

**Assessment on Sustainable Development based  
on the Rio Convention of 1992**

**In Vanuatu**

**2002**

Abel Tapisuwe  
FSP Vanuatu

P.O.Box 951  
Tel: (678) 22915  
Fax: (678) 224510  
Email: [fspvan@vanuatu.com.vu](mailto:fspvan@vanuatu.com.vu)

## Table of contents

Table of contents .....	2
Acknowledgement.....	4
Summary.....	<b>Error! Bookmark not defined.</b>
Chapter 1: Introduction .....	7
1.1 Purpose and methods used: .....	7
1.2 Survey questionnaire .....	7
1.3 Workshop.....	7
1.4 Issues affecting the gathering of information .....	7
Chapter 2: Achievements .....	8
2.1 Legal framework.....	8
International Treaties Status .....	8
2.2 Programs.....	8
2.2.1 Environment (Natural resources) .....	8
2.2.2 Social .....	10
2.2.3 Economic.....	11
Chapter 3: Identified constraints, solutions and recommendations.....	12
3.1 Capacity building constraints.....	12
3.1.1 Solutions to capacity building: .....	13
3.2 Constraints to financing of sustainable development .....	13
3.2.1 Solutions to financing of sustainable development:.....	14
3.3 Constraints to address Climate Change impacts on environment: .....	15
3.3.1 Solutions to address Climate Change impacts on environment:.....	15
3.4 Constraints on natural resource management (land and sea): .....	16
3.4.1 Solutions to natural resource management: .....	17
3.5 Causes of poverty of opportunity .....	18
3.5.1 Solutions to poverty of opportunity:.....	19
Chapter 4: Discussion on Constraints on sustainable development .....	21
4.1 Capacity building.....	21
4.1.1 Human resource development .....	21
4.1.2 Changing attitudes.....	23
4.1.3 Sharing of information .....	26
4.2 Financing of sustainable development .....	28
4.2.1 Difficulty in accessing funds for sustainable development .....	28
4.2.2 Lack of financial and political commitment.....	29
4.2.3 Local assessment of climate change impact.....	31

Cyclones:.....	31
4.2.4 World Trade and trade liberalisation .....	32
4.3 Issues to address Climate Change impacts on environment .....	33
4.3.1 Lack of transfer of Renewable Energy Technology: .....	33
4.3.2 Industrial countries (Annex 1) must change their production and consumption patterns.....	36
4.3.3 Environment education, awareness, information sharing, establishing lasting partnerships and Strengthening of the Environment Unit .....	36
4.4 Natural resource management (land and sea) .....	38
4.4.1 Legal Binding: .....	38
4.4.2 Insufficient Awareness on above legal duties:.....	38
4.4.3 Threats to resource management:.....	39
4.4.4 Resource Management Programs:.....	40
4.4.5 Resource Management tools: .....	40
4.4.6 Difficulties faced by stakeholders in implementing resource management: .....	41
4.5 Causes of poverty of opportunity .....	41
4.5.3 Legal framework: .....	42
4.5.4 Credit: .....	42
4.5.5 Transport: .....	42
4.5.6 Utilities: .....	43
4.5.7 Local costs are high:.....	43
4.5.8 Propriety and intellectual copy- rights:.....	43
4.5.9 Reduce length of land lease agreements: .....	44
Annex I: Reference .....	45
Annex II: List of those contacted through workshop and visits.....	46
Annex III: Invitation to attend the workshop Sustainable Development .....	48
Annex IV:List of invited participants to attend the workshop .....	49
Annex V: National Multi - Stakeholder Consultation Workshop.....	52

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The Views and expressions in this report belong to the writer alone and are not necessarily the views of the Foundation for the Peoples of the South Pacific – Vanuatu nor the Earth Council who funded the study nor those who voluntarily contributed the information.

## **Summary**

In his opening address of the workshop, the Director of the Environment Unit, Mr. Ernest Bani, brought up some challenging issues regarding our natural resource management to ensure that there is sustainable development – so that we would have the capacity to earn our income to meet our health and education costs, but at the same time, those resources are still in tact for our future generation.

Some of these challenging issues are quoted:

### **1. Access to water:**

Water is essential for our lives. However, water is becoming scarce. Water sources are drying up because development activities expose these areas to open sunlight causing water tables to be lowered. Due to the growing population, water sources are being contaminated as settlements spring up into these areas.

### **2. Alternative energy sources:**

About eighty percent of Vanuatu's population lives in rural areas. They all depend on wood for fuel to provide light and heat for cooking. Though it has been their practice for thousands of years, it is unsafe – continuous breathing of smoke can cause lung diseases and it adds to the carbon emission.

Industrialized countries must assist us by transferring renewable energy technologies on favorable terms so that they are accessible to everyone in our rural communities.

### **3. Change our patterns of production and consumption:**

At the signing of the Rio Convention in 1992, there was a general consensus that the world was heading towards a disastrous situation as a result of global warming and the green house effect, which causes climate change- unpredictable cyclones, warming up of areas and the sea level rise due to the melting of ice.

At the convention, the expectation was that North changes their production and consumption patterns and improves environment standards, reduce pollution, reduce toxic materials and cut down the use of natural resources. They are also expected to change their consumption patterns as these are closely related to what can be manufactured, which are the causes of these chaotic situations.

Locally, we also are required to change our production and consumption patterns. Our consumption patterns must change. Over a period of less than a hundred years, our consumption patterns has changed so much that we are now faced with health problems. Our lifestyles have changed into wanting a better and easy life – less strenuous activities. We are depending too much on “dead” imported food, which through processing have lost their nutritive value. Non communicative diseases are on the rise including high blood pressure, diabetes, gout, stroke, chronic heart diseases and cirrhosis to name a few.

### **4. Dependency on aid:**

We are so dependent on aid. Let us get away from that dependency. Let us set up mechanisms to ensure sustainable development fund sources in every sector so that everyone has a fair share between on all sectors.

### **5. Population growth:**

Our population is growing so fast that it is frightening. Urban drift is very high. The more population there is, more natural resources are being depleted, if no control mechanisms are set in place.

## **6. Establish conservation areas:**

Some things has been done, but there is a need to develop them further into something like the seed banks where unique, endemic and overexploited resources would be kept. These unique resources give us our identity and determine how we act. In resource-depleted areas, people tend to be more aggressive.

We need our resources to improve our quality of life, to improve our standard of living. In return resources need protection from us. Our constitution cap 17, gives clear responsibility to each individual person to protect environment for themselves and for their future generations.

## **7. Abuse of rights:**

Today when we make restrictions on resource use, some say we limit their rights. There may be rights, but it is important to make sustainable harvests and respect other people's rights. If trees are cut on a slope, soil erosion will cause rivers to be polluted and water source will be drying up. Those further down the stream will suffer because their rights have been violated or not considered.

## **8. Re-focus in new directions:**

Development must be linked. For so long we have been having individualistic developments not linking other developments. There is limitation in the public sector, while the private sector has more potential. Therefore, there is a need to build up this partnership. CRP's aim was to build this partnership. It is not happening. If there are differences, then we need to iron them out in order to ensure sustainable development. Government departments need to work together with another government departments; government departments must work together with non-government organisations and the private sector. Politicians need to have better relationships with everyone. If politicians are seen to the captain of this country, then we are the engineers and the deckhands. We all need to work together for a meaningful sustainable development to take place.

We need to developed more consultation rather than keeping to ourselves as we have done in the past.

These challenging issues are being addressed in the following paragraphs under sustainable development issues identified in our workshop, which include the areas of capacity building; financing of sustainable development; impacts on environment as a result of atmosphere and climate change, natural resource management and continuous poverty due to available opportunities.

## **Chapter 1: Introduction**

### **1. Purpose and methods used:**

#### **1.1 Purpose:**

It is now ten years after the signing of the Rio Summit on Climate Change in 1992. The purpose of this work were:

- Assess the progress in implementing the Rio Earth Summit agreements
- Identify implementation problems, weaknesses and barriers and recommended solutions in the form of national programs
- Consolidate recommendations and identify opportunities for cooperative action to advance the implementation of Rio Earth Summit agreement

#### **1.2 Survey questionnaire**

A pre- formatted questionnaire from the Pacific Concerns Resource Center was distributed to selected participants from the civil society.

The questionnaire was distributed to selected participants and invited to participate in the workshops. The list can be seen in the annex IV.

#### **1.3 Workshop**

A two -day workshop was held from 16- 17<sup>th</sup> April with workshop participants to assess what has been done in the last 10 years. After making the assessment, the workshop participants came up with an action plan, which is included in the report. This is a report of the assessment identified from the workshop and the survey. The workshop program can be seen in the annexes.

#### **1.4 Issues affecting the gathering of information**

Accuracy of the information gathered could be affected because the returned survey form was low. Only 13% of the response was recorded. Also the turn out for the workshop was only 25% of the expected invitations that were issued.

Though the writer eventually contacted another 43% through individual visits, it was difficult to cross check information with other partners.

Individuals were often difficult to contact due to their work commitments. They had to be visited many times before effective communication could be established.

This lengthy time resulted in the delay in producing this report.

## Chapter 2: Achievements

### 2.1 Legal framework

Below are some treaties that have been ratified to combat the issues of sustainable development:

International Treaties	Status
United Nations Convention on Biodiversity	Ratified 1993
United Nations on Climate Change	Ratified 1992
Montreal Protocol on Substances that Deplete the Ozone Layer	Before Govt
Vienna Convention for Protecting of the Ozone Layer	Before Govt
Convention on the Prohibition of Fishing with Long Drift Nets in the South Pacific	Ratified 1991
United Nations Convention on Law of the Sea	Ratified 1982
Protocol of 1978 Relating to the International Convention for the Prevention of Pollution from Ships	Ratified 1989
Convention on International Trade in Endangered Species of Wild Fauna and Flora	Ratified 1989
International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage	Ratified 1989
International Convention on Civil Liability for Oil Pollution Damage	Ratified 1983
International Convention for the Prevention of Pollution of the Sea by Oil	Ratified 1983
Plant Protection Agreement for the South East Asia and the Pacific	Ratified 1997
South Pacific Nuclear Free Zone Treaty	Ratified 1995
Treaty on the non-proliferation on Nuclear Weapons	Ratified 1995
Niue Treaty on Cooperation in Fisheries Surveillance & Law Enforcement in the SP Region	Ratified 1995

### 2.2 Programs

#### 2.2.1 Environment (Natural resources)

Since the Government signed the Convention on Biological Diversity in 1992 and ratified it in 1993, Vanuatu has taken part in a number of regional environment programs that have made significant contribution towards meeting the requirements of the CBD. These include:

1. The “state of the environment project” which gathered information about a range of natural and social indicators including water quality, climate, soils and air quality.
2. Environment and Education Awareness Project that tried to improve the understanding of key environmental issues among teachers, church leaders, NGOs and the media.



3. Environment Bibliography Program which has established links on environmental libraries in SPREP member countries
4. SPBCP worked with the people of Matantas and Sara on Santo to demonstrate sustainable forest conservation alternatives.
5. VSFUP Project prepared the Code of Logging Practice and strengthened the capacity of the Forestry Department to ensure logging activities are sustainable.
6. SPRIG Project, which documented variations within selected tree species, identified seed sources for different varieties and developed conservation plans for trees species of priority to the Forestry Department.
7. SPC/GRF Project that demonstrated sustainable agro-forestry in association with local management of forest resources
8. PRAP which trailed sustainable gardening systems
9. ACIAR Trochus Project, which replenishes trochus stocks through captive rearing and release in association with local management measures.
10. National Biodiversity Strategy and Action Plan (NBSAP) raised knowledge of Vanuatu's biodiversity so that right approaches could be found to manage the country's biological resources.

Some private sector and non-government organization currently addressing natural resource management include Foundation for the Peoples of the South Pacific (FSP-Vanuatu); Vanuatu Rural Training Centre Association; Bahai Faith; Rotary Club of Port Vila; Handicraft Blong Vanuatu, UNELCO, Island Product, Kava Store and the Port Vila Municipality, who have or are carrying out these programs:

1. Wild Yam Project is an on going program aimed at the cultivation and retention of all productive and non productive *Dioscorea numularia* for forest conservation and food security
2. South Pacific Community Eco-forestry which aims at the sustainable management of forests
3. Urban Waste Management Project, which raised awareness to manage waste in urban areas
4. Some initiatives have been tried very successfully to conserve the environment through the identification of potential income generating sources of non-timber products, processing and marketing. Areas covered include fruits, nuts, weaving of mats and baskets, carvings and jewelry.
5. Through established environment curricula in teaching environment in vocation rural training centers that is an important medium for the younger generation to be aware of environmental issues and attaining life skills.
6. Annual Awards by some NGOs encourages members to conserve their natural resources. Non- bio gradable plastic bags are being banned from being used in Port Vila. Some businesses are now producing bio gradable plastics capable of breaking down within 100 days.
7. As an alternative source of fuel, coconut oil is currently research for possible adoption in Vanuatu
8. Annual Clean up Campaigns in Port Vila encourages residents to be conscious of their environment

9. Using local resources and re-cycling of plastics in schools assist in making use of unwanted plastics and adds value to natural resources
10. Researching into alternative renewable energy sources has been done with wind, geothermal, water, solar and vegetable oils. The following conclusions were made:
  - Wind has potential and could provide 20% energy in Port Vila within the next five years
  - Water has potential but is very limited to only one or two islands for large energy sources. Potential is there for small villages with small energy requirement. It still needs to be promoted.
  - Solar is not reliable for large energy requirements, but is suitable for individual home needs
  - Coconut oil is very promising for vehicle fuel requirement. About 30% transport vehicles in Port Vila are already using diesel/ coconut oil blend
  - Geothermal is being developed on Efate and could take up to twenty years before benefits could be realized.

### **2.2.2 Social**

Some private sector and non-government organization currently addressing social issues include Pre-School Association, Foundation for the Peoples of the South Pacific (FSP- Vanuatu); Vanuatu Rural Training Centre Association; Bahai Faith; Rotary Club of Port Vila; World Vision, UNELCO, Solar Vanuatu Power, Electricity Services and Van REPCo who have or are carrying out these programs:

1. Communities are encouraged to actively establish and manage their own pre-schools, primary and secondary schools. The Government helps by providing trained personnel
2. Basic health especially reproductive health and improved hygienic traditional birth administration. Some programs have also been carried out on improving village sanitation, better nutrition and reduction of alcohol, tobacco and kava consumptions and providing access to clean water.
3. Human rights project tried to give awareness on the rights of women and children. Curriculum on legal rights and responsibilities has been incorporated into the rural training center programs on skills training.
4. Local churches continue to develop local decision - making bodies to be able to make effective and sustainable decisions to promote peace and unity within communities in the country.
5. Assistance are given to rural communities by charitable organizations in the form of reading materials for local schools, international cultural exchange, scholarships, building materials, medical equipment and anti-malarial campaign
6. Mobilizing communities through PRA/PLA activities to identify their needs, establish objectives and action plans to address their identified needs
7. Providing skills on food preservation and food security activities to relief food shortages in times of disasters

8. Supplying rural communities with solar energy to provide lighting to improve health labor and improve security and abilities to participate in communal nocturnal activities
9. Individuals and churches to supplement those operated by government are establishing an increasing number of private secondary and skills training institutions.

### **2.2.3 Economic**

Some private sector and non-government organization currently addressing natural resource management include Foundation for the Peoples of the South Pacific (FSP-Vanuatu); Vanuatu Rural Training Centre Association; Bahai Faith; Rotary Club of Port Vila; Handicraft Blong Vanuatu, UNELCO, Island Product, Kava Store, who have or are carrying out these programs:

1. Income generating activities from natural resources, farming activities and cottage industries to earn income in both urban and rural communities to improve their living conditions
2. Assisting communities to work together to identify and establish market outlets
3. A scheme had been established in urban areas to assist women to generate and bank their income to ensure financial security
4. Training of youth to acquire income generating activities both in urban and rural areas
5. Researches are being done on renewable energy sources. Solar energy source is being increasingly accessed by individuals, schools and communities in rural areas.

### **Chapter 3: Identified constraints, solutions and recommendations**

These are the constraints identified through the survey and the workshop and their solutions. The writer suggests that the solutions should be treated as recommendations for the Government and its partners to take actions on to address the constraints. They are divided into the following areas:

#### **3.1 Capacity building constraints**

1. Lack of general and specialised qualified personnel in natural resource fields e.g. Agric, Forestry, Fisheries, Environment especially in rural areas. At higher level, there is generally lack of technical appropriate qualified personnel to develop policies/legal framework and implementation framework to be able to set in place some guidelines for practitioners to use in implementing programs
2. Lack of re – focussing on sustainable development
3. Lack of funds for capacity building due to funding agencies' criteria do not meet local conditions requirements
4. Outreach very limited – lack of updating of information. Extension links are ineffective due to lack or insufficient knowledge and information to transfer
5. Access to education/ training is very difficult due to limited spaces, distance and costs
6. Lack of mechanism of for sharing of or accessing information
7. Lack of two way communication between communities (fund recipients) and decision makers (distributors)
8. Need a change of mentality to conserve environment e.g. not to litter, indiscriminative damaging of resources, unwise use of resources by taking things for granted that they will be available
9. Lack of priority areas in development in resource use
10. Cultural values e.g. language and cultural norms and values along with level of education to understand concepts. Also the means of communication used.
11. Appropriateness of concepts to be acceptable to rural people to fit into their physical and cultural environment
12. Education/awareness at the right level to ensure cross section of population get the messages
13. Need better coordination in working together to tackle programs so no duplication exists that prohibits sharing of resources and excessive resources
14. Access to reach communities especially in most remote areas of the country often restricted by geographical location e.g. rough terrain and long distances
15. Lack of implementing of issues raised through awareness. People keep on doing the same things even though they know that those habits are wrong
16. Lack of flexibility in funding towards programs/projects/formats due to funding agencies' criteria do not meet local conditions requirements
17. Lack of transfer of skills/ knowledge to rural communities due to shortage of skilled technical people

18. Lack of technical institutions e.g. agriculture to provide knowledge and skills in natural resource use and management
19. Competition on projects (makes sharing very difficult as Govt and NGOs tend to see their projects as their own initiatives and thereby protecting it from others to be involved fully. If partly that is all there is to others' contribution
20. Lack of NGO/ Government partnership. There is very little cooperation between Govt and NGOs and also from Govt Department and other Govt Departments

### 3.1.1 Solutions to capacity building:

Constraints addressed number	Solutions to capacity building issues	Action
1,4,5,12,18	Provide support to technical and vocational practical training through training institutions and other training schools. Promote foreign advisors/technicians to pass on knowledge and skills to indigenous personnel at all levels	Govt/NGOs / Donor
6	Establishment of a mechanism to access information e.g. Human resource roster	Govt/ NGOs
10	Training of trainers for rural areas in appropriate language and local traditional norms	Govt/ NGOs
14,7,17,8	Integrate sustainable development principles and other environmental consideration into formal education curricula	Govt/CDC
2,9,11	Consultation with communities to identify appropriate training needs through use of tools such as PRA and KAP	Govt/ NGOs
8,13,15,19	Continuous awareness on roles and responsibilities in society at all levels (Policy makers, decision makers, grass roots on adoption of sustainable development innovations	Govt/ NGOs/ Church
20	Enhance and strengthen coordination of sustainable development initiatives in Vanuatu between Government and NGOs	Govt to Govt Govt to NGOs
3	Funding agencies must be flexible in their lending and funding project criteria in small LDC islands	Annex 1/ bilateral / multi lateral agencies
18	Establish natural resource institutions e.g. Agriculture, fisheries and forestry to offer formal relevant qualification. More Ni-Vanuatu to go to higher institutions to gain higher qualifications e.g. Masters and PhD	Govt/ NGO, Private sector, Donors

### 3.2 Constraints to financing of sustainable development

1. Lack of financial and political commitment to sustainable development. Financial commitment target mainly income generating natural resources. Economical programs precede conservation initiatives. Every time

government changes there is tendency that commitment to sustainable development changes

2. Appropriateness of financial allocation / direction which ties to constraint (1)
3. Lack of focus on local condition/ vision/ commitment to address sustainable development also comply with constraint (1)
4. Local assessment of climate change impact including the implementation of adaptation measures receives no attention despite global threatening on the effects of climate change due to carbon emission and global warming up causing rising sea level
5. International debts continue to constraint us from improving our GP income per capita to meet our sustainable development strategies. Public in general are not informed fully on types of international debts, types of agreement made for the fund when originally given and how such funds were used. Generally advice for the incurring of such funds came from outside advice who were based with Government ministers as advisors or initiated from foreign individual business interest
6. Lack of funds for sustainable development due to funding agencies' criteria not meeting local conditions and requirements. Their expectations indicate that they do not understand local conditions (like living in another planet) where language used locally could be second language e.g. English and facilities do not exist to carry out highly technical scientific analyses
7. Industrial countries continue to systematically deprive and suppress Least Developing Countries from opportunities of development by exploiting their resources e.g. deliberately leading Least Developing Countries to focus their priorities on inappropriate and irrelevant fields creating a negative impacts on available natural, human and financial resources

### 3.2.1 Solutions to financing of sustainable development:

Constraints number addressed	Solutions on financing of sustainable development	Action
1,2,3	<b>1. To establish and implement a national vision on sustainable development to ensure:</b>	<b>Govt/ NGOs</b>
	<b>Financial commitment</b>	
	<b>Political commitment</b>	
	<b>Transparent and equal financial allocation and distribution</b>	
	<b>Co-funding agencies to have respect for our vision</b>	
4	<b>2. Access financial resources to enable assessment of climate change impact including the implementation of adaptation measures</b>	<b>Govt and Annex 1</b>
5	<b>3. Cancellation of international debts which was incurred as a result of outside advice which led to financial difficulties e.g. Lambumbu cocoa project,</b>	<b>Govt/ Annex 1</b>

	<b>Vanuatu Livestock Development and Belmol cattle project. There must be transparency on where the funds came from, how it was meant to be spent and how it was actually spent</b>	
6	<b>Funding agencies to adapt their criteria to suit local conditions/ requirements and recognition of our vision established in solution (1) above</b>	<b>Govt/ Annex 1</b>
7	<b>LDC's need to identify for themselves what their needs are and not to act on the advise from outside at the first instance. Outside advice should only merit consideration after a thorough research is done with clear convincing results presented from the research team.</b>	<b>Govt /</b>

**3.3 Constraints to address effects and impacts on environment due to atmosphere and climate change:**

1. Lack of Renewable energy and transfer of technology. This is due to high expectations of producers: lack of trusts between them and their distributors; the need to give to distributors high volume of products which may be irrelevant based on local conditions and needs
2. Insufficient awareness and education on climate change
3. Adaptation to climate change impacts and their costs
4. Lack of commitment on climate change
5. Continue to pressure industrial countries (Annex 1) to change their production and consumption patterns to reduce green house emissions
6. Lack of coordination from Departments / ministries/ NGOs dealing with Environmental issues
7. Lack of financial resources / commitment – to identify / develop alternative energy sources and do away with monopoly of company supplying energy

**3.3.1 Solutions to address effects and impacts on environment due to atmosphere and climate change:**

<b>Solutions: Action plans on atmosphere and climate change</b>	<b>Action</b>
<b>Develop and implement a national policy on climate change to decrease emission of carbon dioxide through burning of firewood; bush; fossil fuel and fluorocarbon from refrigerators and air conditioners</b>	<b>Govt/ NGOs/ Aid agencies</b>
<b>Developed countries to develop and transfer appropriate renewable energy to Vanuatu based on building trust on local distributors' local needs and conditions</b>	<b>Govt/ Bilateral Multilateral</b>
<b>Integrate climate change science into formal and non formal curricula</b>	<b>Govt</b>

<p><b>Strengthen Environment Unit to better coordinate environmental issues</b></p>	<p><b>Govt/ GEF/ Bilateral /Multilateral agencies</b></p>
<p><b>Allocate funds to assess and implement potential renewable energy resources and</b></p>	
<p><b>Establish favourable environment to attract and ensure renewable energy initiatives and their prosperity (Part of climate change policy)</b></p>	

**3.4 Constraints on natural resource management (land and sea):**

1. There is lack of sustainable development. Even when well planned action plans are available, other non sustainable plans precede due to better financial gains they are capable of achieving to meet immediate needs
2. Depletion of resources / over exploitation of resources
3. Soil erosion due to logging and exposing soil to rain and flooding
4. Lack of understanding of ecosystem (resources in relation to other resources) causing people to destroy resources without planned thinking
5. Land ownership and responsibility: Review informal and formal existing institutions to ensure that landowners are accountable to depleting natural resources on their land
6. Lack of planning for future generation: e.g. Use of water resources / sources. Current generation thinks only of their needs, but not for their future generation. Also investors come to invest for their own self interests
7. Access of technology that enables more resources to be harvested. Such technologies should be restricted in their use as they cause mass indiscriminate harvesting resulting in losses of both immature and mature resources. Undervalue resources so that it appears insignificantly important to conserve or protect
8. Change attitude to management of land and other resources so that natural resources are not unnecessarily foregone for more attractive better income generating activities
9. Awareness and education to address the issues of protecting/ conserving and management of better resources for the benefit of later generations
10. Diversify income generating opportunities/ land use/ marketing + infrastructure
11. Lack of research on non- commercial, natural resources
12. There is lack of technical practical training in agriculture and other natural resources. No training institutions available to train locals to any formal qualifications resulting in the lack of sufficient technical and support in agricultural, fisheries, forestry sector.
13. Existing national vision on sustainable development is not implemented or ignored making recommended sustainable development uncommitted and on an ad hoc basis



14. Landowners rely too much on Government funds and resources to embark on conservation initiatives.
15. Population growth creating pressure on the use of resources
16. Traditional and conventional agricultural patterns of farming (systems and monocultures limits sustaining of natural resources

**3.4.1 Solutions to natural resource management:**

<b>Constraint number addressed</b>	<b>Solutions on natural resource management</b>	<b>Action</b>
1,8,	See national vision to be established in financing of sustainable development which places high emphasis on eliminating bribery and corruption	Govt/ NGOs
2,3, 10, 16	Review our logging and agricultural practice patterns to ensure sustainable development. Encourage diversification of income generation bases instead of only a few. These must be able to sustain resources	Govt/ NGOs/ Private sector
4, 11	More awareness on results of applied research where there is clear result that can be shown to people the importance of natural resources reliance on each other within an ecosystem. Carry out more research on non commercial resources	Govt/ NGOs
5	Review informal and formal existing institutions to ensure that landowners are accountable to depleting natural resources on their land. Include them into development initiatives as important stakeholders and not an observer looking over the fence to see what is happening on their land	Govt/ NGOs
6,9,15	Educate people to make effective plans to manage resources that will be available for future generation. Investors must ensure that resources are efficiently managed. Plans must also include future population growth (whether to reduce or not)	Govt/ NGOs and Private sector
7	Limit the use of technologies which enable resources to be harvested in large volumes and indiscriminately	Govt/ NGOs/ Private sectors
12	Establish natural resource institutions to offer formal qualification. Encourage more people to do their masters and doctorates. Ensure that there is no restriction on relevant training opportunities.	Govt/ Aid agencies
13	Revisit and review existing visions on sustainable development e.g. the constitution and activate	Govt/NGOs

	<b>them</b>	
14	<b>Landowners must rely on their own resources for small conservation initiatives</b>	<b>Govt/ NGOs</b>

### 3.5 Causes of poverty of opportunity constraints

1. Lack of access to market due to lack of infrastructure in place
2. High cost of living experienced in Vanuatu as compared to other countries
3. High volume of agricultural products required by overseas importers leaving no room for researching or creating production level to increase e.g. one container
4. Low circulation of money into rural areas
5. Production costs relatively high in Vanuatu e.g. labour cost resulting in high prices on end products; energy and telephone (utilities)
6. Imbalance of trade between Vanuatu and other countries e.g. Australia or Vanuatu and its members of Melanesian Spearhead Group (MSG). Policies/ procedures could be barriers to trade so that there is a win win outcome from importing and exporting countries.
7. Lack of appropriate infrastructure/ mechanism /legal frame work to capture opportunities to earn income
8. Bribery leads to poor decision making ineffective development programs
9. Foreign policies have direct implications e.g. imposing high standards on importing criteria.
10. Heavy reliance on imported food products which contribute to non communicable diseases
11. Population pressure on service/ resources due to rapid population growth
12. Loss of copy rights by indigenous peoples of their resources and intellectual traditional knowledge
13. Constitutional right is interpreted to cover a wide area which can lead to disagreements especially with other people's rights are not considered
14. Migration to urban areas looking for job opportunities and betterment of life
15. High interest and difficult lending policy from lending institutions
16. Corruption causes funds and resources to be used inappropriately thus targeted recipients are disadvantaged
17. Monopoly of services placing high rates on consumers
18. Inappropriate fund/ misuse of funds at all levels
19. Lease agreement period too long e.g. 75 years
20. Need to review financial legislation to benefit direct beneficiaries
21. Implementing transparency on funds / projects
22. Access to training opportunities
23. Lack of employment / business / entertainment opportunities in rural areas
24. Erosion of traditional community social activities causing

25. Meaning of business not based on local culture to ensure balance causing jealousy

**3.5.1 Solutions to poverty of opportunity:**

<b>Constraint number addressed</b>	<b>Solutions to poverty of opportunity</b>	<b>Action</b>
1,23, 14,4	<b>Decentralisation of services into rural areas which will enable infrastructure to be put in place and encourage market to be established locally.</b>	<b>Govt</b>
2,5, 17	<b>Re-activate price control and expand on its role to reduce prices. Reduce or eliminate vat. Eradicate mentality that people in Vila are rich. Eliminate monopoly in providing services. Through competition, prices offered to consumers</b>	<b>Govt</b>
3	<b>Encourage importers to import small varied products eventually to develop to higher volumes</b>	<b>Govt</b>
6,9	<b>Revisit and renegotiate new deals with MSG and other trading partners on fair trading so that the value of import equals the value of export based on fair conditions</b>	<b>Govt/ Trading partners</b>
7,20	<b>Set in place relevant legal framework to capture opportunities to earn income to improve standard of living and well being. Review financial legislation to directly benefit beneficiaries</b>	<b>Govt</b>
8, 16, 18,21	<b>Refer to solution (1) of financing sustainable development programs and (1) of natural resource management (land and sea) for bribery and corruption and better management of funds at all levels which ensures accountability at all levels of management</b>	<b>Govt/ NGOs</b>
10	<b>Continuous awareness on the importance of the value of local food on health. Encourage local food to be major part recipes in food preparation in households and catering services. Place high import duties on imported food. Encourage farmers to produce large quantities of local food to reduce prices. Encourage cheaper freight and transport costs by building and maintaining roads</b>	<b>Govt/ NGOs/ Shippers</b>
11	<b>Continuous awareness on efficient use of services and resources. Encourage families to plan their families for later generations benefit</b>	<b>Govt/ NGOs</b>

12	Researchers/ industrial countries to acknowledge indigenous resource and intellectual copy rights	Govt/ Researchers manufacturers and distributors
13	Constitutional right to be addressed relevantly / appropriately so that other people (including future generation) also enjoy their rights fully	Govt/ NGOs
15	Assist lending institution reduce their lending policies so that potential local investors and individuals could borrow to develop viable enterprises as well as improving well being status	Govt/ Lending institutions
19	Amend constitution and land lease act to set in place lease periods based on the value of investment with the view to reduce current period of 75 years to at least 35 years so that current generation could be able to use and benefit from their land	Govt
22	Refer to management of resources (7)	Govt
24,25	Promote and re-activate communities to relearn their cultural values and knowledge on which to build businesses which eradicate jealousies and community disorders	Govt/ NGOs

## **Chapter 4: Discussion on Constraints and possible solutions**

During the workshop, participants decided that we only discuss constraints and possible solutions, as they believed they would attract more attention than merely stating what we did over the last 10 years. These constraints and solutions were presented in chapter 3.

It is thought that it would be in the best interest of everyone that we bring to everyone's attention what our constraints are in carrying out the programs to address the Rio Convention as well as the Kyoto's convention.

We discuss these findings below:

### **4.1 Sustainable development issues: Capacity building constraints**

#### **4.1.1 Human resource development**

The workshop participants felt that generally there is insufficient locally specialised qualified personnel in natural resource fields e.g. Agric, Forestry, Fisheries, Environment especially in both urban and rural areas. It was felt for example that though agriculture is the livelihood of rural communities in Vanuatu, the field staff are not qualified extension workers. They continue to encourage commodities that deplete natural resources, such as vegetation, while there is a need to encourage sustainable agricultural production, which encourages the use of a holistic approach to ensure that land is suitably used for this generation and the next. In the area of environment, there is lack of personnel capable of analysing chemicals. Vanuatu has no plant taxonomist to identify plant species. Some felt that there are many administrators and bureaucrats but not enough technicians and scientists to implement programs or be the link between the decision makers and the grass roots to be able to identify needs and be able to translate into tangible programs to address rural community needs.

At the higher educational hierarchy, there is generally lack of technical appropriate qualified personnel to develop policies/legal framework and implementation framework to be able to set in place some guidelines for practitioners to use in implementing programs.

The educational attainment shows that 55% of the population has reached the level of primary school; only 7.8% have attended senior secondary/ vocational or post secondary school. Only 1.3% has been to tertiary level (1999 Vanuatu National population census). This low percentage after primary education could be largely due to limited space available in secondary schools where future tertiary level students are identified. This gap should see some improvement through the increasing establishment of more secondary schools by the Government, Churches and individuals.

Other areas affecting access to tertiary education identified by the Scholarships Unit include:

- a. Lack of the pre-requisite qualifications for entry to needed courses especially among women scholarship applications
- b. Termination due to poor academic progress
- c. Termination because of acceptable behaviors.

Students in secondary schools lack relevant information to choose the right kind of career paths. This information used be done by some Government Departments in the past especially those in the area of natural science to attract bright students. This has now ceased due to lack of financial and human resources.

Cultural complexities form barriers to gender access to opportunities (Judy et al, 2001). Due to high costs of sending children to schools, parents tend to give priority to their sons. While this shows up quite clearly in the 1999 census, this could also be attributed by the higher ratio of males over females at 1:1.05 (1999 Census)

In 1998, the Scholarship Unit reported 39 terminations. This is an inefficient use of funds especially when other potential recipients were rejected due to insufficient funds. As seen earlier, only a very small portion of school leavers can be awarded effective scholarships.

Though unclear fields of study and gender, the 1999 Vanuatu census recorded only .07% of the population who had attained masters and doctorates. There is some disparity in where they are found and where they originated. Eighty percent are located in Port Vila and the rest scattered in other areas of the country. Though this is an important level for human resource development, funding agencies are reluctant to fund trainings due to the high costs involved. They prefer to fund scholarships in the certificate, diploma and bachelor brackets, which are less expensive. This is the case also for pilot training. While it is one of the priorities for Vanuatu Government on scholarship awards for 2002, it remains to be seen how many funding agencies are willing to fund this award.

Table 1 below summarizes figures on study from 1997 – 2007 at various levels reported by the Scholarship Unit:

Fields of study	Bachelor	Master
Economic/Accounting/Business	18	
Management / Administration	13	
Science	12	
Medicine	18	
Engineering	1	
Geography	1	
Land	1	
Development		1
Environment	2	

To improve specific skills can be problematic in the sense that it is always difficult to tailor specific courses for each employee due to limited financial resources. As such employees are lumped together in some training sessions, which we hope will eventually address the individual needs.

The Government Human Resource Development Centre has been offering management and administration courses to public service sector for sometime. With the anticipated better working relationships between the government, private sector and non-government organizations, it is important that courses are also offered widely to benefit everyone. Better collaborative work could improve the facilities of the Centre.

The Next Vanuatu is a private tertiary education institution is also offering administration and management courses at the cost met by students. According to those who have attended their courses, they feel that lecturers do not have the necessary skills or the experiences to effectively transfer knowledge (pers.com).

The University of the South Pacific is offering extension courses in various fields from certificate to degree level and is an avenue for many secondary school leavers. Again those who have attended the offered courses feel that it takes unnecessarily too long and exams can be affected when the satellite tele-radio breaks down. They feel that they are unnecessarily deterred from taking as many modules as they would like to take which directly determines how much time in years to take a full course right through.

Vocational schools are operated throughout the country offering knowledge and practical training at certificate level to both secondary and primary school leavers. Standards vary from school to school, but again depending on the trainers' knowledge, skills and experience. There are generally insufficient qualified personnel.

The Vanuatu National Institute of Technology (INTV) offers technical courses on construction, engineering, hospitality and administration at certificate level has the capacity to expand to higher level and is currently doing so with an outside funding. While they are interested in offering natural resource courses, they could be better off having such courses on other islands where resources and the environment are more promising.

Workshop participants felt that the Government should provide support to technical and vocational practical training institutions so that students would be competent on leaving these institutions. They also felt that the government should establish natural resource educational institutions to cater for good academically qualified technicians.

It was noted during the workshop that out reach by government field officers was very limited. Though they have technical knowledge, they are not capable of transferring the knowledge through appropriate methods for rural communities to absorb given their limited education. Any awareness programs must be made so that everyone at different levels of education and language receives messages. Very often, messages targeted at rural communities are irrelevantly packaged for example the language used could be more English biased therefore more technical terms are used which may not be understood. In the urban centers everyone may not get messages because of the medium or the time used.

Participants felt that there is lack of a two- way communication between communities and the decision makers. Though this may be true, it maybe a problem for decision makers who are themselves Ni-Vanuatu by traditional and naturalized rights. They may not feel that it is their role to establish this very important link

#### **4.1.2 Changing attitudes**

Sustainable development which includes sustainable resource management initiatives for example conservation of natural resources, planned logging and promotion of a holistic agricultural production are development plans aimed at improving our living standards, but still maintaining resources for generations to come.

Conservation initiatives have shown to us that natural resource stocks (marine/ forest/ terrestrial), when given a rest period, can actually replenish very quickly. Very

many rural communities are realizing this potential and have actually gone ahead to conserve portions of their land and sea with or without external assistance using whatever resource means available to obtain their aims. Some have used legal means by seeking legal assistance and some have used traditional systems. Both systems can work.

At Analgahat on Aneityum, a community there had contracted a lawyer to assist them to defend their marine resources against major shell buyers in Port Vila for the last seven years and they seem to be successful. By selective harvesting and selling of marine products, they have been able to establish social and economic projects such as acquiring a fishing boat, establishing a health clinic and assist families to meet school fees (Tapisuwe et al, 2001)

On South East Ambrym, land holding families have successfully used traditional system to maintain over 20 hectares of prime forest for wild yam cultivation without much policing. The area has been a source for fuel wood, building materials, medicinal herbs and food relief for the last 30 or more years (Tapisuwe et al, 2001).

Many rural communities who have undertaken conservation initiatives without any outside technical input lack technical knowledge and skills to manage these initiatives. They have voiced their concern to Government. They have requested more support in terms of information sharing, moral support and guidance. They have even requested the decentralization of the Environment Unit. So far this support is yet to come.

Government budget given to the Environment Unit and other natural resource departments such as fisheries, forestry and agriculture for sustainable natural resource management is about one percent or less. Over 50 % of that is spent on staff emoluments and the rest to other administrative costs. They all have to depend on external aid.

The small budget for the Environment Unit is used only to maintain a three- man team office in Vila and is insufficient to assist the numerous communities who have gone ahead on their own to conserve their resources.

To effectively address sustainable development, the Government needs to re-focus by placing more emphasis on its funding on the environment and especially so on the Environment Unit.

Legal framework needs to be put in place to address natural resource management. An environment management and conservation law to regulate environment sustainable development has been drawn up and repeatedly re- drafted for the last six years, yet it has not been discussed in the Parliament. Why is it taking so long?

The low environmental budget plus the retardation of the environment management and conservation regulation is a clear indication that environmental issues are not our priorities. In the rural areas, natural resource depletion is ongoing for other development purposes. It indicates that this is an attitudinal problem, which must be changed. Sustainable development in the context of the Rio Convention addresses social, economic and environment development as important components of sustainable development making it a three-legged structure. One cannot continue to only address one component and expect the other two to follow suit or better themselves spontaneously. There needs to be a balanced distribution of resources in the three areas. For this to happen, attitude needs to be changed so that focus given to development will be more sustainable.



If this link is missing, it will be very difficult for any programs to be implemented at the community level. Resources will continue to be used inappropriately on other priorities.

Participants felt that along with specialized training, training of trainers for rural areas in appropriate language and local traditional norms who could be the link between the rural communities and the decision makers.

Already in rural communities are government departments' field workers such as the agriculturalists, fisheries, foresters, educationists and health workers. It seems that they are not effective in assisting rural communities to address the very complex needs as they are merely addressing their particular small part of fields. They should be filling the gap between the rural communities, the decision makers and their superiors who have more influence on what laws to pass or not to pass. If they are not, what is wrong? Is their language different? Are they able to understand the real root causes of the complex problems of the communities and further more, are they able to communicate their findings effectively to their superiors? It is known that very few endeavor to venture far from existing infrastructures to the most remote areas due to lack of time especially to visit areas in land where walking distance may not be too inviting due to rough terrains to cover. Even in the accessible areas, effective outreach is seen to be ineffective in terms problems / ideas from rural communities not effectively being passed on to the headquarters, to the heads who would translate into programs.

Departments tend to carryout their programs in isolation of the whole rural context for example, the duplication of programs. The Agriculture and the Fisheries Dept are individually encouraging producers' cooperatives to promote "cooperative agricole" or the fisheries cooperatives. The Cooperative Dept. has been establishing cooperative societies for a long time. Many are still operating. Why cannot we incorporate the idea of the producers' cooperatives to the existing cooperatives who already have the managerial skills in book keeping with working committee members who make decisions regarding the functioning of these cooperatives.

Is it really their short fall or is it the heads, the senior officers and the directors who are too busy and not be able to pick out simple messages from the field and translating them in effective and beneficial programs for the affected rural communities?

The participants felt that there need to be a change of mentality to conserve and look after the environment better. It is the environment, the resource richness of the vegetation, the sea, the beaches, the unpolluted air, which attract tourists and investors to Vanuatu. Locals are used to discarding bio gradable products such as leaves and household refuse in their homes, taking for granted that it will rot. When in town, they continue to discard waste products such as plastics with the same belief. Plastics may take up to 600 years to rot. When uncontrolled they become problems. They are sources of litter, making the urban areas; beaches, forests and marine are unwelcoming sights. They suffocate fish and other marine and freshwater fishes and animals.

There is an increased indiscriminate and unwise use of the resources often taking for granted that there is plenty or will continue to be available. During the conservation work on ACIAR, Tapisuwe et al, 1998 found that 50 year old trees were unnecessarily cut and burnt recklessly without thinking about them or thinking that they will grow again. While this may be true, they do not realize that trees take between 50 – 100 years to fully mature.

Even if people have the knowledge, they continue to do the same things even though they know that those habits are wrong. In many conservation areas such as Lopez Lopez in South East Santo, the workers at the IRHO station continued to pollute the river, which runs down to the beach where a bungalow was built and was an attraction for tourists into the area without having some respect to their rights to clean water to bath (Tapisuwe et al, 1998)

Again in similar conservation work, resources continued to be harvested even though, they knew that these areas were restricted to enter.

#### **4.1.3 Sharing of information**

During the workshop, participants felt that though there is a lot of information in the form of reports, are available through various researches by both Government and Non- government organizations, such findings are shelved in individual offices doing nothing better than collecting dust.

Those putting out these reports sometimes are reluctant to share information widely as they believe they own the right to them. Anyone who wants those reports must pay them for their use or they must reproduce theirs the difficult way by spending more money in the process.

It is now common in writing to acknowledge writers and copy right law has just been passed to safe guard writers. So the rights on these reports can be legally addressed.

Some participants felt that a reason for keeping the reports to themselves is that they are afraid of what they have produced. Another is that they do not know what they have produced. This is especially when reports are to large and one would require another consultant to clearly specify what needs doing which would require additional funding.

Another reason is the competition on projects, which makes sharing very difficult as government, and non-government organizations tend to see their projects as their own, with their own initiatives and as such tend to protect them from others to be fully involved. If partly, that is all there is to others' contribution. This is a thriving environment for duplication to occur. Though competition does produce better results, in some cases, may be counter productive resulting in duplication of resources which is not beneficial for a country like Vanuatu with limited resources and a very small population.

Participants felt that there is lack of NGO/ Government partnership. There is very little cooperation between Government departments and between NGOs. The example of the cooperatives mentioned earlier is a classical one which shows that Departments generally do not work or share ideas/projects / time together.

Though government departments are the official focal points for external funding, some find it difficult to share non-government inputs to the implementation of programs. Often, Government departments see that they being, the official focal point have the financial say into how externally funded programs can be implemented, often tending to keep such programs to themselves due to the much needed funds involved irrespective of whether they have adequate human and other resources available or not.

Reports once produced are much better off being made widely available so that people could use them. When they are locked up in offices as private properties not to be seen by other people is not a right attitude as their usefulness comes when

they can be used, modified and applied by anyone to suit their particular needs and situations.

The participants felt that these documents/ reports are useful and must be made available to potential users in the Government, NGOs and the private sector. They recommend that the Government establishes a resource center where all research reports produced in Vanuatu are centrally placed or stored for easy access by potential users.

## **4.2 Sustainable issues: Financing of sustainable development**

According to the Action Strategy for nature conservation in the Pacific island region for 1999-2002, there is a general declining trend globally in the financial assistance to the Pacific island states against an increasing demand for public services on national budget. This has a significant implication for national governments to finance nature conservation.

Financing of nature conservation is being more and more funded through international donors on a project basis. Most donors are results – driven and are most comfortable with short-term projects that clearly yield predictable and visible output.

Nature conservations take longer to see results and even more so for community based conservation.

It also says that for donors, fundamental changes in some of their planning assumptions are called for to recognize and accept these changes.

### **4.2.1 Difficulty in accessing funds for sustainable development**

Workshop participants felt that there is generally much difficulty in accessing funds for sustainable development. Funding agencies' criteria do not usually meet local conditions and requirements. Some of these requirements include:

- a. Projects must be large
- b. outcomes must be seen at the end of the programs, therefore capacity building is not included as managers are expected to already possess management skills. Results cannot be seen in the training of local managers
- c. Proposals must be written in technical language.
- d. Facilities must be available locally for scientific analysis

Local conditions where in the case of Vanuatu, the country is made up of over 80 small islands scattered over 680,000 sq. km in the Pacific Ocean. This scatterness, means transport costs are high and in some areas not reliable due to the often rough seas for example the East of Pentecost, Maewo, the Torba and Tafea Province outer islands.

On land, the terrain is always rough making building permanent hinterland roads very difficult for example the Middle Bush of Santo, Middle Bush of South Malakula and Epi. This makes visits to these areas quite impossible and again unreliable.

Given such a condition, sustainable development projects must be small and be managed by the beneficiaries themselves – the rural communities. This entails the need for an important, but intangible component – that of capacity building so that rural communities can better manage their projects.

Language used locally could be second language for example English. Again, in Vanuatu there are over 100 languages making it perhaps the only country in the world, which has a high language per head. On top of that we have in addition, three languages – the Bislama that is the lingua franca as a national language and English and French, which are the official languages, used in businesses and education. On average, each person may be able to communicate in five languages. To put it more poignantly, English or even French are definitely our second or third languages. It is much too demanding for practitioners who are the main people in identifying problems in rural communities and writing project proposals to expect the very high technical English or French usually required by funding agencies. Do not these

agencies understand simple everyday English or French? Could they not be able to translate simple English into their complex technical languages? Is it because they are the big brothers giving away money to their small brothers in the third world to mob away their mess? Whose mess? Carbon dioxide emission causing the global warming thus the green house effect is not the only problem for the third world. The problem belongs to everyone – the first world, the industrialised world who are responsible for large amounts of carbon dioxide emission through the manufacturing industries and the deforestation of the world for the need for more timber products.

Vanuatu as a least developed country do not have facilities to carry out even basic scientific analyses such as a laboratory tests to test marine, fresh water and air pollution causing poisonous agents in fish and other marine and aquatic resources. The country cannot afford to establish such facilities with the necessary equipment such as relevant microscopes and other associated equipment.

Some very basic facilities exist locally such as that belonging to our Central Hospital, UNELCO our utilities and at the fisheries, but are used mainly to meet tailored needs such as for medicinal purposes.

For scientific analysis to be done, we rely heavily on facilities that exist overseas such as Australia, France and USA. Occasionally, when there is any need for scientific analysis to be done, samples have to be sent to these countries often resulting in large amounts of funds to be spent.

#### **4.2.2 Lack of financial and political commitment**

Over the last three years, the Vanuatu government has been operating an average annual budget of US\$56million (Financial report 1999-2001). Its allocation between the social, economic and environment sector reflects the following trends:

- a. The social sector uses up to 70% with nine departments, the main consumers being the departments of education (30%); health (16%%) and Police (11%). The other six departments use up the rest, each receiving 3 – 8%.
- b. The economic sector including the environment uses up to 30% between 13 departments, the main one being the department of economic and social development (72%) and the other 12 departments sharing between .5% - 5%.

Being a departmental budget, it is most certain that it is used mainly to pay for administrative costs including salaries. An interesting point is that it appears that there is no fair sharing of the budget to reflect sustainable development, which assumes that its effectiveness lies in fair distribution between social, economic and environment development.

By seeing the figures, it is apparent that 70% of the budget is allocated to the social sector and is shared by nine departments, while only 30% is given to the economic and environment sector which has 13 departments.

The Environment Unit is only given .2% of the economic sector share or 0.08% of the total government annual budget. The other economic sector budget is also low and insufficient for any visible change in sustainable developments to improve the living standard of the rural people.

Large portion of the budget is spent on staff emoluments and other administrative costs and a small amount available for development programs such as maintaining roads, hospitals, researching new technologies to transfer to the grass roots. For example only 27% of the Agriculture budget is used to maintain the ex-IRHO, the Vanuatu Agricultural Research and Training Centre based on Santo. This small amount is not enough to actually contribute to eventually

sustain the level of established infrastructures. The Port Vila Central Hospital buildings have been deteriorating so much that outside assistance was needed through fund raising by local NGOs. Roads in Port Vila and outer islands badly need maintenance

While we may be able to justify this imbalance to say that all these social services are essential, it is apparent that some departments are actually consuming funds unnecessarily, in the name of serving the nation and its people. One that is always a concern to the general public is the Parliament budget.

There is too much extravagant spending by Parliamentarians. Politicians are giving themselves too much salary as members of Parliament and as members of the council of ministers. Is this the modern democratic system? Is this the modern norm for the poor to elect one of them to be their representative and to become rich overnight while their voters remain poor?

It is not uncommon that some decisions taken by politicians in statutory bodies make decisions, which are not legal resulting in unnecessary payment of compensation such as to the 1994 civil servants who went on strike, the Police/Mobile Stand Down Group and the recent Vanuatu Broadcasting Corporation. The constitution recognises labour rights because that is the reason why we have established the Labour Commission. If these strikes were not legal, then, what is the need for compensation? Why do we need to throw out the best, trained people out? It is affecting the government's work output. Before 1994, Government output to the rural areas was at its best. Today, it is not despite the CRP. Improved service delivery is ineffective and insufficient for example the Agriculture Dept with a now changed name was a very effective department is now dormant. It's once highly trained personnel are out. Even those who did not go on strike just resigned, as situation got worse.

With coalition governments, it is now normal for governments to change, not to serve the interest of the people or the state, but to serve the interests of individual dissidents from ruling parties who feel that they should have been given portfolios, thus the need to cross the floor causing a change in government for the next three to six months then another change. Already there is talk of rotating the ministries so that the backbenchers will have a chance to become ministers. What is the point. Have they got better ideas and plans that warrant extra un-budgeted expenses to be made in severances. We need the full four year term government. These changes call for extraordinarily very high severances for those going out only after six or less months in service. During power struggles, a sitting could be extended unnecessarily for up to a month during which Parliamentarians are paid their high sitting allowances for doing nothing much than fighting for numbers to get into government.

Comprehensive reform program has been around now for sometime, however, political leaders are not applying it to themselves. They apply it to their workers instead.

Savings from such extravagancies could be used in the economic and the environment sectors. Some additional funds to the Environment unit will significantly help its expected role in addressing environmental issues. Being easily accessed by rural communities to get more information and guidance on environment management especially in the area of conservation establishment and management.

Workshop participants felt that to ensure there is political, financial and sustainable development, commitment that the government establishes and

implements a national vision on sustainable development. This vision should also have a capacity to be transparent so it does not get changed or funds set aside for the vision are not spent elsewhere every time government or policy changes.

This vision should be both binding and respected by changing governments and be respected by funding agencies.

#### **4.2.3 Local assessment of climate change impact**

Vanuatu being made up of very tiny islands in the vast Pacific Ocean creates a major concern to all of us (though a majority of the population due to lack knowledge are still in the dark to the situation) for changes likely to occur as a result of gas emission, which traps heat causing the greenhouse global warming up. The global warming up causes temperatures to rise giving adverse climate changes which we are already experiencing:

##### **Cyclones:**

In the last 15 years we have experienced more cyclones than those that occurred in earlier times. Some of these were very severe such as the Nigel, Eric and Uma. Very many others with only minimum or medium effects, but none the less, the number of cyclones have increased to a level that now becomes an annual expectation. These cyclones affect the environmental vegetation by uprooting and defoliating trees often exposing empty spaces that are very quickly taken up by invasive plant species that quickly populate the area causing a decreasing overall species richness of native species; changes to processes such as water tables, fire regimes, soil quality and nutrient cycling (Tapisuwe, 2001).

Cyclones are always accompanied by heavy rains that build up to torrential floods, which erode soils and depositing them on the coastal reefs causing them to be bleached such as the Mele reef.(pers.com).

They also create damages to coastal areas, sometimes washing soils, beaches and vegetation again depopulating marine coastal resources in these areas.

##### **Coral bleaching and other effects:**

Warm sea temperatures bleach coral so that they die. Dead coral reefs are no homes to marine resources as there is less food in the affected area.

Warm water expands which causes it to take up more spaces thus the water level rise. This change of the sea level could also be made by ice melting.

Having said this, we are not very certain of the actual causes. There are two possible causes for coral bleaching and the change in the sea levels: warm temperatures and the tectonic activities.

Between Vanuatu and New Caledonia lies the boundary between the Pacific Plate and the Indo –Australian Plate that runs almost parallel with Vanuatu on the western side, in the form of a trench known as the South Vanuatu Trench. Plates on either side of this trench move over each other, causing the New Caledonia to be sinking while Vanuatu is rising slightly leaning to one side (pers.com). The resultant effect is that some areas will be experiencing sea-level rise while in other areas sea level will actually drop.

Rarua et al from the assessment of the climate change came up with the following findings:

1. There is limited information and high uncertainty in relation to future climate and sea-level changes in Vanuatu

2. Increasing population growth will lead to increased pressure on land and other resources
3. If rain decreases, small islands will face shortages. If rain increases, agricultural production could be affected as agricultural areas could be flooded damaging crops. Diseases such as malaria will increase due to favourable breeding environment of mosquitoes in the flooded agricultural areas.
4. The coastal environment including the coral reefs and mangrove systems could be affected, but will be most noticeable from the pressures of population
5. The shift in social values, land use practices and changing attitude to environment will influence the potential of vulnerability of Vanuatu to climate and sea-level change.

An additional point to be made is that there should be more work done on tectonic activities to clearly differentiate the cause of the sea level changes. None the less, a rise on the sea level can be felt and seen no matter what the causes are.

Again Rarua et al identified the following priorities to plan and implement appropriate responses to climate and sea-level change:

1. Better access to the global information that is of direct relevance to Vanuatu, in particular those relating to El Nino/ South Oscillation (ENSO) and extreme climate events as well as continual provision of up-to-date information on climate change on climate and sea level change.
2. Improving the present understanding of environmental and socio – economic sensitivities to climate and sea level change. This requires coordination and cooperation of activities relating to information exchange between sectors
3. There is a need to understand and appreciate how social and economic changes have and will influence the vulnerability of communities. It is important to identify traditional and other relevant values and mechanisms to be strengthened to enable these communities to cope with and adapt to global change.
4. There is a need for a wider population and community awareness program designed to improve understanding of the ecology and inter-relationships of their environment in order to enable them to become an integral part of the national effort to implement appropriate adaptation measures.

These priorities are meaningless unless they are implemented. Cooperation between the government, the non-government organisations, the private sector and funding agencies are called upon to cooperate in the financing and implementing of these priorities are so important to ensure that people are not affected, but more so to understand the process so that they can help themselves.

#### **4.2.4 World Trade and trade liberalisation**

While it was believed that the Rio Agreement's integration of economic and environmental issues would address the trade liberalization of trade so that countries could trade with each other with less restriction and ensure transfer of technologies and improve our GP income per capita to meet our sustainable



development strategies, it creates a rather poor image in Vanuatu. This country is a member of the Melanesian Spearhead Group, which has established their regional trade agreement with the same intention to free trade to improve better partnership relationship. Our experience indicate that while it promotes other member states to improve their income, has not benefited us in the process. Our products are only very limitedly sold to our members. We are buying more of their products than selling our products to them (Chamber of Commerce report, 2002). This is also the trend for established trading partners such as Australia, Japan and China. We are importing more of their products and exporting very little in exchange. Often this leads to a trade deficit.

The main cause of the trade deficit problem is that our production cost is so high that products sold are expensive, therefore are not competitive.

Cheap products from other countries are much favoured for their low prices, which increase the opportunity for more imports to be made. This increased importation affects local industries to suffer. Some industries such as the Port Vila Meat Cannery is less productive and at one stage they were talking of closing down. They are only operating because they have very much scaled down their operations. Small manufacturers are most affected for example the Tropic Soap, which has been producing soap for sometime has closed its doors. An ice cream making company the Swity and the toiletry making company the Cello Vila are on the brink of closing. According to the Chamber of Commerce, generally most affected are the small manufacturers many of which are owned by Ni-Vanuatu. This is not a good picture. In effect we are not encouraging Ni Vanuatu businesses to develop even in cottage industries. Again according to the Chamber of Commerce, large companies such as vehicle selling companies and Santo Oil Mill are not much affected. It appears therefore, that while we encourage foreign large companies to operate in Vanuatu, we are discouraging small industries to establish themselves as their products are expensive. Ni-Vanuatu businessmen, who may have visions to make something, but limited funds to operate, own many of these small industries.

### **4.3 Issues to address Climate Change impacts on environment**

#### **4.3.1 Lack of transfer of Renewable energy technology:**

According to the 1999 census, 78.5% of the population of Vanuatu live in rural areas of Vanuatu. They rely heavily on fuel wood for their lighting and energy sources. Though this has been occurring for thousands of years, there is the need to change particularly for health safety reasons. Burning of wood for light, cooking and clearing land for agricultural and other development or just sheer pleasure of making bush fires releases carbon dioxide and adds to the already large amount of carbon emission causing the global warming up causing green house effects which changes the climate which affects us, not only Vanuatu but globally. Another source of carbon emission is the burning of fossil fuels mainly petroleum and diesel to run our vehicles and generators to produce energy for lighting and providing heat especially in urban centres and other Provincial centres.

In the Eco Asia 2000, the Government made it known that due to the local conditions (scattered, many islands, access difficulty), it is important that Vanuatu must be aiming to have all of its energy sources from renewable energy sources from sun, wind and water (Solar Vanuatu Power and Light Services).

This is in line with the expectation that after the signing of the Rio Agreement in 1992, industrialised countries would transfer their technologies to the third world states.

According to the Energy Unit, transfer of technologies has not happened. Technologies that would decrease the emission of carbon such as solar, wind and water energy sources to generate power are not happening. They are still very expensive. Though there are funds such as the Carbon Credit Fund that exists in Australia and other industrialised countries, GEF and SPREP, it is very difficult to access such funds. Their criteria are too difficult and the process is too long and usually one waits too long to eventually get a negative response.

Some transfer is available through the Japanese aid, but as with all aid programs, the chance of continuation is limited. There is no ongoing program in place for the sustainability of this funding.

Fossil fuel distributing and consuming companies such as Mobil, Shell, and UNELCO and vehicle dealers such as the ASCO Motors **are very dependent on international standards geared to reduce but not** substitute or eliminate carbon by using fossil fuel, even though they understand quite well the consequences and know quite well the alternative clean energy sources (Energy Unit, 2002). They continue to keep the status quo of importing large quantities of fuel into the country. According to the Energy Unit, petroleum and utility suppliers in industrial countries, companies give more emphasis on “demand site management”, which try to advise their customers to be conscious of their consumption, which does not assist in the changing of consumption patterns.

Having said that, the UNELCO has researched possibilities of alternative energy sources for Port Vila. Through their work, they have concluded that hydro electric and solar energy are not viable. Hydro because of insufficient water and solar is not reliable. Wind and geothermal power sources have potential.

According to computer simulation research on Efate and in Port Vila, they believe there is a potential for wind energy. They estimate that in five years time, wind power could supply 20% of the required energy and are developing the program further.

Geothermal energy could have a potential but would cost a lot of money, which UNELCO does not have. They are now giving on the ground assistance to a consortium of Australian, European and USA based energy companies to develop this source of energy that is found in North Efate. The estimated time for the product to be available is unclear, but may take up to twenty years to see any real benefits.

Through the government's initiatives, the Japanese Government is currently funding the Sarakata Hydro Power station to supply electricity to Lugainville town through the UNELCO. This funding will be in three phases. The first phase had been completed which saw the establishment of the site and supplying of the power. The second phase, which is to step up the level of power, is soon to be completed, but only on the condition that the UNELCO reduces the current consumption tariff.

Some small companies, who are interested in importing these alternative energy sources, find it difficult. Some of the problems they face are:

**Expensive:**

As these alternative clean energy sources are expensive, funding is the most important problem experienced by Ni-Vanuatu. Joint ventures with investors may not necessarily work out. Experience show that investors only use Ni – Vanuatu to do away with expensive formalities such as paying for establishment fees, but in reality do not want to part with their ventures and the eventual profit. Their management strategies are solely in their own hands, even employing expatriates as directors and assistant directors, even though their Ni-Vanuatu counterpart has the managerial capacity (Solar Vanuatu Power and Light Services).

**Distributors do not trust potential agents:**

Distributors want their agents to sell large volumes of stock, which is difficult, as local agents do not have sufficient funds.

**Low money circulation in rural areas:**

Generally, rural areas must be addressed because that is where about 80% of the population live, but finding access to proper lighting very difficult. An important problem that exists is the low circulation of money in these areas to pay for basic necessities including these energy sources, which are well accepted, but cannot be afforded. There is an urgent need to step up on income generating activities so that rural based income per capita could be improved. We need to assist rural communities to assess their strengths and weaknesses, in terms of the kinds of resources they have including their capacity needs and then with them work out strategies to build their income building activities. One of the so many options is the organising of a market system for their agricultural produce, which is in abundance as farming is one of their main activities. Capacity building in terms of training to address organised market and business establishment must address the business copycat syndrome mentioned in the Vanuatu Market study by Ismael et al, 1996. They found that this is a rooted social habit problem through out the Pacific to imitate what others have started often killing someone's business initiatives at its infant stages.

Workshop participants felt that as there is very limited progress transfer and implementation of renewable energy, that the government develops and implements a national policy on climate change to decrease emission of carbon dioxide through burning of firewood; bush; fossil fuel and fluorocarbon from refrigerators and air conditioners. Government should continue to pressure fuel importing companies, and car dealers and their customers to finance the transfer of appropriate clean renewable energy sources to Vanuatu.

A local mechanic has effectively run six vehicles for a year now on a mix of about 80% coconut oil and is estimating that over a third of Port Vila's mini-bus public transport vehicles have moved over to coconut oil blend fuel. Coconut oil alternative fuel gives these important benefits:

1. Cheaper than diesel – giving bus operators a greater profit margin.
2. It can be produced locally, having a small beneficial impact on our balance of trade. It helps copra producers earn an income in an increasingly difficult market
3. It would help Vanuatu reduce its greenhouse gas emission as it produces less nitrogen oxides into the air
4. Smells deliciously which is an improvement on the typical black smoke of diesel vehicles. It produces less smoke
5. Requires less heat to convert into energy, which enables vehicles to run longer on coconut oil per litre as compared to the same quantity of diesel
6. It releases carbon that had recently been in air, but absorbed by coconut trees to grow compared to fossil oil that the production process took place before man existed probably as the nature's way to conserve excess carbon.

A research that was done by Thaddeus et al at the University of Gunma in Japan in 2000 showed success without any re-modification of the single cylinder, direct injection diesel engine they worked (JSAE Review 22 (2000) p.349 -355). One reason that the product has not led to public use is that researchers carrying out

research are too academic, lack practical engineering and problem solving skills (pers.com). Whyte, 2002, while communicating the subject to other FSP networks, indicated a few catches that would affect the coconut oil production for fuel:

1. New vehicles that run on coconut oil would lose their warranty cover
2. It is untested and not a recommended fuel
3. Price could increase if government impose tax on coconut oil
4. Petroleum importing companies would lose some profits
5. Coconut oil builds up carbon deposits in the combustion system, but this could be due to raw oil that contains a lot of fat. Further processing is required to remove this excess fat.

According to the UNELCO, though, coconut oil may seem to be working on small engine; it has not been tested to work on large engines. They would not want to do the tests anyway as it is too risky. On the other hand, they are getting fuel subsidised at roughly 50% and the security of fuel supply is already in place (pers.com). However, they are willing to try on small generators. If it does work, there is the question relating to the supply of coconut oil. That capacity does not exist to supply large quantities on regular basis to ensure supply security.

#### **4.3.2 Industrial countries (Annex 1) must change their production and consumption patterns**

Three of the related basic expectations quoted from the Indigenous Perspectives Volume 4, No 1 June, 2001 are that at the time of Convention signing of the agreement were that:

1. North would change production and consumptions patterns and improve environment standards, reduce pollution, reduce toxic material and cut down the use of natural resources.
2. North would help South with financial and technological transfer and together to bring about more favourable international economic environment through equitable trade and resolution of debt crisis faced by the South.
3. South with more financial and technological resources would be able to manage its economy better to meet their peoples' needs, improve pollution standards and reduce depletion of resources for example forests.

This simply is not happening. Clearly, North is not playing its part. By changing the production and consumption patterns favouring sustainable development that takes environment as an essential component, the North could make a lot of financial savings that could be used to service points 2 and 3 above. Though some finance is made available, conditions make it very difficult to access.

#### **4.3.3 Environment education, awareness, information sharing, establishing lasting partnerships and Strengthening of the Environment Unit**

Given the country's local conditions mentioned above in para 4.1, coupled with the diversity of cultures, create special challenges for the access of information on environmental issues, transferring it and implementing the adoption of such information, needs consolidated effort by both government and non-government organisations and non-government organisations and other non government organisations. There needs to be a better working relationships, between

government departments, government departments with non-government organisation. In fighting, and harbouring and protection of projects and reports must be minimised with the intention of eliminating this kind of attitude. In the face of diminishing funding sources, it is most important that funds are shared through the sharing of information at all levels, from accessing project funds through to implementation and reporting.

Project reports and related environmental information must be centrally available in printed and electronic form where interested users can have access to it.

Workshop participants felt that the government must strengthen and decentralise the Environment Unit to better coordinate environmental issues. This view is also shared by rural communities, who have been involved in conservation initiatives for a number of years now (Tapisuwe et al, 2001). According to them, there is insufficient information on environmental issues available especially on establishing and managing conservation areas. By decentralising the Unit to other Provinces, these communities' access to information will be much useful.

Education and awareness programs need to be stepped up as workshop participants felt that currently, information going out is very limited. There is a need to integrate climate change science and environment into formal and non- formal curricula so that students in educational and training institutions are aware of the environmental changes taking place. Changing attitude to better manage natural resources at a sustainable level will be better absorbed by students at young age.

Deforestation in rural areas is an ongoing natural process for food and income generating activities to meet the growing population in both the most remote and accessible areas of the country. For this reason, an increased step up in carrying out awareness programs in local languages is called for especially in the most remote areas. Both government and non-government personnel must be encouraged to take more incentive to spend more time in these areas. There must be clear incentive for them to do so

Multi- systems of sustainable agricultural production programs give high yields. However, at the same time maintaining soil fertility must be given top priority for research and transfer of information. The Agriculture Department has been researching alternative farming systems for some time, but has fallen short of disseminating information to everyone. Their field staff needs to be taught on alley cropping and contour farming. Under the Asian Development Bank program of upgrading the Extension Service of the Department in the early 1980s, field station areas in rural areas were extended to cover an extra half to a hectare to cater for on farm trials e.g. at Pang Pang on Efate.

An innovation is only accepted if one sees that it works. That it is practical and easy to carry out given ones limited resources. Only when field staff are willing to adopt these improved sustainable farming practices themselves in their food production around their home base stations, will the chances of nearby farmers adopting such innovations be higher.

Concerned individual families normally give government personnel from some departments such as health, forestry, fisheries and education who are based in rural communities gardening areas to supplement their food. They must be encouraged to apply improved farming practices in their gardens. Again, if communities can see that all government workers in the area also take up the encouraged practices, the chances of acceptance will be much better than if only the agricultural field staff are involved.

This approach of inter departmental application of promoted innovations is an important element which should be piloted. The writer believes this is an awareness campaign program that could work, but needs to be tapped on, piloted and if successful, be promoted. It had been proved effective in the late 1980s and early 1990s to promote home gardens around residential areas, where idle lawns were turned into productive food gardens in Port Vila to supplement food intake by individual households.

#### **4.4 Natural resource management (land and sea)**

##### **4.4.1 Legal Binding:**

There are two fundamental provisions in the country's constitution which directly govern natural resource management:

1. Article 7 (d) states: "To protect Vanuatu and to safeguard the national wealth, resources and environment in the interests of the present and of future generations".
2. It also recognises the indigenous Ni-Vanuatu and their descendants right to own land. Traditionally land is a community- based land normally based on clans, tribes or family lines. Due to changing environment as a result of external influence, individuals tend to claim for themselves. This usually creates tension between the expected stakeholders. To get a long lasting peaceful solution on land disputes, the constitution also states that this must be taken to a traditional court system, where descendants could be traced and any differences are ironed out. For development purposes that would be beneficial to the country, the government can declare an area of land as public land. Individuals could also land through lease agreements.

Landowners have total control on what they can do on their land. They could be advised on the best options available to them to develop their land, however, the decision they make totally rests on them.

Workshop participants felt that it is time we revisit and review existing visions on sustainable development, such as the constitution and activate them.

The article on the environment is very specific and is clearly and simply worded. It gives us the fundamental duties to safeguard our natural resources so that they continue to be available to us, our descendants and to others.

##### **4.4.2 Insufficient Awareness on above legal duties:**

Yet this constitutional obligatory duty is not widely disseminated. Environmental awareness has always been on resource depletion, to address the negative impacts that the depleting resources have on the environment. Communities continue to place emphasis on conserving or managing depleted resources on short term basis to meet their immediate future needs. Tapisuwe et al, 1998; 1999; 2000. They continue to carry out conservation activities to replenish animal resources (fish, crustaceans, flying foxes, etc.) for near future feasting seasons like Christmas holidays, marriages, other social activities and political gatherings. Timber resources, on the other hand, continue to be destroyed through improper gardening practices, agricultural production and social and economic development without consideration for the future generations needs.

There is an urgent need for environmental awareness that focuses on the citizens' obligations as mandated in the constitution. When we continue to deplete natural resources, we continue to violate our constitution, article 7 Para. (d). This is not a clear message in our environmental awareness programs. The writer believes rural communities are not aware of this constitutional obligation. This lack of information continues to ensure that landowners are not accountable to depleting natural

resources on their land. They need to know of their constitutional duty to conserve the environment through:

1. Being obliged to diversify their income generating sources and applying improved farming systems that will sustain soil carrying capacity.
2. Educating them to understand the ecosystems, how resources co- habit the environment. By destroying one resource the other resources will be affected. Therefore, there needs to be a planned thinking when using resources:
  - a. Better planning for future generations: e.g. Use of water resources / sources. Current generation thinks only of their needs, but not for their future generation. Also investors come to invest for their own self- interests
  - b. Decreasing the use of technologies (fishing nets) that enable more resources to be harvested. Such technologies should be restricted as they cause mass indiscriminate harvesting, resulting in losses of both immature and mature resources.
  - c. Adding economic, social and environmental values to resources so that they can be significantly conserve and protected, for example, adding ornamental, medicinal and other values.

The concepts of environment and conservation of nature are inherent to traditional Ni-Vanuatu lifestyles and cultures. It has been and is still the foundation of Ni-Vanuatu culture, language and identity. It continues to cement relationships with other people and is the basis for subsistence, social, commercial and economic activities (Environment, 1993).

With the growing population, higher demands are placed on the use of resources to meet rising material expectations, new personal goals and increasing social mobility. The result is that resources are being depleted at a very alarming rate.

#### **4.4.3 Threats to resource management:**

Most threats to resources are from over-exploitation to meet subsistence as well as cash livelihood needs for increasing populations of resource owners more locally based. The ability to provide appropriate incentives for conservation through enterprise development has been discussed for some time. Yet, it is one of the most difficult capacities to address effectively because of the complexity of skills needs and socio- economic considerations required for locally specific application. Few practitioners are entrepreneurs or trained business development specialists, yet they are mostly on the forefront of addressing needs in this sector. They therefore need to have a basic knowledge and awareness of effective strategies to coordinate the participation of a wide range of stakeholders in the critical decision making process of enterprise development.

Destructive harvesting of resources are found everywhere: using small mesh gill nets and targeting of spawning sites for marine resources; indiscriminately cutting down and burning trees and destroying of habitats is an ongoing process.

Changes in national policies, democratic process and government support are instrumental to strengthen community capacity for ownership and management of their natural resources.

Resource owners need strengthening capacity in these important areas:

1. Understanding of conservation threats and impacts on their livelihoods
2. Assessing and addressing threats

3. Organising and institution building for sustainable resource management
4. Understanding and participating in official resource management decisions that affect their livelihoods, (Fry et al, 2000).

#### **4.4.4 Resource Management Programs:**

The Vanuatu National Biodiversity Conservation Strategy, which was produced in 1999, has extensive biodiversity conservation action plans covering watershed management; management of introduced invasive pest species; management of over exploited resources; management of cultural heritage; conservation of significant species and places; application of environment impact assessment; financing of biodiversity conservation initiatives; have in place an intellectual property rights mechanism; the establishment of a scientific research council; monitoring of biodiversity; priority research on species which adequately lack information and the human resource capacity building for environment.

Due to some awareness that has gone out over the last few years, the depletion of resources has been minimised. Most conservation efforts are implemented by rural communities through their own initiatives with or without external assistance. Some of them are long term, for example, the Loru Protected Area, Ring Te Shu, Narong Marine Park and the Analgahat conservation. While many are short term designed to replenish resources for specific needs.

#### **4.4.5 Resource Management tools:**

Tapisuwe et al, 1999 identified three general categories of resource management: traditional, government regulations and the commitment of traditional leaders.

Government regulations were not effective, mainly because communities place the non - compliance on the government personnel who are expected to come and find out for themselves – quite impossible due to lack of funds. They do not see it as important to observe regulation. Regulations are only for commercial purposes, but do not apply to the same resources when used for subsistence and social purposes.

It has been observed that where traditional leaders are committed to conservation of areas, such conservation does work without the application of traditional system or the government regulations.

Traditional approaches were found to be less effective in or near urban areas due to the large immigrants found in the area, who have lost respect for the original community and the cohesiveness of the communities. Where communities are not cohesive, conservation initiatives did not always work.

In general Ni-Vanuatu villagers have a more restricted view of who is a stakeholder than workers with external agencies. This difference of stakeholder influences the focus of information received from villagers or agency staff.

Villagers recognise the chief of the landholder's land area, the chief or head of the landholder family (where he is not also chief of the land area) and the landholder family as stakeholders. In almost all cases, the chief has primary responsibility for resource management decisions; and it is at his discretion who he consults. Alternatively, the landholders can discuss their interests with their chief; and it remains at the chief's discretion to accept, modify or reject their proposal and whom he consults. Local communities list of stakeholders include: the chief of the landholders' traditional right area, the head of the landholder family (could be men or women in some areas), senior men in the landholder family and other groups or individuals as invited by the landholder family or chief.



Many outside agencies emphasise in principle the involvement of a broader range of stakeholders who they perceive can contribute to the resource management decision and its implementation. External agencies' lists are much broader to cover the communities' internal institutions, Provincial authorities, national authorities and regional interested organisations (Tapisuwe et al, 1998).

#### **4.4.6 Difficulties faced by stakeholders in implementing resource management:**

Hamnett et al, 1995, identified the following constraints on conservation activities stakeholders faced when trying to work together:

##### 1. Within communities:

- a. Differences in language and education can hinder communication with project personnel
- b. Scheduling of community activities on conservation may not be appropriate for everyone
- c. Information is not necessarily shared among community members
- d. Project managers and communities might have different expectations
- e. Lack of community cohesiveness
- f. Though communities establish suitable institutions, such youth and women's groups, such groupings are not always committed to conservation activities, especially where leadership decisions do not involve them
- g. Lack of skilled local people to staff sustainable management projects including the capacity to seek funds
- h. Systems need to be devised to ensure equity in benefit sharing

##### 2. Constraints faced by the donor agencies include:

Donor agencies and procedures are often inflexible. The lack of flexibility to finance projects and to change project designs during implementation can hinder progress and can result in tensions within communities, between communities and implementing organisations and donors.

##### 3. Within Projects and Implementing Organisation:

Community based sustainable resource management requires a multi-disciplinary technical project team that is sensitive to community needs. It is always expensive for anyone implementing agency to put together.

#### **4.5 Sustainable development issues: Causes of poverty of opportunity constraints**

Basically, what we are saying here is that even though we could be doing the right thing towards improving the standard of living, we remain poor and will continue to do unless constraints that prohibit any positive progress are eased, reduced or eliminated. Some causes are discussed below:

##### **4.5.1 Lack of market:**

Generally there is low circulation of money in all rural areas of the country, as there is a lack of access to market due to lack of infrastructure in place. Areas that are particularly affected are small islands in the TORBA, SHEFA and TAFEA Provinces; West Coast Santo and Malakula; east side of Erromango, Epi, Ambrym, Pentecost and Maewo and the hinterland of the major islands of Santo, Malakula and Pentecost. Many of these have airports and all have good sea ports. Where there are

airports, airlines set limits to economise on their flights to these areas and let these airports share passengers so the trips are full on both ways flights. Ships also economise due to limited agricultural produce to deliver to Port Vila, especially when servicing small islands. On the larger islands, especially on the eastern side of the country where agricultural production is high, the sea is always unreliable. It is common for these vessels to call at an interval of six months. It is common too for packaged agricultural produce to go bad while waiting for shipment. There are no accessible roads into the hinterland of some islands, which create the same problems as other areas. People rely on the sale of produce to pay for health and educational services. As there are no other opportunities for employment, people's lives are always at risk. They are prone to health problems, which cannot be checked, minimised or eliminated. The area remains poor in education. Their children are deprived of secondary and tertiary education, as their parents cannot afford the imposed fees.

This creates an opportunity for migration to urban areas looking for job opportunities and betterment of life for those who can afford to leave these islands. In urban areas, they are faced with more acute problems: unemployment, high costs of living, malnutrition and other social problem.

#### **4.5.2 Reduce the high cost of living and promote viable competition:**

Sandy Ismael et al, who made research into the Vanuatu Market in 1996, found the following to be the main factors that continue to make Vanuatu a very expensive place to live and prevent Vanuatu from being competitive in the market world:

#### **4.5.3 Legal framework:**

The large businesses are dominated by foreign residents and naturalised citizens. Ni-Vanuatu are active in the informal economy: taxi and buses for men and marketing for women. Some also operate kava bars, small restaurants and trade stores.

All persons conducting businesses are required to have business licences. Fees may be reduced for part-time or newly formed businesses. Some categories of businesses are exempt from licences including agricultural production and produce hawkers. Some businesses are closed to non-citizens such as kava bars, open-air vendors, mobile shops and inter-island shipping.

Business licence fees are high and must be passed on to consumers. Costs associated with importing of equipment and raw materials such as duties, service tax and transport are also high. Many of these charges levied by the government can be reduced upon application and be scrutinised by a formal committee, which is difficult for planning decisions to be made in advance.

#### **4.5.4 Credit:**

The minimum capital requirement to establish businesses to purchase equipment and raw materials are high. Only a few Ni-Vanuatu can meet the requirements and loans are difficult to access because of security requirements. Interest rates and fees are also very high.

#### **4.5.5 Transport:**

The main forms of transport are by sea and air and are expensive for the reasons mentioned in this paragraph and other areas in this document including high costs of fuel and quickly deteriorating spare parts used on poorly maintained roads. Their unreliability is also disastrous for perishable produce.

#### **4.5.6 Utilities:**

Utility costs in Vanuatu are one of the highest in the world. Fuel, transport and telecommunication costs are high.

#### **4.5.7 Local costs are high:**

Getting goods to customers is costly due to factors already mentioned including high retail mark-ups and the 4% turnover tax.

All these costs, when put together, make the final product price very expensive to sell locally and overseas.

To effectively reduce prices, it is imperative that the government needs to address all the areas mentioned above, including the elimination of monopoly arrangements that exist so that there is a fair competition to enable prices to be lowered.

Other alternative government revenue sources must be explored to ensure that turnover tax is reduced while still keeping the income tax haven as an incentive for investors.

Trading agreements, like the Melanesian Spearhead Group, need to be revisited to ensure that trading is carried out on a reciprocal value basis.

Rural communities who are the main producers of export commodities are not commercial producers and have not been brought up to visualise the benefits of mass production. Hence, individuals continue to produce very small quantities, making it difficult to export very large quantities at very short notice to overseas buyers who are looking for quantities to fill containers as the precondition to seal a business trade.

For new commodities, such as spices where production is limited to certain areas in the country, a grace period must be included in the trade agreement to develop and promote it until large volumes can be produced. This is a slow process, as perennial crops usually take three to six years harvest.

#### **4.5.8 Propriety and intellectual copy- rights:**

Traditional intellectual copy right oral laws exist in rural communities and are respected by community members. For example, *namele* leaves are not to be used by anyone who has not paid for their use. Knowledge cannot be passed on unless the recipient has paid. One reason that traditional knowledge is lost is because the right must be bought before it can be released to anyone, even to one's own son or children.

One reason for the successful harbouring of rights is the secrecy of the knowledge. Once exposed, it is very difficult to monitor its payment or its transfer to other users. Thus, there is an increased chance that someone who has not paid, is making huge money while the owner is being cheated and deprived of his potential income source.

A classic example is the bungee jumping in New Zealand and elsewhere where people jump off high buildings. Pentecost island where the original idea leading to the spectacular land diving started, that the Europeans, in the name of anthropological studies stole the idea and used it for their own benefit. To make it worse, they claimed the right as their own, using their western copy right law to shield themselves from lawsuits.

Though a copy right law is now in place, a control mechanism is yet to be put in place to monitor its implementation.

#### **4.5.9 Reduce length of land lease agreements:**

As mentioned earlier, only an indigenous citizen and his/ her descendants are given the constitutional right to own land. There is no freehold title. Land is under perpetual ownership through the lease agreement between a developer and the landholding family. Usually, for agricultural lease, land can be leased for 75 years. It is now felt that this is too long for the first landowner in his generation to be doing something useful for himself, before the land is transferred to the next generation.

The workshop participants felt that an amendment to the constitution and the land lease act should be reviewed with the intention of reducing the current period of 75 years to at least 35 years so that current the generation could use and benefit from their land.

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## Annex II: List of those contacted through workshop and visits

List of participants met through workshop and individual visits:

Name	Position	Organisation
1. Morgan Armstrong	Executive Director	FSP Vanuatu
2. Noel Steven	Community Officer	Vanuatu Family Health Association
3. Frederick Hosea	Educator	Department of Economic and Social Development
4. Pastor Bill Bule	Vanuatu Christian Council Representative	Vanuatu Christian Council
5. Odina Lala	Project Officer, Youth to Youth	FSP Vanuatu
6. Joshua Rapport	Peace Corps Volunteer	Farm Support Association (FSA)
7. Alison Donley	Peace Corps Volunteer	FSA
8. Dorah Johne	Tafea Field Worker	Vanuatu Society for Disabled People
9. Paula Tari	Representative	Bahai Faith Religion
10. Hanson Leona	Enterprise Development officer	Vanuatu Rural Development Training Centre Association
11. Trinison Tari	Education and Information office	Environment Unit
12. Pakoa Rarua	Environmental Health	Department of Health
13. Kalo Pakoa	Fisheries Department	Senior Research Officer
14. Jack Carlo	Vanuatu Red Cross Society	Disaster Preparedness Officer
15. Ernest Bani	Director	Environment Unit
16. David Stein	Director	Vanuatu Renewable Energy Power Company

		Energy Power Company
17. Vincent Lebot	Senior Research Officer	Agriculture Department
18. Fraser Bule	Principal Agric. Officer	Agriculture Department
19. Livo Mele	Director	Department of Forestry
20. Alison Obed	Senior Fisheries Officer	Department of Fisheries
21. William Naviti	Acting Director	Department of Fisheries
22. Petro Loughman	Agric. Extension Officer	Department of Agriculture
23. Wycliffe Bakeo	Executive Director	Rural Skills Training Project
24. Mrs. Tanton Bakakoto		State Law Office
25. Kalfau Kaloris	Director	Foreign Affairs
26. Benuel Tarilongi	Director	Vanuatu Quarantine Inspection Service
27. Timothy Tenkon		Vanuatu Quarantine Inspection Service
28. Dickinson Tevi	Accounting Consultant	FSP Vanuatu
29. Jerrison Labi	Finance	Finance Department
30. David Stein	Vanuatu Solar	FSP
31. John Aruhi	General Manager	Chamber of Commerce
32. Hollingsworth Garae	Manager	Solar Vanuatu Power & Light Services
33. Leo Moli	Director	Energy Unit
34. Edwell Tonny	Deputy Director	Cooperative Department
35. Pullin Edward	General Manager	ASCO Motors
36. John 37. Chaniel	Water Supply Manager Deputy General Manager	UNELCO
38. Tony Deamer	Manager	Island Product
39. Graham Tabi	Manager	Non-Communicable Diseases Project - FSPV
40. Antoine Thyna	Principal Officer	Scholarships Unit

**Annex III: Invitation to attend a two day workshop on Civil Society Assessment on World Summit on Sustainable Development (WSSD)**

From: Abel Tapisuwe, Coordinator, Civil Society Assessment on World Summit on Sustainable Development (WSSD)

To:

Date: 22<sup>nd</sup> March, 2002

**Subject: Invitation to attend a two day workshop on Civil Society Assessment on World Summit on Sustainable Development (WSSD)**

Dear Sir/madam :

Thank you for participating in filling a questionnaire which was given to you this week.

We apologize for any inconvenience we made if your forms were not stapled rightly. A blank space (p.4) was made available for your convenience for writing space should you need it.

We will make a follow up visit next week to see if you have any problems filling the form.

The questionnaire should come back to us by 28<sup>th</sup> March for us to put together information before the two day workshop from 16<sup>th</sup> – 17<sup>th</sup> April.

We would be most grateful if you or your representative would come to the above 2 day workshop at the Vanuatu Cultural and Museum conference room.

We enclose the workshop's programme. Should it be impossible for you or your representative to attend, please let us know well in advance.

Thank you very much.

Your sincerely,

Abel Tapisuwe



**Annex IV: Those invited to the Multi-stakeholder Consultation for the WSSD assessment in Vanuatu**

#	Organization	Postal Address	Person to contact	Phone contact
1	World Vision International/ Vanuatu	247	Simon Boe	22161
2	Wan Smol Bag Theatre	1024		27119
3	Vanuatu Women's Center	1358		25764
4	Vila Town council of Women	1358		24775
5	Vanuatu Teachers Union	287	Obed Massingiw	23679
6	Vanuatu Red Cross Society	618		22599
7	Vanuatu Society for Disabled People	373		22321/ 22809
8	Vanuatu Natural Science Society	944		25081
9	Vanuatu National Council of Women	975		23108
10	Vanuatu Hotel and Resorts Association	230		23388
11	Vanuatu Girl Guide Association	673		22925
12	Vanuatu Family Health Association	PMB 65		22140
13	Vanuatu Credit Union	390		24731
14	Vanuatu Christian Council	1178		22722/22161
15	VANGO	PMB 096		26034
16	Syndicat Agricole	17		25717
17	Saint Vincent de Paul Society	1380	Joseph Tariodo	22427
18	Save the Children Fund Australia	283		22794

19	VARTCA	925	John Liu	27740
20	Rural Skills Training Program	1456	Wycliff Bakeo	24202
21	Rotary Club of Vanuatu	901?		25757
22	Presbyterian Women's Missionary Union	150		22722
23	Pre-School Association	1617		23515
24	Port Vila Taxi Association	1254	Patrick Crowby	25135
25	Peace Corps Vanuatu	PMB 097	John Laan	26160
26	Nawita Artists Association			23654
27	National Union of Labour	PMB089		22992
28	National Spiritual Assembly Baha'i of Vanuatu	1017		22419 (mornings)
29	National Komunity Development Trust	1511		22969
30	Mothers' Union	Anglican	Ruth Dovo	23808
31	Mautfer Island Council of Women (Efate)	951	Elizabeth Mermer	22752
32	Lions Club of Vanuatu	499?		
33	Kiwanis Club of Vanuatu	255?		
34	Malvatmauri Council of Chiefs	PMB 047	Chief Tom Numake	22474
35	Handikraft blong Vanuatu	642		23228
36	FSP Vanuatu	951		22915
37	Farmers Support Association		Charles Rogers	22851
38	Dorcas Federation	SDA 85		22157
39	CUSO	158		22119
40	Christian Women's Fellowship	638 Church of Christ		22469

	Fellowship	of Christ		
41	Christian Women's Business Association	351 Holiness Fellowship		26213/26214
42	Catholic Commission for Justice and Development	59		22640
43	Port Vila Island Chief Representative		Jean Marie Leye	
44	Trading Post	1292	John Marc Neil	
45	Press Club blong Vanuatu	637	Shirley Joy	22200
46	Boys and Brigade	Presby 150		22722
47	Adventist Development and Relief Agency	P.O.Box 85		25173 / 22157
48	Boys Scout (1 <sup>st</sup> Tagabe Group)			
49	Rainbow Gardens	156	Wylie	24720
50	Teuma Market Gardens	745		23310
51	Vanuatu Agriculture Supplies	819		22376
52	Mobil Petroleum Cooperation	658		22332
53	Shell Pacifique Vila	121		23523
54	Iririki Island Resort	230		23388
55	Melanesian Cooperative Savings and Loans Society	1666		23657
56	The Melanesian Hotel	810		22150
57	Crown Plaza Resort	86		22313
58	Le Meridean Hotel	215		22040
59	UNELCO	26		22215
60	UNICEF	926		24655
61	ESCAP	PMB 004		23458
62	PIANGO	164		25607
63	VSO	514		26508

## **Annex V: National Multi - Stakeholder Consultation Workshop**

16<sup>th</sup> - 17<sup>th</sup> April, 2002

Port Vila

### **Workshop Aims:**

To bring together key individuals from civil society to:

1. Discuss sustainable development achievements and constraints since the Rio Earth Summit in 1992
2. Identify priority level and make recommendations and / or develop initiatives for a way forward.

### **Day 1**

0800 Opening Prayer - Member of VCC

Welcome - FSP Vanuatu

Opening - DG of Environment, Mr. Michael Bakeo

0900 Overview of meeting programme and objectives - Abel Tapisuwe

0915 Presentation on sustainable development summary – Ernest Bani

1000 **Tea Break**

1015 Background information on WSSD - Ernest Bani

- What is WSSD?
- What are the objectives of WSSD?
- National preparatory process
- Date lines to meet
- 

1045 Presentation: Vanuatu Profile (1992 - 2002)

1145 **Lunch Break**

1330 Working groups session 1: Assessing sustainable development achievements and constraints since 1992

1500 **Tea Break**

1515 Report back from working groups session 1

1615 Working groups session 2: Identifying national priority issues and developing recommendations and / or initiatives at the National level.

(Discussion may be based on the Pacific Regional Submission developed in Apia)

1730 **End of Day 1 with a prayer**

## Day 2

0800 Opening prayer - Participant  
Brief recap of yesterday's and today's work

0815 Report back from working group session 2  
Followed by open discussion

930 **Tea Break**

0945 Working groups session 3: The way forward, emerging challenges, new initiatives and commitments, future needs ( course corrections, resources required

1130 **Lunch Break**

1330 Report back from working groups session 3  
Followed by open discussions

1430 Shell presentation

1530 **Tea Break**

1545 Plan/ Strategize next steps to WSSD

1645 Synthesizing and presenting back to participants summary of 3 working sessions. Followed by open discussions

**1745 Close with a prayer**