, etc.) as well as national level. Other benefits could be negotiated by the SRC where necessary. Among the monetary benefits, access fees should be paid and royalties should be negotiated.
- 6.1.7 The access and benefit-sharing agreement between SRC and user of the resources should be legally binding under Vanuatu's law.
- 6.1.8 As far as regional co-operation is concerned, the working groups concluded that initiatives such as the regional ABS workshop held in Nadi in March 2000 should be continued with a view to establishing a regional framework for access to genetic resources and benefit sharing. They further reported that shared resources and migratory species should be taken into account and the need for a regional database of species was highlighted.
- 6.1.9 There are already interim policies to deal with access applications such as the country's Cultural Research Policy and the application form developed by the Environment, Forestry and Fisheries departments. The interim committee set up under the NBSAP process is already discussing the establishment of the RSC. However, the workshop participants stressed the need for raising awareness about existing policies and strengthening their enforcement.

FRIDAY 20 APRIL 2001

7. OVERVIEW OF DRAFT ELEMENTS OF A NATIONAL ACCESS FRAMERWORK

7.1 Mr David Hill, consultant of the Environment Unit, gave an overview of the main elements of the draft Environment Act. He highlighted that the issue of

ownership of biological and genetic resources would be covered in the revised draft Environment Act. He added that the current draft Act only covers species in relation to genetic material and the ecosystem element is not included. Mr Hill stressed that Mutually Agreed Terms could be integrated in the bioprospecting regime of the new Act, which could also provide a definition of access for 'environmentally sound uses'. He added that the current draft Act enables the Ministry of Natural Resources to levy fees and charges, although further regulations would be needed.

- 7.2 A discussion followed Mr Hill's presentation. It focused on the financial implications of using bonds and charging fees for bioprospecting permits and also on the need to look into existing cryptic species in Vanuatu.
- 7.3 Mr Brendan Tobin, from Peru's Society for the Protection of Nature's Rights, gave an overview of the Peruvian experience in regulating access to genetic resources, benefit sharing and the protection of traditional knowledge.
- 7.4 Workshop participants were split into two working groups to discuss the bioprospecting provisions of the draft Environment Act (sections 119 to 126).

8. ADOPTION OF WORKSHOP RECOMMENDATIONS

8.1 In the light of the discussion generated at the workshop, the Plenary proposed and endorsed a list of recommendations for further action. The list of recommendations is attached to this report as Annex 1.

9. CLOSE OF WORKSHOP

- 9.1 Workshop organisers gave closing statements thanking all participants for their hard work and useful outputs achieved.
- 9.2 Mr Bani closed the workshop thanking the organisers and participants for their active participation. He announced that he would be passing the recommendations on to the Minister and Acting Director-General for further consideration.
- 9.3 The workshop was closed at 4pm on Friday 20 April 2001.

LIST OF ANNEXES

Annex 1: Workshop Recommendations

Annex 2: List of Participants

Annex 3: Workshop agenda

Annex 4: List of workshop documents

Annex 5: Questions for a Policy on Access to Vanuatu's Genetic Resources & Sharing of Benefits Derived from them

Annex 6: Summary of working group discussions

RECOMMENDATIONS FROM THE WORKSHOP

We, the participants of the national workshop on access to genetic resources and benefit sharing, having met on the 19th and 20th of April 2001, in Port Vila, Vanuatu, have agreed on the following recommendations:

- 1. Vanuatu affirms its sovereign right to its biological and genetic resources as provided for under the Convention on Biological Diversity (CBD).
- 2. The people of Vanuatu affirm their customary right to their biological and genetic resources.
- 3. The recognition of the ownership of biological and genetic resources should be based on customary tenure, as provided for in the land tenure provisions of the Constitution.
- 4. The Scientific Research Council (SRC) shall be the body to regulate access to all genetic resources in Vanuatu for the purposes of the CBD.
- 5. The Working Group set up under the National Biodiversity Strategy and Action Plan (NBSAP) to establish the SRC shall consider issues raised by this workshop which include:
 - acting on behalf of the government;
 - acting on behalf of disputing resource owners;
 - the merits of operating as an independent agency under its own Act with local legal assistance;
 - its composition and funding.
 - opportunities for harmonisation at the international and regional level.
- 6 There is a need to establish a national programme to raise public awareness on matters relating to policies, guidelines, codes of ethics of researchers, ownership, access to genetic resources, benefit sharing and the importance of biological and genetic resources.

LIST OF PARTICIPANTS

- 1. Mr Abel Tapisuwe Friends of the South Pacific, Vanuatu Representative
- 2. Mr Sompert Rena Fisheries Research Officer PMB 045, Port Vila
- 3. Mr Ernest Bani Head, Environment Unit PMB 063, Port Vila
- Mr Tom Numake
 President
 Malvatu Mauri
 National Council of Chiefs
- 5. Mr Francis Qarani Senior Quarantine Officer PMB 095, Port Vila
- Mr Frederik Butafa USP Law Student Emalus Campus, PMB 072, Port Vila
- Mr Vereniki Qereqeretabua USP Law Student Emalus Campus, PMB 072, Port Vila
- Mr Tom Kalo Langitong Senior Trade Policy Officer Trade Department PMB 030, Port Vila
- 9. Mr Ralph Regenvanu Director, Vanuatu Cultural Centre PO Box 184, Port Vila
- Mr Francis Hickey Traditional Marine Tenure Project Manager Vanuatu Cultural Centre PO Box 184, Port Vila

- 11. Ms Donna Kalfatak NBSAP Co-ordinator PMB 063, Port Vila
- 12. Mr Kuba Olearski Anthropology student Poland
- 13. Ms Leah Nimoho NBSAP Project Officer PMB 063, Port Vila
- Mr Johnson Naviti
 Acting Sectoral Project Manager
 Department of Economic and Social Development
 PMB 008, Port Vila
- 15. Ms Alice Athy Seaplants and plants researcher Fisheries Department
- 16. Ms Felicity Steward USP Law Lecturer
- Ms Rosette Kalmet Geology, Mines and Water Resources Tel. 22423
- Mr Daniel K Mark Dan NGO Grassroots Environment Environment Unit
- 19. Mr Livo Mele Director of Forests PMB 64, Port Vila
- 20. Mr Richard Shine Catalogue Manager Vanuatu Cultural Centre PO Box 184

WORKSHOP AGENDA

South Pacific Regional Environment Programme (SPREP) World Wide Fund for Nature - South Pacific (WWF-SPP) Foundation for International Environmental law and Development (FIELD)

Access to Genetic Resources and Benefit-Sharing (ABS) National Workshop 19-20 April 2001 Outrigger Conference Room, Melanesian Hotel Port Vila, Vanuatu

SPREP, WWF-SPP and FIELD have been working in partnership to assist small island developing states in the Pacific region to implement the Convention on Biological Diversity (CBD). The CBD is a key international agreement for the conservation and sustainable use of the world's biodiversity. Vanuatu is a Party to the Convention.

The workshop is part of a SPREP/WWF-SPP/FIELD Darwin Initiative project to assist Pacific island countries to implement the provisions of the Convention on access to genetic resources and benefit-sharing (Article 15), technology transfer (Article 16) and indigenous and local communities (Article 8(j)).

The intention is to enhance the ability of Vanuatu to meet its obligations and secure their rights under the Convention by discussing a draft framework with possible policy, administrative and legislative approaches and measures to regulate access to genetic resources in Vanuatu.

This initiative has been supported by SPREP, WWF-SPP and the Government of United Kingdom (Darwin Initiative, Department of the Environment, Transport and the Regions).

Workshop Objectives:

In the framework of promoting the discussion and implementation of the recommendations included in the 1998 Nadi Statement, and following up on the 2000 Regional Workshop on Access to Genetic Resources and Benefit Sharing in the Pacific Island Region, this workshop's objectives are:

- To raise awareness about regional and international processes and initiatives on access to genetic resources and benefit sharing, including traditional knowledge and intellectual property rights.
- To consult on elements of a draft national access framework *Output: Revised national framework on Access to Genetic Resources and Benefit Sharing*

Thursday 19 April 2001

OPENING SESSION

8:15-8:30 Registration
8:30-8:35 Prayer
8:35-8:40 Opening statement by the Director General, Ministry of Natural Resources
8:40-8:45 Introduction of the agenda

PLENARY SESSION I

8:45-9:00	Introduction by Workshop Organisers : the work ahead and workshop objectives
9:00-9:30	Bioprospecting in Vanuatu
9:30-9:45	Setting the background: International commitments under the CBD
9:45-10:10	ABS Session 1: Prior Informed Consent
10:10-10:30	Morning Tea

PLENARY SESSION II

- 10:30-11:00 ABS Session 2: Mutually Agreed Terms and Benefit Sharing
- 11:00-11:30 ABS Session 3: The protection of traditional knowledge
- 11:30-12:15 General discussion on the previous presentations
- 12:15-12:30 **The regional context**: The 1998 and 2000 Nadi regional workshops, and the ABS regional guidelines
- 12:30-1:00 Status of ABS in the region 'Issues and options paper'
- 1:00-2:00 Lunch

PLENARY SESSION III

2:00-2:15 Organisation of work and tasks assigned to working groups introduction to the questionnaire

WORKING GROUP SESSION I

- 2:15-3:45 Working Groups to discuss and give replies to questionnaire
- 3:45-4:45 Working groups to report back to plenary
- 4:45-5:00 Recap of Day 1

Friday 20 April 2001

PLENARY SESSION IV

- 8:00-8:10 **Purpose of day 2**
- 8:10-8:30 **Overview of draft national access framework**

WORKING GROUP SESSION II

- 8:30-10:00 Working Groups to discuss draft national access framework
- 10:00-10:30 Morning coffee

PLENARY SESSION V

- 10:30-11:15 Working groups to report back to plenary
- 11:15-11:45 General discussion on draft national access framework: final questions and clarifications
- 11:45-12:15 Adoption of recommendations
- 12:15-12:45 Next Steps: follow-up of workshop and actions to be taken for advancing the national access framework
- 12:45-1:00 Closing

LIST OF WORKSHOP DOCUMENTS

- 1. Workshop Agenda
- 2. List of Participants
- 3. Questions for a policy on access to Vanuatu's genetic resources & sharing of benefits derived from them.
- 4. 1998 Nadi Statement
- 5. Regional Guidelines on Access to Genetic Resources and benefit-Sharing (March 2000)
- 6. Conditions for Access to and Benefit Sharing of Samoa's Biodiversity Resources (March 2000)
- 7. Information Package on the Convention on Biological Diversity for Pacific Island Countries (available on display copied to be sent to workshop participants on request)
- 8. Report of the Regional Workshop on Access to Genetic Resources and Benefit-Sharing
- 9. Issues Paper for Access to Genetic Resources and Benefit Sharing in the Pacific Islands Region (Clark Peteru, December 2000)

QUESTIONS FOR A POLICY ON ACCESS TO VANUATU'S GENETIC RESOURCES & SHARING OF BENEFITS DERIVED FROM THEM

Background

1 Vanuatu has ratified the Convention on Biological Diversity (CBD) and therefore needs to provide a system for access to and benefit-sharing from genetic resources¹.

¹ The following are relevant excerpts from the CBD:

Art. 1 Objectives

...conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilisation of genetic resources...

Art. 3: Principle

States have... the sovereign right to exploit their own resources...[without causing] damage to the environment of other States...

<u>Art. 8 (j) In-situ Conservation</u> Each Contracting Party shall ...

respect, preserve and maintain knowledge, innovations, and practices of indigenous and local communities ... relevant for the conservation and sustainable use of biological diversity

and promote their wider application...

and encourage the equitable sharing of the benefits arising from [their] utilisation...

Art. 15 Access to genetic resources

... the authority to determine access to genetic resources rests with the national governments and is subject to national legislation.

Each Contracting Party shall endeavour to create conditions to facilitate access to genetic resources for environmentally sound uses by other Contracting Parties and not to impose restrictions that run counter to the objectives of this Convention.

Access ... shall be on mutually agreed terms...

Access ... shall be subject to prior informed consent...

Contracting Parties [ie, users] shall...carry out scientific research... with the full participation of, and where possible in, [provider countries].

Contracting Parties [ie, users] shall ... [share] in a fair and equitable way the results of research and development and the benefits arising from the commercial and other utilisation of genetic resources. Such sharing shall be on mutually agreed terms.

Art. 16 Access to and transfer of technology

Each Contracting Party ... undertakes... to provide and/or facilitate access for and transfer to other Contracting Parties of technologies that are relevant to conservation and sustainable use of biological diversity...

2 Vanuatu has draft legislative provisions on bioprospecting, which should be examined.

3 Bioprospecting can be defined as:

"the obtaining of samples of biota containing genetic material from areas within national jurisdiction for the purpose of research on, conservation of, or commercial or industrial utilisation of such material".

There is a continuing need by various industry sectors for access to genetic resources as a raw material as shown in Table 1.

Table 1 Estimates of annual sales for various categories of product derived from genetic resources.

	Global sales (\$bn)	years to	cost (\$m)
	of products	develop	to develop
	derived from	a	_
	genetic resources	product	
		-	
1. agricultural produce	\$300 - 450 ⁺		
seed	\$30	8 - 12	\$1 - 2.5
transgene	-		\$35 - 75
		4^{+}	
2. pharmaceuticals	\$75 - 150	10 -	\$231 - 500
		15^{+}	
3. biotechnology	\$60 - 120		
industrial enzymes	-	2 - 5	\$2 - 20
4. botanical (or herbal) medicines	\$20 - 40	<2 - 5	\$0.15 - 7
5. ornamental horticultural products	\$16 - 19	1 -	\$0.05 - 5
		20^{+}	
6. personal care and cosmetic products	2.8^{+}	<2 - 5	\$0.15 - 7
7. crop protection products	\$0.6 - 3		
biocontrol agent	-	2 - 5	\$1 - 5
chemical pesticide	-	8 - 14	\$40 -
-			100

Source: ten Kate and Laird, pp 2 and 9.

Of the seven sectors listed in Table 1, products from sectors 1, 4, and 5 are derived entirely from genetic resources. The average projected growth across sectors varies, for example, the pharmaceutical industry is projected to grow at a steady 6% per year for the next few years, the botanical medicine industry is projected to expand by 10-20% in most countries and the natural component of the personal care and cosmetic industry is projected to grow between 10-20% per year.

4 Regulating bioprospecting as required by art. 15 of the CBD would entail considerations such as the following:

1. Objectives

- a) To ensure the commercial value obtained from genetic resources is a positive force for development and conservation;
- b) To establish a process to determine access and benefit sharing so as to:
 - i) regulate the utilisation of genetic resources and associated traditional knowledge;
 - ii) ensure the benefits derived from utilising genetic resources and associated traditional knowledge are equitably shared particularly where communities are involved;
 - iii) to develop domestic research capability;
 - iv) achieve economic and social development;
 - v) conserve genetic diversity.
- c) other?
- d) Related considerations:
 - Who owns plant, animal, and microbial genetic resources? Who owns biological resources?

What is the situation regarding land and sea tenure?

How far will the State intervene in regulating bioprospecting?

What are the likely volume of requests for access?

What is the capacity of the source country to add value to genetic resources?

What is the ability of the country to administer a regulatory programme?

Is there an existing policy on national research?

2. What genetic (including biochemical) resources are to be covered?

- a) All genetic resources except human?
- b) Government and regional agricultural-forestry-marine research and genetic resources exchange programmes to be exempted?
- c) Private sector researchers and scientists to be exempted?
- d) Traditional research, exchanges, and practices to be exempted?
- e) Should there be expedited procedure...

3. Who owns the genetic resources?

This is nowhere specified in law. Will it be:

- a) the owner of the biological resource?
- b) the land-owner on which the biological resource is found?
- c) Government on behalf of the country?

4. How will disputes be resolved (eg, regarding ownership of genetic resources)?

- a) mediation?
- b) arbitration?

5. Mandatory conservation

A percentage of benefits, whether to government or private owners, to be channelled towards conservation goals.

6. Role of national and local government

a) Will government have an active, "cradle-to-the-grave" role?

b) A minimalist role, just to provide an enabling environment and to ensure a fair deal is struck between users and owners?

7. What body should deal with applications for bioprospecting?

- a) The Environment Unit? Under the Environment Minister.
- b) An interdepartmental Committee?
- c) An entirely new body? Composition? Funding? Location?

8. What information is required before access is allowed?

- a) Information about the user
- b) Information about the use
- c) Information about impacts, EIA, SIA
- d) public consultation

9. Who will grant the licence?

- a) The Environment Unit? Under the Environment Minister.
- b) An interdepartmental Committee?
- c) An entirely new body? Composition? Funding? Location?
- d) Will this decision be appealable? To whom?

10. Who will police the licence?

- a) Environment officers?
- b) Villagers?

11. What terms should be negotiated in an ABS Agreement between collector and owner? (MATs)

Prior Informed Consent

- a) Have consents of ultimate providers been obtained?
- b) Are they aware of all the implications of the activity, eg, Purpose of the research; how the material is to be used and by whom; limits on third party transfers; possible benefits, etc?
- c) Who is to obtain relevant permits?

Conservation

- d) Non-destructive harvesting: effect on target and non-target species
- e) Environmental Impact Assessment (including social impact)
- f) Collection and export limitations based eg, on rarity (CITES), or the strategic importance of genetic resources targeted
- g) trust fund for mandatory conservation money

Testing

h) reporting and tracking requirements during the course of testing (screening, pre-clinical trial, clinical trials, etc.).

Administrative

- i) Duration of the agreement
- j) Conditions on which agreement can be nullified
- k) Choice of law
- 1) Enforcement of the contract, whether by litigation or arbitration
- m) Dispute settlement resolution

12. What benefits can be shared (and with who)?

- a) benefit-sharing (to be consistent with national development goals, eg, local employment and value adding)
- b) ownership of samples, derivatives and associated knowledge or information (intellectual property rights)
- c) participation of locals in research and publication
- d) preference for resupply and exclusivity/non-exclusivity of supply
- e) training of locals in taxonomy and database management
- f) priority access to the results and benefits arising from biotechnological use of the genetic resource
- g) providers to receive all technologies developed from research on endemic species
- h) technology transfer (equipment) for performing in-country research
- i) in-kind support for conservation and village development
- j) up-front payments per sample
- k) fees for recollection
- 1) fellowships
- m) milestone payments as R&D progresses (screening, pre-clinical trial, clinical trials, pre-marketing research)
- n) royalties
- o) fees from licensing of intellectual property rights

13. How will a ABS Agreement between a user and an owner be enforced?

- a) Bond money deposit
- b) Bad publicity (blacklisting)
- c) Litigation (local Courts)
- d) Binding arbitration
- e) User may be bound by a "code of conduct"

14. Regional cooperation

- a) What arrangements can be made with neighbours who share a genetic resource? eg, establish a regional database of species? Establish a regional fund into which a percentage of revenues are deposited?
- b) Regional research and value-adding utilising regional institutions such as the USP.
- c) Avoidance of "island-shopping".
- d) Dispute resolution procedure.

15. How might this policy be transformed into law?

- a) Via a new Act?
- b) Via a Regulation made under an existing Act?
- c) Via Amendments to be made to existing Acts?
- d) No need for a law?

16. Need for an interim policy

- a) Under which Department?
- b) On what terms? (See Samoa example)
- c) Need for interim committee?

Traditional knowledge: protection and compensation

Diagram 1. Categories of traditional knowledge



Two systems of Innovation, one system of legal protection



Conventional IPRs, particularly the patent, are seen as unsuitable for protecting traditional knowledge relating to biodiversity because:

- they are based on a notion of utility (commercialisation of biodiversity) rather than a respect for nature or cultures;
- they seek to privatise ownership of genetic resources and traditional knowledge;
- they are increasingly used to claim ownership over as many life-forms as possible;
- they give a restrictive (western science) interpretation of invention and knowledge;
- they are designed to be held by individuals and corporations rather than communities;
- they are expensive to apply for and to maintain.