THE TREND IN PLANNING FOR SUSTAINABLE DEVELOPMENT IN PAPUA NEW GUINEA: WHAT IS MISSING?
THE TREND IN PLANNING FOR SUSTAINABLE DEVELOPMENT IN PAPUA NEW GUINEA: WHAT IS MISSING?

by

Tahereh Nadarajah

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Tahereh Nadarajah
November 1995
"This report is dedicated to the children of Papua New Guinea whose future is in the hands of the present generation of decision makers."

T.N.
FOREWORD

The National Research Institute is committed to the sustainable development process in Papua New Guinea. This topic has been included in the economic policy analysis course that the Institute offers for government executives. Researchers in social studies, economics, and education work closely and exchange information on a networking basis on social, economic and environmental issues which will assist in achieving sustainable development.

The Institute’s Environment and Development Unit has been active in promoting sustainable development thinking. For example, in forestry, a major NRI study examined the sustainability of Papua New Guinea’s forest resource. The study has been positively reviewed by international and national practitioners and academics, and will be complemented by research into the economics of forest sustainability.

The Institute’s researchers assisted the various government agencies during the preparatory negotiation of UNCED, for the Earth Charter, the Climate Change Convention, and the Forest Principles. Also, our close ties with local and international non-government organisations enabled us (through gathering information) to make a meaningful contribution during the preparatory stages of UNCED negotiations. The National Research Institute’s representative, along with the government delegation, participated in UNCED in Rio de Janeiro in 1992. NRI continued its interest together with the Department of Environment and Conservation, the Department of Foreign Affairs, the University of Papua New Guinea, and non-government organisations to ‘bring home’ the spirit of UNCED in a post-UNCED seminar organised by those agencies, in November 1992. NRI provided the main discussion paper for the seminar — ‘A Framework for a Plan of Action’ — which was based on Agenda 21 themes with the major emphasis on bringing on board all stakeholders in the development process. The seminar brought together some non-government organisations, provincial government representatives, academics, and government line agencies.

One of the recommendations of the seminar was to appoint a steering committee to prepare, guide and facilitate the process leading to the preparation of a National Sustainable Development Strategy (NSDS). In the meantime, the 1993 Waigani Seminar adopted the action areas of the discussion paper for post-UNCED as its main sub-themes. Also, the post-UNCED seminar recommended that the outcome of the 20th Waigani Seminar (whose theme was environment and development) should be used as a basis for the United Nations mission (which prepared the NSDS policy paper for the Cabinet) in August 1993. NRI, as a member of the Waigani Seminar’s organising committee, worked closely with the University of Papua New Guinea. The institute coordinated the ‘people’s participation’ sub-theme of the seminar which brought together local groups from around the country, that are active in sustainable development initiatives. The emphasis was for the participants to define, in a practical (Papua New Guinean) way, what sustainable development means to them. The Waigani Seminar took a major departure from its academic tradition and opened it to provincial and local participants who contributed greatly to the success and enrichment of the week-long seminar.
The institute continued to follow-up on the Waigani Seminar and the subsequent two United Nations missions in 1993 and 1994 through networking with UNDP, the University of Papua New Guinea, and government line agencies. NRI's link to Capacity 21 as a major post-UNCED program (at the international level) has provided the institute with the opportunity to analyse the current local situation more realistically.

This paper follows the NSDS process over the past three years and draws attention to the other Papua New Guinean planning mechanisms currently under debate. The major issue in the paper is for the relevant partners to bring the national environmental plans, the land-use plans, and the forest and conservation plans under the same guiding principles of sustainable development. Integration and participation are the essence of sustainable development thinking and planning. Until all the stakeholders, especially industry, commerce and resource owners, participate fully in development planning, they will not assist its implementation and the dramatic result will be the continued resource exploitation in a 'business as usual' fashion. It is hoped that this discussion paper will be a catalyst for bringing sustainable development planning to a more focused discussion, which will result in subsequent positive action.

Wari Iamo
November 1995
Introduction

In recent years, Papua New Guinea, like many other developing countries in this "global village", has attempted to use 'sustainable development' as a shield against the onslaught of resource exploitation forces. At the global level, the Papua New Guinean Government and non-government organisations participated in the United Nations Conference on Environment and Development (UNCED) in 1992, in Rio de Janeiro, and signed two of its conventions and three other documents, including the Earth Charter.

At the regional level, Papua New Guinea has contributed to regional initiatives such as the South Pacific Regional Environment Program (SPREP), the United Nations Environment Program (UNEP), and South Pacific Forums to discuss the resource development and associated social and environmental impacts. The Twenty-Fifth South Pacific Forum focused on resource management in the region. One of the outcomes of the 1994 South Pacific Forum has been the development of Common Codes of Conduct for governing the logging of indigenous forest, and to which operating companies will have to adhere.

At the national level, since UNCED, the government has initiated few activities. The post-UNCED seminar in November 1992 was the first attempt to bring UNCED verities 'home'. It was followed by two major national seminars on environment and development issues — the Waigani Seminar on 'Environment and Development' in 1993, and the Huon Seminar on management of resources in 1994. This was followed by a Biodiversity Country Study workshop in which a workable biodiversity conservation strategy for Papua New Guinea was discussed. Concurrently, two United Nations-Government missions were commissioned to assist in getting the process of planning for a National Sustainable Development Strategy (NSDS) for Papua New Guinea off the ground. This paper briefly reviews some of the issues concerning NSDS initiatives and discusses the gaps in development planning processes.

The NSDS analysis has to take account of the recent initiatives such as the creation of the Ministry of National Planning, and the new provincial reforms. This analysis would be incomplete without taking stock of the national development strategies of the 1970s and national planning as a whole. Also, there is a brief analysis of some of the recent sectoral national plans. These plans can only form some basic groundwork for the NSDS. Manus Province's and the Numunuku clan's planning for sustainable development at provincial and local levels are highlighted. The major task ahead is for the people of Papua New Guinea to decide on the form of development they need. In this context, the initiatives at the local level will undoubtedly require further elaboration.

 Provincial Governance Reform

Any national planning in Papua New Guinea has to consider the implications of governance issues (related to the provincial government reforms, as set out in the Micah Report — National Parliament of Papua New Guinea 1993) on development planning. The reforms have been based on the fact that decentralisation in Papua New
Guinea, through the provincial system of government, has not worked; that is, it has not delivered the services to the majority of the people who live in the rural areas.

The report states that while the 'spirit and intent were sound, the structures and mechanisms adopted were perhaps inappropriate and inadequate' (ibid.). Thus, while they have recommended changes in the structure of the system, they have not 'distracted' from the spirit of decentralisation. Among the Constitutional Reform Committee's recommendations are that:

- the current provincial government system be reformed and restructured into smaller political units to be known as provincial authorities;
- local-level government be re-established and be guaranteed by the National Constitution with sufficient financial and administrative support;
- the Auditor General be given powers to conduct an audit of provincial governments and local-level governments without notice and to have powers to prosecute;
- a Commission for Provincial and Local-Level Services be established to manage, provide, and train manpower needs of provincial authorities and local-level governments;
- the provincial authorities comprise all local-level government presidents, non-government representatives, and all national members of Parliament;
- all local-level governments receive direct funding from the national government;
- the National Planning Office be re-established; and
- a Constitutional Commission be established to oversee the implementation of our recommendations (ibid.).

In response to the proposed constitutional amendments and the proposed organic law on provincial and local-level government, Momis (personal communication 1995) states that 'the real problem which prevents the government from being effective in promoting rural development is lack of administrative capacity at all levels — national, provincial and local'.

In the recent Waigani Seminar, Ivarature (1995) posed the question, 'Does Papua New Guinea at present have the necessary institutional ability and requirements to modify the present state of services?'

Two recent studies by Thomason et al. (1991) and Axline (1993) analyse the impact of decentralisation of delivery of health services, and the bipartisan process, respectively. Relating the institutional reform of the new system and national planning, Axline (ibid.) concludes the following:

One problem with putting so much emphasis on institutional reform of the system of provincial government as a central approach to improving governance is that it tends to divert attention from the many other problems of governance, and serves to raise expectations about the great benefits that will accrue once the structure is changed....Improved governance requires planning based on medium and long-term consideration.... it requires planning scope that is more
comprehensive than the electoral level, or even provincial level, to take into account national priorities.

In regard to the provincial governments' input into national development priorities, Axline (1986) thinks the setting of those priorities must remain the responsibility of the national government. As discussed later, this is what the National Sustainable Development Strategy is all about.

However, because these proposals are still being heatedly debated in various forums, this paper has not attempted to analyse the development plans within the framework of the new governance reforms.

National Planning

The aim of this section is to briefly review the background of national planning in Papua New Guinea, and analyse its strengths and shortcomings, with a view to throwing some light on what might be the best choice of direction for national planning. The necessity of national planning analysis is particularly important at this stage because of the creation of a new Ministry of Planning in early August 1995. Also, the National Sustainable Development Strategy Report (UNDP 1994b) recommends that the NSDS secretariat be located within the Department of Planning. The methodology for this analysis has been through interviews with key people who were involved in the National Planning Office, and consulting papers given at the recent 21st Waigani Seminar.

The Central Planning Office (CPO) was established in 1973, at self-government, under the directorship of a Canadian, David Beatty, with Charles Lepani as Deputy Director. The Central Planning Office became the National Planning Office (NPO) at independence, and Charles Lepani became the Director. The NPO came under the Prime Minister's Department.

The staff were hired on the basis of their expertise in sectoral areas, and thus they had sectoral responsibilities in the NPO.

The coordination of foreign aid was a major function of the National Planning Office. The NPO served as a secretariat to the Budget Priorities Committee, and in an advisory capacity to the Cabinet through the National Planning Committee. Priorities were set by the National Planning Committee, not 'the planning officers who were responsible for particular departments'. It was a collective decision-making process involving input from all departments.

When the National Planning Office was abolished, there was still a need to manage foreign aid. The Office of International Development Assistance (OIDA) was created to carry out this role. OIDA had less responsibility than the NPO, and was 'upgraded' to become the third division of the Department of Finance and Planning. It was given its own secretary in 1989 (Freyne, personal communication 1995).
Planning for Sustainable Development

National Development Strategy (NDS)

Planning in Papua New Guinea is not considered as a 'comprehensive process' that is usually understood by the term development planning (Axline 1986). The origin of planning can be traced back to 1972, when the Faber Report on development strategies for Papua New Guinea was designed. A combination of the Faber Report and subsequent discussion on social development formed the basis for the 'Eight Aims'.

Two documents — the Faber Report (1973) which presents trends and national goals, and the Post-Independence National Development Strategy (1976) — have been the basis of the development policies of the 1970s and early 1980s. As listed in the Faber Report, the Eight Aims are:

1. A rapid increase in the proportion of the economy under the control of Papua New Guinean individuals and groups, and in the proportion of personal and property income that goes to Papua New Guinea.

2. More equitable distribution of economic benefits, including movement towards equalisation of income among people and towards equalisation of services among different areas of the country.

3. Decentralisation of economic activity, planning and government spending, with emphasis on agricultural development, village industry, better internal trade, and more spending channelled to local and area bodies.

4. An emphasis on small-scale artisan service and business activity relying where possible, on typically Papua New Guinean forms of business activity.

5. A more self-reliant economy, less dependent for its needs on imported goods and services and better able to meet the needs of its people through local production.

6. An increasing capacity for meeting government spending needs from locally raised revenue.

7. A rapid increase in the equal and active participation of women in all forms of economic and social activity.

8. Government control and involvement in those sectors of the economy where control is necessary to achieve the desired kind of development.

A white paper outlining a National Development Strategy (NDS) heralded an attempt at programming for development through the integration of budgetary and planning systems. The two major thrusts of the policy were rural development (particularly of less developed areas), and development of Papua New Guinea's natural resource base to provide for full economic self-reliance (Lcpani 1990).

It is important to assess the NDS in its historical context. Although the strategy sets out a framework for 'the economic aspects of the nation's development' (National Planning Committee 1976), it acknowledges that other aspects of development are equally important. Thus, the following goals were considered prerequisite for social and cultural development:

- an increase in the range of goods and services available to the people of Papua New Guinea; and
existing inequalities in the distribution of goods and services are reduced.

The post-independence National Development Strategy (1976) set out the eight goals in more detail and also offered the key policies and programs to implement such strategies. The strategy called for ‘a high proportion of the nation’s resources to be directed to rural areas’. Economic policies in the strategy were ‘designed to assure an adequate and even flow of resources to support the key programs of the strategy. Thus, the strategy called for the promotion of several natural resource projects in order to raise the internal revenue’ (National Planning Committee 1976).

In fact, the eight aims could be considered as the first attempt to formulate a strategy for development (ibid.). However, their usefulness was limited because they were not a clear statement of objectives to be used as a guide to action or foundation of specific policies.

The National Development Strategy was a broad outline of policy guidelines for various sectors of the economy. The strategy in a sense was designed to pursue the broad objectives of the Eight Goals and National Directive Principles of the Constitution, and was a short-term instrument for long-term goals. Axline (1986) remarked that the strategy provided a very broad statement of policies which had to be implemented through a consistent policy-making process — the National Public Expenditure Plan (NPEP).

Expenditure planning was based on an annual three-year rolling exercise called the NPEP. It was adopted as the tool for assuring that growth in expenditure was directed towards activities which the government had designated as having high priority in the National Development Strategy (ibid.).

Lepani (1979) outlined the basic aims and scope of the NPEP:

The NPEP aims to link the planning process with the macro-economic policy and budget, to direct public spending to activities of highest national priority to implement the NDS, and to monitor the implementation of the projects.

Through the NPEP, the planning process achieved its aims, and resulted in a ‘greater degree of coordination between political and bureaucratic decision-making bodies (ibid.).

For example, a department would request the National Planning Office to call a meeting. After that, the Ministers would be well briefed on the matters to be discussed. When the matters came before the Cabinet, all of the members knew about them. However, that process no longer exists, and departments and Ministers do not communicate on policy matters now.

The first Secretary for Finance after independence, Sir Mekere Morauta, at the recent 1995 Waigani Seminar, summarised the achievements of the NDS and Eight Aims in the first ten years of independence as:

- increased Papua New Guinean control over the economy;
- a progressive policy framework for the mining sector;
government control of the financial system and natural resources;
- an increase in the general level of welfare, with life expectancy rising from
  40 years (in the 1970s) to 50 years (in the 1980s);
- establishment of provincial governments — decentralisation; and
- significant progress in achieving national self-reliance (Morauta 1995).

Morauta’s observation of achievement of the Eight Aims during the second decade of
independence is that ‘economic growth in all sectors apart from mining, petroleum and
forestry has been stagnated, with an indication that the general level of welfare has
‘slipped’ (ibid.).

One of the shortcomings of the system was perceived to be an increased amount of
administration and the transfer of authority from line departments to central agencies.
It was not as much an increase in administration, it was more of a different approach to
it. It promoted sectoral program planning, based on consultation and coordination as
opposed to strictly administering functions of line departments. The increased
paperwork was to ensure accountability, and this frustrated those people who wanted
to take ‘short cuts’. The 1993 World Bank report stated that the NPEP led to the
domination of central agencies such as the National Planning Office, the Department of
Finance, and the Public Services Commission at the expense of weakening the line
departments’ capabilities in planning and personnel management (Axline 1986).
Perhaps this was avoidable.

In response to the NPEP’s shortcomings, steps were taken to reform the planning
process in Papua New Guinea. Basically, the aim was to move away from ‘purely
expenditure planning on a three-yearly basis’ to a system of Medium-Term
Development Planning (MTDP). The National Development Plan became the central
instrument of this new planning process, and consisted of two interrelated parts — a
Medium-Term Development Strategy (MTDS), and a Medium-Term Development
Program (ibid.).

The Medium-Term Development Strategy was more of a general framework which
allowed flexibility in budgeting. The MTDS operated on an annual cycle, while the
NPEP system was a three-year rolling cycle in which the budget became part and
parcel of planning. The NPEP system impinged on the budget, whereas the MTDS
was a framework through which the annual budget was prepared. However, there was
no commitment, and it can always be referred to. It just continued to narrow the
perspective of planning, budgeting, and policy development. The MTDS did not, in
the end, allow for either medium-term or long-term policy setting. Worse still, policy
planning was totally ignored and replaced with annual accounting and annual
budgeting (Lepani, personal communication 1995).

Revival of the Need for National Planning in the 1990s

The response to the World Bank Mission in 1981 was the Strengthening National
and Provincial Economic Management (SNAPEM) project. This was implemented in
two phases between 1984 and 1993. The first phase led to the establishment of the
Program Management Unit (PMU) in the mid-1980s, in order to formulate an
administrative reform process that was appropriate for Papua New Guinea (The
National Planning in the 1990s

The program succeeded in creating a planning process — the Resource Management System (RMS). The installation of the RMS progressed through some of the provincial governments.

The second phase of SNAPEM led to the establishment of the Project Cycle Unit and Program Budgeting System by the Department of Finance and Planning. In 1990, the Policy Coordinating and Monitoring Committee (PCMC) was formed. In the same year, the Department of the Prime Minister and the National Executive Council (NEC) convened a week-long workshop of provincial planners in Port Moresby. It was subsequently decided to make this meeting an annual event.

At the fifth provincial planners' conference, in 1994, in Goroka, the need to create (or rather resurrect) a National Planning Office was discussed. Concurrently, the Bipartisan Parliamentary Select Committee on Provincial Government, which was established by the National Parliament of Papua New Guinea in 1993, recommended that the national planning function be separated from the finance function in the current Department of Finance and Planning and that 'a Department of National Planning be established to be responsible for national and provincial planning in the country'. Further, the committee recommended that 'the Resource Management System (RMS), as a home-grown planning system, be adopted as the national planning and public administration system by all national and provincial departments and that the program budgeting system and the basic minimum needs system be integrated into the RMS system' (ibid.).

In May 1994, the Wingti-Chan government proposed the creation of a National Planning Department, thus transferring the planning functions from the Department of Finance and Planning, the Department of Personnel Management, the Department of the Prime Minister and National Executive Council, to the Department of National Planning.

Then there was a proposal before the NEC, from the Chan-Haiveta government, for the 'establishment of a Planning Secretariat in the Department of the Prime Minister and National Executive Council' (from the proposal to the National Executive Council, November 1994). The document states that Papua New Guinea's budget is based on 'purely financial considerations', with no monitoring body to ensure that it is driven by planning. The document, which refers to the abolished Policy Coordination and Monitoring Committee (PCMC) and its secretariat, by the NEC (NEC decision NG 15/94), notes that the PCMC succeeded in establishing practical systems in the past two years to:

- provide local-level information for planning;
- bring together planners from line departments and operating agencies; and
- provide policy input on a range of activities and policy issues.

Further it is noted that the available expertise and experience of the PCMC has been taken into account in drawing up this proposal. It has proposed a Planning Secretariat which will be responsible for the development of national policy as well as national and local-level planning and implementation. The objective is 'to bring together a small team of talented bureaucrats and a professional secretariat service team as a 'Core Planning Secretariat' which will be a permanent body empowered to design and implement long-term national planning' (ibid.). It has also proposed that the Office of
International Development Assistance (OIDA) be brought 'intimately into the planning process' (ibid.). OID was abolished in November 1994.

The uncertainties about the nature and location of the National Planning Office led the government to approach UNDP, early in 1995, 'to advise government on a suitable national planning model for Papua New Guinea' (written communication from UNDP to the Director, NRI). In response to this request, UNDP commissioned a study team comprising two consultants, in May 1995. The team's recommendations are discussed in the following section. The final UNDP report is scheduled to be handed to the Minister for Planning, Moi Avei, early in November.

Draft Report on 'Support to National Planning'

The UNDP team prepared its first draft of the National Planning Report in early July 1995. The report recommended three possible options for a future planning framework (ibid.):

1. Relocation of the National Planning Office under the Department of the Prime Minister and National Executive Council;
2. Elevation of the current Planning Division in the Department of Finance and Planning to National Planning Office status, with a separate State Minister; and
3. Maintaining the present structure as in the Department of Finance and Planning, without a separate State Minister and State secretary.

The first draft of the UNDP Planning Report (1995) does not seem to be very aware of the National Sustainable Development Strategy (NSDS) process. Some of the UNDP officers who have been involved in that process, have observed the uncertainties in the nature of the proposed National Planning Office, by consecutive governments, and have shown concern that there will be an overlap of functions and roles of the proposed NSDS Secretariat and the National Planning Secretariat. Surprisingly, the draft report does not seem to have considered the NSDS, or perhaps there has been a lack of interest in relating planning to sustainable development principles.

Because the NSDS proposal and the Draft UNDP report on planning both originate from the UNDP office, it is vitally important that all who are involved compare notes and discuss the issues in a more holistic approach.

On the international level, the Papua New Guinean Government is committed to the UNCED '92 Conventions and the plan of action — Agenda 21. The theme of the Earth Summit — sustainable development — is very similar to the directive principle in Papua New Guinea's Constitution. Thus, the choice of sustainable development as the guiding principle for national planning would be a logical course of action. Countries such as Bolivia have created a Ministry of Sustainable Development, which is responsible for general planning in the country, and acts as the coordinating instrument. This paper shows that the sustainable development process in Papua New Guinea has been painstakingly slow, and more importantly, it has had no influence on overall development planning.
The lack of sensitivity of the draft report to a sustainable development approach became obvious when the document made no mention of participation, which is the new approach to development planning. The roles of industry and business and 'consultation' with the provincial governments have been mentioned in the report. However, the most important 'players' in the Papua New Guinean context of land tenure are the landowners. There is no provision in the draft report to 'consult with the resource owners and seek their participation'. Paying lip service to this issue is simply not sufficient. Far from the popular and convenient view of some development agencies, there is a need to have an in-built mechanism in all planning levels to facilitate 'real participation' of resource owners, not just their 'involvement' in the projects that have already been decided upon by foreign agencies. One of the Directive Principles of the Papua New Guinean Constitution — the 'Papua New Guinean way' — has been totally ignored in planning. No-one claims that it is easy, but if one believes that sustaining culture will contribute to peace and stability, and if there is to be a lessening of the law and order problem and an efficient use of human resources, then it is imperative to incorporate cultural ways into modern development planning theory.

Montagu (1995), poses a fundamental question as to whether the government has a 'defined role in resource planning and management given that it has little direct tenurial control over the land'. At the 1995 Waigani Seminar, Lepani (personal communication 1995) questioned the whole basis of the current role of landowners as rent collectors and suggested an alternative of a 'real partnership in resource development'. Lepani (ibid.) perceives that the government's distribution policies are challenged by questions from the landowners as 'to what constitutes public interest, and their demands for clearer policy of both cash and non-cash costs and benefits regarding the use of their resources'.

This draft report has come at a very crucial time for Papua New Guinea, with the whole governance system being reformed. According to the new reform, which has been passed by the Parliament, the development issues will be addressed and planned on an entirely different scale and approach. The system of provincial power and finance has changed. For example, the change of electorate (community government areas) in Manus Province might be reduced from the present 16 to three. This will mean a major change in development planning. The Secretary for the Department of Manus, argues that we cannot have a national plan 'unless all the provinces combine to determine what the national plan should be' (Malai, personal communication 1995). Regarding the preferred option of the UNDP proposal for a National Planning Office, Malai does not agree with the creation of a Ministry of National Planning:

'the departments should plan for themselves. The moment you talk about national planning, you take away the responsibility of planning from the people who are part of the entire system. If we centralise planning, other line agencies will say we are not part of that'.

Malai has been critical of the launching of the recent National Health Plan in Goroka.

Lepani (personal communication 1995) points out that there was no role for provincial governments in the National Public Expenditure Plan. In the recent meeting that the Minister for Planning organised with academics, and former planning experts, the National Research Institute emphasised the sustainable development strategy — all
of these internationally, promulgated plans (the outcomes of UNCED '92) can be used. There is no need to devise a new plan, but whatever is done must be in conjunction with the provinces. NRI's advice to the Minister for Planning is for the National Planning Office to concentrate for the next two years on increasing the planning capacity of the provinces, so that later on it will be possible to incorporate their plans into national development planning. Lepani agrees that the new governance system is another reason for strengthening the capacity of provincial planning. Approximately 80 percent of the budget will be diverted to the provinces, so it cannot be assumed that a centralised agency can do all the national planning. Previously, the Program Management Unit within the Department of the Prime Minister used to carry out policy planning training for provincial staff. Perhaps that facility should be revived.

It is very important to look upon the draft report as one of several proposals, and a starting point for discussion of national planning. In the light of the governance reform, the draft report should be revised. The governance issues and national planning are two crucial interrelated issues which should be discussed concurrently.

National planning at this stage of Papua New Guinea's development deserves a thorough approach and should be discussed in various forums. There are sufficient prominent nationals who have extensive experience in national planning. They should work together to analyse what has already been achieved and what new approach is needed. The mistakes and shortcomings have to be discussed frankly if an effective approach to planning is to emerge.

The draft report's preferred option is the creation of a separate Ministry of Planning. It is unfortunate that the draft report has concentrated heavily on the Department of Finance and Planning. There are some government agencies such as the National Forest Authority which are seriously involved in bottom-up planning, and their efforts should be considered. They are the first to admit that lack of 'technical capacity' at the provincial and local levels makes it difficult for the national planners to find a realistic foundation for national sectoral planning. However, there is no other choice. The national system of planning should encourage this kind of approach by government departments, especially those dealing with natural resources.

During an informal meeting at the National Research Institute to discuss the UNDP draft proposal on the National Planning Office, opinion was that those UNDP recommendations advocating the involvement of the Prime Minister's office under all options, tend to encourage a top-down approach to planning. Planning should be elevated above budgeting which in turn should be guided and driven by a proven perceptive plan — perhaps the NSDS. The Economic Studies Division of NRI proposed the establishment of an autonomous National Planning Commission or National Planning Council, chaired by the Minister for Finance, and comprising distinguished citizens with experience and vision in the public and private sectors. That Commission or Council would direct and oversee the work of the National Planning Secretariat, which would be headed by a Director General who would be assisted by Directors in the areas of policy and project planning, impact evaluation, monitoring, and sustainable development advisory services.

However, the government announced the creation of the new Ministry of Planning. The new Minister for Planning, Moi Avei, calling for a participatory meeting of academics, planners and former senior public servants to discuss national
planning believed this to be a good start to planning. He is of the opinion that we have
to call people together, no matter how long it takes to get results. If there is a
consultative process, there will always be a good outcome.

During the discussion concerning which functions the Ministry of Planning should
take from the Department of Finance and Planning, and the Department of the Prime
Minister, the Minister was advised that he should strategically position himself at a
political decision-making level. He should revive what was the National Planning
Committee and 'own' it (the National Planning Committee used to consist of the Prime
Minister, and the main sectoral ministries, but since 1980, it has been the Prime
Minister and the coalition party leaders). That coordination at the political level,
would provide the impetus for everything else. Planning must be revived within the
national decision-making committee.

Although the necessity of planning on an integrated basis has been realised by
recent consecutive governments, its coming to form is still at a 'fluid' level. During
the past year, proposal after proposal has been placed before the NEC. The latest
proposal (November 1994) seems to have acknowledged the past two years work in
policy and planning and has the ingredients for success. However, its coming to
being, location (whether in the Department of Finance and Planning or the Department
of the Prime Minister), and subsequent effectiveness might be an administrator's
nightmare. This restructuring of planning has come at a time which coincides with the
abolition of the provincial government system. Thus, it is of the utmost importance
that any new national planning initiative identifies and establishes mechanisms to
facilitate local and district-level participation in the planning process. Efficient
channels of communication must be sought and strengthened.

Some of the latest planning tools are examined in the next section, and several
sectoral plans are also discussed.

Land-Use Planning: PNGRIS Update

In terms of land-use planning, the Papua New Guinea Resource Information
System (PNGRIS) has been updated during the past three years. The PNGRIS update
is one of the technical tools used to assist planning.

On 22 June 1995, PNGRIS handed over 50 years of data collection surveys of land
use in Papua New Guinean to the Papua New Guinean Government. The PNGRIS
team leader, McAlpine, in his address to the technical meeting in June 1995 explained
that Papua New Guinean is one of the most resource information rich countries in the
world. The surveys date back to the 1950s and 1960s, and have cost a considerable
amount of money. For example, K12 million was spent on the Madang Province
survey. However, that kind of money is not available any more. The problem with all
the information that was gathered was that it was stored in various government
departments. Thus, in an operational sense, it was not very useful. In 1980, the
Department of Primary Industry initiated the idea of combining all the data from the
20 years of surveying of land. In 1980, a series of books on vegetation, land use, and
rainfall were written, and maps were produced.
At the same time, the GIS (which was user-unfriendly) was used by scientists. The CSIRO tried to put all the information within its mainframe computer programs (GIS). Thus PNGRIS, as a means of integrating all information, was created. Vanuatu and other Pacific countries have their own versions of GIS. About 5,000 Resource Map Units (RMUs) in the country were produced and installed at 11 agencies.

The development of the PNGRIS involved 10 government departments and one provincial department. The Vice-Minister for Agriculture and Livestock commented that:

Too often, we have seen agriculturalists and foresters go their own ways in planning with environmental planners coming in between. I am sure the PNGRIS will now allow for a more systematic and coerced approach to planning development projects (Genia 1995).

Some examples from the PNGRIS database which have contributed to the success of specific projects are:

- Intervention programs sponsored and managed by the Department of Agriculture and Livestock, in particular, the agro-ecological zoning of the whole country as the basic framework for designing programs;
- Drafting and assessment of forest logging plans, notably the development of provincial forest plans, with the first having been compiled for Madang;
- Designing of a framework for the most recent National Nutrition Survey relying on an ecological zonation compiled from PNGRIS;
- The Department of Environment and Conservation has determined conservation needs areas based on the natural resource data and is assessing the sustainability of resource use in forest logging and agricultural areas; and
- Commercial uses of PNGRIS up to the present include planning of the oil pipeline from Morobe to Kikori, and alignment of roads from Nebilyer to Mendi and Kutubu. Currently, several options for the alignment of a gas pipeline from the Hides field to the coast are being assessed through use of the PNGRIS database (ibid.).

Population

The 1980 and 1990 National Censuses' population data, as well as census units, indentify male and female totals, and were included on those land-use data.

One of the intriguing things to come out of these data is that, if we go back to a land-use map, it shows that land-use has been intensified. This has great implications for national planning.

Most of the 65 percent of the people who live in the steep land do so for reasons such as tribal disputes, subsistence farming, or security. Most food crops in Papua New Guinea are root crops and don't like 'wetness' (except for taro). Thus, people have to condition themselves to hillside environments. The most populated wet area is in 'wallala' where there is sago and fishing (in Gulf and Sepik Provinces).
Population comparison between 1980 and 1990 shows that people are leaving the hillsides and steep areas. This is important for national planning.

The 500 000 scale maps were produced for national use. In the past three years, much more detailed information in the following three major areas has been produced:

- in forestry, up to 100 000 scale;
- for provincial planning, 50 000 scale (this is not possible for the whole country, but Madang Province has been prepared as an example of what can be done); and
- the environment.

Only 13 percent of the land is used. Seventy-five percent of the land is forested. Although, only 20 percent of the land is in the highlands region, 65 percent of the country's population live there.

Population and Environment

The following facts can be obtained from PNGRIS:

- overall national and provincial population, land-use, and percentage graphs;
- comparison of land-use intensity in various landforms and altitudes (tables and graphs are available); and
- intensity of population and area, province by province.

The land-use planning and environmental planning have traditionally been separate and have been approached from different perspectives. However, the new trend is towards integrated planning, based on a particular resource, or geographical area (AusAID 1995).

Forestry Information

For more detailed provincial planning concerning forests, a complete new series of aerial photographs for vegetation mapping was used. Approximately 62 types of vegetation were identified, with 32 being forest types.

In order to determine species and volume of each forest type, there was a need to carry out field sampling which would have taken five years and cost some K20 million. Instead, CSIRO looked at the information that was already available, and data from logging companies. Obviously, there were areas where no information was available, for example, Telefomin. They also developed the concept of forest zones. However, the major limitation was that it was not computerised, as part of PNGRIS. The data were based on 1974 aerial photographs. Since then, there has been a lot of logging, and it is important to incorporate all changes. PNGRIS is not 'static'.

At the request of the Department of Environment and Conservation, a map of 'Biodiversity Priorities for Papua New Guinea' which was prepared by the Conservation Needs Assessment (CNA) project of NFCAP, also has been overlayed on
PNGRIS. However, that department and the National Forest Authority have to discuss their overlapping interests in a realistic fashion. In some cases, after overlapping the CNA major forest area, there will be hardly any production forest left.

One of the achievements of the PNGRIS has been the setting up of a 'User Group Committee' comprising personnel from the Department of Agriculture and Livestock, the Department of Environment and Conservation, the National Forest Service, the Papua New Guinea Electricity Commission, the University of Technology, the University of Papua New Guinea, the National Research Institute, the Australian International Development Aid Bureau (as of 1995, AusAID), and the Commonwealth Scientific Industrial Research Organisation (CSIRO). The committee is in the final stages of producing a policy for 'The Use and Distribution of the PNGRIS', as well as a users' guice. The PNGRIS process has achieved interdepartmental cooperation on a technical basis, and it is now important to make that work on a policy formulation and planning basis.

It is imperative that everyone at all levels of planning — local, provincial, and national — is aware of the existence of that information and finds ways of making full use of it. The agency responsible for developing this information is the Rapid Resource Assessment (RRA) project of the National Forestry and Conservation Action Plan. There has been a considerable amount of training of national personnel, by CSIRO in Australia, to enable them to work with the system. Also, there are plans to make the PNGRIS available for provincial planners, and this commenced with a workshop in early 1995, in Madang. District managers and departmental representatives were invited to participate in this workshop.

CSIRO has prepared a paper which focuses on several issues relating to the institutional capacity for implementation of this system (Montagu 1995). However, it is important not to overestimate the utility of the automated planning tools such as the PNGRIS. The success of such a system is 'contingent on its compatibility with existing planning procedures' (Montagu, personal communication 1995). Prior to the PNGRIS update, information existed in a variety of forms in different sources, but now it is possible to 'integrate information' in a much more concise manner (ibid.).

National Forest Plan

The National Forest Policy (Ministry of Forests 1991), in Section 3(b), states that 'the forest resource of Papua New Guinea shall be managed and utilised in accordance with government programs embodying the principles of sustained yield management as presented in this policy and development guidelines set out in the National Forest Plan'.

Section 3(c) of the policy states that the National Forest Plan 'shall designate the potential of each province' (ibid.).

However, in view of promoting the bottom-up planning process and the fact that the Papua New Guinea Forest Authority would like to know 'what the landowners want', rather than giving then a provincial plan which is based on the National Forest
Plan, the National Forest Authority has spent 1994 in strengthening the Provincial Forest Management Committees and in the preparation of provincial forest plans. It is envisaged that by the end of 1995, 'some form of provincial forest plans for all 19 provinces will be available as a basis for the preparation of the National Forest Plan' (Everts, personal communication 1995).

**Provincial Forest Plans**

Preparation of provincial forest plans by the Provincial Forest Management Committees has been perceived as one of the strategies for achieving the objectives of the forestry policy. Provincial Forest Management Committees' functions and responsibilities are delineated in the forestry policy (Ministry of Forests 1991: 56-57). Each committee shall consist of eight appointed members — a representative of the National Forest Service, a provincial government representative, Members of Parliament from the province, representatives of landowning groups, and a nongovernment organisation representative. These committees are already beginning to form in West New Britain, East New Britain, and Morobe Provinces, while the committees in Madang and Oro Provinces have already met. The committees are structured in such a way as to allow communication between non-government organisations, landowners, and the government, which will 'reduce the influence of provincial politics' (Warra, National Forest Authority, personal communication 1994).

The initial approach to preparing provincial forest plans lacked an important segment — landowners' participation. Therefore, a new approach was proposed by the National Forest Authority (1994), altering the provincial forest plan from a 'specific forest use plan' to a broader base which is a provincial government's preferred forest uses, based on defined priorities for potential forest benefits. However, this new approach would not determine specific boundaries, or develop utilisation schedules.

In consultation with other government agencies such as the Department of Environment and Conservation, a pro-forma Provincial Forest Plan has been prepared, which, after the National Forest Board's approval, will be used by the Provincial Forest Management Committees as a basis for their provincial forest plans. The Papua New Guinea Forest Authority will also provide them with PNGRIS 'digitised' maps (the current PNGRIS data has to be digitised). The Papua New Guinea Forest Authority has requested that the RRA (Rapid Resource Appraisal of NFCAP) be extended to carry out this task (Kari, planning divisional manager, personal communication 1995).

The Papua New Guinea Forest Authority has realised the 'lack of technical capacity' in the Provincial Forest Management Committees. Thus, it will have the initial responsibility of providing such expertise (Everts, personal communication 1995). The National Forest Authority will provide the provincial committees with the necessary guidelines, PNGRIS digitised maps, and codes of practice (this has been prepared in consultation with the Department of Environment and Conservation, the Department of Agriculture and Livestock, and other relevant agencies, but it would have been ideal if the industry was included. After all, the full partnership will result in more cooperation in the industry) to assist the provincial planning process (Kari and Everts, personal communication 1995).
National Forestry and Conservation Action Program (NFCAP)

The Papua New Guinean Government acknowledged the need for changing forest policy (recommended by the Barnett Commission of Inquiry in 1989) and requested the multi-disciplinary review mission under World Bank leadership in 1989. An action plan was prepared and approved by the government in 1990. Donors pledged swift support for what has become known as NFCAP, which aims to provide the political, social, and technical arguments for sustainable use of the nation's forests (NFCAP 1994). The NFCAP Steering Committee decided that, as NFCAP comprises quite a number of projects, it is more appropriate to call it a 'program' than a plan (Filer, personal communication 1995). Some 26 projects are listed under the program, and several of these have already been completed.

A review of five years of NFCAP's operation was carried out in September 1994. This lack of coordination in natural resource use planning has been referred to in the NFCAP review report and they recommend that a strategic planning function within government be established to integrate the National Sustainable Development Strategy process (UNDP 1995a). This paper does not intend to evaluate NFCAP in any way. However, the author submitted a brief critique to the review team, which highlighted that most of NFCAP’s tasks have been on the policy formulation and planning level. That should be allowed to evolve. What is needed now is on the other end of the scale — tasks associated with work in the field, and the people.

The NFCAP review (1995) recommends that NFCAP Phase II requires a 'strong and explicit political commitment to sustainability and conservation in the forestry sector'. It is important for the donors for NFCAP Phase I to consider that most of the needs are in the following forestry areas:

- monitoring forestry practices;
- replacing logging with forest management — application of current forestry management plans;
- training of forest managers who know how to deal with people (resource owners);
- focusing seriously and systematically on alternative forest use with economic benefits, for example, ecoforestry and ecotourism; and
- resource owners should become true partners in forest development. The concept of merely resource owners' involvement, as so often used by donors, is not sufficient (Nadarajah 1994, submission to the NFCAP review team).

There should be a major departure in planning for NFCAP Phase II. Donor agencies should consult with the National Forest Authority very closely at this early stage about the needed area of capacity building in forestry, rather than following what they perceive to be the needs of NFCAP Phase II. Unlike 1990, when donors had to decide on a program (because the National Forest Authority did not exist), the national forestry administration is established, and together with the National Forest Board, are very much in control.

One example of lack of consultation during the project design in 1990 was the Landowner Awareness project which, instead of being one of the first NFCAP projects it suffered long delays by Deutsche Gesellschaft für Technische Zusammenarbeit
(GTZ). By the time the Landowner Awareness project became functional, the rest of the NFCAP projects were nearing completion. NFCAP Phase II has to learn from projects with overambitious goals, such as the Ecological, Economical Social Sustainable Tropical Rainforest Use (EESSTRU) project which was left incomplete. Some components were either unachievable within the given period of time, or were not realistically planned according to the need and capacity.

In order to facilitate participation and integration, a steering committee was assigned the coordinating function of NFCAP. The steering committee was established in late 1990 and comprises representatives from the Department of Environment and Conservation, the National Forest Authority, the Provincial Forest Management Committee, the Department of Agriculture and Livestock, the Department of Finance and Planning, the Office of International Development Assistance, the University of Papua New Guinea, the National Alliance of Non-Government Organisations, and the Technical Support Project. However, there are no resource owners, donors or industry representatives. The NFCAP review perceives that the steering committee has not been 'active enough in providing clear direction to the lead agencies and the Technical Support Project'. This has been because of 'poor attendance of some members of the committee, often the result of competing demands on time' (ibid.). This is an important lesson for the NSDS which also has been proposed to be coordinated by a 19-member steering committee. Why fall into the same trap twice?

The NFCAP review, realising the importance of integration of planning for forests under the NSDS, recommended that 'cooperation for NFCAP should be closely linked into the national approach to sustainable development; that is, incorporating NFCAP into the coordinating unit responsible for developing NSDS, with an appropriate senior, in-line coordinator. Secretarial or technical assistance could be provided to this office through NFCAP' (ibid.).

This recommendation is a double-edged sword. On the one hand, it follows the logical path of sustainable development thinking, while on the other, it has trusted the fate of NFCAP to a void, because the coordinating unit for NSDS (as it has been referred to by the NFCAP review) does not exist yet, and awaits a government decision on the form of its national planning mechanism.

National Environment and Conservation Plan

The Department of Environment and Conservation completed its strategic plan in 1992. The National Executive Council then directed the department to prepare a 'National Environment and Conservation Plan'. It was envisaged that such a plan would aim for implementation in 1993 (Government of Papua New Guinea 1992). Normally, one would assume that the formulation of policy comes first. Then the plans to achieve the policy and the strategy and mechanism to implement it would follow. However, the Department of Environment and Conservation has chosen to prepare a 'strategic plan' as the first step, and then to try to develop a National Environmental Plan. In 1995, the department is still in the process of formulating the plan (Department of Environment and Conservation, personal communication 1995). The rationalisation program, which was part of the government's 1995 budget strategy, puts the very existence of the DEC in the balance, with the department being
directed to 'review its functions and report back to the Cabinet in June' (Post-Courier, 8 March 1995). Also, it was stated that there might be a 'decentralisation of DEC's functions to the provinces' (ibid.). However, how these changes will affect the NSDS Steering Committee (which is headed by the Secretary for Environment and Conservation) remains to be seen.

A great deal has been already prepared for Papua New Guinea in the area of environmental management planning. It is time to take stock of policy planning and select the elements which will enable the country to effectively implement those policies. The environmental management program suggested by UNEP in 1986 should be examined. The UNEP-Government of Papua New Guinea study carried out in 1986 categorises the nation as a country which needs to integrate environmental considerations into the planning processes, preferably in the early stages of development planning.

The study also states that 'the development planning process in Papua New Guinea is quite sophisticated'; the problem is to 'deliver effective environmental management, on the ground'. The study proposed eight projects for increasing expertise and departmental capacity building — projects which were aimed at strengthening the Department of Environment and Conservation. There has been no follow-up of those proposals although the donor support was there (Ellyard, personal communication 1994). In 1995, the Department of Environment and Conservation is still heavily involved in planning for departmental strengthening.

Planning for Sustainable Development: The Global Experience

The essential link between the environment and development was the principal theme of the World Conference on Environment and Development held in Stockholm in 1972. The Brundtland Report for the World Commission on Environment and Development (1987) made it clear that the transition to sustainable development is equally important for developing as well as more industrialised countries. The United Nations General Assembly responded to the recommendations of the commission and agreed to hold a global conference on environment and development (UNCED or the Earth Summit as it became known) in Rio de Janeiro, Brazil, in June 1992.

By participating in negotiations for conventions on Climate Change and Biological Diversity (and signing them), and sending delegates to some of the Preparatory Committees (Prep Coms), Papua New Guinea has fulfilled its obligation as a member of the United Nations. The commitment that Papua New Guinea made at UNCED '92 — to implement measures for achieving sustainable development — encouraged the government to organise a Post-UNCED seminar in November 1992 in Port Moresby.

More than 180 nations at the Earth Summit (UNCED '92) agreed to treat the environment and development on an equal basis. After two years of painstaking negotiation, their decisions were summarised in 'Agenda 21', which is a comprehensive international agreement that provides a framework for action to integrate the environment and development. Agenda 21 calls for new efforts to build national capacities, and it assigned UNDP a lead role in this initiative. Traditionally, the government treated UNDP as a 'slush fund'.
Capacity 21's approach is to be catalytic and innovative. Capacity 21 is a major UNCED follow-up fund which the United Nations created. After two years of operation, Capacity 21 held a meeting of all its advisers in order to review its direction and effectiveness in being 'catalytic' in sustainable development initiatives around the world. The following experiences are from two countries that have Capacity 21 programs and which are moving away from central command and central economies to economies with a degree of decentralised governance. This decentralisation of governance becomes fundamentally important in making the changes needed to achieve sustainability.

Malawi

Malawi has embarked on a nationwide strategy of decentralisation. They have completed their national environmental planning and intend to implement these plans at the district level. Six pilot districts have been chosen. The government is now preparing to build its needed district capacities to implement the plans (which is in line with Momis's thinking that Papua New Guinea needs capacity building at all levels of government). Through various ongoing national conferences, seminars, and workshops, the government wants to make sure that before they have a policy, they have consensus from the people. Therefore, they have placed an emphasis on people's participation before the law is adopted. An expressed intent has been to find the means of linking traditional local systems of decision making to district and national government (UNDP 1995b).

Bolivia

The Bolivian Government has demonstrated overwhelming support for decentralisation by providing funds and institutional power at the local level. State reforms include a reduction in the number of Ministries by about fifty percent and concentration of the development activities in three functional departments — Sustainable Development and Environment, the Ministry of Economic Development, and the Ministry of Human Development. A new national law of popular participation has been passed (with the effect of transferring funds and power, to manage these funds, from the national to the local level). They also have a severe shortage of both government and local capacity to manage new systems, and this has to be realised in their capacity building programs.

Initiatives in Bolivia appear to be signalling the beginning of a new era in linking the environment and development. The essential links between the environment and development were the principal themes of the World Conference on Environment and Development held in Stockholm in 1972. After Stockholm, many countries established Ministries for the Environment. The last two decades have witnessed the growth of such departments around the world. However, after UNCED '92, people are thinking more about integration of environmental issues into mainstream economic policies, rather than having a separate department for it. At a time when the Department of Environment and Conservation in Papua New Guinea has been asked by the government to review its functions, with a view to decentralising some of them to the provinces, it is important to delegate or integrate its major functions to key departments, rather than abolishing or reducing the department's responsibilities.
Planning for Sustainable Development

Papua New Guinea's Experience of Planning for a National Sustainable Development Strategy

Planning for a National Sustainable Development Strategy (NSDS) in Papua New Guinea did not originate from local need; it was a response to a global strategy — the UNCED '92 principles. The post-UNCED seminar that was organised by the Department of Environment and Conservation and the Department of Foreign Affairs recommended the start of the NSDS process, by setting up the steering committee. The main sub-themes of the 1993 Waigani Seminar were based on the action areas suggested in Agenda 21. The seminar transcended its academic tradition, and was structured in such a way as to provide participation of agencies involved in local and provincial development projects. However, after this seminar, the trend continued on a national level.

The initial stage of the NSDS commenced immediately after the Waigani Seminar, in August 1993. The four-month United Nations mission, through consultation with various levels of decision-making bodies and non-government organisations, prepared a policy paper for submission to the National Executive Council. The paper was endorsed by the NEC, which also approved the establishment of the NSDS Steering Committee (with interdepartmental members). One of the major functions of the committee was to 'prepare for consideration by NEC, by the end of 1994, a proposal for a NSDS Commission, with functions set by the NEC' (NEC Meeting No. 16/1994).

During the period of submission of the policy paper to the Cabinet — from the beginning of 1994 until August 1994 — very little was said or done about the NSDS. After the NEC decision, it was anticipated that the government departments (especially those dealing with resources such as agriculture, fisheries, and forestry) would start preparing for formulation and the eventual implementation of such a strategy. However, that was not the case. Instead, there was a feeling of 'wait and see' experienced by concerned people. There was also an additional concern that the initial centre recommended for NSDS had changed from the Project Coordination and Monitoring Committee (PCMC) to the Department of Environment and Conservation. Finally, the United Nations Development Program (UNDP), which is the agency responsible for action on Agenda 21; that is, the plan of action for the Earth Charter of UNCED '92, facilitated the second United Nations mission.

Another interrelated major event was a national workshop on the 'Papua New Guinea Biodiversity Country Study' which was held in August 1994, in Madang. The Department of Environment and Conservation commissioned some 20 institutions, in early 1994, to carry out the Biodiversity Country Study for Papua New Guinea. The study was submitted to the Conference of Parties on Biodiversity Convention in December 1994, in the Bahamas. The workshop expanded its agenda to cover a 'Workable Conservation Strategy for Papua New Guinea'.

In his keynote address to the Biodiversity Country Study workshop, Sir Barry Holloway (the head of PCMC), proposed a practical way of achieving sustainable development:
It has to be done, people to people. We have to change the attitude of mind of planners and managers. Planners and academics have to get a bit of dirt on their hands. That will make them better planners, and educators. It is important that the planning tools already in existence and the full potential of the relevant legislations are realised by all.

During the discussion in the policy and planning group of the workshop, the connection between and relevance of the Biodiversity Country Study to the National Sustainable Development Strategy were realised by many participants. It was suggested that most of the planning tools already exist, with land-use planning having been updated through the PNGRIS database. Also, the Department of Village Services and Provincial Affairs will overlay their community information on the PNGRIS system. Funds are needed to create a secretariat which will coordinate (network) the current plans and eventually prepare the way for a Commission on Sustainable Development to be established. It was expressed that there are enough Papua New Guineans who are capable of running the secretariat. This thinking is very much in line with the need for a new approach to development aid cooperation which the UNDP referred to in its 1994 Human Development Report. The report highlights that:

ninety percent of UNDP’s US$12 billion annual technical assistance budget is still spent on foreign experts despite the fact that national experts are now available in many fields (UNDP 1994a).

The South Pacific Regional Environment Program (1994) reports that at the regional level (Pacific):

there is an expanding pool of local experts who are highly qualified within the island countries. It is not appropriate any longer to automatically look to expertise from outside (ibid.).

Papua New Guinea made some progress in addressing this issue by having an ‘all national’ review team for NFCAP in 1994. It is hoped that this sets a precedent for other similar activities.

Second Mission for the NSDS

However, the UNDP mission comprising seven international and two national consultants and one national adviser started their six weeks work in mid-August 1994, and organised several working groups in various parts of Papua New Guinea, dealing with issues such as policy and planning, enabling government, managing Papua New Guinea’s assets, and people’s participation.

The working groups’ reports were presented at the public seminar at the Administrative College in Port Moresby, in September 1994. During discussion in the seminar, the head of the United Nations mission explained that Papua New Guinea had to decide on the course of action it wants to take with regard to the NSDS or establishment of the Commission on Sustainable Development. Some countries, such as Pakistan, decided to start at a national level. Others, such as New Zealand, did not
opt for that. Instead, the process has been initiated and strengthened by community and interest groups.

The terms of reference for the United Nations joint interagency mission’s objectives were designed to assist the NSDS Steering Committee to formulate and implement the NSDS by providing policy advice to the government in the following areas:

- integration of the environment and development at all levels of decision making;
- an integrated approach to management of renewable and non-renewable resources;
- capacity building for villages and communities;
- grassroots non-government organisations; and
- mechanisms for effective people’s participation (UNDP 1994b).

The UN mission’s report has produced a set of strategies, mechanisms, and steps to be taken to achieve those objectives (ibid.). The terms of reference reveal a strong emphasis on the management of renewable and non-renewable resources. However, one of Papua New Guinea’s major renewable resources — forests — gets minimum attention in this report, and does not even get a mention in the ‘sustainable land management’ section.

It is interesting to note that the National Forestry and Conservation Action Program (NFCAP) review which was carried out immediately after the second United Nations mission for the NSDS (UNDP 1994b), places the implementation of some of the forestry policy planning’s recommendations within the NSDS, whereas the NSDS mission has not discussed forestry!

Ironically, the meeting for the working group on ‘sustainable land management’ was held in West New Britain — a province which has committed its forest many times in excess of recommended sustainable levels of forest harvest (Nadarajah 1994). And yet, the group did not discuss forests! Neither did the report integrate forestry into agricultural activities or the land-use section. Post-logging land use is a serious problem because this hampers forest regeneration, hence unsustainable forest development occurs. What happens to the land after the loggers have finished with the forest is nobody’s concern.

Similarly, the section of the report on strategy mechanisms for ‘viable villages’ only recommends village fisheries development (UNDP 1994b). If forestry had also been discussed, the report would have drawn a parallel line between community fisheries and community forestry activities (which is perceived to be the sustainable way of forest development). There are already several community forestry projects in Papua New Guinea, and these are run by non-government organisations and communities rather than by the National Forest Authority. In contrast, the report suggests the responsible agency for community fisheries to be the (yet to be established) National Fisheries Authority (ibid.).
In the analyses and conclusions section of the report where the legal issues under "enabling government" are discussed, the *Environmental Planning Act 1978* has been the target of criticism by the report — out of 32 sections, the Act gives 15 ministerial discretions and 11 mandatory actions. The discretionary powers 'give the Minister the power to withhold information if he considers that it is in the public interest that it should not be divulged'. This is seen as a move to disempower the public. Overall, the report states that the mechanism for public participation at all levels is 'fragmented, unreliable and at the discretion of the Minister' (ibid.).

Also, the report notes that in the *Environmental Contaminants Act 1978*, there are 36 discretionary powers and eight mandatory powers out of 72 sections. This analysis is rather contrary to the popularly held opinion that environmental laws in Papua New Guinea are 'strong and comprehensive' (Papua New Guinea-UNEP 1986; Hughes and Sullivan 1989; Papua New Guinea 1991; Ellyard 1994).

The UNEP Report (1986) recognises the lack of implementation of policies, and lack of departmental capacity as the main causes of ineffectiveness of policy, rather than the environmental legislations.

A recent comprehensive analysis and assessment of environmental legislation in Papua New Guinea does not propose any specific recommendations for change to the legislation, because the whole process of development of such legislation needs a fundamental change — any change should emerge from a consultative process, with participation of stakeholders and the Department of Environment and Conservation (AusAID, 1995).

The report (ibid.) highlights the non-implementation of the three environmental Acts introduced in 1978, as the 'most striking feature of environmental legislation'. For the past 17 years, these Acts have been 'essentially dormant', and despite the widespread reporting of breaches, there have been no successful prosecutions. There have been no conservation areas declared under the *Conservation Area Act (1978)*. The report then poses a critical question as to why no steps were taken to either implement or amend the Acts. Therefore, it is a vital prerequisite for the Department of Environment and Conservation to address the question before embarking on legislative reform. The following action is suggested:

the Department of Environment and Conservation should seriously explore the reasons for non-implementation of three major pieces of environmental legislation and should draw from this evaluation key lessons for future legislative reform (ibid.).

The department's staff mainly point to faults within the legislation but have not indicated that a lack of implementation may be reflected in 'an administrative failing' (ibid.).

Ironically, the UNDP Report (1994b) refers to this point in the 'good governance' section, where the threats to sustainability are listed as economic decline after mineral boom, social disruption, and unemployment. They state that the consensus in most working groups as to why the laws in Papua New Guinea do not work is not the law itself, but the fact that no law has been given the test of time. Laws also do not work because people abuse process and preclude the laws and institutions from working.
Furthermore, after the laws are passed, practically, there is no system to implement them. The report concludes that:

unless and until these issues are addressed and some resolution of these obstacles is realised, no national sustainable development strategy will succeed, and the development of resources will continue in a haphazard and ultimately destructive fashion (UNDP 1994b).

Overall, the focus of the United Nations Report is on recommendations and strategies for the government agencies. The UNCED process taught us all at least one lesson — sustainable development is not about governments, it involves all sectors of society. The problem is not so much with the NSDS *per se*, but with the deep-rooted problem of development aid agencies, which are structured to mainly deal with governments.

The nature and shortcomings of the development agencies' practices in major resource development such as logging, fishing and mining have not been addressed in the United Nations Report. The recent World Bank Report (1995) reveals that governments and landowners in the Pacific are forsaking economic rents to which they are entitled, to logging contractors. In fisheries, a 'significant decline in coastal resources across all Pacific marine countries, and deterioration in environmental quality of coastal areas' is reported (ibid.). The report recommends urgent action to reverse this trend. Most importantly, the Department of Fisheries should shift from 'fisheries development to fisheries management' (ibid.). Indeed, this is the most neglected area of forestry, too, as there is no evidence of forest management in Papua New Guinea. So-called forestry development projects are all about 'mining the forest'.

The weakest section of the United Nations report (1994b) is 'The Way Ahead', where it sets out the functions of the NSDS Commission and the secretariat. These functions have been referred to interchangeably, but should be quite distinct. The secretariat is the temporary body whose role is to prepare the way for the Commission. There must have been some in-built indicators in the mission's report that will be used as a minimum prerequisite for the formation of the Commission, or to determine whether a Commission on Sustainable Development is the answer, and more importantly, if it would be effective.

In the policy legislation working group, the nature and possible form of the Commission were discussed at length. Most participants seemed to have difficulty visualising so far ahead, and there was no consensus among the members on these issues. However, the section of the mission's report which was devoted to policy legislation does not reflect those uncertainties. The fact that the functions of the NSDS Commission and secretariat are not set out distinctly is perhaps indicative of some degree of uncertainty about the issues on the part of the mission.

One positive outcome of the planning for sustainable development in Papua New Guinea has been the progress in the preparatory process of national policy and planning documents. A review of the initiatives towards sustainable development during the past three years shows that we have come a long way. In 1991, the National Report of Papua New Guinea (Unisearch 1991) was prepared by a single agency — the University of Papua New Guinea — which put together the 'grey materials' from the government departments. The emphasis was on policy rather than
its implementation status, and there was no focus on the reality of resource
development. The national report was merely a desk-top production.

However, the post-UNCED process and activities were more transparent and
included more interested agencies and groups by being sensitive to participants. The
first and second United Nations missions' reports were based on the findings of a few
working groups and the discussions were more focused than those of the previous three
years. The idea of sustainable development is slowly taking shape (at least for a few
minorities who took part at the national and provincial levels). There is still some
work needed at the national level and that is the awareness which has to be created
among the government departments regarding their commitment to the NSDS. The
tangible results of these commitments would be the decentralisation of functions and
funds. Government agencies dealing with resources must develop an 'integrated
understanding' of the issues involved in sustainable development. One such issue is
involving the landowners at the very start of the planning.

Now that the national sustainable development policy paper has been endorsed by
the Cabinet, a new Ministry of Planning has been established, and the decentralisation
of funds to the provinces seems to be a reality (through recent reforms), it is vitally
important that we look at the National Development Strategy and evaluate what has
been achieved in the past twenty years of its implementation. The papers presented at
the 21st Wailgani Seminar, to a large extent, analysed that.

The National Development Strategy clearly addressed economic development. If
the assumption is that the NSDS will bring a balance between social, economic and
environmental aspects of development, then it would not be very difficult for the
NSDS to build on the foundation of economic achievements resulting from the
National Development Strategy. However, based on the recent analysis by Morauta,
the 1980s period needs particular attention, as this was when planning ceased to
function. The revival of planning through the creation of a Ministry of Planning is
seen as timely, but Lepani (personal communication 1995) believes that the success of
the ministry is conditional upon how it can control the political influence, or rather,
how planning should influence the politics.

NSDS Update: After the Second Mission

Based on the recommendations of the second mission, UNDP, through a
consultative mechanism, has prepared a proposal for preparatory assistance (for a
period of one year only) to be funded by its Capacity 21 program, to 'support the
formulation and implementation of the NSDS for Papua New Guinea' (personal
communication, draft proposal by UNDP, October 1994). UNDP has approved (in
principle) the funding, and the proposal has been forwarded to the NSDS Steering
Committee. It is now with the Prime Minister's Department and OIDA, for approval.
The proposal called for the 'establishment of a secretariat to service the NSDS Steering
Committee' and a 'core team to establish a sustainable development network with non-
government organisations, local communities, and village-based governments in order
to initiate awareness and literacy programs and help communities identify their needs
and priorities for capacity building' (ibid.). It was anticipated that as soon as the
secretariat is established, the NSDS Steering Committee (whose 19 members, with the
Secretary for Environment and Conservation as chairperson, were officially gazetted in late 1994) would automatically become the NSDS Commission.

Since then, a new government has come to power, and the PCMC has been abolished. There are two proposals before the NEC:

1. The establishment of a National Planning Office within the Department of the Prime Minister. This is to revive the old National Planning Office which became part of the Department of Finance and Planning.
2. The establishment of the Planning Secretariat in the Department of the Prime Minister and National Executive Council.

Confusing? Yes! With this new proposed development in the Department of the Prime Minister, the role and functions of the NSDS Commission have to be revised, because there will inevitably be some duplication and overlap. Also, it is not clear whether the NSDS core team and secretariat will work alongside the National Planning Office or within it.

The reality is that the NSDS Commission is discussed at the same level (and in the same context) as the National Planning Office. The main objective of the NSDS is a participatory (integrated) way of planning. If that is achieved through the National Planning Office, then the NSDS Commission's existence might become questionable.

Although planning is an important part of strategy, strategy is more than a plan. It is a process of creating a long-term vision (Carew-Reid et al. 1994). The main elements of this process are:

- participation, information assembly and analysis, policy formulation, action planning, implementation and capacity building, communication, and monitoring and evaluation (ibid.).

What is missed out in their list is achieving consensus through consultation during the decision-making process. The usual workshops and seminars allow participation, but do not place emphasis on consensus of opinion. If decisions continue to be made at the national level, there will always be a problem with implementation at the local-level.

The National Development Strategy and the Eight Goals have been tried and implemented with some success and then changed to the Medium-Term Development Strategy. After three years of work through the preparation of various policy papers, documents, seminars and workshops, NSDS seems to be homeless. The interest and participation in this process has been fragmented, and no tangible outcome has resulted from the past three years of formulation.

The National Development Strategy and the Eight Goals have been tried and implemented with some success and then changed to the Medium-Term Development Strategy. After three years of work through the preparation of various policy papers, documents, seminars and workshops, NSDS seems to be homeless. The interest and participation in this process has been fragmented, and no tangible outcome has resulted from the past three years of formulation.
Any national sustainable development strategy should serve as a 'mechanism' for achieving the transition to sustainable development which requires 'nothing less than a thorough greening of political, business, and consumer mainstreams, and of the values and lifestyles' (Dalal-Clayton et al. 1994).

In reviewing the national sustainable development process in Papua New Guinea, one fact stands out very clearly — most efforts and solutions are at the national level. Although that is necessary, the challenge before the decision makers is for all action to focus on where it matters — realising and harnessing the local capacities for planning, getting their consensus on development planning, and identifying the necessary mechanisms of successful implementation at the local level. The following section delineates the justification for the need to change the direction of planning.

A Provincial Perspective: Manus Province’s Approach to Planning for Sustainable Development

Manus Province, with a population of only 32 000 might be considered as a model because it has chosen the process of sustainable development planning. Since 1985, the province's development planning has been progressive. Each five-year plan has had a specific goal, and each development plan has built on the strength of the previous plan and extended the goals to a more integrated approach. That is why it is referred to here as progressive planning.

The approach of the first five-year development plan (1984-1989) was of a centralised (top-down) nature. The emphasis of the plan was more on economic development, and infrastructure, which was achieved successfully.

One other significant feature of development planning in Manus Province has been the deliberate effort on the part of the government to review plans. Their 1989 review of the first five-year plan revealed that, despite the large expenditure on economic development projects, Manusians did not experience real improvement in the quality of life. This was a turning point for development in Manus — 'man became the object of development' (Hamou 1993).

A survey of 'basic minimum needs' for the province was carried out in 1990. The approach of the second five-year plan was to decentralise the planning process. The focus was on total human development — integral human development (ibid.).

The emphasis was on the principle of self-reliance and the use of resources for sustainable living — social development. It was realised that the institutions were in place, and that the problem was 'manpower building'.

The participatory way of planning, which was initiated in the second five-year plan, is gaining more momentum in preparation for the third five-year plan. Currently, businesses, organisations, and non-government organisations in Manus have prepared their five-year plans (1995-1999), or are in the process of preparing them for submission to the 'stakeholder groups' for consideration.
A major component of the third five-year plan will be the 'mobilisation of people to become an active force in implementing their own needs which they have identified in the second five-year plan, and implementing Agenda 21. It will take the government a much longer time, if we try to implement it ourselves' (Hamou, personal communication 1995).

The approach of the third five-year plan is to decentralise planning even further through empowerment of target groups. The emphasis and main components of the plan will be 'the environment and sustainable development'.

Numambuku Clan Development Project

This project has been selected as one of the case studies for the Capacity 21 program (UNDP 1995b), and is the case study here because of the specific features which make it unique in Papua New Guinea and Simbu Province.

The project originated five years ago, and was selected by the National Research Institute of Papua New Guinea as one which reflected local initiatives. It was presented at the 'people's participation' sub-theme of the 1993 Waigani Seminar. This seminar was part of the formulation process of the National Sustainable Development Strategy for Papua New Guinea. One NRI researcher prepared a case study of the project on the Waigani Seminar's presentation by the project coordinator, and on his own visit to the project site. The project became the subject of interest for some of the aid donors such as AIDAB (now AusAID).

The development process started with the interest of one clan member who had returned home from Port Moresby after receiving agricultural extension training. His intention was to assist people to transform their way of life. However, he knew full well that he could not (and should not) do that by himself. Thus, he played the role of a 'change agent'.

The next stage was 'provoking thinking'. The change agent went to the 'housemen', and started storytelling with the people. Eventually, the issues affecting their way of life, in health, education, nutrition and development were raised and discussed.

The following stage was when a few people started thinking and discussing the development issues, and they formed the core group.

The core group then started discussing the issues with other members of the clan. The facilitator believed that the clan was a suitable unit for a development project.

Although the Numambuku clan has a population of some 500 people, it was decided that, initially, a group of 200 people was sufficient to start with. The other reason was that the rest of the clan was geographically located somewhere else. Thus, any services, such as the water supply, had to be extended to cover their area. It was important not to spread their resources too thin.
Organisational Structure

In order to institutionalise participation, the Numambuku clan formed a Clan Development Committee with full community representation (youth, women, and churches). The committee knew that, in order to realise the economic changes envisioned in their development priorities, they had to rely on their own sources of funding. Hence, they set up a local credit scheme, which has worked very well.

Outcome

The outcome of the Numambuku clan project should be judged in terms of the strength of the process, not on how many vegetable gardens have survived, or how many fish are in the fish ponds. Some of those projects served their purpose of generating funds, but could not be continued because of lack of infrastructure. However, that was not a source of discouragement, as it broadened people's perception of sustainable development and human development. Thus, completion of the community centre took precedence over all other activities during 1994. At present, the community seems to have enough basic grounds for expanding health and other human development issues.

The recognition of the need for diversification has also been a source of generating more funds, as well as realising the need for skills and capacity to succeed in those areas such as business ventures.

Although the tangible results of the projects are important, it has been the clan's achievements in the sense of advancement through institutional (the Clan Development Committee) and social organisations (completion of the resource centre) that have been most rewarding.

Common Features of the Manus and Numambuku Development Projects

Economic Development: An Inevitable, First Phase of Development

The Manus and Numambuku projects started with economic development, but both have realised at the end of that stage, that economic development did not contribute to human development. However, considering the pre-project status of their communities, it is naive to believe that they could do much for the latter unless they had the necessary infrastructure (in Manus) and income generation (in Numambuku). Manus Province's planners realised the lack of infrastructure in their first five-year plan, while the Numambuku Clan, knowing that the provincial government would not assist them, had to think of generating cash to pay for constructing their resource centre, roads and water supply.

What is clear from the analysis of these two cases is that even where communities want to have sustainable development, they don't seem to be able to embark on balanced developmental plans. Going through the economic, social, and finally environmental phases seems to be the inevitable order. The realisation of the necessity of social human development was there, and became more obvious at the end of the
first stage in both cases. The funds for the basic minimum needs had to be generated; for the Numambuku clan, funds had to be generated, while for Manus, the first five-year plan’s budget priority was to build the needed infrastructure.

Making Participation a Reality

Another similarity of both projects is their emphasis on the principle of popular participation. One of the neglected areas in national planning is landowners’ participation in all national decisions about the resources. The landowners; that is, resource owners who own 97 percent of Papua New Guinea’s land through customary ownership, only benefit from the resource rent — royalties, levies and compensation for the use of their land by the State. They are not involved in the planning stage and in the national forum, and are not partners in development (Lepani, personal communication 1995).

Manus Province has facilitated the resource owners’ participation. In the second and third five-year plans, the ‘Manus man’ became the object of their development plan. Since 1992, they have institutionalised the participation mechanism right down to the village level. More recently, this has been achieved by following the Agenda 21 action plan, through stakeholder groups. Manus Province is serious about bottom-up planning. The sustainable development thinking is accepted by the provincial government at both the political and executive levels. It has now become the way of decision making by non-government organisations, the business community, and community governments in Manus Province.

In regard to the Numambuku project, participation was realised as one condition that can make or break a project. Hence, they applied that rule at the collection of funds stage (even some times by force), and in decision making and institutional organisation. Non-participation is considered a risk factor by the Numambuku clan; that is, those who don’t participate now may sabotage the project at a later stage. Participation solved a great deal of the clan’s law and order problems. Through participation, members of the clan have gained greater confidence in themselves and their capacity to make their lives more prosperous.

Participatory development posits that for development to be successful, the community must be the starting point (Arturo, personal communication 1992). As the community reaches towards its true potential, so will the individual members of that community (ibid.). The essential components of participatory development are grassroots participation and consultation, which means that the people who, for decades, have been the objects of development, now become its subjects.

The debate on the meaning of people’s participation focuses on whether such participation in development is a means to achieve development, or an end in itself. Okley and Marsden (cited by Burkey 1993) believe that participation is an end in itself, and that it is the unavoidable consequence of the process of empowering and liberation. In their view, the state of achieving power and of meaningfully participating in the development process is the object of the exercise.
Haq et al. (1977) (cited by Burkey 1993) provides an excellent summary of the philosophy of self-reliant participatory development.

1. The ultimate goal of development is the growth and development of the individual within the context of his or her own collective fellowship, for example, the family, the group, the community, and the nation. The measure of development is its effect on the individual and collective fellowship.

2. Development should lead to the de-alienation of the individual. He or she should feel at home with the process of development in which he or she becomes the subject as well as the object.

3. Development should strengthen the feeling of a collective personality in which men and women find, within this fellowship, their richest expressions as individuals.

4. Participation is the true form of democracy and the only way in which the individual can become truly integrated with the collective fellowship.

5. Self-reliance is the expression of the individual’s faith in his or her own abilities and the foundation on which genuine development can proceed.

Askew (1984) (cited by Burkey 1993) folds the five concepts of the philosophy into the following operational definition:

Self-reliant participatory development is an educational and empowering process in which people, in partnership with each other and with those able to assist them, identify problems and needs, mobilise resources, and assume responsibility themselves to plan, manage, control and assess the individual and collective actions that they themselves decide upon.

The Visionary Approach to Self-Reliance

A further similarity between the Manus and Numambuku projects is their approach — self-reliance was the foundation of their planning and the key factor in their success. Manus Provincial Government is ranked as one of the five high human development provinces. Obviously, it is not categorised under 'less developed areas' in Papua New Guinea. Thus, Manus did not get priority in the national budget allocation for the provinces. However, the Manus Provincial Government did not let this slow down their development plans.

Similarly, the Numambuku clan was aware of the lack of support from the Simbu Provincial Government. Therefore, as a first step, they started their credit scheme to generate needed funds for economic activities.

Commitment

In both cases, the decision makers demonstrated an admirable degree of commitment to their goals. However, this commitment does not originate from very encouraging circumstances. In the Numambuku clan’s case, it exists among the clan members, against the background of a very disappointing lack of provincial government support (even after the success of the project). In the case of the Manus Provincial Government, they seem to draw a lot of strength from their commitment.
Commitment is a very intriguing phenomenon. In both cases it seems that one does not need favourable circumstances to create it, and once it is embedded, it becomes a source of strength and determination. It is a vital factor in achieving sustainability.

**The Reality of Resource Development in Papua New Guinea**

This paper does not focus on 'development' *per se*. However, it does refer to some of the major impacts of so-called development projects.

The mining activities at Ok Tedi, Misima, Porgera, and Lihir (not operational yet) use river and ocean dumping as the main means of disposing of mine wastes in Papua New Guinea. The closure of the Bougainville mine in 1989 was to some extent the result of landowners' concern over environmental damage.

The Ok Tedi mining project has been described as an 'ecological catastrophe' (Hyman 1991, cited in Rosenbaum and Krockenberger 1993). OTML has discharged its waste (at the rate of 31 million tonnes of tailings per year) into the Ok Tedi-Fly River system. The impact of the mine on both terrestrial and aquatic ecosystems is 'indisputable'. The first 70 km of the Ok Tedi River is almost biologically dead and species diversity over the next 130 km (to the Fly River junction) is 'drastically reduced' (Rosenbaum and Krockenberger 1993).

After ten years of operation of the Ok Tedi mine, the landowners along the Ok Tedi River filed a K2.6 billion compensation claim in the Australian courts against the mine owners (Hayes and Mowbray 1994). The environmental impacts of oil exploration and extraction are so far minimal, but it is perhaps too early to judge the long-term effects.

There is very little reporting about fisheries in Papua New Guinea. However, 'growth overfishing which occurs as a result of removing the largest individuals from the stock has been observed in 'bêche-de-mer stocks' in many areas (Hair 1995). The report also states that mining and removal of coral reef has a devastating effect. Live reef is widely utilised as building materials and in the production of lime, by logging companies.

Land practices such as uncontrolled logging and mangrove clearing can increase run-off and consequently sediment load in the rivers. Similarly, tailings from the Ok Tedi mine into the Middle and lower Fly Rivers, and the deep-sea outfall from the Misima mine have caused pollution of mangrove habitats. Huber (1993) (cited by Hair 1995) refers to the need for integration of management of the environment. Sectoral management of terrestrial and aquatic resource ecosystems will always fail because of the absence of consultation between these sectors. Hence, incompatible development will occur; that is, there is a lack of a mechanism for sectoral communication in planning (Lepani, personal communication 1995).

Environmental and social impacts of logging operations in Papua New Guinea have been well-documented in the 1989 Barnett Inquiry Report, in which no company was found to have complied with the environmental standards required of them by the Department of Environment and Conservation (and the relevant *Environmental*
Planning Act 1978). After 20 years of logging activities in the Gogol region in Madang Province, there is nothing tangible to indicate the project’s claimed social and infrastructural development. The environmental plans that the logging companies are submitting stay as documents to satisfy the Environmental Planning Act and do not reflect the reality of the impact of the operation (Nadarajah 1993). There is no monitoring of those plans by the Department of Environment and Conservation or any other agency.

The current logging practices in Papua New Guinea are not sensitive to the forest ecology, thus the chances of natural forest regeneration are greatly reduced or impeded. Simple consideration such as the marking of vital residual trees that are not to be damaged during the logging operation is not done (Vigus, personal communication 1995). The loss of forest cover in an unsustainable manner is not only a potential contributor to soil degradation, but will reduce Papua New Guinea’s widely recognised rich biodiversity of plants and animals which depend on that vegetation. The World Bank Report (1993) states that ‘it is clear that the current forest revenue and concession regime protects neither the ecosystem nor the short-term financial interests of the average clan member’.

The need to enforce a set of codes of practice for logging companies was discussed at the 25th South Pacific Forum. The forum endorsed the undertaking of leaders of the Melanesian Spearhead Group to examine practices associated with the region’s forest resources. The Prime Ministers of Australia, New Zealand, Fiji, Solomon Island and Papua New Guinea agreed to work towards ‘Common Codes of Conduct’ for logging indigenous forests to which forest industry operators in their countries will adhere. The codes of conduct were drafted. Key interest groups from all countries that were present participated in the preparation of the common codes (AIDAB 1994). The Papua New Guinea National Forest Authority’s comments on the applicability of the codes were discussed and accepted. In addition to that, the National Forest Authority, in close cooperation with the Department of Environment and Conservation has prepared ‘Key Standards for Selection Logging in Papua New Guinea’ (Department of Environment and Conservation, and the National Forest Authority 1995) to better suit the local conditions. These two documents and the presence of the SGS group would have made a good start to implementation of forestry monitoring practices.

Much to everyone’s surprise, it was reported that ‘on the insistence of Papua New Guinea’ the Codes of Conduct were struck off the main agenda of the 26th South Pacific Forum, which was hosted by Papua New Guinea (Post-Courier, 13 September 1995).

The other vitally important issue associated with sustainability of forests is related to land-use planning. What happens to the land after the loggers finish with it is nobody’s concern. The current trend of establishing oil palm plantations on the deforested land is entirely unplanned and ad hoc. There is no study to estimate impacts of such agricultural activities on the environment (soil, air, and water systems).

Except for the recent reports by the people in Oro Province of the impact of oil palm plantations on the river systems, the impact on the Papua New Guinean environment of fertilisers and chemical sprays used for oil palm production, remains widely unknown. The limited economic studies portray an equally bleak future for oil
Palm. The 1994 report (related by Brian Brunton, ICRAF) reports fresh fruit bunch prices (fbp) for Papua New Guinea at US$26 kina per tonne, compared to US$66.40 in Malaysia, and US$ 64.64 in Indonesia. Thus, it is doubtful that smallholders will get optimum economic benefit from such activities.

However, there are two issues that require attention. First is the role of international organisations in steering the course of sustainable development planning for major resources such as forests — what they profess to do and what they actually do. Recently, the National Forest Authority, in line with their commitment to implement a sustainable forestry policy, called a meeting to discuss Papua New Guinea's Country Statement to the ITTO mid-term review. This review assesses the country's ability (as an ITTO member country) to comply with the ITTO goal of achieving sustainably managed forests by 2000. The participation of the forest industry in such a meeting was very encouraging. Other participants were from line departments, such as the Department of Environment and Conservation, and research and academic organisations.

There seems to be a fundamental flaw in ITTO's philosophy, when their suggested format for such a country report covers the following areas:

- institutional and policy framework;
- forest resource base;
- production of and trade in logs (in detail);
- international cooperation;
- relevant environmental measures (very brief section related to policies concerning timber); and
- socioeconomic effects.

It would be expected that an organisation which makes member countries such as Papua New Guinea undertake initiatives concerning the status of their sustainability would have included regeneration (reforestation) as one of the areas to be assessed. However, reforestation did not get any mention in their reporting format. How is it possible to talk about the sustainability of forest resource if a country's reforestation strategy is not assessed and addressed? In Papua New Guinea, reforestation has been one of the most neglected areas. One of the few reforestation projects (a community forestry basis such as the Kandrian/Glastonbury project) faces tremendous financial constraints to make it a viable activity. One tends to question the credibility of international organisations such as ITTO, and whether they are really serious about the perpetuity of tropical forest.

Forest regeneration (or the lack of it) in Papua New Guinea suffers for several reasons. Under the old Timber Rights Purchase (TRP) system, what happened to the land after it was logged, was nobody’s business. The new forestry reforms, through the Forest Management Agreements (FMAs) have addressed that problem to some extent. But, changing the old TRP conditions to Forest Management Agreements would be a lawyer’s nightmare. However, reforestation is very much tied into a broader aspect of sustainability — integrated land use. Oil palm plantations in logged areas seem to be alarmingly on the increase. If that is the trend, it is a waste of time talking about a 40-year cycle. There is no guarantee of land for forest regeneration even after the first cut, let alone in a 40-year cycle. The Minister for Forests recently had to fight to save 500 000 hectares of virgin forest which was going to be logged
under the guise of agro-forestry. There is no mechanism in the national planning system for the line agencies to iron out such land-use conflicts of interest. The only debate that takes place is in the media. These issues are some of the paralyses of sustainability.

The second issue of concern is the participatory process of decision making. There is some positive evidence that the National Forest Authority is serious in its endeavours to implement the popular participation of all stakeholders. At the provincial level, the Provincial Forest Management Committees are engaged in forest planning together with all the other stakeholders. However, there has been a lack of performance and accountability of landowner companies that were supposed to be the resource owners' representatives, even though they were formed for commercial rather than social objectives (Forest Management and Planning Project, 1995). The National Forest Authority has prepared draft guidelines for 'resource owner representative bodies' outlining their functions and formation.

The other factor which has enhanced participation has been through the structure of the new National Forest Board. Early in 1995, the Minister for Forests sought a change to the Forestry Act to make the National Forest Board subject to the directives of the Minister and the Cabinet (The Times of PNG, 2 March 1995). However, the National Alliance of Non-Government Organisations (NANGO) strongly opposed the amendment. The amendment did not eventuate. In 1989, when the National Forest Policy White Paper was being debated, the non-government organisations fought hard to have a representative on the National Forest Board, and have played an effective role. However, it is important for them to understand that, although their advocated (and often adversary) method may be effective in general terms, when they are trusted with matters which are discussed at board meetings, they cannot take those issues against the department. They have the right, as does any other member of the board, to voice their views at the board meeting, but using the information given to them by the department to argue against the government is unethical. More importantly, it may create a defensive thinking among the forestry staff, and create doubt as to the usefulness of participation and transparency of decision making. This attitude will also diminish the belief in the democratic system that the National Forest Authority has been trying to establish in the past three years through a functioning board, and Provincial Forest Management Committees.

**Human Development in Papua New Guinea**

This paper does not discuss the human development aspects of Papua New Guinea in detail. However, it is sufficient to say that the Pacific Human Development Report (UNDP 1994d) ranks Papua New Guinea, the Solomon Islands and Vanuatu, in the 'low development' category, whereas the rest of the Pacific countries are of 'medium human development' ranking (see Figures 1, 2, and 3). Why should one of the resource-richest nations in the Pacific have a 'low human development' ranking?

A similar question was asked by members of the Constitutional Reform Committee when they began considering provincial government reforms. This paper does not provide a comprehensive answer to that question, but merely points out the need for a change of focus in development planning.
Figure 1: Expectation of Life at Birth for Selected Pacific Countries, 1980-1990

Source: Booth and Muthiah (1993)

Figure 2: Adult Literacy Rates for Selected Pacific Countries, 1980 and Latest

Source: Booth and Muthiah (1993)
The intriguing point raised in the report is that 'kinship structure of landownership' has been a contributing factor in achieving a 'comfortable traditional lifestyle'.

An alarming statistic in the 'gender issues' section of the report reveals that Papua New Guinea and Solomon Islands have very low rates of female adult literacy. The difference between male and female literacy rates in Papua New Guinea is more significant than for the rest of the Pacific countries. Female adult literacy is 58 percent of the male rate (ibid.: Figure 7).

Tawaiyole (1995) states that females in Papua New Guinea 'lag behind males in the lower levels and far, far behind at the tertiary level'. The barriers to female participation in education are 'parents' preference of sending sons instead of daughters to school, high drop-out rates, (especially in the lower grades of primary schools), and favouring boys in selection for higher education — the selection system is based on merit and there are indications that the trend is changing'(ibid.). Tawaiyole explains that the high drop-out rate for girls happens in Grades 1 and 2 when they need most support from their parents. A hostile physical environment such a long walk to school in rural areas, and harassment of young girls are two of the main causes of high female drop-out.

Research in 150 countries on female primary enrolment rates in 1975 has shown that large gender disparities 'actually appear to reduce Gross National Product' (Hill and King (1991), cited by UNDP 1994d). Thus, the report deduces that 'the education
of women makes hard-headed economic sense'. The other bonus from women's education is improvement in family health, and reduced fertility.

This fact has been experienced by Haq (1994) when, as Minister for Planning and Finance in Pakistan, he decided to give topmost priority to population control. However, pouring aid money into measures such as making condoms available to grassroots people were failures. Despite this campaign, the population in the 1982-86 period rose by only 0.1 percent. In analysing the causes of failure, Haq admits that the answer lies in 'women's literacy'. The female literacy rate in Pakistan's villages was six percent and it became apparent that better results would have been obtained had the funds been spent on improving women's literacy. The empowerment of women is perceived to be the decisive factor in any successful effort for population planning.

The latest report on the health status of Papua New Guinean women and children (UNICEF 1993) reveals that Papua New Guinea has one of the highest maternal mortality rates in the world (see Figure 4).

Figure 4: Comparison of Maternal Mortality Rates in the East Asia Region

However, other sources (Hayes, personal communication 1995) are highly suspicious of the statistics which might be based on Molar's (1989) study of the Simbu Hospital. The normal tendency for women in such urban centres is to go to hospital when there is something terribly wrong with pregnancy (and birth). Thus, a high mortality rate is recorded. The statistics from one centre (Simbu) can hardly be considered a national representative average. The correct way of determining an accurate maternal mortality rate will be through what is planned for the 1996 Census. A representative sample of women will be asked to answer questions related to their
dead sisters and mothers and hence the cause of death. From these data, the representative percentages can be determined.

The same UNICEF report states that the major cause of death for women is childbirth (village birth), while the major causes of death amongst children are preventable diseases, malnutrition, respiratory infections, diarrhoea, unsafe deliveries, and malaria.

Compared to its Pacific neighbours, Papua New Guinea has regressed in its immunisation program. Deterioration of immunisation coverage has occurred in several provinces (Newbrander et al. 1993). The immediate reason for this has been the lack of resources, particularly transport. The report (ibid.) concludes that the reason for this deterioration is that:

'Deterioration of immunisation coverage has happened in the less wealthy provinces with full financial responsibility where the non-payroll portion of central government grants has steadily got smaller because of the formula used; it has happened in provinces which have further decentralised to the district level because the health divisions have lost control over their resources; and it has happened in other provinces because of the lack of input into the budget process at the Department of Finance and Planning by either the provincial Divisions of Health or the national Department of Health.

In a critical review of decentralisation of health services in Papua New Guinea, Thomason et al. (1993: Chapter 12) consider the 'lack of mechanisms linking the provincial Divisions of Health with the national Department of Health on the one hand, and the national Department of Health with the central Departments of Finance and Planning, and Personnel Management on the other, as the single most important factor impeding the coordinated development of the health system in Papua New Guinea'. These are the issues that have to be considered by the new national Ministry of Planning.

The other alarming feature of the UNICEF report is the malnutrition of children in the under five year age group, which is twice that of any other Pacific nation. This situation does not result from the 'lack of food, rather it is a lack of knowledge about basic nutrition' (ibid.).

Also, Papua New Guinea lags far behind other nations in providing access to safe water supplies. The report calls for a national campaign to extend water and sanitation to all regions of Papua New Guinea.

In terms of education, a UNESCO survey (1990, cited by UNICEF) states that enrolment rates have shown a zero increase between 1980 and 1988, and a decrease in adult literacy between 1970 and 1990. This is despite the fact that 'Papua New Guinea has spent more per person on education than Australia, China, the former Soviet Union, or Singapore' (ibid.).

Curtin (personal communication 1995), using the World Bank's Development Report (1992), explains that the UNICEF report's interpretation of the UNESCO table is questionable (see Figure 5).
It is impossible for a country with a per capita income of US$860 in 1990 as compared to Australia’s US$17,000 to spend more on education per person than Australia does. Australia spent only 6.8 percent of its budget on education; its budget was 25.8 percent of its Gross National Product (GNP), which was US$290 billion in 1990. Thus, considering its population of 17.1 million, Australia spent US$304 per person, whereas Papua New Guinea spent US$37 per person in 1990. Papua New Guinea’s total budget is much smaller than Australia’s, and the other named countries’ budgets, and that is why even a high allocation to education, which is partly because of Papua New Guinea’s smaller allocation to defence, does not result in large spending per person.

These discussions are indicative of the fact that Papua New Guinea is lamentably short of accurate social indicators of development.
Sustainable Development: Prosperity of the Nation and Its People

The following statement from Bernard Narokobi at the recent NSDS seminar (1994) raises a real concern over development affairs:

"we need to focus our attention on the effects of the 'aftermath of development of natural resources, rather than the development of the resource itself'."

The point is, if development results in an 'aftermath', then has that development served its true meaning?

Development studies show that different periods seem to have experienced different problems. Economic growth, which was the key issue on the development agenda during the 1950s and early 1960s, was replaced by distribution and basic needs in the late 1960s. Adjustment and debt were the main issues of a later decade (Banuri and Marglin 1993). The United Nations Research Institute for Social Development Report (UNRISD 1995) for the World Summit for Social Development has examined the social impacts of structural adjustment at the global level. The changes assumed that, by addressing economic fundamentals, the social issues would resolve themselves of their own accord.

However, recent events have proven that there is a fallacy in this thinking. More importantly, social institutions such as international social organisations, many state institutions, and local-level communities and families have been considered as 'obstacles to progress' and have been dismantled. A clear example of this at the State level in Papua New Guinea is the lack of priority given to departments dealing with social issues, where women, youth, religion, and sport have been clustered together under one department.

Economists who were calculating the economic benefits of a healthy and well-trained work force in many adjusting countries discovered that this human capital was rapidly depreciating. However, these adjustment programs started to be sensitive to the social issues by the end of the 1980s. Hence, the creation of 'social safety nets', even though they have yet to offer much support.

Since 1987, when the World Commission on Environment and Development brought the concept of sustainable development to the attention of the world, the idea has been used and misused by various sectors of most societies. The Commission defined sustainable development as that which 'meets the needs of the present without compromising the ability of future generations to meet their own needs'.

The emphasis in the 1990s has been on sustainable development and environmental conservation. The documents arising from the 1992 United Nations Conference on Environment and Development (UNCED '92) stressed the importance of making people's participation in the management of natural resources a prerequisite.

Industries around the world made their own interpretations of the concept of sustainability. Conservation groups thought of it as continuity and perpetuity of resources. Development can mean different things to different people. Some see it as
integrated human development, while others visualise it as economic growth. Although Papua New Guinea's Constitution has defined integrated human development, more recent studies (Axline 1993) claim that, in the context of decentralisation of services 'there has been an implicit assumption that development is distribution of money'. Others have a broader vision of it — development should satisfy not only people's basic needs such as health and education, but also social, cultural and spiritual aspirations. Constitutional mandates for Papua New Guinea are for integrated human development, and to adopt 'Papua New Guinean ways' in pursuit of development. However, the current political and economic realities are such that it is difficult to achieve these objectives (Warakai 1994).

The failure of development programs around the world during the past two to three decades has made people evaluate 'what went wrong'. In general, the programs were all too big and too ambitious, and were designed as top-down models. The actual people who were to benefit from the development had very little to say about it. 'Participation' meant the 'involvement' of people in some programs that were preplanned by others from outside their communities. Participation is an essential part of human growth, and is not to be merely the mobilisation of labour forces or a coming together to passively hear about someone else's predetermined plans. Often, the real needs were not recognised and the social and environmental values were sacrificed in the name of 'development' — which no-one usually had a clear picture of it until it was too late. Basically, people were bystanders during the process of development.

It is hard to believe that even a gathering of many thinkers and planners which resulted in The Hague Report (Pronk and Haq 1992) defined 'sustainable development' in a rather 'circular' way:

sustainable development is a process in which economic, fiscal, trade, energy, agriculture, industry and other policies are so designed as to bring about development that is economically, socially, and ecologically sustainable.

Sustainability is perhaps a 'check' word for development plans. However, it can also have different and sometimes conflicting goals, such as the sustainability of economic growth, and not have any consideration for the environmental and social costs involved.

How to Bring About Change: Local People Must Begin Development

Papua New Guineans have to decide about the nature of the development process, as well as the role of each sector to achieve it. The real purpose of development is laying the foundation for a new social order that can cultivate the endless potentialities that are latent in human consciousness. The role of economic policy is to foster the creation of a means to achieve that purpose (Bahá'í International Community 1995).

It is important to examine the assumptions surrounding the appropriate roles to be played by the protagonists in the development process. It is indisputable that:
the government has got a crucial role. However, the future generations find
'almost incomprehensible the circumstance that, in an age paying tribute to an
egalitarian philosophy and related democratic principles, development planning
should view the masses of humanity as essentially recipients of benefits from aid
and training'. Participation (if any) is secondary in decision making and is
limited to choices that are usually formulated by outside agencies, whose goals
often do not address the reality (ibid.).

Participation is not 'an event. it is a process' (UNDP 1993). In practice, any proposal
to increase participation must pass the empowerment test — does it increase or
decrease people's power to control their lives (ibid.). This empowerment is about
facilitating the flow of information to and from the local communities. Has this been
considered as a basis of planning for the NSDS and the National Planning Office?

Participation is about human rights (which in turn relates to social justice). One of
the instruments of social justice is consultation (John Huddleston, IMF, personal
communication 1995). Huddleston describes consultation as a decision-making tool
that has three characteristics which make it distinct from debate, which is a most
common way of conducting public affairs. Debate is about power and not about
justice or truth, and it is confrontational. The three characteristics of consultation are:

*Participation*: All stakeholders in the issues and decisions under discussion must
be involved in consultation.

*Detachment*: This is the ability to detach one's ego from one's ideas. It also
means to respect an idea regardless of its source.

*Scientific Process*: We must adopt a scientific approach to solving problems,
identify the problems (including all the ethical and spiritual principles involved),
and devise plans implement them.

The world renowned environmentalist, David Suzuki, who advocates home-grown
development plans, remarked at the University of Papua New Guinea that one of the
reasons why we lost touch with reality (the environment and its people) was that
scientists in pursuit of *objectivity*, distanced themselves so far from their *subjects*
that they are aliened from them.

According to Vick (1989), 'true development is the mobilisation of society to
transform itself'.

There are two basic steps to achieve that — by awakening a desire for social
change, and by creating the confidence that it can be achieved. Fostering self-reliance
is much more difficult than spending US$100 000 on a two-year, expatriate-led
development project (ibid.).

The Worldwatch Report (Brown et al. 1991), depicting the vision of a sustainable
society, states that the lasting society will not occur 'without a transformation of
individual priorities and values'. It also expands on the fact that materialism, which
has resulted in a 'strain on resources', will not survive the transition to a sustainable
world because such societies have equated quality of life with increased consumption.
The report visualises the achievement of a society 'in balance with the resources that
support it, instead of one that destroys the underpinnings of its future' (ibid.).
The future sustainable societies require a 'world-embracing vision'. However, actions should be through fostering local initiatives and action. There is a need to have more faith in local people's analytical capabilities. The applicability and success of the new technical assistance should make a shift from 'transferring technology' to 'enhancing local capabilities' (Chambers 1993). The other personal, professional and institutional challenge is the necessary change of attitude. Chambers (ibid.) states that 'we have been holding the stick for too long'. Instead, it is necessary to listen more to the different views of foresters and farmers.

There are many development projects in Papua New Guinea and other countries, which have not worked because the people did not act for themselves to make the project successful.

Avei (1994), who investigated the development pattern of the Boera Community in Central Province, has listed two sets of projects. The first category is based on the traditional knowledge and technology that has proven to be useful for effective community living over many generations. Some of these are:

The use of palm fronds as nets to catch fish, the invention of the double-hulled canoe (hakona), the development of the turtle hunt, the yam trade (gaura), the invention of the lagatoi (sago trade), the introduction of money and schools in 1945, shops and markets in the 1950s, and many more.

The second category of developments, which occurred within the last 50 years, has not withstood the test of time. Some of these include:

A water supply system (five projects in 20 years), a cooperative tradestore formed in the late 1940s, a Savings and Loans Federation in the late 1960s, an afforestation program in the mid-1980s, and a telephone installed in 1985 by the Post and Telecommunication Corporation which was damaged within a year.

A summary analysis of the two types of development makes it abundantly clear that the success stories were associated with project that had originated from the people according to their knowledge and needs, and thus the will to carry them out was there.

In contrast, the unsuccessful attempts have been more recent and obviously have been imposed or initiated by outside development agencies.

This observation concurs with the findings of the Swedish Aid Agency which reported that 90 percent of its water programs were non-functional after ten years (Vick 1989). Vick (ibid.) reports on the installation of a water supply for a community where water was tapped into every household in the village. However, women still went to the river to wash their clothes, because washing was a social gathering time. Perhaps if the women had designed the water supply themselves, they would have installed a tap in the centre of the village.

Similarly, a case arose in Manus Province, whereby a logging company, as part of their obligation to provide infrastructure to a village, had asked the people what they needed. The request from a predominantly male majority was for a power generator,
which was never installed and used. If the women had been consulted about their needs they would have requested a water supply.

Such simple considerations are often overlooked by development agencies, but if left to people themselves they would plan their needs in a way to suit their social patterns of life.

For Boera village, Avei (1994) perceives the problem to be a lack of proper leadership at the community level, because the decision-making process has been left wide open to the younger levels of the community, without proper grooming as in the times past.

Some government officials in the recent working group for the development of a National Sustainable Development Strategy for Papua New Guinea argued that the proper decision-making structure — the clan — exists, but the government has not been able to use those mechanisms effectively to implement their policies. However, Avei (personal communication 1994) states that the so-called modern developments have influenced those structures to the extent that some communities are not making 'communal decisions' any more.

He also states that, in their search for a better life from external sources, the Boera community has created a life of 'entrenched dependency'. Although the second category of development activities in Borea has been perceived to have economic benefit, the activities have caused a lack of initiative, and a poor vision of self-worth.

The following excerpt explicitly underlines the prerequisites for success of any activity:

the attainment of any object is conditional upon knowledge, volition and action. Unless these three conditions are forthcoming, there is no execution or accomplishment...by expressing the knowledge and will of the community, their activities gain momentum (Baha'i Writings, cited by Vick 1989).

Knowledge is the starting point. Often, reviews of the projects that are initiated and planned by aid agencies reflect the lack of local involvement and support. However, considering that the local people had no knowledge of the project objectives, it is not surprising that the volition is not created, thus no achievement follows. The valuation of modern technical knowledge and indigenous knowledge also plays a great role. The latter, which sustained the Aboriginal societies for many centuries, should be the focus of attention. The ideal solution is to find the complementary role of each system.

Relating knowledge, power, and the environment is like relating the modern system of knowledge to a fox that knows many things (Banuri and Marglin 1993). Like the fox, this system has many strengths. However, it has one 'fatal' flaw; that in its quest to master nature, it is slowly but surely destroying the basis of life upon this planet. The success of this system of thinking has come at a considerable cost. The so-called modern societies view indigenous knowledge as 'inferior and regressive'.

A traditional system of knowledge is likened to a hedgehog who knows one big thing, and knows it well. These traditional systems were designed to ensure survival of human and other life forms on this planet. Traditional systems search for
sustainable development which redefines the relationship of humans to nature 'as one of harmony or stewardship rather than of conquest or mastery' (ibid.). The traditional knowledge is 'embedded in the social, cultural, and moral milieu of any community, whereas the modern system of knowledge distinguishes these different dimensions (ibid.).

When thinking about the three requirements for achieving any objective — knowledge, volition and action — the communities need to reach their own vision of growth, arrive at unity of thought, and devise plans of action which they are capable of carrying out themselves (Baha'i International Teaching Centre, personal communication 1994).

The implications of this principle for Papua New Guinea's plan for sustainable development would be to facilitate many kinds of sustainable development plans and projects at every level of society. During the 1993 Waigani Seminar, two examples of planning for sustainable development were presented — one was by the Manus Provincial Government and the other by the Numambuku clan of Simbu Province. Papua New Guinea needs more of the Manus planners and Numambuku individuals who have begun the process of transforming lives. The aid agencies need to be sensitive to these existing capacities and provide the back-up support in accessing the information and technology. The current funding trend of aid agencies was described by one of the participants at the 1993 Waigani Seminar as 'a boomerang' and in need of a complete shift. Instead of spending all of the aid money on infrastructure and salaries for 'expatriate experts', it should be used to identify and develop the local capacities.

Discussion

Papua New Guinea has already experienced central (national) planning in the 1970s and 1980s. In 1986, the National Planning Office was abolished and its functions were merged with those of the Department of Finance. Almost a decade later, it has been realised that planning is on an ad hoc basis, hence the call for the re-establishment of a National Planning Office. The newly created Ministry of Planning stands out as being advantageous from many points of view.

First, there is enough documentation on how the Central Planning Office, the National Planning Office, and the National Public Expenditure Plan worked (or did not work).

Second, through the PNGRIS update, there is now land-use and population information available to the line departments to enable them to initiate integrated land-use planning.

Third, successful examples of provincial-level planning can be looked on as models that have worked.

Finally, sectorial planning can draw from the bottom-up planning strategy that has been adopted by certain agencies. For example, the National Forest Authority seems to have departed from the conventional way of preparing a National Plan first.
Instead, the provincial capacity to plan is being built up. However, the necessary cost associated with provision of the needed technical assistance for the Provincial Forest Management Committees has to be realised in the Papua New Guinea Forest Authority's budget.

The national planning for two of the line agencies — the Department of Environment and Conservation, and the National Forest Authority — has not been achieved, although the causes of non-achievement are quite different in each case. The Tropical Forestry Action Plan (TFAP), which is a worldwide plan by the World Bank to halt deforestation of tropical forests, was changed to 'program'. This was decided during the first year of operation of the NFCAP Steering Committee when they realised that the TFAP in Papua New Guinea was only 'a set of projects' not a 'plan'. However, the National Forest Authority's approach to preparing the provincial forest plans, as a framework for the National Forest Plan, is a step in the right direction. The Department of Environment and Conservation's National Environmental Plan has not as yet come into being. However, the PNGRIS update is now available to be used by these agencies as a 'planning tool'. It appears that there is a need to harmonise government agencies' approaches to bring them into line with their departments' national plans. Such sectoral plans need to be guided by a general sustainable development strategy, which must set the national priorities. It must be a tool to combat short-term visions of development within the boundaries of electorates or even within provincial levels.

The two examples of successful sustainable development planning — Bolivia and Malawi — indicate that such planning is synonymous with decentralisation. Papua New Guinea is at two thresholds — implementing new reforms in a decentralised system of governance that has not worked, and coming to grips with sustainable development planning (indeed, national planning). One must wonder whether the decision makers are aware of the relevance of decentralisation in its true sense, as one of the pillars on which sustainable development planning rests.

The other pillar would be participation. Since the Bougainville negotiations in 1973, Papua New Guinea has come a long way to acknowledge resource owners' participation in resource development. This is a quantum leap when compared to the negotiations behind the 1973 Bougainville Copper Agreement. Government advisers said "No" to Narokobi's proposal that the State is the trustee for resources which are owned by the people (Narokobi 1986).

Recent budget papers view MRDC's role as facilitating the active participation of resource owners rather than 'collecting rent'. Collection of rent generally benefits one generation, whereas the alternative — full participation of resource owners as Montagu and Lepani indicated — is the sustainable approach to partnership.

The planning process for the NSDS has had two 'push starts' from the international agencies with no obvious progress during the past three years. It is time for a real driving force and commitment from Papua New Guinea to address the issues of a sustainable society. The void in planning and implementation of the National Sustainable Development Strategy is very obvious. While these initiatives on the national level have been taking place, there has been no change of practice on the part of resource developers and planners. Not only do the social and environmental
impacts of resource development show signs of despair, the recent World Bank Report (1995) shows that this trend cannot be economically sustainable.

There are sufficient legislations and laws to facilitate planning for sustainable development, and they should be 'field tested' now. Whatever the planning mechanism (the National Planning Office, or the NSDS Commission), it is important that all stakeholders have a clear perception of sustainable development; it is not about the environment, it is about all sectors of society.

From the resource development point of view, it is about integrated land-use planning. The land tenure system in Papua New Guinea necessitates a major rethinking in the decision-making process. At present, there is no system of land-use planning for customary land use in Papua New Guinea. Decisions concerning customary land are made on an ad hoc basis. It is usually a question of 'who gets there first!'. The time has come to begin the dialogue, planning, and action for finding the clues for the 'development puzzle' at the local level. The task ahead is enormous.
References

AIDAB, 1994. 'Code of Conduct for Logging of Indigenous Forests in Selected South Pacific Countries', Amendment to the Agreed Draft of the Technical Forestry Meeting (Suva, December 1994), following comments by Australian states and New Zealand, Canberra: FORTECH.


51. References


Ivarature, H., 1995. 'The Provincial Government Reform: Key Challenges Facing Papua New Guinea', a paper presented at the seminar organised by the Australian College of Defence and Strategic Studies, and at the 21st Waigani Seminar, Port Moresby.
References 51


References


SPREP, 1994. 'Environment and Natural Resources Management in the Pacific', a paper presented by Dr. Fuavao, SPREP Director, at the meeting of Aid Coordinators (MINI-MAC) on the occasion of the Mid-Term Review of the Pacific Sub-Regional Program, Port Moresby, 22-23 November 1994.


References


———. 1995c. 'Support to the National Planning Office', first draft report.


