

PART 1:
INTRODUCTION
AND
BACKGROUND

CHAPTER 1

INTRODUCTION

Purpose of the study

In both industrialised and less developed countries, governments have invested, and continue to invest, much effort and resources in national planning. Often this expenditure has met with disappointingly little success. Many of the centrally planned economies of Eastern Europe have failed to achieve anticipated economic development, as evidenced by their movement in the early 1990s towards becoming market economies. In Western Europe the Mediterranean Regional Project (Sobel 1978, 290) cast serious doubts on the efficacy of comprehensive planning. In the 'Third World' development planning advocated enthusiastically by western economists in the 1970s led to disillusionment by the 1980s (Goertzel 1976, 107; Sobel; McGinn, Schiefelbein & Warwick 1979, 218; Allan & Hinchliffe 1982, 3). Despite this, international lending agencies, such as the International Bank for Reconstruction and Development (World Bank) continued to make planning a requirement of loan agreements with less developed countries (such as the Second Education Project funded by the World Bank in PNG which came to an end in the mid 1980s).

Governments in developed Western countries in the 1980s have tightened coordination and control within government (Painter 1987). An increasingly managerial style is being required of the public sector, and this has percolated as far as the tertiary education sector. It has been manifested in changes to the structures of funding bodies (such as the abolition and replacement of the British University Grants Committee and the Commonwealth Tertiary Education Commission in Australia), to the promotion of institutional planning functions, and the development of performance indicators. The abundance of management literature on strategic planning attests to the demand for planning in the business sphere. It seems, then, that despite its manifest problems, people show no sign of giving up planning. It suggests that if only we could understand more about planning, the reward for such effort might be disproportionate.

In this thesis planning is understood as a particular mode of the more general phenomenon of the policy process, a mode which tends to be more overt, specific, elaborated and integrated, particularly with respect to time

and resource specifications. For analytic purposes we may conceptualise national policy process as a continuum, with elaborate comprehensive national plans at one end, and disjointed incrementalist decision-making (such as described by Lindblom) on the other. From this perspective the study of planning offers the academician particular advantages: firstly, the formal publication of plans makes at least part of the policy process less opaque than the mode of policy-making in which incremental decisions are recorded, if at all, in fragmentary form. Incremental policy making is inherently more difficult to access and piece together for analytical purposes. In other words, the tendency for planning to manifest itself at more frequent intervals in overt form makes it easier to distinguish the intended consequences of planning from the unintended ones. This in turn offers greater scope for identifying and analysing the various elements in the process and their interaction. Secondly, the tendency of planning to be more precise and explicit in specifying its objectives and targets, gives it greater susceptibility to analysis and, particularly, measurement. This in turn gives it greater susceptibility to judgement as to its success or failure. These two advantages suggest the possibility that the study of national planning as process might contribute to an eventual improvement of national policy process.

This thesis aims to contribute to understanding the nature and key determinants of national tertiary education policy process through a study of national tertiary education planning process. It commences with an empirical study based on an episode of national tertiary education planning which took place in Papua New Guinea (PNG) from 1984 to 1990. It examines the explanatory power of a selection of major political sociological theories, and concludes with comments on the implications of the case for theory.

Context of the study

Universities in Europe grew up individually and existed autonomously for hundreds of years. By the twentieth century, and particularly since the second World War, their importance as a national resource has been recognised, especially by governments. Two major post-war phenomena in Europe generated a massive expansion of tertiary education, which had previously mainly served the social elites: the post-war 'baby boom' which

required immediate expansion of the school system and would later impact upon tertiary education; and demands for social equity resulting from war-time disruption of former patterns of social order. Expansion required massive investment and increased financial involvement by government. At this point universities and tertiary institutions became encompassed within emerging national tertiary education systems (Layard & King 1968, in Baxter, O'Leary and Westoby (eds.) 1977; Gross and Western (eds.) 1981; Millett 1984; Karmel, in Moses 1990, 24 - 47; Watson 1991).

Watson identified two main phases of tertiary education system planning. The first, from about 1955 to the early 1970s, was characterised by a social demand approach. It assumed that investment in tertiary education would yield both national economic and individual returns. It was steered chiefly by economists, engineers, mathematicians, lawyers and civil servants. In Europe it was not, however, by this stage a system-level approach. Requirements for expansion were expressed at national level, but planning for expansion was left mainly to institutions, and academics were often directly involved. In the federal countries of North America and Australia, state or provincial governments tended to play a more prominent role than federal governments (Glenny, Berdahl, Palola, & Paltridge 1971; Millett; Watson).

In less developed countries a different emphasis developed: a 'manpower needs' approach focused on input/output costs; differential rates of return to investment; the relationship of education to economic growth; and the supply and demand for high level manpower. This approach was dominated by economists, and was promoted by the establishment of the Organisation for Economic Cooperation and Development in 1960, which became a major proponent of education planning and of the transfer of western knowledge and experience to less advanced nations. This approach generated a wealth of literature reflecting the development of an 'economics approach' to education by the early 1970s (Parnes 1962, in Baxter, O'Leary and Westoby (eds.); Dore 1976; Tilak 1982; Watson).

A major contributor in the 1960s to the international promotion of education planning was UNESCO. Reflecting its primary concerns with eliminating mass illiteracy in poor countries, it placed greater emphasis on school administration, curriculum and buildings, and less on tertiary education. Its

approach was more practical and less technically-sophisticated. Many of the countries with which it was concerned were either centrally planned economies or had single party government. Consequently its approaches tended to be centralised, and not particularly appropriate for western countries (Weiler 1978; Spaulding 1981; Watson).

The start of the second phase, from about 1972 onwards, was marked (according to Watson) by a gradual disillusionment in western countries with the lack of success of the large scale planning which characterised the previous period, particularly that sponsored by the OECD (Sobel). The focus thus shifted to institution-level activity, combined with the establishment of 'analytical and policy-planning commissions and coordinating agencies.' Planning in the United States was thus carried out by a multiplicity of agencies (Millett). There developed (in North America in particular) a heightened awareness of the politics of planning, accompanied by demands for open, participatory styles of planning. Planning became 'associated with 'management' and with the growing field of 'policy studies' (Hogwood & Gunn 1984; Watson).

At about the same time the economic climate in most western countries changed for the worse: recessions, inflation, high unemployment and cuts in public spending reflected these changes. There developed a perception that planning needed to rationalise and correct the uncontrolled expansion of the 1960s. The 'vehicle for control was institutional central planning and management' (Watson). This trend served to focus attention on the use of the budget as a planning tool (Wildavsky 1975, 1983, 1984), with Planning, Programming and Budgeting Systems and similar being adapted for use in tertiary education. It has also led to the development and use of management information systems and mathematical models (Bleau 1981; Stein 1982). The application of such models has met strong resistance at the institutional level, however, and at the system level management information systems have generally been regarded as not being worth the investment (Watson). Accompanying these developments, on the other hand, has been intensified interest in issues such as inequality, social policy, compensatory policies, affirmative action, and a general lack of consensus on planning.

Within the broad framework of the development of tertiary education planning described above, the present study falls within the second phase. It deals centrally with the activity of a policy-planning commission/coordinating agency and its dealings both with government and the tertiary educational institutions with which it was directly concerned. Within this set of interactions universities, modelled on western-style universities, played a very prominent role. The primary planning issue was to rationalise and correct the uncontrolled expansion of the 1960s. Although PNG is a less developed country, has invested heavily in central planning systems and a manpower needs approach to tertiary education, it has a mixed capitalist economy, a modified form of Westminster-style parliamentary democratic government, and has been heavily influenced by Australia. These parameters give rise to a mode of planning in PNG which, whilst heavily technical, is even more characteristically political. The primary focus of this study is on planning as socio-political rather than technical process, and its analysis and interpretation therefore relates to the field of policy studies. Its technical aspects will receive correspondingly less emphasis.

The research questions

Governments all over the democratic world have experienced difficulty, to a greater or lesser extent, in 'capturing' tertiary education institutions (and particularly universities) and ensuring that they serve the economic needs of their nations, despite the fact that in many cases they are financed heavily or exclusively by their governments. As costs increase, or as available resources diminish, or both, it can be expected that governments will intensify their demands for utility and accountability from tertiary education institutions. Yet public policy as expressed through government intervention in tertiary education has met with only limited success.

Within the less developed world, public policy for tertiary education has often been expressed through comprehensive national plans, whether plans specific to tertiary education, to education as a whole, or to the national economy as a whole. Given the chronic resource scarcity characteristic of the less developed world, the importance of the success of plans to maximise returns for investment is heightened. Yet experience of planning in the less developed world has often been disappointing. Papua New Guinea's experience of tertiary education planning is a case in point.

The merits of exploring national planning (as distinct from disjointed incrementalism) as policy process have been argued above. Taking tertiary education as an area of public policy, the following research question was formulated:

Observing that elaborate national planning in less developed countries had often been much less successful than anticipated, was this true of PNG and if so, why?

Addressing this question empirically through the medium of a single case study, it is reformulated as:

How can the lack of success in implementing the Papua New Guinea Higher Education Plan 1986 - 1990 be explained, and can this explanation be generalised to planning in the public sector in Papua New Guinea?

Scope of the case study

The study comprises an episode of public policy which encompassed the period November 1981 until June 1990. For practical purposes, however, it began in May 1983 with the passage of the legislation establishing the Commission for Higher Education. It centres on the activity of the Commission leading up to and including the formulation of the first single-sector national higher education plan for PNG, the 'Higher Education Plan 1986 - 1990: A Strategy for Rationalisation'. It describes in detail the preliminaries and process of formulating the plan, its transition through the processes of the national government, and its implementation up to 1990.

It is essentially a micro-level study, based on documentary records, both published and archival. The formulation phase (August 1984 to July 1986) relies principally on minutes and formal reports of meetings, supplemented by participant observation. The description and analysis of this phase was informed and corroborated by intensive and extensive field interviews of other participants. The implementation phase is based mainly on unpublished documentation collected in the field (minutes, reports, correspondence, file notes), field interviews of participants, observation and audio-recording of a major planning meeting, and telephone interviews.

The original design had been for a study of the formulation stage only, since the plan was not approved for implementation until nearly a year after the study had commenced. The plan's approval was the first and most important finding of the field visit in April 1988, and led to the decision to extend the study to cover the implementation phase. As a consequence, the formulation phase occupies more of the case description than the implementation phase, in which the researcher had not been a participant observer.

Although the extent to which generalisations can be made from a single case study is limited, some conclusions can be drawn by comparing this case with others within the same national policy context. For this purpose, once the approval and implementation of the plan had been discovered, a limited multi-site case study approach was adopted, probing the extent to which phenomena found in the higher education sector could be found in the broader education and health sectors. These probes were necessarily very selective, given time and resource constraints.

As an adjunct to the case study, a description of the salient characteristics of PNG, of its higher education system, and of its national planning system is presented in Chapter 2. From this description, which relies mainly on published material relating to PNG, it may be possible to identify other countries which have similar characteristics, against which the general applicability of conclusions from this case study may be assessed.

Summary of the main argument

The main argument of the thesis is that, although many factors combined to account for the lack of success in higher education planning in PNG, the following emerged as the most important: the dependence of PNG on and vulnerability to the global economy; the scarcity of resources exacerbated by global recession, by Australian aid policy, and in certain sectors including higher education by PNG domestic economic policy; the weakness of PNG democracy and inherent incoherence in its government; and, perhaps most importantly, the deliberate frustration of the planning process by those interests that felt themselves directly threatened. Such interests were served by a wide range of factors. Some of these were inherent qualities, such as possession of superior intellectual and educational attributes, communication and political skills. Other factors included the opportunities

afforded to them by, for instance, prior positions of relative advantage based on existing concentrations and control of resources, personal connections, strategic organisational and physical locations, scarcity and marketability of highly educated manpower, conditions of dependency, systemic instability in government, and the interests associated with state elites and international capital. The capacity of such interests to defend themselves depended upon their ability both to recognise and to exploit their inherent strengths and their strategic advantages and opportunities. Where their interests coincided, for example, with those of the international capitalist system, or those which were protected by law, their power was greatly increased. To some extent they were capable of deliberately aligning themselves with such interests for that purpose. Increasing resource scarcity, whether externally imposed or internally generated, played a key role in activating such interests and was associated with increase in inequality. Democracy appeared to be particularly vulnerable to elite domination when confronted by acute resource scarcity. Resource scarcity exacerbated inequality as a result of the dominance of elite interests, and contributed significantly to the frustration of the national planning process.

Many of these conditions and opportunities (such as the economic circumstances and the weakness and incoherence of the elected political elite) applied equally to the rest of the public sector. Increasing resource scarcity permeated much of the public sector as well as higher education. For this reason the explanation of this case is applicable much more generally to the policy process in PNG, and possibly to that of other countries which experienced similar constraints.

A number of political sociological theoretical perspectives are useful in explaining the ways in which policy may be frustrated. Those selected for discussion were: pluralist, Marxist and elite theory. Each, however, frames its explanation using subsets of the range of factors, and is insufficient on its own. The three selected are not mutually exclusive. These theoretical perspectives would have greater utility if their mutual antagonisms could be removed and they could be used jointly or in synthesis. An adequate theory would need to be capable of linking micro-level policy phenomena to global level phenomena.

The researcher's relationship with the topic

Participant observation during the formulation period of the Plan (mid 1984 to mid 1986) was a consequence of the researcher's employment as Principal Project Officer heading the Planning and Research Division of the Commission for Higher Education. The level of the position was equivalent to Assistant Secretary and reported directly to the Chairperson of the Commission. For three periods during this time the researcher had also formally acted as Chairperson, most notably during the critical final six weeks which encompassed the Commission's consultations with the higher education institutions and preparation of the Cabinet submission. As acting Chairperson her status was equivalent to acting Secretary of a government department, and she was responsible directly to the Minister for Education.

At the time of her participation she was unaware that she would ultimately base the case study for a doctoral thesis on this experience. However her key role in the process placed her in an ideal position for a first hand account of the formulation phase. Her familiarity with many of the other participants allowed privileged access to confidential material, and her intimate knowledge of the subject greatly enhanced the ease with which documents could subsequently be obtained and interviews conducted. Because of the potential for bias resulting from her personal involvement in the formulation stage of the plan, meticulous attention was given to verifying with other former participants wherever possible all of the case description not supported by documentation, as well as all of the early analyses and interpretations. The implementation phase, covered by Chapter 4, was constructed exclusively from documentation and interview, since she had by this stage relinquished her post and departed from the country.

The structure of the thesis

The thesis is presented in four main sections. Part I consists of this Introduction, followed by Chapter 2 presenting a description of the relevant background: the formation of the Independent State of PNG, its geographical and political characteristics, the characteristics of its higher education system, and the stages in the evolution of its national planning system. Part II presents the Case Study, consisting of five chapters, three of which describe in detail the formulation of the National Plan for Higher

Education (Chapters 3, 4 and 5); a fourth (Chapter 6) describes the implementation of the Higher Education Plan 1986 - 1990; and a fifth (Chapter 7) presents the Findings of the Case Study and desiderata for theory. The case study traces the development and implementation of the first national plan for tertiary education in PNG from the origins of its concept up to its emergence in the form of the PNG Higher Education Plan 1986 - 1990: A Strategy for Rationalisation in May 1986, its approval by the National Executive Council (the PNG equivalent of Cabinet) in November 1987, and the first two years of its implementation up to the end of 1990. The study describes in detail the process of formulating and implementing this substantial episode of public policy. Chapter 7 shows how the case description was subjected to systematic analysis and used for grounded theoretical development of a number of key themes and concepts. These form a bridge between the case description and the subsequent discussion of theoretical perspectives. Part III reviews the relevance and explanatory power of three main theoretical perspectives: the pluralist perspective (Chapter 8), the Marxist and Dependency theoretical perspectives (Chapter 9), and the elite theoretical perspective (Chapter 10). The final Part IV consists of Chapter 11 which evaluates the relative utility of each of these perspectives for explaining the case study, draws conclusions, and discusses the implications for theory.

As the topic involves the study of an actual empirical case which had commenced prior to commencement of the study, it was not conducive to experimental research design. For this reason the case study precedes the theoretical discussion, and the emphasis in the thesis is on evaluating the adequacy of theory in its application to an empirical case.

Methodology

The first three case study chapters, dealing with plan formulation, were drafted initially, from documentation supplemented by recollection. A summary was made of each of the chapters, being a preliminary form of analysis. The original text of these three chapters was considerably longer than currently appears, since it has subsequently been edited several times to reduce superfluous wording and eliminate sections which, in the light of analysis, proved to be irrelevant.

The original text was subjected to a modified form of grounded theoretical analysis, treating the case description as data. All analytic sections (such as the summaries and other analytic comments) as well as any technical notes, were identified and excluded from analysis. From this the key themes and concepts were derived and, in particular, a conceptual map of the plan's formulation (shown in **Diagram 1**, Chapter 7) was constructed. From this map the key analytic matrix: conceptual plans A, B and C was derived. This analytic matrix and the key themes (discussed in Chapter 7) were then probed systematically through in-depth semi-structured interviews of key participants. Interviews were recorded on audio-cassette, transcribed and sent to key informants for comment.

During the field visit data was also collected in documentary form, and through exploratory interviews of key informants on the implementation phase of the plan up to that point (April - June 1988). Further information on implementation was obtained by telephone to key informants in April 1989 and December 1990. Triangulation was used extensively. The outcome of the probes of key concepts and themes was analysed in the light of the data on implementation and relevant literature, and formulated as the Findings of the Case Study and desiderata for theory (Chapter 7).

Perceiving the importance of interest group activity in the implementation phase, on the one hand, and the impact of the global economy, on the other hand, as well as the elitist character of tertiary education, a selection of theoretical perspectives was drawn from political sociology: pluralist theory, Marxist and dependency theory, and elite theory. The relevance to the case study of each of these theoretical perspectives was examined, and conclusions drawn, discussed in Chapter 11.

Literature

The study was generally informed by literature in the fields of policy studies (including implementation theory) and of tertiary education, particularly its coordination. It was also informed by literature on planning in a number of different fields: development planning and planning in the Third World; business planning and planning theory; national planning studies; education planning; urban and regional planning; and space-time planning (from the field of geography). Reference was also made to modern

organisation theory. For the case study extensive use was made of material published by the PNG government, by the University of PNG, and by the PNG Commission for Higher Education, as well as a considerable academic literature published in books and both national and international journals. For the chapters reviewing theoretical perspectives, reliance was placed on literature critiquing pluralism and democracy, Marxism, post-Marxism and dependency theory, elite theory, theory of bureaucracy and democracy, and world systems theory. Literature on corporatism and theory of the state was also explored but not discussed.

Terminology

Certain conventions in terminology were adopted for the case study. The term 'higher education' as used by the Commission for Higher Education and in PNG in general has a definition different from that used in some other countries. In the Higher Education Act it is defined as

all types of education of post-Grade 10 level, but does not include National High Schools¹ or similar institutions or religious institutions (Papua New Guinea, 1983).

It thus includes technical and some types of vocational education which in some countries such as Australia are excluded from the term. (It does not, however, include vocational training centres which are offered as an alternative to secondary school.)

Throughout the case study the term 'higher education' is used according to its definition in the Higher Education Act. In the remainder of the thesis it is normally replaced by the term 'tertiary education' except where reference is made to tertiary education in PNG.

For the purpose of clarity, in the case study the following conventions in terms denoting the Commission for Higher Education and its constituent parts are adopted, (although no such definition is laid down in the Act). The 'Secretariat' denotes the salaried staff of the office which served the Commission and formed its operational arm. (Specifically this meant the three principal project officers and the Chairperson in her role as head of the office, but by implication also included the more junior staff under their

¹ Senior high schools offering exclusively Grades 11 and 12.

supervision.) The 'Commissioners' denotes the members of the Commission and their Alternates, appointed by the National Executive Council and who served in a part-time and unpaid capacity. The 'Commission' (other than when appearing in quotations from documents) denotes the overall body consisting of both Commissioners and salaried staff of the 'Secretariat', together with the Chairperson in both her capacities (i.e. as Chairperson of the Commission and head of the office).

The National Executive Council equates to the Cabinet in other countries, and will be translated into the term 'Cabinet' throughout this study, except where source documents using the term are directly quoted.

The term 'Third World' will be used, following the concept developed by Horowitz (1972), as a general term to denote nations which are characterised primarily by their poverty, and to distinguish them as a group from the wealthy capitalist countries ('First World') on the one hand, and from the (former) Soviet bloc nations ('Second World') on the other.

Reference will be made to the PNG currency 'kina' (K). When the currency was introduced at independence it was equal to the Australian dollar. In April 1991 it was equal to A\$1.3 approximately.

CHAPTER 2

BACKGROUND TO THE CASE STUDY

Characteristics of the emerging State

The State of PNG, situated to the north of Australia, achieved its independence from Australia in September 1975. It has a democratic system of government based on ruling coalitions made up of a number of smaller parties. The transition to Independence and the first five post-independence years saw general continuity of government headed by Michael Somare. Since 1982 however there were frequent changes of government, particularly in the latter half of the decade. Most of the changes followed votes of no confidence in the government. The evolution of political parties was weak (Hegarty 1983, 1). A major post-Independence political development was the creation in 1978 of provision for nineteen provincial governments and their associated bureaucracies.

The 1980 census estimated the PNG population at approximately three million and growing annually at a rate of about 2.3 percent, with about eighty-seven percent rural and engaged mainly in subsistence agriculture (Papua New Guinea, Ministry of Finance and Planning 1986). English was adopted at an early stage as the official medium of instruction in both schools and higher education institutions, as some 750 indigenous languages existed, with no single dominant linguistic group. The PNG economy has an agrarian base complemented by a small but growing number of enclave mineral developments. The country is heavily dependent on export of primary commodities including gold, copper, coffee, timber, copra, cocoa and palm oil. In addition, Australian budgetary aid constituted at 1988 about one-fifth of government revenue.

Pre-Independence education policy

In the 1950s and earlier, under the Australian Colonial Administration, a policy was adopted of gradually building up the provision of education from the primary level, extending coverage as widely as possible. At that stage the secondary school system was embryonic.

In the 1960s came the realisation that not for ever was the Trust Territory of Papua and New Guinea to remain part of Australia, and that there was virtually a total absence of indigenous personnel educated and trained to a level necessary for the administration of an independent State. The 1960s saw a massive shift of resources into post-secondary education and this was largely at the expense of slowing down or arresting the further development of the primary and secondary levels of education. The major issue in education during this period became, essentially, the creation of an educated elite. Post-secondary education in PNG was from its start placed firmly in the context of manpower policy.

A largely unplanned mushrooming of post secondary institutions took place during the 1960s. Individual government departments set up their own training colleges, notably agricultural and forestry Colleges by the Primary Industry Department, nursing schools by the Health Department, teachers colleges and technical colleges by the Education Department and so on. A large number of church organisations also participated in the development of post-secondary education, particularly in nursing and primary teacher education (Papua New Guinea, Commission for Higher Education 1984 A & B).

As early as 1971 (Brown, Cohen, Eri & Nash 1971) it was recognised that the expansion of post secondary education had reached the point where rationalisation was needed. The Faber Report (Faber, McFarquhar, Hart, & Diddens 1973) (which substantially influenced the Eight Aims of the first Somare-led government) pointed, on the grounds of social equity, to the need to redress the balance between resources expended on post-secondary as compared to the primary and secondary levels. In 1972 legislation was drafted to provide for the creation of a coordinating body for post secondary (i.e. 'Higher') education and for the preparation of a national plan for higher education. It took until 1983 for legislation to be passed and the Commission for Higher Education held its first meeting in March 1984.

Characteristics of the higher education system

By this stage there were sixty-seven institutions of higher education (which according to the PNG definition includes all post-grade ten education with the exception of the national senior high schools which offer grades eleven

and twelve). These sixty-seven institutions consisted of seven main types: two universities on four campuses, nine primary teachers colleges, nine technical colleges, sixteen nursing schools, two colleges of allied health sciences, seven primary industry training colleges, twelve miscellaneous institutions, and ten privately funded institutions. By 1984 over 76,000 Papua New Guineans had successfully completed, within the country, programmes of post-secondary education. Of these, 24,000 were qualified primary teachers, 24,000 were graduates of technical and secretarial college programmes, and over 6,000 had received university degrees and diplomas.

The two universities were responsible for all degree and postgraduate level education, as well as secondary and technical teacher training, and subgraduate and postgraduate diplomas. (The only other degree level education was offered by the theological colleges.) The paramedical colleges and nursing schools provided post basic training and basic nursing training respectively. Certificate level training was provided through the primary teachers and primary industry colleges, while the technical colleges offered a range of basic, trade, apprenticeship and technician level training. Most of the miscellaneous colleges confined themselves to vocationally oriented programs. Research was an integral part of the universities, but there were also several research institutes falling outside the higher education system.

Admission to the universities normally required successful completion of Year Twelve (or equivalent) with passes at specific levels for particular programs of study. First degrees normally required four years for completion, except medicine which required five years followed by two years of professional experience for registration, and architecture which required six years including professional experience. Degrees were awarded by the universities themselves. Most of the remaining higher education institutions required successful completion of Year Ten with passes at specific levels in particular subjects, although a number also required Year Twelve, particularly those offering post-basic programs.

Although higher education institutions were distributed between seventeen of the nineteen provinces, higher education was a national (rather than a provincial) function. The main responsibility for the development of higher education lay with the Ministry of Education. Despite this, a considerable

number of institutions and enrolments fell outside the Education portfolio. Fifteen institutions (representing about eight percent of total higher education enrolments) came under the Health Ministry, and seven (representing about six percent of the total) under the Ministries of Agriculture and Livestock and of Forests. Another twelve were distributed between a further eleven Ministries.¹

The two universities were established prior to Independence as autonomous institutions by separate parliamentary acts. They were each governed by their own Council with membership drawn from a variety of sources, including members of parliament as specified in the acts. Some members were *ex officio*, others appointed by the Minister for Education, others representing private enterprise and the lay community, and others were elected representatives of the staff and student bodies. Each had a number of standing committees, including an academic board. In the non-university sectors many institutions had very little autonomy, the major policy and resource allocation decisions being made by their parent departments, which performed the role of coordinating authorities for these sectors.

Academic power in both universities was collegial, particularly in the University of Papua New Guinea (University of PNG), although there were differences of structure and emphasis between the two. Non-academic staff and students had elected representatives on the key committees including the Council.

In 1984 there were 1327 full time teaching staff in higher education, fifty-seven percent (757) of whom were non-citizens. University teaching staff made up twenty-eight percent (377) of the total, of whom seventy-eight percent (294) were non-citizens (Papua New Guinea, Commission for Higher Education 1986 C).

Non-citizens were by definition ineligible for tenure. The majority of citizen academics were appointed initially on three year contract terms, renewable for periods not exceeding five years at a time. The academic ranks were tutor, senior tutor/technical instructor/lecturer, senior lecturer, associate professor, professor. These were directly linked to citizen and non-citizen

¹ The number of government ministries increased to 16 in 1987 when a separate Ministry of Fisheries was created.

public service salary scales, and generally subject to similar conditions of service, which were tightly controlled by Cabinet's Salaries and Conditions Monitoring Committee. Promotion between these grades within the universities was subject to university criteria and generally based on performance in teaching, research and publication, except in the case of senior tutors and technical instructors of whom research and publication was not a requirement.

Responsibility for recruitment of university staff lay with the universities, whereas recruitment to institutions of the Department of Education, Health, Agriculture and Livestock, and so on was through the public service. Teaching staff in all institutions (except staff funded from solely private sources) were linked to a single public service salary scale, but considerable differences existed between the career and status of teaching staff in different types of institutions compared to the universities.

Within the universities separate citizen and non-citizen staff associations existed, whereas in the non-university sector staff interests were represented mainly through the Public Service Association and the Overseas Staffing Assistance Group.

The universities were funded by government on a staffing formula related to student load and notional standard staff contact hours. The formula included the assumption that a proportion of non-contact hours would be spent on research.

Funding of higher education

Between 1969 and 1972 the financial needs of the universities were assessed by the chairman of the (Australian) Commonwealth Grants Commission. In 1973 responsibility for higher education was formally transferred from Canberra to Port Moresby, and a new mechanism was set in place. Between 1973 and 1976 the Universities Finance Review Committee established by Cabinet reviewed the financial estimates of the universities and made recommendations to Cabinet. After 1976, the functions of Universities Finance Review Committee were effectively taken over by the new National Public Expenditure Plan mechanism which will be described below (Parry 1984, 94 - 95). Thus up until 1976 universities were treated for funding purposes as separate and individual cases drawing,

presumably, on the general pool of resources available to the government. Funding for the other tertiary institutions was allocated through the budgetary process of their parent departments.

With the advent of the four-year rolling National Public Expenditure Plan in 1977, budgeting for the universities and many other agencies became linked to the overall development planning of the government. All new initiatives were to be assessed in terms of their contribution to the government's development priorities. The National Public Expenditure Plan system dealt, however, only with new expenditures, while the bulk of expenditure was budgeted as recurrent and based on historical patterns. The universities had by this stage reached a more or less no-growth state, and the wedge of expenditure allocated through the National Public Expenditure Plan process was relatively small. In general there were relatively few new university initiatives which obtained funding, and relatively little change to the universities' autonomy for practical purposes.

One significant exception to this was in 1979 when the Public Service Salary scales underwent a major restructuring, and the universities were directed to bring their salaries and conditions in line with those of the Public Service. The government's position was strengthened when the Cabinet created a Salaries and Conditions Monitoring Committee in 1982. Any variations to salaries and conditions thereafter had to seek the approval of this Committee, and requests were often unsuccessful.

By far the largest source of finance for higher education was the national budget. All government monies for higher education institutions were appropriated through the national Departments, with the exception of the Universities, the Legal Training Institute and the PNG Maritime College which had direct appropriations. In 1983 appropriations to higher education accounted for approximately 6.5 percent of total appropriations (Papua New Guinea, Commission for Higher Education 1984 B).

Performance of the economy

In the first four years following Independence (1976 - 79) the economic performance of the country was promising. In 1978 and early 1979 there were sustained high levels of prices for most of PNG's agricultural exports (Papua New Guinea, National Planning Office 1978, 20). As was realised

later but not at the time, the economy was 'riding the crest of a wave which in the second half of 1980 began to break' (Papua New Guinea, Department of National Planning and Development 1985, 48).

In 1981 downswings deeper and sharper than anticipated in world market prices for all PNG's major exports were experienced (Papua New Guinea, National Planning Office 1981 A, 1). Copper and gold production from the Bougainville Copper mine dropped sharply, and the price of oil and petroleum products doubled. The balance of external payments turned sharply into deficit. Expenditure had to be reduced in real terms in order to restore balance to the foreign exchange accounts. A major adjustment was required (Papua New Guinea, National Planning Office 1981 A, 1-2).

By the end of 1982 it was clear that the world economy was 'experiencing its worst recession since the 1930s' and that the hoped for recovery was not yet in sight. The scale of PNG's adjustment problem was now far more serious than previously anticipated and further reductions in government expenditure were planned. (One of the major strategies for this was the application of a ten percent cut to the public service (about 3,000 workers) (Papua New Guinea, National Planning Office 1982, 6).)

Signs of a recovery in the world economy appeared during 1983 and for the first time in four years PNG recorded an overall surplus in its balance of payments in 1983 (Papua New Guinea, National Planning Office 1983, 17). Although the prospects for commodity prices were better than the depressed levels of the previous three years, no revenue flows were expected from the new Ok Tedi gold and copper mine until the early 1990s. The economy was expected to remain fairly flat with little growth in the resources available for public expenditure (Papua New Guinea, National Planning Office 1983, 28).

The prices of most of PNG's export commodities rose slightly in 1984 and 1985. The improvement in the balance of payments was reversed again in 1985 however. Gross Domestic Product experienced real growth of 0.3 percent in 1983, and 2.2 percent in 1984 (Papua New Guinea, National Planning Office 1983, 15), but as the population had been growing at about 2.3 percent per annum, per capita incomes had fallen. World growth slowed in 1987 after a moderate growth performance in 1986, and there were fears of further recession following the stock market fluctuations.

Briefly then, 1976 - 79 saw substantial growth, 1980 - 1983 sharp contraction, and 1984 onwards slight recovery, but with growth levels barely sufficient to keep pace with population growth. The main implication of this for higher education and the universities was that in the early 1980s there began to be intense pressure to reduce spending. The universities, as the consumers of by far the largest share of higher education resources, attracted particular attention as possible sources of savings. Some of the other implications are discussed further on.

Decline of Australian budgetary aid

Shortly before Independence (i.e. 1973 - 74) the proportion of total government expenditure funded by Australian aid was about 50 percent (Papua New Guinea, National Planning Office 1979, 25). A five year agreement governed this budgetary support for the period 1976 - 81, but its future real value was vulnerable to inflation (Papua New Guinea, National Planning Office 1978, 17). For the planning periods 1978 - 81, it was assumed that Australian aid would decline by two percent per annum in real terms (Papua New Guinea, National Planning Office 1978, 41).

In 1980, the Government decided on the basis of improved metal prices that a four percent real decline in Australian aid would be manageable. In the event the aid agreement from mid 1981 - mid 1986 settled future Australian aid flows at a faster rate of decline (i.e. five percent per annum) than previously experienced. In August 1980, the Government received a serious set back when it was informed that Bougainville Copper Ltd. (which contributed a significant portion of government revenue) was revising downwards its projections of copper and gold production from the existing mine over the 1980s (Papua New Guinea, National Planning Office 1980, 28).

Despite this, it was envisaged that the Government's expenditure planning over the 1980s would be considerably easier with the new five-year aid agreement (1981 - 1986) because the aid flows were to be fully indexed for Australian inflation up to ten percent per annum (Papua New Guinea, National Planning Office 1980, 28). The agreement provided for discussions between the two Governments on adjustments in the event of sustained

changes in the price of gold (Papua New Guinea, National Planning Office 1980, 35).

By November 1982, however, the Government was pessimistic about the prospect of a rapid recovery and sustained growth, in view of the extreme uncertainty surrounding the future of the world economy (Papua New Guinea, National Planning Office 1982, 17). The Australian Government agreed to reduce the rate of decline in aid to the following levels: one percent in 1983/84, two percent in 1984/85, and three percent in 1985/86 (Papua New Guinea, National Planning Office 1983, 32).

By 1985 Australian aid as a proportion of budget expenditure had declined from about a half to about a quarter. The new aid agreement for 1986 - 1990 provided for a five percent per annum decline in the real Australian dollar value of the aid, but about K67 million was to be offered in project aid. So the net reduction in the real Australian dollar value of the Australian aid package was to be about three percent per annum in real terms, provided the tied aid could be drawn down promptly and efficiently.

By November 1986 (Papua New Guinea, Ministry for Finance and Planning 1986, 36) the aid agreement for 1986 - 1990 had been varied, with reductions in the value of Australian aid for 1987, 1988 and 1989. It had already been reduced in Kina terms by the weakness of the Australian dollar. Beyond 1987 there was uncertainty as Australia had proposed minimum and maximum figures, and only for two years (1988 and 1989).

In summary then, over the period 1973 - 1988 the real value of Australian aid to PNG declined progressively and substantially, rather less rapidly than Australia desired, and rather less smoothly than PNG desired. Efforts at improving predictability by the agreement of 1981 - 1986 were frustrated by the economic recession of the early eighties and the resulting need to revise the agreement. Unpredictability of the real value of Australian aid was a major problem for the PNG planners, and this remained a feature throughout the whole period. The main implication of the decline of Australian aid and the continuing fluctuations and uncertainty over its real value is that it exacerbated resource scarcity and intensified the pressure to find savings from higher education, as well as contributing to a climate of economic uncertainty.

National planning in Papua New Guinea

PNG provides multiple examples of national planning. Since 1973 there have been at least four single sector comprehensive five year national plans: two for health, one for education and one for tertiary education, with a new education plan prepared in connection with the Public Investment Programme 1988 - 1992.² There have also been at least two comprehensive national planning systems, both of which have been superseded. In addition to national plans, there have been other examples of comprehensive plans which have similar characteristics. There have been several integrated rural development plans (at least two of which have impinged on tertiary education in ways which conflicted with government policy on rationalisation of higher education³). PNG is without doubt a much planned nation and enormous resources have been devoted to the planning process, irrespective of whether the government's signalled intentions have been realised. A brief review of the development of national planning in PNG is presented below.

Independence in 1975 was preceded by a period of about two and a half years of self-government. Prior to that the territory was administered by the Commonwealth of Australia from Canberra. Under the Australian administration, Departments were set up in Port Moresby, the capital, through which social services, infrastructure, transport and communications and so on were planned, developed and administered. These administrative institutions included Departments of Finance, Education and Health, and so on, and were modelled on comparable Australian institutions (Ballard 1981, 77). When the pre-independence Coalition government came to office in 1972, there were a total of eighteen departments and twenty-one statutory authorities (Ballard, 87).

A pattern of expenditure similar to that in Australia also occurred, such that education came to absorb about one third of total budget for the territory. A

²A new National Higher Education Plan was produced by the Commission for Higher Education in late 1990.

³The Southern Highlands Integrated Rural Development Programme (financed by the World Bank) included a new nursing school in Mendi, and the East Sepik Rural Development Programme (financed by the Asian Development Bank) included a new agricultural college. There was already a proliferation of small nursing schools in the country, and the Sepik Agricultural College duplicated courses already run in Popondetta and created or exacerbated surplus agricultural training capacity.

five year National Health Plan was developed in 1973 by the Department of Public Health in Port Moresby, to cover the period 1974 - 1978. It was approved by Cabinet on 23 May 1974. It came to be regarded in international health circles as an exemplary approach to the delivery of health services in the kind of geographical and socio-economic conditions prevailing in many of the less developed countries of the world. By 1975 both the Education and Health Departments had become well established and experienced institutions, with their own planning functions.

Despite this PNG had none of the characteristics of a national economy when the first Somare-led pre-Independence national coalition government was formed in April 1972 (Garnaut in Ballard, 157). The first real attempt to formulate a strategy for development was initiated by the announcement, in December 1972, of PNG's Eight Aims (Papua New Guinea, National Planning Office 1978, 2). These Aims were consistent with the five National Goals and Directive Principles laid down in the PNG Constitution. Although they were intended to make 'a radical departure from previous policy, they did not prove a fully effective tool for re-directing the activities and resources of the government' (Papua New Guinea, National Planning Office 1978, 3).

A framework for economic policy-making developed over the next five years, centred on the National Planning Committee of Cabinet and the Budget Priorities Committee (Garnaut in Ballard, 157). In late 1976 the National Development Strategy was approved, recognising that 'plans had to be made to control and redirect the pattern of government expenditure' (Papua New Guinea, National Planning Office 1978, 4). (Prior to this, budgeting for government activity had been carried out on an annual, incremental basis.) The new framework laid bare for political decision fundamental choices between dependence on aid, improvement in urban and public service incomes, improvement in various kinds of rural services, and reduction of inequalities in the amount of services provided within various provinces.

The Ministry of Finance played a central role in the evolution of the policy-making framework. The special role of the Minister for Finance was to be concerned mainly with macro-economic policy. As perceived by its first holder of this office (Julius Chan), it was 'to look after the base: to safeguard the revenue, to safeguard the value of the currency, and to ensure ... that the economy proceeds on a steady course' (Ballard, 158).

Along with Australian administrative institutions, PNG inherited conflict over responsibility for economic planning. In 1969 a General Financial and Economic Policy Division of Finance (then Treasury) had been established to provide advice on the use of economic powers as they were released from Canberra. This had been intended to replace the Office of the Economic Adviser which had prepared the first five-year development programme. However the directorate and staff of the Office of the Economic Adviser had been retained and renamed the Office of Programming and Coordination (Garnaut, in Ballard, 167). This Office was given the task of preparing a second five-year programme to follow the first from June 1973. The situation was complicated by a mission from the University of East Anglia Overseas Development Group which was engaged in consultations with ministers and officials over the general shape of the second programme. The Office of Programming and Coordination had anticipated a practical outcome from the East Anglia group, rather than the philosophical tone of its report. The head of the General Financial and Economic Policy Division saw no useful role for the Office of Programming and Coordination, while the director of the latter seems to have envisaged some division of responsibilities between Finance and his Office along the lines of short- and long-run policy questions. The matter was resolved for the time being by the new Minister for Finance (Julius Chan) who saw the need for a planning office to be located within the Finance Ministry, to be responsible for the generation and monitoring of new projects and programmes in line with government priorities.

Although the Chief Minister's Office was prepared to drop the director of the Office of Programming and Coordination, it was unwilling to allow the planning function to move to Finance where it would have been under the control of the minority People's Progress Party leader (Chan). Thus

...the ensuing struggle over the location of planning generated the first political crisis under the national government. The issue was finally resolved in December when the Chief Minister announced that the Office of Programming and Coordination would be abolished and a new Central Planning Office established. The Central Planning Office would be located administratively within the Finance Department, but the director would report politically to a National Planning Committee of Cabinet ... The administrative location within Finance was never of

much importance and ceased at independence (Garnaut in Ballard, 168)

The locus of initiative for economic policy-making lay therefore with the Office of the Chief Minister although Finance was also very influential through its minister.

The years 1973 - 1976 were years of transition to Independence and much of the attention of politicians and bureaucrats including the Central Planning Office was devoted to crisis management and the establishment of stability. A number of documents were published on Strategies for Nationhood: Policies and Issues (Papua New Guinea 1974). By 1974 the general principles in the form of the Eight Aims had been articulated and by 1976 a White Paper entitled National Development Strategy (Papua New Guinea, Central Planning Office 1976) had been published. Four major policy areas had been established: stabilisation of the flow of public expenditure (including the aid relationship with Australia), the 'hard currency strategy' (monetary) policy, fiscal policy particularly with regard to the renegotiation of the Bougainville Copper Agreement, and coordination of financial resource allocation decisions. By 1977 these four policy areas were being managed fairly effectively.

The National Public Expenditure Plan

In 1976 the Central Planning Office was renamed National Planning Office and new era of national planning was entered in 1977. The innovative planning system which heralded this era is described fully by Allan and Hinchliffe (1982), who were involved centrally in its establishment and development. Thirty years of comprehensive, national economic planning in the non-socialist countries of the Third World had failed to meet expectations. PNG had achieved self-government and independence at a time when the disillusionment with comprehensive national planning was gaining momentum. Public expenditure planning was a response to the general failure of comprehensive planning, and as a reaction to the country's highly dependent position in the international economy (Allan & Hinchliffe, 3). The neglect of the budget by economic planners was, in the view of Allan and Hinchliffe, both serious and surprising since it was through the allocation of government revenue that much government policy took form.

The new National Public Expenditure Plan built on the existing annual system of priority-setting through the budget but adopted a rolling budget with a time horizon of four years (Papua New Guinea, National Planning Office 1978, 4). The longer term approach was deemed necessary in order to overcome two main difficulties: that of generating important new initiatives which would require more than a single year's planning; and the tendency to allocate small increases in resources to all activities, resulting in too few visible achievements in any direction. The National Public Expenditure Plan was therefore aimed firstly at controlling and limiting expenditure on existing policy, and secondly at reserving the limited room for growth in total government expenditures for clearly documented projects to achieve targets in nine strategic areas (represented as nine sub-budgets).

Three particular features collectively distinguished the National Public Expenditure Plan from other kinds of planning (Allan & Hinchliffe, 27). These were: an integrated set of bureaucratic and political planning bodies, an overall ceiling on public spending set as part of a macroeconomic policy, and a division of the overall ceiling into nine sub-budgets, each related to a specific aspect of the government's development strategy. These sub-budgets did not correspond with the conventional budget divisions by government department used by Finance for control purposes. The National Public Expenditure Plan had antecedents in some other planning processes such as comprehensive planning, project planning and programme budgeting. The main characteristic which distinguished it from these was, however, that it aimed specifically at engaging politicians actively in the process of making explicit trade-offs between competing aims.

The first of its three main features comprised two main committees: The National Planning Committee (a committee of politicians) chaired by the Prime Minister, which included the leader of each coalition party plus the Minister for Finance (if not a coalition leader). After the 1977 election it was expanded to include the deputy leaders of coalition parties. From March 1980 (and for a brief period before that) until late 1985 a separate National Planning portfolio existed whose responsible minister was also a member of the Committee. The second was the Budget Priorities Committee (a bureaucratic committee) chaired by the Secretary for Finance and including the heads of the other main coordinating agencies (Central Agencies):

Prime Minister's Department, National Planning Office and Public Services Commission. For matters relating to foreign aid the head of the Department of Foreign Affairs was also a member.

The National Planning Committee made recommendations on the overall budget ceiling, the broad expenditure allocation between the different sub-budgets and the detailed programmes. The Budget Priorities Committee provided advice and recommendations on all these matters. The role of the two committees tended to be mutually reinforcing, with the National Planning Committee providing essential political authority, and Budget Priorities Committee coordinating the departments and central agencies of government in preparing programmes to achieve political objectives.

The second main feature was that expenditure decisions were made within a well defined ceiling of growth in real public spending on goods and services, taking account of both domestically generated revenues and all anticipated flows of foreign aid. Aid was tied exclusively to projects already approved within the National Public Expenditure Plan.

The third main feature, the sub-budget ceilings, were classified according to policy area: rural welfare, less developed areas, general welfare, economic production, improved food production/subsistence and nutrition, improved training and increased PNG economic participation, urban management, effective administration, and environmental protection. The thrust was towards achievement of the Eight Aims and National Development Strategy, emphasising redistribution of an inequitable and inherited pattern of development. Many of these groupings of expenditures cut across government agency lines (Allan & Hinchliffe, 30). While this allowed a clearer examination of agency programmes in relation to overall government objectives, it also raised a complex series of questions about the relative roles of the central and technical agencies in making allocative decisions. A point of importance to this thesis is that

Priorities are established within groupings, but if there are many good projects within one group, the marginal projects in another may be squeezed out in their favour (Allan & Hinchliffe, 30).

In other words, the totals allocated to each sub-budget were not immutable, and by implication, neither were the totals allocated to each central and technical agency. There was thus some scope for flexibility and adjustment.

The other most important aspect of the National Public Expenditure Plan process for the case study which follows is the fact that it was restricted to the additions to the budget, rather than applying to total budget spending. This limitation was attributed to doubt as to whether, at the initial stages, there was the administrative capacity to undertake a thorough analysis of the whole budget (Allan & Hinchliffe, 30). The analysis of the case study will show, however, that this limitation was also necessary for bureaucratic political reasons, whether or not this was recognised by Allan and Hinchliffe. For when the Medium Term Planning system of 1984/85 tackled the question of redistributing the recurrent budget (i.e. the domain of the Department of Finance) a bitter struggle ensued between the Departments of Finance and of National Planning and Development. The general strategic implication of the National Public Expenditure Plan was however that redistribution would take place through growth, by holding recurrent expenditures steady and by selectively distributing the surplus.

As a mode of planning, the National Public Expenditure Plan had a fundamentally different starting point from project planning, programme budgeting and comprehensive planning (Allan & Hinchliffe, 39). Rather than concentrating on technical approaches, it accepted the political nature of the process and aimed at improving the organisation of the way in which microanalytical information was used. By about 1980, after considerable 'teething' troubles, the National Public Expenditure Plan system had become fairly well understood in central and technical agencies, at least procedurally. It seemed to work reasonably well, although there were criticisms of the amount of effort required to meet these procedures and the little reward in terms of success in winning project approval and funding.

From 1975 to 1979 (which encompassed the development of the National Public Expenditure Plan system) PNG enjoyed, as we have seen, a period of significant economic growth and the economy was buoyant. This provided conditions in which a planning system based on growth was feasible. From 1980 to about 1985, following the oil crisis in 1979 and the world economic recession, the PNG economy experienced a sharp and unanticipated

downturn with deficits in 1981, 1982 and 1983. Suddenly there was no growth, and the planning system had lost its mission in life.

The crisis of the early 1980s also gave rise to soul searching which took the form, amongst other things, of a series of major reports: the Report on Administrative Problems in the Public Service (To-Robert Report), the Report of the Committee on Organisation and Management in the Public Service (Noel Report), and Public Sector Management in PNG: An Administrative Overview, (World Bank 1983). The latter concluded that

not enough progress had been made in the areas of planning and sectoral strategy formulation, financial management and budgeting, and human resources management (Papua New Guinea, National Planning Office 1984 A).

The same source indicated that a World Bank staff member had been 'seconded to PNG to advise Government on these issues.'

The Medium Term Planning System

Another new era in planning was entered when the Cabinet, on 27 January 1984, acting on the World Bank Report, decided to institute a new Medium Term Planning System which would produce a National Development Plan for the period 1986 - 1990. This was to be launched on the tenth anniversary of Independence: 16 September 1985. The National Development Plan was to have two main components: the Medium Term Strategy and the Medium Term Programme.⁴ This required changing from an annual planning cycle incorporating the rolling four year budget to a medium term time frame (five years), and a greater emphasis on sectoral and cross-sectoral planning. The Government's top priority was now to encourage growth in the economy through creation of productive work opportunities.

The National Development Strategy of 1976 had not been intended to be a detailed blue-print of how its policy objectives could be attained. That was the role of the National Public Expenditure Plan, which had succeeded in both ensuring that a larger proportion of government expenditure was directed into truly developmental activities whilst ensuring that financial

⁴ Letter from Director of National Planning Office to National and Provincial Departmental Heads and Statutory Bodies, 17/2/1984.

discipline had been maintained. Neither the National Development Strategy nor the National Public Expenditure Plan had placed sufficient emphasis on the need to create productive employment opportunities (Papua New Guinea, National Planning Office 1984 A).

Although the Medium Term Planning System was presented as a development of the National Public Expenditure Plan, it was fundamentally different in a number of ways. A major difference was the reorganisation of planning away from the nine strategic objectives back towards the conventional sectoral divisions based on ministries and departments of government. The budget was delineated into twelve main sectors, such that no longer could individual projects compete on their merits with individual projects in any other sector (as had been possible under the National Public Expenditure Plan). Although the conscious removal from the budgetary process of the competitive bidding for the annual 'wedge' might reduce Departments' discretionary power, in practice (it was argued) they would now be able to set a policy direction for the medium term (which had not been possible with the annual focus), to determine the selection of projects to achieve this policy, and then devote resources to implementation rather than to a 'fruitless annual planning exercise.' The task of the National Planning Office was to ensure that the central strategic theme of the Plan was incorporated fully into each sectoral programme of action (Papua New Guinea, National Planning Office 1984 A). However, because there was virtually no growth in the economy, and the sub-budgets were now sectoral, the resources to finance any new initiative in a sector had to be found, in effect, from existing resources in that sector. There was therefore to be a direct trade-off between recurrent funding and development funding.

The system was conceptualised as having two main phases. The strategy phase (for which about nine months was allowed), would prepare the Medium Term Development Strategy, based on the National Development Strategy of 1976 but adjusted to reflect the policy concerns of the 1980s. The programming phase, for which about nine further months was allowed (see **Diagram 2** overleaf) (Papua New Guinea, National Planning Office 1984 D) would prepare the Medium Term Development Programme based upon the existing National Public Expenditure Plan but constructed on a sectoral basis with a longer time horizon. (Originally it was proposed to allow a much longer period for the development of the plan, but the Cabinet

decided against this, contrary to the advice of some professionals in the National Planning Office.)

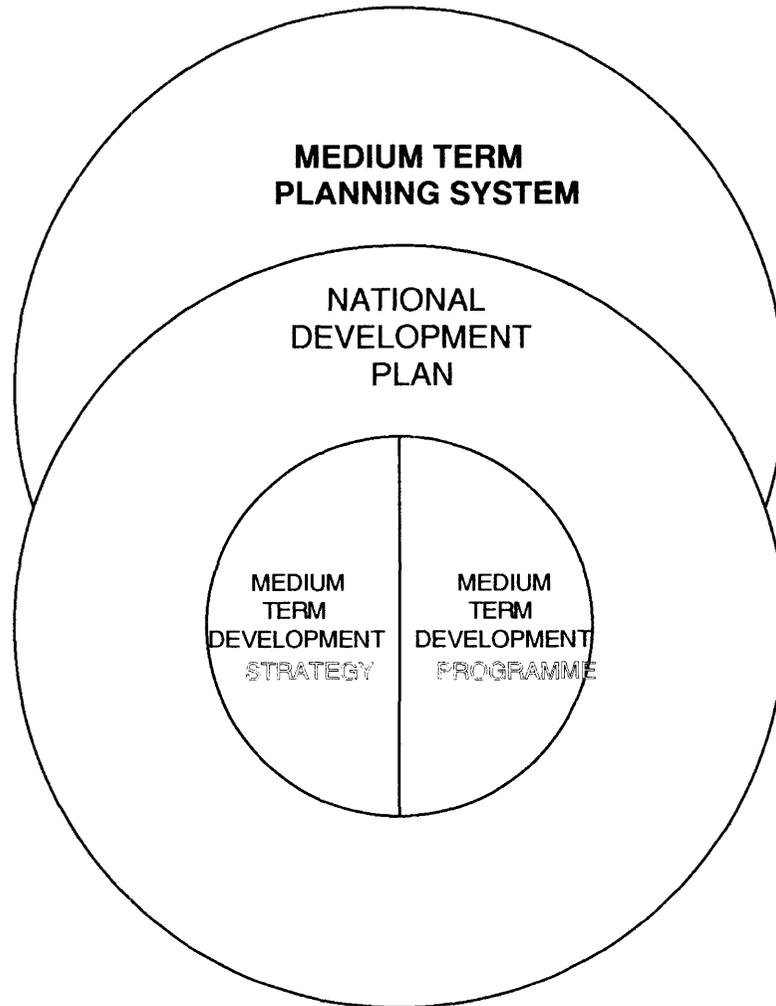


DIAGRAM 2

The system was coordinated by the Department of National Planning and Development (former National Planning Office), and was responsible to a Ministerial Committee, chaired by the Deputy Prime Minister and Minister for National Planning and Development (at that time Pias Wingti). The other members of the committee were the Ministers for Finance, Education, Foreign Affairs and Trade, Provincial Affairs, Public Service, Primary

Industry, Police and Post and Telecommunications. Twelve Sectoral and six cross-Sectoral Committees,⁵ reported to a sub-committee on the five year Development Plan having responsibility for the day-to-day management of the plan preparation. This sub-committee reported to the Budget Priorities Committee of the National Planning Office, which in turn reported to the Ministerial Steering Committee.

Within the first phase of the National Development Plan, i.e. the Medium Term Development Strategy, each sector was to produce three stages of documentation: an Inception Report (identifying the key issues for the sector concerned) by 13 July 1984; an Interim Report (consisting of statistical review/status report for the Sector) by 14 September; and a draft Final Report - i.e. draft Sector Strategy - by 30 November. Two members of the National Planning Office staff were appointed to each Sectoral Committee, one as a committee member and National Planning Office supervisor, and the other as National Planning Office Action Officer and member of the secretariat of the Sector Committee. The whole process was to place 'a phenomenal workload on the National Planning Office' in addition to its already substantial workload in producing the 1985 - 1988 National Public Expenditure Plan (Papua New Guinea, National Planning Office 1984 D, 11).

The superimposed network of Sectoral Committees conflicted in some instances (as in our case study) with existing administrative lines of authority. These Sectoral Committees were created with the authorisation of Cabinet and it was not made clear whether they were to be ad hoc or standing committees. It was in these committees that decisions were made on the identification and selection of options for the Plan. Departments were to review their planning and management activities and make organizational proposals as part of the consultation process. Nominated staff within each Department were to provide a secretariat which, in conjunction with the National Planning Office, would coordinate that Department's contribution to the National Development Plan. The new arrangements thus in effect interfered with departmental lines of responsibility by interposing an external committee structure to which individual departmental officers were directly responsible.

⁵ Dealing with Macro Economic Policy, Land Policy, Aid Policy, Regional/Specific Area Policy, Policies to influence Non-Government Activities, and Foreign Policy.

Cabinet, in adopting the new planning system, noted that the World Bank had identified two main problems with the National Public Expenditure Plan: firstly, there was inconsistency of thinking about policies and programmes, and to remedy this the system should be reorganised onto a sectoral basis. Secondly, as it presently operated the system encouraged a short term view of the development process with an excessive focus on the annual budget, whereas a longer view, based on the likely level of resources available to each sector over the next several years, was needed. In short, the Bank wanted more realism about resource availability and restriction of the range of choices (Papua New Guinea, National Planning Office 1984 A).

Paias Wingti, then Deputy Prime Minister in the Somare government, was widely recognised as the chief protagonist of the new Medium Term Planning System and was almost certainly heavily influenced by the World Bank. The Medium Term Planning System's strategy phase alone was extremely costly in terms of time and effort by bureaucrats across the entire range of government agencies, and of selected non-government representatives. It was also extremely costly in terms of the purchase of consultancy services for the sectoral committees, financed mostly by overseas aid. By the time the strategy phase was completed, the Medium Term Planning System had begun to suffer from lack of interest among the national politicians. Despite this, the Department of National Planning and Development pressed on with the programming phase and produced a draft Medium Term Development Programme 1986 - 1990 and a draft National Development Plan. During the course of this Mr. Wingti left the government (March 1985) and joined the opposition. In November 1985 he became Prime Minister when the Somare government was defeated in a lack of confidence vote. At this point the Medium Term Planning System was consigned to limbo, never having received any official endorsement or approval. The new government apparently needed to publicly dissociate itself from its predecessor's major policy initiative, despite Wingti's association with it in the past. Despite the public dissociation, the unofficial documents continued to inform and be used by some officers of the Finance and Planning Department, and much of their content remained *de facto* policy.

A third major era in national planning was entered when the Wingti government prepared its first budget in early 1986, which embodied a radical simplification of planning. The Ministry of National Planning and Development had by now been abolished, and the Department reduced to a Planning Division within the Department of Finance and Planning. The economy was now divided into five main sectors. Two of these were classified as high priority: the Economic Sector and to a lesser extent the Infrastructure Sector, while the remaining three were treated as lower priority: Social Services Sector (including Education and Health), Law and Order Sector, and Administrative Services Sector. A policy of arbitrary budget cuts distributed on a percentage basis was imposed on agencies in each of the lower priority sectors, with the objective of shifting spending into the higher priority sectors with the aim of generating growth in the economy. This was a far cry from the 'distribution with growth' of the National Public Expenditure Plan, and even the 'redistribution with no-growth' of the Medium Term Planning System. Equity considerations were subordinated to growth considerations. This era continued until mid 1988 when the Government lost power in a lack of confidence vote to a new government headed by Namaliu (successor to Somare), having in the meanwhile won a national election by forming a majority coalition. In summary then it can be seen that in the space of only ten years the national planning system in PNG underwent at least three radical changes, thus:

Approx. dates	Up to 1977	1978 - 1983	1984 - 1985	1986 - 1988
Basic characteristics of planning system	Annual budgeting inherited from colonial period based on line departments.	National Public Expenditure Plan -4 year rolling development budget based on 9 (cross-sectoral) strategic objectives.	Medium Term Planning System - 5 year strategic planning system based on 12 sectors and 4 cross-sectors.	Wingti government's simplified 5 sectoral division of economy with intersectoral shift to economic sector.
Resource climate	Strong Australian support	Economic growth	No growth	Economic scarcity

DIAGRAM 3: MAJOR PHASES IN THE NATIONAL PLANNING SYSTEM

These changes were associated with external influences of various kinds, including that of the World Bank and Australia. The Somare Government abolished the powerful Public Services Commission in 1984 and replaced it with a Department of Personnel Management. Further changes were instituted by the Wingti Government in early 1988, abolishing the Budget Priorities Committee and replacing it with the Resource Management Committee and its associated committees. This had the effect of disrupting the established power relationships of government departments. Some declined in power while others ascended; new departments emerged and some old ones disappeared. In this turbulent environment two new single sector plans were produced: The Higher Education Plan 1986 - 1990 (Papua New Guinea, Commission for Higher Education 1986 A) and the (second) National Health Plan 1986 - 1990 (Papua New Guinea, Department of Health 1986).

During the whole of this period Australian budgetary aid to PNG was declining as a policy of both nations. Considerable uncertainty, however, surrounded the value of Australian aid during these ten years, due to fluctuations and the relative decline in the value of the Australian dollar, and the impact of the recession of the early 1980s on the Australian economy.

One further process which was to have a major impact on both the national planning function and the operations of the government departments needs to be mentioned in this context. It began in the pre-independence Constitutional Planning Committee, and manifested itself two weeks before Independence in a unilateral declaration of independence by the island of Bougainville on which a major copper mine was situated. This secessionist move was temporarily headed off, but it was to revive again after Independence and resulted in the passage of the Organic Law on Provincial Government in 1978. As a result of this, a huge new layer of government, consisting of nineteen provincial governments and their bureaucracies was created. Some of the respective legal powers and administrative procedures remained confused indefinitely (Regan 1987, 1988). Many provincial governments experienced financial and managerial difficulty, and suffered from an acute shortage of personnel skilled in planning. The creation of this additional tier of government vastly complicated the task of the national

government and its departments, some of which (such as Health) remained in a state of shock for several years.

Higher education planning in the context of national planning in PNG

In 1979 the National Planning Committee of Cabinet decided that the National Planning Office should produce a comprehensive manpower plan, as part of a continuing programme concerning manpower, education and labour issues. The first National Manpower Assessment 1979 - 1990 was published in 1981. Although this was not to 'be taken to express the official views of the Government on the issues addressed' (Papua New Guinea, National Planning Office 1981 B, iv), it very quickly became adopted as the chief guide to manpower requirements by agencies such as the Education Sectoral Committee of the Medium Term Planning System. A second National Manpower Assessment 1982 - 1992 was published in 1986, which was used as the main guide to manpower requirements upon which the Higher Education Plan 1986 - 1990 was based (Papua New Guinea, Department of Finance and Planning 1986).

The creation of the Commission for Higher Education coincided with the government's commitment to the Medium Term Planning System and the preparation of the National Development Plan 1986 - 1990. The Commission was drawn directly into the preparation of the strategy for the whole of the Education Sector, an activity which competed for time with the Commission's efforts to prepare the National Plan for Higher Education as prescribed in its Act. An overriding assumption of the Education Sector's strategy was that there would be no additional resources for education as a whole, and that any new developments would need to be financed from savings found within the Sector. The basic thrust of the strategy was that highest priority was to be given to accelerating the achievement of universal primary education, and that this was to be financed through savings from the post-secondary subsector. The major issue for post-secondary education thus became, in effect, how to continue producing approximately the same quantity and quality of graduates at progressively reducing cost over a five year period. To a lesser extent the issue was also to redirect resources within higher education so as reorient its output more to meet shortages in high priority manpower categories. These were chiefly accounting and

managerial personnel, scientists and technologists, and graduate teachers, especially science teachers (Papua New Guinea, National Planning Office 1981 B; Papua New Guinea, Department of Finance and Planning 1986).

The Medium Term Planning System proved unworkable: as we have seen, by the end of the first year (1984) it was clear that the new planning system had lost much of its political support. After March 1985, when its chief protagonist Pias Wingti left the government and the programming phase became shaky the status of education policy became uncertain for the remainder of the year. The failure of the National Development Plan after nearly two years of preparation had major consequences for the Commission. One of these was that much time had been lost for the construction of a data base essential for post-secondary education planning and substantially set back the preparation of the national plan for higher education. By late 1985, however, the Commission had accumulated sufficient data to enable a comprehensive description of the post-secondary education system as at 1984 in terms of student/staff ratios, equivalent full time students, unit costs, student demand, and an assessment of the entire stock of graduates of the post-secondary system to date.

In November 1985 post-secondary education planning took another turn: a few days before its fall, the Somare Cabinet directed the Commission to prepare a single sector 'Higher Education Development Plan', which was clearly aimed at cost-saving and was to include cuts to university programmes in particular. With the fall of the Somare government, a policy vacuum of at least three months ensued during which it was not at all clear whether even the achievement of universal primary education was still the highest priority. The question appeared to be resolved for Higher Education when in March 1986 the Wingti Cabinet reiterated the Somare Cabinet's directive to the Commission to prepare a Higher Education Development Plan, with a slightly extended deadline: 30 May 1986. The major issue for post-secondary education remained quite clearly: how to continue producing approximately the same quantity and quality of graduates at progressively reducing cost, irrespective of where the savings were to go.

The Commission duly prepared, by the given deadline, a document entitled 'Higher Education Plan 1986 - 1990: A Strategy for Rationalisation'. The deadline allowed for only minimal consultation with the tertiary institutions

and other interested parties. The Plan proposed to save over K10 million over the years 1987 - 1990, most of it in the first year. It embodied three main kinds of proposed changes: the closure of selected very high cost university programmes for which there was a very small manpower requirement; the amalgamation of several tertiary institutions which were situated close to each other geographically, to form larger institutions with a view to economies of scale; and the closure of a number of very small institutions whose students would be absorbed into other institutions which offered essentially the same programmes.

The Plan received unqualified support from the Prime Minister who wrote to the Education Minister:

...I am extremely pleased with both the Submission and the detailed Plan from which it emerged. I fully endorse and support all of the recommendations ... I firmly believe that with strong support from your Ministry the Commission for Higher Education can continue its excellent work and ensure full implementation of these recommendations with a consequent saving of resources to be diverted to other areas of higher priority.⁶

Despite this, when the Plan was considered by Cabinet as a group the Ministers were unable to agree and it was deferred until after the national elections which were at that time some ten months away (in mid 1987). With the passage of time and the Wingti government's development of the new economic policy in which the twelve sectors of the previous government's new planning system were condensed into five, higher education was lumped into the so-called 'Social Services Sector' along with education as a whole, health, and youth and community services. Higher education and education as a whole were downgraded in priority.

The change of economic policy had an enormously profound impact on the implementation of the strategy for the education sector within which higher education planning had become enmeshed. Whilst the Wingti government still seemed to endorse in principle the basic thrust of the education sectoral strategy, i.e. expanding primary education at the expense of post-secondary

⁶ Letter from Pias Wingti MP, Prime Minister to Sir Iambakey Okuk CBE MP, Acting Minister for Education, 27/8/1986.

education, in reality the implementation of this shift was impossible because resources were to be shifted away from the education sector as a whole. In other words, a policy of 'robbing Peter to pay Paul' became redundant when it was decided to 'rob Paul' as well. To make matters more problematic: being unable or unwilling to decide how to 'rob Peter', the government allowed the Department of Finance to impose arbitrary percentage budget cuts on most government agencies including those providing post-secondary education. Cuts were imposed in 1986, 1987 and 1988, and the universities were affected particularly.

In late 1987, in preparation for the 1988 national budget, Cabinet considered the Higher Education Plan for a second time. By this time the proposed savings had been reduced to a little over K2 million and many of the most contentious proposals had been dropped or substantially modified. Cabinet approved the Plan some sixteen months after its original submission to the Education Minister, and attempts were made by the Commission throughout 1988 to ensure its implementation.

The case study which follows describes in detail the initial attempts by the Commission to develop a National Plan for Higher Education, the conflict between this and the Education Sectoral strategy of the National Development Plan 1986 - 1990, the ultimate formulation of the Commission's Higher Education Plan 1986 - 1990: A Strategy for Rationalisation, its approval by Cabinet in 1987, and its implementation during the period 1988 - 1990.

Health planning: a parallel case

The experience of health planning in PNG manifests some striking similarities and some important differences from that of higher education planning. A comparison of these is educative, and a limited discussion of these will be presented later. The salient features are, however, that the first National Health Plan 1974 - 1978 was prepared and adopted by Cabinet in 1973, prior to Independence in 1975. This plan had a strong moral or philosophical commitment - to maximising the delivery of basic health services to the rural population through a highly developed and hierarchical referral system.

The advent of provincial government in 1978 and following years and decentralisation of health responsibilities threw the Health Department's planning into disarray. Financial decentralisation of most health functions was not achieved until 1983. In 1984, like all other government agencies, the Health Department was drawn into the Medium Term Planning System and required to produce a strategy for the Health Sector. Thus the Department underwent a process directly analogous to that of the Education Sector. Following the collapse of the Medium Term Planning System in 1985, the Department went on to produce the second National Health Plan in 1986 for the period 1986 - 1990. Although this was apparently not formally adopted by Cabinet, it was adopted by the Department and implemented as far as possible. Thus both higher education and health planning followed a very similar course from 1984 - 1987 in an environment which was in many respects identical. A comparison of their respective experience and what may be learned from it will be discussed in the findings and analysis.

**PART II:
THE CASE STUDY**

CHAPTER 3

ORIGINS OF THE NATIONAL PLAN FOR HIGHER EDUCATION: CONFLICT AND UNCERTAINTY

Emergence of the concept of a national plan for higher education

The passage of the Higher Education Act 1983 marked the beginning of a formal commitment by the government of PNG, through a specialised agency, to the coordination of tertiary education as a whole and to the concept of a national plan for higher education. Prior to this, the planning and coordination of tertiary education was done on a sectoral basis - agricultural, nursing and teacher education carried out by their respective Departments of the Government, for example, and the universities separately by individuals and bodies appointed specifically for the purpose.¹

The Act provided for the creation of the Commission for Higher Education, specified the objects of higher education, the functions and executive responsibilities of the Commission. In particular it specified the preparation of a national plan for higher education containing recommendations to the Minister for Education including

- (a) the range and level of programmes needed to meet national requirements; and
- (b) the declared² institutions at which various programmes should be conducted; and
- (c) the number of students that should be enrolled in each programme and the number and level of Government scholarships or other awards that should be made available for each type of course; and
- (d) the establishment of new declared institutions or the amalgamation or closure of existing ones.

¹ An Education Plan 1976 - 1980 had been approved by Cabinet in February 1976. It touched on tertiary education only in so far as it dealt with teacher education and did not attempt to deal with institutions of further and higher education, other than the teachers' colleges, except in so far as it was concerned with their enrolment requirements, for this would have been well beyond the province of the Department of Education and the matters for which it exercised financial, executive and administrative responsibility (Papua New Guinea 1976, p. 90).

² The Act gave power to the Commission for Higher Education to require certain kinds of information (e.g. enrolments) from all institutions wholly or partially in receipt of government funding. Of those, the majority were 'declared' by the Cabinet. The Commission for Higher Education was empowered to make recommendations on financial allocations to the declared institutions. The non-declared institutions were mainly those run by the disciplined services.

The concept of this comprehensive plan can be traced back to 1972, however. Following the 1964 Report of the Commission on Higher Education in Papua and New Guinea, chaired by Sir George Currie, an earlier draft Bill for a Higher Education Act had been prepared in 1973, from which this wording was lifted with only minimal changes (Papua New Guinea 1973). The period 1971 - 1983 preceding the passage of the Act has been well documented by Parry (1984), and reflects difficulty in overcoming political ambivalence about setting up such a Commission and its task of planning.³

The Act embodied a number of important assumptions concerning the national plan for higher education, summarised as follows: Firstly, that the basic unit of analysis was the tertiary education programme (i.e. B.A., Dip. Ed. and so on, in each of the various disciplines). Secondly, that it would be possible to ascertain the 'national requirements' (undefined) for the output of graduates for each of these programmes. Thirdly, that sufficient information existed or could be obtained regarding attrition to ascertain how many students would need to be admitted to each programme to achieve the desired output. Fourthly, that demand from and supply of appropriately qualified students would be sufficient to meet desired intake levels for each programme. Fifthly, that sufficient information existed or could be obtained to enable a judgement to be made as to which institution was the most appropriate to offer any given programme. Sixthly, that there might be some possibility of relocating programmes in alternative institutions. Seventhly, that recommendations on the level and extent of Government financial support for students should form an integral part of the plan, and that this support might be applied differentially between programmes. And finally, that scope might exist for the establishment of new institutions, and that sufficient information existed or could be obtained to exercise a judgement

³ An Interim Commission for Higher Education had been established in 1981, of which one of the main roles was preparing the Higher Education Act. An Information Paper by the Chairman of the Interim Commission (Kenehe 1982) indicated the Commission's purpose as 'to foster the coordinated development of Higher Education in PNG' and bring about rationalisation and coordination. No reference was made to a national plan as such, planning being envisaged as assisting institutions with their planning. A more diffuse and devolved mode of planning seems to have been envisaged by the Interim Commission.

as to the desirability of amalgamating or closing some of the existing institutions.⁴

Taken together these assumptions suggest that the national plan for higher education was conceived of as a rational-comprehensive exercise aimed at achieving some undefined but well articulatable national objectives. Government funded higher education was conceived of as an integrated system drawing on a common pool of government resources, and that there was possibility of shifting resources between various locations and institutions, as well as possibility of winding up specific aspects of existing institutions.⁵ These assumptions seem to ignore the current pattern of higher education infrastructure as well as the bureaucratic structures through which resources were delivered, as well as the power bases associated with these bureaucratic structures. Furthermore they seem to ignore the existence of several partial coordination systems⁶ already operating within the higher education sector.

With the passage of the Act on 17 May 1983, the Commission's operational body was created out of the former Office of Higher Education, which had previously formed part of the Department of Education for many years. Although a new staffing structure was formulated, the Commission inherited almost all of the former staff of the Office. The timing coincided with a major cutback in Public Service staffing, an unfavourable climate for expanding staffing levels and recruiting 'new blood' into the organisation. The Chairperson had served on the staff of the Office for a number of years previously. The only major staffing changes were the creation of and appointment to three senior positions, each heading one of the three Divisions within the Commission's staff.⁷ Moreover, the functions⁸ of the former Office were subsumed into the new Commission, to which was added

⁴ Verified by individual interviews with Commissioners and Chairperson of the Commission for Higher Education, April/May 1988.

⁵ Verified by individual interviews with Commissioners and Chairperson of the Commission for Higher Education, April/May 1988.

⁶ e.g. Nursing Education Council; Teacher Education and Technical Education Divisions of the national Department of Education.

⁷ These were the Principal Project Officers: Finance and Administration (filled from 4 June 1984), Planning & Research (filled from 28 August 1984), and Manpower & Scholarships (filled from 18 September 1984).

⁸ These functions were chiefly the administration of the National Scholarships Scheme, the Central Selection Unit which acted as a clearing-house for all tertiary admissions, and scrutiny of university budget estimates.

its major new mission: the preparation of a national plan for higher education. The operationalisation of the Commission was therefore not so much the creation of an entirely new organisation, but the addition of a major new mission to an old one, an increase in its status (in formal terms) and in its scope (in terms of budget scrutiny of the non-university institutions), and the addition of a minimal number of new key staff.

The process of proposing individuals for appointment as commissioners, and their subsequent approval or rejection by the Cabinet, was not completed until 14 December 1983. The Act provided for a Chairman to be appointed by the Head of State, acting on advice, given after consultation with the Public Services Commission. Not less than four and no more than seven Commissioners, having expertise or experience in higher education, administration, planning, finance or legislation were to be appointed by the Cabinet. Of these at least one was to be a woman, and one representing the interests of church agencies. A corresponding number of alternate Commissioners with similar qualifications was to be appointed (Papua New Guinea 1983). The first meeting of the commissioners was on 2 March 1984. The three new key positions were not filled until mid to late 1984, so that the Commission was limited until then in terms of pursuing its new mission.⁹

From their first meeting the Commissioners ascribed importance and urgency to the preparation of the national plan for higher education and approved a tentative timetable (see **Appendix 1**) which envisaged that a first draft would be completed by September 1984 and a final draft by March 1985, with adjustments to be made if necessary.¹⁰ Existing facilities were to be better utilised to meet manpower requirements as forecast by the National Planning Office, and the judicious allocation of scholarships would be a means whereby the autonomy of the University of Papua New Guinea (University of PNG) could be contained. Wherever possible training in specific areas (e.g. Health, Teaching) was to be centralised. It was recognised that to be effective, the National Plan for Higher Education would need to cut across departmental and institutional boundaries.¹¹

⁹ Verified by interview with Chairperson of the Commission for Higher Education, April 1988.

¹⁰ Minutes of Commission for Higher Education Meeting No. 1, and Background Paper CHE 1.3.1 for that meeting, 2/3/84.

¹¹ Minutes of Commission for Higher Education Meeting No. 1, minute 4, 2/3/84.

This was the first explicit statement that the plan should be framed with specific reference to manpower requirements as forecast by the National Planning Office, which by this stage had published its first National Manpower Assessment (Papua New Guinea, National Planning Office 1981 B) and was preparing a second. Here, too, for the first time was an awareness of the potential difficulties of cutting across existing departmental and institutional boundaries, although no suggestion or consideration was given as to how this might be accomplished.

The Commission held a seminar entitled 'Towards a Strategy for Higher Education in Papua New Guinea' from 19 - 21 June 1984, 'to generate discussion of alternative strategies and to enable the Commission to reflect on the issues arising from the discussion when considering the formulation of the national plan for higher education'.¹²

Forty-two formal papers and a few informal presentations were made, chiefly by university staff and key officials from various ministries and Departments. The Minister for Education (Sir Barry Holloway) gave the Opening Speech and Professor K. McKinnon, former Director of Education, was the Keynote Speaker. Contributions were classified as follows: resources for higher education; private enterprise; universities; demand for higher education; investment in higher education; standards; outreach in higher education; distance education; tertiary education and other sectors of higher education; staff development and training. Most of the papers dealt with specific institutions or sectors of higher education, and very few were written from a general policy perspective (Papua New Guinea, Commission for Higher Education 1984 C).

On 22 June 1984 the Commission selected three papers regarded as containing the basic elements with which the Commission could begin to develop its strategy plan for higher education: the Keynote address, that of the Director of the National Planning Office and that of the Manpower Planning Unit 's Principal Economist, of the National Planning Office.¹³ All of these were written from a general policy perspective.

¹² Minutes of Commission for Higher Education Meeting No. 1, minute 1 (ii)(e), 2/3/84.

¹³ Minutes of Commission for Higher Education Meeting No. 2, minute 4, 22/6/84.

Superimposition of the National Development Plan

Coincidentally a paper entitled 'Administration and Organisation of the Work Programme of the Medium Term Development Plan (MTDP)' was presented to the Commission by the acting Principal Economist, National Planning Office Manpower Planning Unit (who later joined the staff of the Commission's secretariat as Principal Project Officer Manpower and Scholarships). This item appeared in the minutes under the title 'Incorporation of the national plan for higher education into the government's Medium Term Strategy'. (Nothing else, however, in the minutes implied that the Commission regarded the national plan for higher education as an integral component of the Medium Term Development Programme.) This marked the beginning of a protracted conflict between the preparation of the national plan for higher education in accordance with the Higher Education Act on the one hand, and the Cabinet's requirement that the Commission participate in the preparation of a strategy for the Education Sector as a whole on the other, through the Education Sector Committee of the Medium Term Planning System (National Development Plan 1986 - 1990). The Medium Term Planning System and the extent to which it differed from previous national planning activity has been discussed in detail in Chapter 2. It was to have a very significant impact on the work of the Commission over the next eighteen months, and on the development of the national plan for higher education in particular.

The Commission was informed that its participation would be required, through a higher education working sub-committee, in the Education Sector Committee, one of a network of such committees within the Medium Term Planning System. A sectoral issues paper was to be prepared by the end of September 1984, and the government's Budget Priorities Committee would consider recommendations for the sector as a whole. The advice given to the Commission as to what was involved is reproduced in full in **Appendix 2**, since it is important to an understanding of a subsequent series of events.¹⁴

The Commission promptly established its Sub Committee on Higher Education which met for the first time on 12 July 1984, and identified the

¹⁴ Minutes of Commission for Higher Education Meeting No. 2, minute 3, 22/6/84.

following six issues for its consideration: centralisation, national priorities, allocation of resources to higher education, who should pay, government guidelines, and standards. It proposed that implementation of the plan should be considered through the following mechanisms: recommendations on level of expenditure, the setting of quotas for enrolment through the Committee on University Training Manpower, revision of scholarship policy, the Training Priorities Committee, recommendations on teacher training, universal primary education.¹⁵ Thus even before recruitment of the Commission's key personnel, its new mission was engulfed by a massive planning exercise for the whole economy.

The Medium Term Planning System proceeded apace, to enable completion of the strategy stage by November for incorporation in the national budget to be presented to Parliament. The detailed budget for 1985 was to be finalised at that time, with outline budgets prepared for the subsequent four years. The urgency of the Medium Term Planning System was linked to the tenth anniversary of Independence on 16 September 1985 when the Prime Minister intended to announce the new National Development Plan for 1986 - 1990.

The key actors within the Commission were the members and alternate members of the Commission, including the Chairperson who was also the Chairperson of the Commission's office (hereafter 'the Secretariat').¹⁶ They comprised citizens and non-citizens drawn from various types of higher education institutions, provincial government and the private sector, appointed as individuals and not as representatives of their parent institutions. The Cabinet made certain changes in the original list of proposed commissioners, and ultimately appointed four citizens: the Secretary for Education (Roakeina), the Secretary of the Central Province (Voi), a female university academic in the field of teacher education (Salley), a businessman in the primary industry sector (Raki) and three non-citizens: the Chairman of the Port Moresby Chamber of Commerce (Roper), a university Professor of Politics (Oliver), and a church representative with interest in nursing education (Louisson). Their full details and those of the Alternate Commissioners are contained in **Appendix 3**. The Chairperson, although a permanent public servant (and thus by definition a citizen), was

¹⁵ Minutes of Commission for Higher Education Meeting No. 2, minute 3, 22/6/84.

¹⁶ Background paper CHE 1.1.1 to 1st meeting of Commission for Higher Education, 2/3/84.

appointed by Cabinet on a fixed term basis.¹⁷ Her husband was a senior Minister in the Somare government of the time. Below the Chairperson in the staff hierarchy of the Secretariat were three non-citizen contract officers, recruited from outside the Commission to the key positions of Principal Project Officers. The remainder of the Secretariat staff (with the exception of the Chairperson's Executive Officer) were all citizens and almost all permanent officers of the Public Service. An undated organisational chart, prepared in 1983/84, appears in **Appendix 4**.

The three Principal Project Officers, although non-citizens, were recruited from within the country and had significant local experience: Principal Project Officer Finance and Administration had been Chief Accountant with the Department of Education, Principal Project Officer Manpower and Scholarships had been acting Principal Economist in the Manpower Planning Unit of the National Planning Office, and Principal Project Officer Planning and Research had served on the administrative and planning staff of each of the two universities.¹⁸ The Secretariat's staff totalled approximately twenty-five people.

The Principal Project Officer Planning and Research was appointed a member of the Sub Committee on Higher Education¹⁹ and as the Commission's representative on the secretariat of the Education Sector Committee. Within days of taking up her appointment much of her time was taken up with the Medium Term Planning System through the work of a consultant appointed by the National Planning Office to assist the Education Sector Committee.²⁰ The Commission was required to produce policy option papers for each of the six issues identified by the Commission for consideration by the Education Sector Committee. At this stage specific objectives and alternative modes of achieving them had not been identified and debated by the Commission for any of the six issues. It seemed that policy options were to be considered by the Sector Committee without reference to the Commissioners' views on those options. There was a great danger that the Commission, through the Medium Term Development Plan process, would be precipitated into commitments for the next five years

¹⁷ Verified by the Chairperson June 1988.

¹⁸ Agenda Paper for Item 4.1 of Commission for Higher Education Meeting No. 3, 21-22/11/1984.

¹⁹ Commission for Higher Education Meeting No. 2 Minute 3(1), 22/6/1984.

²⁰ Minutes of 4th meeting of Education Sector Committee 6/9/1984.

concerning matters of higher education which had received no conscious consideration by the Commission, with foreclosure of options resulting.

At the first meeting of the three Principal Project Officers with the Chairperson on 24/25 September, the measures needed to fully operationalise the Commission were considered, including the assignment of the various functions and executive responsibilities laid down in the Act to the various divisions of the 'Secretariat', a term coined at this meeting. This discussion represented the first attempt by key staff to achieve a common understanding of the provision of the Act and their operational implications. More than two months of the Education Sector Committee's work had taken place before the Secretariat became fully operational, and two of the three Principal Project Officers had barely begun to organise their own Divisions and regular tasks.

At this stage the Secretariat possessed pathetically little information (other than for the universities) even to describe existing higher education provisions in PNG, let alone to use for the development of a rational-comprehensive higher education plan or to defend the higher education subsector when it came under attack in the Education Sector Committee. Data was very scarce on the non-university sectors of higher education until May 1985 when the first comprehensive description of higher education in PNG as at 1984 was produced as part of the Commission's Annual Report to Parliament.

By September 1984 only a very incomplete map of higher education in PNG existed, derived from an annual survey of enrolments undertaken in 1983, covering fifty-three out of fifty-nine institutions offering programmes of at least one academic year or more. Graduate output data existed mainly only for the universities, with virtually nothing on attrition. Data on staffing levels, physical facilities and costs was fragmentary, non-standardised and misleading if used for comparison between institutions or between programmes. The Commission was thus ill-prepared to counter pressures within the Education Sector Committee to finance primary education expansion from proposed cuts in tertiary education funding. The consultant used the limited information available: the wheels of the Medium Term Development Strategy would grind inexorably on, whether the Commission was ready or not.

By 3 September 1984 the Secretariat had expressed concern over pressure to meet the November deadline, particularly because fourteen ministries were involved in the higher education sub-sector, the financial implications were great, and much time was required to co-ordinate all the necessary data. The cancellation of the sub-committee on higher education (which had met only once) was being considered, a particularly significant proposal since this would have closed off the only formal channel for consulting the agencies within other ministries which were responsible for delivering certain kinds of higher education (e.g. nursing, paramedical, agricultural).

With the Secretariat's cooperation, the Sector Committee's draft Interim Report, (a statistically-based review of the Education Sector), was prepared to schedule and considered at the Sector Committee's fourth meeting. The draft was not particularly controversial although two major matters of contention had arisen. The substance of these objections were, firstly, that to present unreliable and non-standardised unit cost data only for selected institutions was potentially very misleading. Despite this objection from the Commission's side, the data remained in the final form of the Interim Report. Secondly, a serious structural problem emerged insofar as higher education was cross-sectoral in nature, while education in general was confined to a single Sector Committee. Although the Sub Committee on Higher Education allowed some scope for input from institutions located administratively within other sectors, the members had no power to represent the sectors concerned, and the Sub Committee had hardly met. As higher education resources were budgeted as bits of budgets of fourteen other departments, there was no mechanism to ensure that, if savings were to be identified within, for example, the Agricultural Colleges, these savings would ultimately accrue to the Education Sector and not be used for other purposes within the Primary Industry Sector. (See p. 56 below for explanation of the strategy of shifting resources from higher education to primary and non-formal education.) No way was ever found within the workings of the Education Sector Committee to take account of this problem, nor did it appear to cause any concern to that Committee.

The greatest cause for alarm within the Secretariat did not arise until the subsequent stage of the Sector Committee's work, in relation to policy options on resource allocation within the sector which were formulated by

the consultant in consultation with the National Planning Office member of the Sector Committee.

Conflict and competition with the Education Sector Committee

By 9 October 1984 the amount of time devoted to the Sector Committee and the informal methods of the consultant were giving rise to serious concern amongst the three Principal Project Officers. This is vividly reflected in the notes of their extraordinary meeting, called 'for the purpose of briefing the Chairperson on the present state of the Secretariat's involvement in Medium Term Development Strategy.' The three Principal Project Officers had each received direct requests from the consultant to produce policy option papers for the Sector Committee, and one had been asked for material on costs; the three felt the appropriate channel for such approaches and any responses was through the Chairperson and/or the Commission itself. Moreover although the six issues (identified by the Commission and included in the Inception Report for the Sector strategy) were central to both the national plan for higher education and the higher education sub-sector of Medium Term Development Strategy, the scope and schedule of the Commission's plan was different from that of Medium Term Development Strategy, and the Secretariat's primary responsibility was towards preparing the national plan for higher education. Concern was also expressed that material had been included in the higher education section of the Interim Report of the Medium Term Development Strategy despite the Chairperson's indication to the Sector Committee of her disagreement (to which we have already referred).

The Principal Project Officers were clearly experiencing anxiety over the pressure which the Medium Term Development Strategy required. One at least experienced considerable confusion concerning the conflict in her role vis-a-vis the Medium Term Development Strategy and the Commission respectively, and feared that matters were getting out of the Commission's control. The consultant was greatly facilitated in his work by already having detailed knowledge of the education system in PNG and an extensive network of personal contacts. The Principal Project Officers' attempt to formalise the relationship between the secretariat and the consultant can be understood as the Secretariat's attempt to reassert control. The Department of Finance and the National Planning Office, it seems, lacked confidence in the Commission's ability at that stage, although it is plausible that the

National Planning Office, in its determination to assert control over future higher education funding, consciously exploited the newness of the key officers of the Secretariat and the lack of information possessed at that stage by the Secretariat.

Amongst other things, the Principal Project Officers' meeting agreed that it was inappropriate for any policy option papers on higher education to be presented to the Sector Committee without the approval of the Commission, and that it was inappropriate for any material on higher education to go forward from the Sector Committee unless it had the approval of the Chairperson. The following day, after the Chairperson had had an opportunity to discuss the Secretariat's concerns with the consultant, it was decided to reconvene the Sub Committee on Higher Education on 31 October and 13 November, and that a meeting of Commission would be held on 21 November in order for it to vet the draft Sector Report and submit its own comments. The Chairperson undertook to seek the support of the Sector Committee's Chairman (who was also the Secretary for Education) for the principle that, until the Commission's Secretariat had adequate opportunity to obtain the necessary data, there should be no plan to reduce resources for higher education as a whole. She would also seek his assurance that no recommendation affecting higher education would go forward from the Sector Committee unless it had the support of the Commission.

On 23 October, the Chairperson reported that the Sector Committee's Chairman had recognised the difference in scope and schedule between the national plan for higher education and the Medium Term Development Strategy, but felt that the Secretariat should provide some background work to meet the Medium Term Development Strategy timetable. He did not see any problem with the timetable of the national plan for higher education in regard to the reduction of financial allocation to higher education, since budget allocations for 1985 were already made. He was reported as agreeing specifically that recommendations affecting higher education would not go forward from the Sector Committee prior to consultation with the Commission. By this time policy option papers had been prepared for each of the six issues and were approved by this meeting.

On 31 October the Sub Committee on Higher Education systematically considered policy option papers from members of the Secretariat as well as a few prepared by other individuals. Lively discussion ensued and agreement was reached in a fairly efficient manner on the pertinent recommendations. One paper, drafted by the consultant, dealt with resource allocation between education sub-sectors. Although ultimately this issue became the most contentious for the higher education representatives, it is interesting to note that it passed the Sub Committee on Higher Education with apparently no comment. The content of this paper should be examined in a little detail since it will be important to an understanding of the remaining events in this episode. It was structured to

first discuss the main theme of the Medium Term Development Strategy, the creation of productive employment opportunities...

then discuss total funding for the education sector, various approaches to improving its efficiency and, in particular, focus on staff student ratios as a means of improving efficiency and reallocating resources between sectors (Papua New Guinea, National Planning Office 1984 C).

Each section contained a brief summary, a set of policy options and recommendations, and then a more detailed discussion of the issues. The logic of the argument is briefly as follows: the economic system creates employment, not the education system, although the latter provides prerequisites for employment: knowledge, skills and attitudes. Productive skills are best provided through tertiary education and/or to adults on the job. The present emphasis in school syllabuses on basic skills should be maintained, and increased attention be given to non-formal education. Both secondary and tertiary education should be restricted to the manpower demands of the economy. The share of the total national budget devoted to education should be maintained, but reallocation should take place within the education sector particularly to benefit primary schooling. The latter argument was based on a study by G. Psacharopoulos entitled 'Education Research at the World Bank' (Psacharopoulos 1983) showing that the highest social return accrues to investment in primary education in less developed countries, with the lowest to tertiary education.

At the heart of the paper is a paragraph commenting that, at the time of writing, data had not been received on budget allocations between the subsectors (i.e. primary, secondary, non-formal and tertiary), and that the author intended to recommend that higher education's budget be held constant in kina terms until its share had declined from about forty percent to about thirty five percent, i.e. by about K5 - K6 million a year at current prices or about ten percent of the higher education budget. Detailed analysis of whether this was realistic would await the data.

Alarm bells should have rung in the heads of the senior Secretariat staff. All three Principal Project Officers and the Chairperson were present at the meeting. Why did they not? One reason is undoubtedly that, as with many of the Education Sector Meetings, members were given no opportunity to read the papers before the meeting. The Medium Term Development Strategy was being prepared in such a rush that in many instances there was insufficient time for the consultant to circulate drafts, often half an inch or more thick prior to the meetings. (The Sector Committee, for this reason, on at least one occasion suspended its meeting for an hour or so to enable members to read the papers. Even so, it was well nigh impossible to digest their contents adequately.)

Another reason that suggests itself is that presenting incomplete information and indicating that it warrants consideration at a later date when additional information is available may tend to obscure. Those concerned may, for instance, indeed be absent from the critical meeting at which the issue is re-considered. Deferral for lack of information creates the possibility of exploitation, for the item may be slipped back in at a later date, once again tabled at the meeting perhaps, possibly dealt with out of context. In those circumstances it might be approved without proper consideration, especially if it were brought up towards the end of the meeting when participants were anxious to leave.

The Commission's position was weakened by the Sub Committee on Higher Education's inability to prepare its own policy option paper on the topic of resource allocation. In lieu of a recommended option, it had simply agreed that the following comments be brought to the attention of the Sector Committee: that there was a potential for savings in the higher education sector; and that there was a generally expressed concern that the pace at

which these savings were realised should be determined by the Commission on the the basis of the other recommendations concerning the policy options.

One further point worth emphasising is that there was a general concern that standards in higher education should be maintained (particularly if there were to be a reduction in its resources), and if possible improved. One of the limiting factors in higher education standards was recognised to be the quality of secondary school leavers. The members of the Sub Committee were therefore sympathetic towards redirecting higher education resources to primary education if they were to be used for quality improvement, e.g. improved primary teacher training. This improvement would eventually flow through to benefit the tertiary level also. The Commission and the Sub Committee on Higher Education were therefore not intrinsically opposed to some shift of resources. This point is important because ultimately resources were taken from higher education by the government and not ploughed back into improvement of primary education.

The Sub Committee's comments on all the policy option papers, together with the consultant's (incomplete) paper on resource allocation, were presented to the Education Sector Committee on 2 November, which accepted them as they stood. The Sub Committee's recommendation that the Commission should determine the pace at which the savings should be realised from higher education was eventually ignored by the Sector Committee in its final draft report however.

At this point the Secretariat's anxiety abated somewhat. On 12 November the key staff met to consider what type of national plan for higher education the Commission should produce, to revise the plan's draft timetable, take stock of data availability, and identify additional data needs. They agreed that the national plan for higher education should be contained in a

single document which emphasised the philosophy of the plan, which was intended to provide guidance and indicate required change of emphasis, which might contain specific recommendations but which did not translate these into budgeted programme (*sic.*).

This differed from the type represented by the Medium Term Plan, in which a strategy was developed into fully costed and integrated programmes.²¹

Considerable discussion also took place on the meaning of the terms 'national requirements', 'national priorities' and 'nation', with agreement that

'nation' was not synonymous with 'national government' in that it allowed a wider interpretation such that requirements or priorities in addition to those of the national government could be taken into account.

and

for the purpose of the plan, 'national requirements' should be interpreted to mean the 'requirements of the national economy', and that the primary objective was how to influence the supply of graduates.

They also considered a manpower model for the plan. Bearing in mind delay in the production of the second National Manpower Assessment and certain intrinsic inadequacies in it for the basis of a manpower model, they agreed that it would not be feasible in the near future to use the model, but that the first phase of it should be undertaken (i.e. establishing the input and output of the base year), for use as a basic resource for the plan. They also agreed on a ten year plan period, with 1984 data used for the base year, and that the plan not be restricted to a manpower plan. The following revised draft timetable was agreed: first draft: September 1985, second draft: December 1985, final draft: March 1986. They noted there was no need for it to dovetail precisely with the Government's budgetary cycle, as the plan would not take the form of budgeted projects. The meeting was harmonious, cooperative and very productive, providing a satisfactory agenda for the Planning and Research Division. On 21/22 November 1984 the Commission adopted a progress report based on these discussions and decisions.

It is clear that at this stage both the Secretariat and the Commissioners envisaged the plan as distinct from the Medium Term Development Strategy,

²¹ Minutes of Principal Project Officers' meeting No. 5/84, note 2.1, 12/11/84.

and in some sense its 'proper task'. The Principal Project Officer Planning and Research certainly felt that meeting the Medium Term Development Strategy requirements was interfering with the accomplishment of the 'proper task' of her division. The Duty Statement for her position specified the requirement to 'draft, in consultation with other divisions of the secretariat of the Commission for Higher Education, a national plan for Higher Education for consideration by the Chairman'. This duty was second in order of importance only to the overall direction and control of and responsibility for the work of the Division.

The Secretariat's peace of mind was short-lived, for the following day the Sub Committee on Higher Education met for the third (and last) time to consider two documents: a further draft by the consultant of the whole of the higher education section of the draft Sector Strategy,²² and a draft entitled 'Re-allocation of Funds Between Sub-Sectors' intended to form part of the main (non-higher education) section of the draft Strategy but which had significant implications for higher education funding. Minor textual amendments were proposed for the former section, and the Sub Committee on Higher Education reiterated its recommendation recognising that there was a potential for savings in the higher education sub-sector, but that the extent of these and the pace at which they could be realised would be determined by the Commission in accordance with the provisions of the Higher Education Act 1983. The second document, however, was hotly debated, and the discussion tense.²³

The Secretariat's objections were in substance that: the whole of the draft Sector Strategy, of which the section on Resource Allocation formed the nub, was framed such as to give first attention and highest priority to primary, then non-formal, then secondary, and finally higher education. The needs of each of the first three had received quite detailed analysis in the light of national priorities. Higher education however had been treated simply as the residual factor in a shift of resources in favour of primary education and to a lesser extent non-formal education. No attempt been made to assess the needs of higher education, and little attempt had been made to evaluate its

²² The official but somewhat misleading title of this document was 'MEDIUM TERM DEVELOPMENT STRATEGY - Education Strategy: Discussion Papers, National Planning Office, Papua New Guinea, December 1984.'

²³ Draft verified by Chairperson of the Commission for Higher Education, June 1988.

importance in terms of the government's policy of high level manpower localisation,²⁴ which had long been a high priority. The government had not lessened its interest in rapid localisation, which had provided the rationale for the heavy expenditure on tertiary education in the past.

The meeting ran on well into the lunch hour, and towards the end various members drifted out, with only a handful of the original ten members present at the end. The minutes were never confirmed, or presented to the Commission for ratification. A report of the decisions was presented both to the Sector Committee and the Commissioners at their respective meetings on 15 and 21/22 November, recording unequivocally the Sub Committee on Higher Education rejection of the single policy option in the paper on Re-allocation of Funds Between Sub-sectors, and reiterating its recommendation recognising potential savings in the higher education sub-sector, but asserting that the realisation of these was to be determined by the Commission in accordance with the provisions of the Higher Education Act 1983 (Papua New Guinea 1983). The Secretariat's dissatisfaction with treatment of higher education funding as residual - i.e. that higher education would get whatever was left (regardless of needs or present commitments) after primary, non-formal and secondary education had been financed - was reflected in minute 3.2.2 of the sixth meeting of the Education Sector Committee held on 15 November.

The Sector Committee decided²⁵ to present three options on education's share of the total government budget. Only the third, that the share of the budget should increase by allocation of a 1.0 percent per annum increase in the size of the education budget, was recommended by the Committee, but 'opposed by the Commission for Higher Education because it would cause major difficulties in adjustment for higher education.' The Commission was dissatisfied that any recommendation which it actively opposed should go forward from the Sector Committee, for it was inconsistent with assurances given previously by the Chairman of the Committee.²⁶ Three other documents were not discussed, two concerning higher education and one being the report of the meeting of the Sub Committee on Higher Education which had opposed the consultant's draft on resources. Members were

²⁴ i.e. Indigenisation.

²⁵ Decision 5/6/84 of the 6th meeting of the Education Sector Committee, 15/11/84.

²⁶ Draft verified by Chairperson of the Commission for Higher Education, June 1988.

requested to 'take the papers home, read and comment and then submit comments to the consultant.' A few days later the consultant, the National Planning Office member and the Principal Project Officer Planning and Research met to incorporate textual amendments into the final draft. Some of the Commission's objections on the draft were satisfactorily resolved by textual changes or circumlocutions, while others were not resolved. Ultimately the consultant regarded the final draft as having either satisfactorily taken account of all these objections, or as having explicitly acknowledged the disagreement of the Commission.²⁷ The Principal Project Officer Planning and Research was still dissatisfied.

About this time the Principal Project Officer Planning and Research and the Chairperson happened to meet the acting Director of the National Planning Office, who advised informally that in a case where a subsection of a Sector Committee was unable to reach agreement with the Committee, although consensus was desirable, a minority report from the dissenting subsection could be appended to the draft Sector Strategy for the attention of members of the Ministerial Steering Committee. On 21 and 22 November, the Commission met to scrutinise the final Draft Sector Strategy and noted (minutes 7, 8 and 9):

- (i) that conflict existed between Medium Term Development Strategy and the National Plan for Higher Education;
- (ii) that certain amendments recommended by the Sub-Committee on Higher Education, at its third meeting, had not been incorporated into the draft report of the Medium Term Development Strategy - Education Sector Report^{28a} ;
- (iii) that neither adequate analysis nor proper consultation appeared to have taken place in relation to some options/recommendations contained in the portion of the draft report relating to higher education;
- (iv) that arbitrary decisions appeared to have been made re financial allocation recommendations for the higher education subsector.

²⁷ An interview with the former consultant on 6/7/12/87 confirmed this.

^{28a} Otherwise described as the Draft Sector Strategy.

Considering that the Draft Sector Strategy was to form funding policy for the next five years, with ongoing effects, the Commission had grounds for very serious concern.²⁸ The Commission passed two resolutions (reproduced in **Appendix 5**) to be brought to the Education Sector Committee together with an eleven page document containing the Commission's comments on the draft report, expressing its disappointment in the Draft Sector Strategy and its strong objections to any hasty decisions on resources to be made available to Higher Education.

The seventh (and final) meeting of the Sector Committee was held on 26 November, to finalise the Draft Sector Strategy and consider National Education Board's and the Commission's views on the final Draft.²⁹ The bound version of the final draft omitted any appendix containing the Commission's comments, nor did these reach the Ministerial Steering Committee meeting in early December.

Despite the assertiveness of the Education Sector Committee, there had been some suggestions that the whole Medium Term Planning System might in fact collapse. Credence of this was strengthened by very poor attendance at the Ministerial Steering Committee which received the draft Sector Strategies, with only two of nine members present. After months of work involving hundreds of bureaucrat man-hours within the Department of Education, the National Planning Office, and the Commission, consuming much time which might have been devoted to the national plan for higher education, the Education Sector Strategy seemed a damp squib. The politicians who commissioned it, and eleven other sectoral and six cross sectoral strategies, seemed little interested.³⁰ A Commissioner (who had played a pivotal role in the Education Sector Committee) explained this as follows: national policies were normally proposed through the bureaucratic Budget Priorities Committee, and screened by the ministerial National Planning Committee, before being passed to Cabinet for consideration. During this period, he claimed, the National Planning Committee was not working effectively - it became almost dormant. There was no commitment at the political level to this committee, and its activities became very *ad hoc*,

²⁸ The Chairperson of the Commission for Higher Education concurred with this view, June 1988.

²⁹ The researcher was unable during the field visit in April/June 1988 to obtain a copy of the minutes of the meeting. Possibly no minutes as such were ever drafted of the final meeting.

³⁰ Draft verified Chairperson of the Commission for Higher Education, June 1988.

resulting in a policy vacuum. This was associated with the Prime Minister's (Somare) perception that the governing coalition was losing control and heading for defeat (as it did in November of that year). In effect, therefore, recommendations of the bureaucratic committee (Budget Priorities Committee) were going direct to Cabinet, and if things went wrong, the Cabinet held particular bureaucrats responsible.

Small wonder, then, that the viability of the Medium Term Development Strategy began to be doubted within the Secretariat. Even the future of the Sector Committee seemed doubtful, for the Chairman of the Sector Committee considered the work of the Sector Committee was now over.³¹ Now at last it seemed the Commission could proceed with preparing the national plan for higher education and that this chapter of higher education planning was now closed. A revised plan timetable allowing about 15 months for its preparation had been agreed in November.³² Now the way seemed clear for an orderly formulation of the national plan for higher education, with sufficient time for adequate data collection and consultations.

On 4 December, however, the Chairperson discussed with the Principal Project Officers the 'imminent adverse effect of the Medium Term Development Strategy to the Higher Education Sector' and possible courses of action by the Secretariat. There was a political expectation for savings to be realised from the higher education sector in 1984 - 85 (i.e. even before the Medium Term Development Plan period was to start). (The higher education expenditure base year figures for 1983 in the Draft Sector Strategy were a substantial underestimate of actual expenditure on higher education in 1983).³³ There was a need to move forward the plan's schedule. Less than a month had elapsed, and the timetable for the national plan for higher education was again reversed, and moreover the Commission was three or four months further behind in its preparation because of the time devoted to the work of the Sector Committee.

Three areas were identified through which savings might be realised without requiring research data and information: co-ordination, student financing,

³¹ Verified by interview with former Chairman of Sectoral Committee, May 1988.

³² Commission for Higher Education Meeting No. 4, minute 6 (iv), 21-22/11/1984.

³³ Principal Project Officer Finance and Administration confirmed through interview in April 1988 that the Commission was still having difficulty in determining total actual expenditures on higher education.

standards. They decided on an awareness campaign amongst tertiary institutions and their parent departments and Ministries to convey urgently the problems facing higher education and seek their reactions and ideas on the matter. In December, however, the Chairperson took six weeks recreation leave and matters quiesced. December/January is normally the long recess period in PNG, particularly in tertiary institutions, and it would have been impossible to find enough staff in the institutions to make an awareness campaign effective. The Planning and Research Division focused instead on completing the 1984 enrolment survey, the results of which were crucial data for the national plan for higher education.

Summary

From mid 1984 to its end, there was conflict between two aspects of government policy: that represented by the Medium Term Development Strategy exercise, and those aspects of the Higher Education Act relating to the national plan for higher education. The Act predated the Medium Term Development Strategy, and was passed by a majority in the parliament. The Medium Term Development Strategy was commissioned by the government of the day, and could be cancelled by a change of government or simply a change of policy. The Act had much greater permanence, a change requiring either its repeal or the superimposition of subsequent legislation.

Secondly, the whole exercise of the Medium Term Development Strategy generated a great deal of confusion and inconsistency in public policy making, manifest at many levels and in many respects. The Medium Term Development Strategy was itself an evolving exercise, and confusion in the Commission and other agencies probably had its roots in confusion within the National Planning Office. The latter was under enormous pressure not only to complete its normal programme budgeting exercise, the National Public Expenditure Plan for 1985 - 1988, but superimposed on this was a massive comprehensive planning exercise for the whole economy. Officials in the National Planning Office (or Department of National Planning as it became) developing and coordinating the National Development Plan (Medium Term Development Strategy/Medium Term Development Programme) lost touch with the realities of the political climate in which they were working. This, together with an unrealistic political deadline for its completion, placed enormous pressure on the National Planning Office,

pressure transmitted by some of its officers when dealing with other agencies.

Thirdly, there was inconsistency between members and staff of the Commission as to its own role: was it a statutory body set up to provide independent advice to the Government through the Minister, or an agent of the Government performing a role analogous with that of a line department? This question was recognised but not adequately addressed by the Commission or its Secretariat. Thus, operationally, there was vacillation between these two, depending on the pressures at the time. This weakened the Chairperson's position, and this element of uncertainty complicated the activities of the other key staff within the Secretariat. It was compounded by the Commission's low political profile at this stage, which made it essential, despite its reluctance, to assert itself through the Medium Term Development Strategy.

Fourthly, no common concept of the national plan for higher education was held even within the Commission by this stage. Its scope and form had not been defined other than by the Act, and it seems that most of the commissioners and staff had little notion as to what the national plan for higher education was to be and how it was to be formulated.³⁴

³⁴ The above draft summary to Chapter 3 was presented to the Chairperson and members of the Commission, as well as other key individuals, for comment. There was general agreement that it represented an accurate summary of the events described, although several commented that they would not have been able to have summarised them in this way at the time, since they had not thought of them in this perspective at that time.

CHAPTER 4

THE PRE-FORMULATION STAGE: DECEMBER 1984 - NOVEMBER 1985

Continued conflict and uncertainty

After completion of the strategy phase of the Medium Term Planning System, there ensued a period of nearly twelve months in which uncertainty persisted as to whether priority should be assigned to the national plan for higher education or to the Education Sector Strategy. A stop-go pattern of activity resulted, as conflicting messages (often informal) were received about progress of the Medium Term Development Programme.

In January 1985 the type of plan envisaged by the Planning and Research Division was still essentially the rational-comprehensive type suggested by the Higher Education Act, relying on systematic analysis of data for the base year 1984, and requiring construction of standardised measures of student load, standardised student/staff ratios for all tertiary institutions (and individual courses as far as possible), and standardised unit costs.¹ A study of the stock of graduates dating back to the first outputs in 1953 (from nursing training schools) was undertaken.

A ministerial reshuffle had taken place on 21 December 1984. The outgoing Minister for Education, Sir Barry Holloway, had taken an intense interest in the education portfolio, and had a cordial personal relationship with the Commission's Chairperson.² The new Minister for Education, Paias Wingti, was also Deputy Prime Minister.³ Despite a greater personal distance between him and the Chairperson, his appointment was viewed positively. His Deputy Prime Ministerial status enhanced that of the Education Portfolio. His personally visiting the Commission (rather than summoning Commission

¹ Construction of standardised unit costs was extremely difficult because budget and expenditure information from the various institutions was in a multiplicity of non-standard breakdowns. Herein lay the greatest difficulty in attempting to arrive at a rational (i.e. standardised) measure which could be used in assessing the efficiency of the various programmes and institutions.

² Although Sir Barry Holloway's appointment as Minister for National Planning and Development promised to facilitate the Commission's relationship with the Department of National Planning and Development and ensure that tertiary education was viewed sympathetically, this was short-lived, as he resigned his portfolio a few months later.

³ He was to become Prime Minister when he defeated the incumbent Prime Minister (Michael Somare) in a lack of confidence vote in late November 1985.

representatives to his office) on 22 January 1985 implied an active interest in higher education. His questions at that briefing suggested an active concern with the effectiveness and costliness of the two universities. He had experienced the University of PNG first-hand as a student before dropping out to pursue his political career. He had acquired at least something of an inside view of the University of PNG. This was unusual for a PNG politician at that time, very few of whom had received any kind of tertiary education (Turner in Bray & Smith 1985). As Somare's Deputy, he was one of the chief protagonists of the Medium Term Development Strategy/Medium Term Development Programme and subscribed strongly to its general thrust. This fact was to be of great importance to the higher education development plan which was to be commissioned by the Somare Cabinet shortly before its demise and after which there was a hiatus in education policy for three or four months.

On 1 February 1985 a meeting at the Department of National Planning and Development (as the National Planning Office had been renamed) instructed agencies that the second stage of the National Development Plan (i.e. the Medium Term Development Programme), and the National Public Expenditure Plan process, now to encompass a five year cycle, was to be used to implement the strategies set out in the Draft Sector Strategies completed in November. All new projects in the National Public Expenditure Plan would have to be financed from savings in the agencies' recurrent budgets and on-going National Public Expenditure Plan projects.⁴ Agencies were required to prioritise all ongoing activities and submit these with their requests for new projects to the Department of National Planning and Development by 17 March 1985. The Sector Committees, despite the Secretary for Education's impression, had apparently not completed their work, for they were required, between 17 - 31 March, to make recommendations to the Budget Priorities Committee on which new projects should be included in the Medium Term Development Programme for the next five years, and identify the sources of savings from recurrent budgets and on-going National Public Expenditure Plan projects to be used to fund them.

⁴ A major new gold and copper mining operation had been expected, as it came on stream, to compensate for the declining revenue from the other major copper mining venture Bougainville Copper Ltd. The government was reliant on this revenue for a substantial part of its revenue. The mine had been closed unexpectedly, so that revenue was to be less than anticipated.

This trade-off between ongoing and new activities was highly problematic for higher education because of the cross-sectoral nature of its funding. The Sector Committee had operated on the assumption that all savings from higher education would accrue to the Sector. At the same time no mechanism had been set in place to ensure that this would happen. It was feared, therefore, that if savings were found from higher education activities in other sectors, those sectors would absorb them into some other activity, rather than release them for use by the Education Sector. Moreover, even if higher education funds were released from other sectors, they might be reallocated to yet other government priorities. In other words, the Education Sector could realistically only rely on its own funds as a source of savings, whilst its proposed strategy had assumed that there would be other sources. If the Government then adopted the Education Sector's Strategy, the Sector would be constrained to find internally much greater savings than it had anticipated - which might prejudice some of its priority activities. The Commission, insofar as it had accepted the proposed intrasectoral reallocation, did so on the understanding that the funds reallocated would be used for primary and non-formal education and not for any other purpose. In reality the Education Sector Committee could not guarantee their use for that purpose, nor indeed that the Sector would ever receive any savings found from higher education institutions outside the auspices of the Education Ministry. The Commission had been well and truly out-manoeuvred.

The credibility, however, of the timetable issued on 1 February 1985 soon became doubtful, for by 14 February it was discovered that the strategy documents of a number of other sectors were not yet available. Five tertiary institutions fell within these defaulting sectors.⁵ Three institutions could not be found in any sector.⁶ Although strategy documents had been completed for the sectors into which another eleven institutions⁷ fell, they made no mention of training. Together these represented about one third of all tertiary institutions. These discoveries exacerbated concern that proper

⁵ Police College Bomana, Corrective Institutions Service Staff Training College, Legal Training Institute, Defence Force Academy and Trade Training Unit, National Arts School.

⁶ Administrative College of Papua New Guinea, National Postal and Telecommunications Training Centre, Fire Services Training Centre.

⁷ The four agricultural colleges, National Fisheries College, PNG Forestry College, Timber Industry Training College, Elcom Training College, Civil Aviation Training Centre, PNG Maritime College and the Customs Training Centre.

account could not be taken in the Medium Term Development Programme exercise of the cross-sectoral nature of tertiary education and its funding.

These concerns prompted a change of thinking within the Secretariat. The Commission on 22 March 1985 agreed to postpone preparation of the national plan for higher education for at least a year, and give priority to meeting the requirements of the Medium Term Development Programme.⁸ The rationale was as follows: there was considerable pressure on all sectors to co-operate in the preparation and implementation of the Medium Term Plan, which enjoyed highest priority in national planning at the time. There was understood to be pressure on the Commission to produce a separate national plan for higher education in the near future. Whether or not the Commission supported the methods or the implications of the Education Sector Strategy, it was felt that everything possible should be done to implement that strategy and at the same time protect higher education in the longer term. The solution to the 'interference' of Medium Term Development Strategy with the Commission's primary task (the national plan for higher education), was to accord priority to the Medium Term Development Programme at that stage. Deferral of the Commission's plan would allow matters to settle down and the Commission's way forward would become clearer. A time lag from the Medium Term Development Programme might also allow greater scope for recommendations in the national plan for higher education which might conflict with those of the Medium Term Development Programme. The Medium Term Development Programme would provide a kind of 'trial run' for the national plan for higher education: allowing more time for preparing the national plan for higher education would enable a more thoroughly researched and better prepared plan. It would also allow time for thorough consultation with the agencies affected. The pressure was taken off - or so it seemed.⁹

At the same meeting the Commission considered a proposed set of criteria intended for 'identifying areas of potential savings in the universities, technical colleges and other institutions of higher education.' Appended were systematic applications of these criteria to data already known for each

⁸ Minute from Principal Project Officer Planning & Research to Chairperson, Commission for Higher Education, 19/3/85.

⁹ Commission for Higher Education Meeting no. 5, 1/85, Resolution 2/85 (minute 4.2), 22/3/85.

of the two universities. No technical reason existed why these criteria could not immediately be applied in the case of the universities, without waiting for the preparation of a comprehensive national plan for higher education.¹⁰ The criteria were a little more difficult to apply to other types of tertiary institutions, but could be modified and used somewhat less confidently. The draft criteria are contained in **Appendix 6**.

The Commissioners however refrained from adopting the criteria - or even from further comment on them - preferring simply to note them. In the mind of at least one of the influential members of the Commission (who was also a member of one of the universities) the criteria threatened to exacerbate distrust between the universities and the Commission, which he sought to avoid.¹¹ Their deferral was significant, for their development and their proposed application had been the Planning and Research Division's carefully considered and best advice as to how to achieve the savings in the short term as required by the Medium Term Development Programme and the economy. The non-adoption of the criteria were interpreted as an expression of no-confidence. Had the criteria been positively rejected, and an alternative been commissioned, this would have ensured further action and kept the issue from sliding into oblivion. The Commissioners' indecision seemed to imply that the criteria may have been the best available at the time, but they were reluctant to use them. In the same breath, the Commissioners seemed to be saying, effectively, 'we agree you should put your greatest effort into implementing the Medium Term Development Strategy, but you may not use the tools designed for that purpose.' From that point onward the Planning and Research Division lost interest in investing effort in implementing the Medium Term Development Strategy and turned instead to the national plan for higher education. (Nevertheless, the Higher Education Plan 1986 - 1990, when it eventually emerged in 1986, was very closely related to the Medium Term Development Programme and did rely substantially on those very same criteria. Almost a year was lost.)¹²

¹⁰Minute from Principal Project Officer Planning & Research to Chairperson, Commission for Higher Education, 27/2/85.

¹¹Verification of this was sought from five of the six Commissioners present at the meeting. Two verified it positively, one had no objection to the wording and was therefore assumed to concur. One felt this interpretation was plausible but could not positively confirm it. The fifth had no recollection of the discussion. The researcher concluded that on balance the interpretation here presented was likely to be a reasonable representation of the truth.

¹²Verified by Chairperson, June 1988.

The Commissioners had an urgent preoccupation: a boycott of classes by university students in support of a claim for a forty percent increase in the book allowance provided as part of the National Scholarship (Natschol) for tertiary students administered by the Commission. On a number of previous occasions in recent years university students had engaged in violent demonstrations over various issues - usually related to their living conditions. The threatened boycott had little logic and possibly ulterior political motives, so the Commission took the threat of violence and disruption very seriously. It also preoccupied members of the Secretariat, and deflected attention from the Medium Term Development Strategy and the national plan for higher education.¹³

The Medium Term Development Strategy began to recede further into the background for the following main reasons, apart from the non-adoption of the criteria. Firstly, no further meetings of the Education Sector Committee were held. The Education Department was preoccupied with a team of Consultants from the World Bank reviewing the planning for the second Primary Education project (Education IV).¹⁴ From this point onwards the work of the Commission diverged from that of the rest of the sector. The Medium Term Development Strategy, which had made itself so forcefully felt through the Education Sector Committee in October and November 1985, suddenly seemed to evaporate. It was not clear what had become of the Education Sector Strategy, or indeed the Medium Term Development Strategy.

The Medium Term Development Programme, if it still existed as such, was now at a stage in which the Planning and Research Division of the Secretariat would have no active role. Institutions and agencies submitted budget estimates, and the Finance and Administration Division of the Secretariat was to advise the Budget Priorities Committee on them. In reality the Secretariat's officers were excluded from many of the discussions between institutions and representatives of the Departments of Finance and

¹³Verified by Chairperson, June 1988.

¹⁴ Planning & Research Division Meeting: Monthly Report for March and April 1985 from Principal Project Officer Planning & Research to all members of the Planning and Research Division, 9/5/85.

of National Planning and Development which were to formulate the recommendations to the Budget Priorities Committee.¹⁵

Emergence of the concept of a consultancy study on rationalisation and savings in higher education

At this point an alternative strategy for achieving greater efficiency and economy began to be developed, involving a consultancy study of rationalisation and savings in higher education. The idea had emerged as a result of a meeting in November the previous year between the Chairperson and three representatives of the World Bank (Gilpin, Searle and Hees). The World Bank had been one of, or perhaps, the chief instigator of the Medium Term Planning System. Furthermore it had been much involved with education in PNG through three large loans. At the time of the Medium Term Development Strategy it was in the process of negotiating the fourth loan and was liaising frequently with the Department of Education during the period of activity by the Education Sector Committee. The Bank's representatives visited the Commission as the fourth loan was to be concerned mainly with primary education, the expansion of which was to be funded at least in part, according to the Education Sector Strategy, from the savings to be found from higher education.

The Bank's representatives visited the Secretariat in November to ascertain the Commission's progress in finding savings. They were sympathetic to the the Commission's difficulties because of its recent start and lack of basic data. Some funds for consultancy studies had remained unexpended in the previous World Bank funded education projects, and they suggested this might be used to assist the Commission.

These funds then being with the Department of Education, enquiries were made early in 1985 as to how they could be accessed. The process was not at all straightforward. All consultancy studies had to be approved in principle by the Consultancy Steering Committee of the Department of National Planning and Development. A large number of administrative hurdles had to be overcome including a tendering process. The Department of National Planning and Development advised that a good deal of money was available from the Australian Development Assistance Bureau to

¹⁵Verified by Chairperson & Principal Project Officer Finance & Administration, June 1988.

support the Medium Term Development Programme, and that a request for technical assistance should be framed which could apply to any donor, not solely the World Bank.

After several revisions, the terms of reference went forward on 29 May 1985, over the signature of the Secretary for Education, to the Consultancy Steering Committee as a request for technical assistance to be funded from residue of World Bank funds totalling approximately K45,000 with a request that these be brought up to the level of K135,000 by the Budget Priorities Committee. The Commissioners, at their meeting on 5 July 1985, anticipated the possibility that about K40,000 would be available, but did not anticipate a favourable response to the request for additional funds. Nothing more was heard of the proposal's fate until late October when the Budget Priorities Committee approved the project and advised the Secretary for Education that he should fund it from his own budget!¹⁶ By this time even the World Bank funds were unavailable, being used for other purposes by the Education Department, and a breakdown in negotiations between the Education Department and the World Bank over the fourth loan had occurred.¹⁷

Just as the whole idea of a consultancy study was about to lapse, the Education Department received a visit from Asian Development Bank representatives, proposing an advisory technical assistance project. (The first Asian Development Bank project, valued at US\$33 million, had involved amongst other things a massive expansion in pre employment technical training facilities.¹⁸ This had subsequently been found to be about fifty per cent more than subsequent forecasts of national manpower requirements. The Secretary for Education referred the Asian Development Bank representatives to the Commission and the consultancy study was undertaken as an advisory technical assistance, although it did not eventuate until after the Higher Education Plan 1986 - 90 had been presented to the Cabinet.

In March/April 1985, two representatives of the Centre for Staff Development in Higher Education of the Institute of Education, London University visited

¹⁶ Letter from Chairman, Budget Priorities Committee to Secretary, Department of Education, ref. 2-8-0/2-8-2 of 22/10/85.

¹⁷ Verified by Project Manager, Education III, June 1988.

¹⁸ Technical Education Project Description, Department of Education, 1988.

the Commission. One of these (Dr. Robert Murray) spoke of his experience of the National Advisory Board and the rationalisation of the polytechnics in the United Kingdom. This information significantly influenced the ultimate approach to the Higher Education Plan.¹⁹

Technical, conceptual and philosophical preparations for an integrated rational-comprehensive national plan for higher education

Within the first few months of 1985 a comprehensive description (in quantitative terms at least) of higher education, and a set of measures, standardised across the entire system were prepared which, together with forecasts of manpower requirements, could be used as measures of efficiency and point to areas in which economies might be sought. This was to be used immediately in the Commission's first Annual Report (1984), (Papua New Guinea, Commission for Higher Education 1986 B) and also for the base year of the plan. Ultimately it was updated and used to form a chapter in the plan on the status and development of the higher education System²⁰ (Papua New Guinea, Commission for Higher Education 1986 A).

On 14 May the Principal Project Officers discussed the integration of the Medium Term Development Programme and the national plan for higher education, and what steps could be taken to ensure that the 'former did not prejudice more than necessary what could be done in the latter.' They agreed to prepare a joint paper raising the longer term philosophical issues of higher education and ask the Commissioners to consider and resolve their position on these. (It will be recalled that during the Secretariat's involvement with the Education Sector Committee, one problem was that the Commission had barely adopted a position on any of the six major higher education issues, except in the most general terms.) A joint paper raising the philosophical issues never materialised, although ultimately the Principal Project Officer Planning and Research prepared such a paper later in the year.

¹⁹ Planning & Research Division Meeting: Monthly Report for March and April 1985 from Principal Project Officer Planning & Research to all members of the Planning and Research Division, 9/5/85, and Principal Project Officer Planning & Research's shorthand notes of discussions with Dr. Robert Murray.

²⁰Principal Project Officer Planning & Research as informant.

Motivated by the absence of a common concept of the national plan for higher education and its preparation, a diagrammatic representation of the planning process was considered by the Principal Project Officers on 21 May. It illustrated the need for further information on higher education's philosophy and manpower requirements before projections could be produced, as well as consideration of the possible implications for the plan of consultants and of the Medium Term Development Strategy.²¹

The diagram built on the data base in preparation, and was partly inspired by a seminar in the Department of Education given on 2 April by Dr. Clifford Gilpin of the World Bank. He had outlined his view of the stages in planning a major development programme, emphasising that progress through these was not simply sequential but iterative in character.²² It both mapped what had to be done, and clarified the relationship between the various components, to avoid delays at a later stage resulting from omission of some essential information or process. It was incapable of adequately representing the iterative nature of the process although it was realised that it would need to be iterative.²³ The plan's completion was envisaged possibly by the end of 1986.

The consultancy study, discussed previously, was now seen as a necessary element in preparing several of the essential components of the plan - the collection and processing of adequate data on costs, manpower forecasts, attrition and graduate performance in the labour market. The Commission directed the Secretariat to move quickly to draw up terms of reference for a consultancy study within the limit of \$40,000 which could realistically be expected.²⁴ The importance of formulating a philosophy for higher education by the end of 1985 was recognised. No resolution was passed, however, nor any specific further action specified.

At 21 August 1985 the national plan for higher education and the Medium Term Development Strategy were viewed by the Planning and Research Division as two very distinctly different exercises, despite their having many

²¹ Principal Project Officers' meeting 3/38, minute 3, 21/5/85.

²² Notes made by Principal Project Officer Planning & Research on Dr. Gilpin's seminar in the Department of Education on 2/4/85.

²³ Draft Critical Path Plan for National Plan for Higher Education, Principal Project Officer Planning & Research, Commission for Higher Education, 2/7/85.

²⁴ Commission for Higher Education Meeting no. 2/85, Resolution 17/85, minute 5, 5/6/85.

parallels and their mutual heavy reliance on the same data base (see **Appendix 7**). 'Data Collection' was central, recognising it as the very heart of the operation, with all other major aspects of Divisional activity fed by it, except 'Staff Development'. The Division's data collection/analysis function was thus portrayed as ultimately the most crucial.

This pointed to a generally troublesome phenomenon throughout the period 1984 - 1986: the conflict between short and long term views of planning. With considerable political volatility and uncertainty over the future of the Medium Term Development Programme, one concrete and enduring contribution that could be made was to build up and maintain an accurate and complete database. The value in this activity would remain long after all traces of the other activities had vanished, available for use whenever it was required.

In researching a proposed philosophy for higher education several elements were collated. One was the consultant Dr. Robert Murray's description of the method of inducing change within the United Kingdom's public higher education sector (the polytechnics). Ministerial influence was expressed only in very broad terms, e.g. to promote scientific and technological disciplines, reduce unit costs, and so on. The National Advisory Board operationalised these broad policy shifts by, amongst other things, differential funding of programmes within institutions. This created pressure within institutions, from staff who would gain from the shift. External pressure was unnecessary and the generation of institutional solidarity and resistance to change was avoided.²⁵ The strategy employed three types of targets. The most important (which set the overall limits) was the number of students in each discipline or discipline group. The others were student/staff ratios and cost per student for each discipline or discipline group. Institutional funding was based on these three components.

The PNG equivalent of the minister's broad terms was advice from the Department of National Planning and Development that higher education should continue to produce about the same quantity and quality of graduates as currently, but for less cost. The Sector Committee had endorsed the view that the National Manpower Assessment (despite its defects) should be used

²⁵ Principal Project Officer Planning & Research's shorthand notes of discussions with Dr. Robert Murray, Commission for Higher Education, April 1985.

as the chief guide to manpower requirements. Thus if the current aggregate supply of graduates was to be maintained, it would be necessary to find cheaper ways of producing them which would not reduce their quality. The greatest manpower shortages were in science and technology, accountancy, management and secondary teaching. Science, technology and particularly secondary teaching had for many years experienced difficulty in attracting sufficient students of adequate quality to fill their quotas at the universities. Coercing students into choices other than their own was counterproductive. To change the balance, a system of incentives was needed.

Reference was made to the report of the Committee of Enquiry into University Development (Gris Report) of 1974 (Gris, Avei, Crocombe, Harvey, Kilage, Low, Rooney, Pochapon, Sarei & Waiko 1974), which had influenced thinking (if not much practice) on university education in PNG for many years. The university subsector, being costliest, was given particular consideration. Whilst few of this report's recommendations had been implemented, much sympathy for its general thrust still existed. It was still probably the most important policy guide for university development in PNG, having neither been refuted nor superseded. The report had particular authority for it had been compiled by a Committee chaired by and consisting mainly of Papua New Guineans rather than foreigners. Its three main recommendations were that the universities should extend their services much more widely throughout the nation through regional centres, correspondence courses, Lahara sessions²⁶, part-time study, and so on; study should be more integrated with work; and that the university institutions should be joined to form the National University of PNG with several different campuses. University politics had basically frustrated the first and third of these recommendations. (Some development of extension studies had taken place at the University of PNG, but most academic staff viewed teaching internal students as their first priority. There was also never sufficient commitment in funding terms for external studies, either from internal or external sources.)²⁷

Another consideration was the Commission's recognition in the Sector Committee that the quality of both tertiary entrants and graduates in many

²⁶ Summer schools.

²⁷ Confirmed by Vice Chancellor & Director of Extension Studies, University of Papua New Guinea, May 1988.

instances was poor, and that the quality of primary and secondary education accounted for most of this problem (Papua New Guinea, National Planning Office 1984 C, 158 - 162). Combining these considerations, and drawing on literature on the role of universities in both the developed and less developed world, a preliminary formulation of the broad aims of higher education for the purpose of the national plan for higher education was formulated. These were: to strive for excellence through the development of the best human potential; to supply the high level manpower needs of the country; to contribute to economic and social and personal development through skill formation and investment of education in human resources; to contribute to nation-building through inculcating leadership qualities and developing a sense of national identity; and specifically, to reduce spending on higher education; to increase efficiency in higher education; and to shift some of the cost to the beneficiary without reducing access.²⁸

Translating these broad aims into an action programme, the following possible targets were formulated: over a ten year period the universities would be required to shift from an almost exclusively internal teaching mode to a mode half internal and half external. This would be achieved through differential funding of internal/external teaching - a wedge advancing with each year. Scholarships would be available for internal studies in science, technology, and education only, as incentives to influence student choice towards desired manpower categories. Science, technology and education would be offered both internally and externally as far as possible. Existing facilities in regions²⁹ should be used for external science teaching. Remedial work³⁰ in English, Maths, and if possible, Science, would be devolved to external studies. Humanities would normally be offered externally only. The

²⁸ Principal Project Officer Planning & Research's undated handwritten notes from working file 'Work of the Planning and Research Division', Commission for Higher Education, c. April 1985.

²⁹ i.e. the network of University of PNG External Study Centres being extended to a number of provinces, the Regional Training Centres of the Administrative College of Papua New Guinea, and also the physical facilities (e.g. laboratories, libraries) of a multiplicity of agricultural, nursing and teachers colleges widely distributed around the country and usually unutilised after hours.

³⁰ This is a reference to the complaint voiced by most of the tertiary institutions that they found the level of competence in English, Maths and Science of many of their new intakes well below the standard necessary to pursue the courses in question. Thus many institutions (perhaps most) were devoting considerable time and resources to what they considered to be essentially teaching at secondary school level, or at least making up for the deficiencies of secondary schooling. It should be remembered also that the vast majority of tertiary entrants (including some also at the universities) entered with only a Grade 10 leaving qualification.

only route to university (and possibly other) studies would be through a first year taught in the external mode. Maximisation of speed of high level manpower production would be restricted to manpower shortage categories only.

The outcome would be a single university (concentrating mainly on science internally). A proportion of buildings³¹ would be set aside for short periods of residence to supplement the external mode - during both term time and vacation. Half of internal places might be reserved for females, as affirmative action.³² Law might be externalised completely, to counteract the over-production of lawyers³³ (Papua New Guinea, National Planning Office, 1981 B). Full-time internal study supported by scholarship with or without an additional bonus might be used as an incentive to high achievement in first year studies through the external mode, irrespective of whether their programmes were in the high priority categories.

It was assumed that programmes could be mounted both externally and internally as required, since staff would be retained at main campuses in the necessary disciplines to mount the external programmes. This formulation was intended as a range of possible choices for discussion. It was not envisaged that this package of measures would be adopted in its entirety.

The changes presupposed need to be viewed in the context of PNG at the time. In the years leading up to and immediately after Independence in 1975, rapid localisation of foreign manpower particularly in the public sector was an overriding political consideration. An exponential growth in the number of tertiary education institutions had resulted and a considerable surplus in physical facilities overall. Government had assumed the full cost of tertiary education, even providing students with airfares and pocket money. The student's main cost was possible earnings foregone during the period of study. The student body was typically aged between seventeen

³¹ i.e. existing buildings on the university campuses. This would be a way of redeploying resources freed by contraction of internal student numbers to support for the external studies mode.

³² This was intended to be a positive measure towards the accomplishment of point 7 in the Eight Point Plan of 1973 concerning the more equal and active participation of women in all forms of economic and social activity (Papua New Guinea, Central Planning Office 1976, p. 15).

³³ The L.I.B. programme had, according to the forecasts of the National Manpower Assessment, already satisfied the national requirement for output of law graduates, and furthermore it did not rely on laboratory/specialised equipment or facilities.

and twenty-four, unmarried, and residing on campus. This was the quickest, but also the costliest, method of creating the necessary manpower. By 1985, however, much of the public sector had been localised and lack of formal qualifications were no longer the major cause of non-replacement of expatriates still holding very senior positions. In a changed economic climate the government was having difficulty supporting tertiary education at this cost. Localisation was an emotive issue in PNG, at times tending to assume disproportion. Policy had not addressed the large capacity of the tertiary system after accomplishing localisation. If outputs did not decrease, the economy might be swamped with graduates of almost every kind. If the acquisition of tertiary education in lower priority programmes were made a little harder (in the sense that remote study required more dedication and self-discipline than internal study), demand might be reduced at an appropriate time. The enormous and costly wastage from full-time internal students' attrition would be minimised, for the students destined to drop out would do so before they got to the campus at public expense. No reduction in supply of the graduates of greatest national importance would occur if scholarships at the full level for internal study were provided for high priority programmes. An increase might even occur, since internal studies, all expenses paid, for four years even in a less preferred discipline might have greater appeal than pursuit of preferences under less advantageous conditions.

Another important consideration was that by 1985 a large and untapped potential for mature students existed. These were people in distant provinces, with various kinds of experience. As most programmes existed only in the internal mode, they remained unserved. The external mode could extend tertiary education to a much wider market.

Government had created the unfortunate precedent of bearing the full cost of internal student support. Despite numerous complaints from institutions that many kinds of social problems resulted from the expenditure of students' pocket allowances, it had proved impossible so far to withdraw any of that support (Still & Shea 1976). A number of principals of tertiary institutions were outspokenly in favour of abolishing the pocket allowance. When the government had made moves to reduce the benefit, vigorous student protest had ensued and the moves had been dropped. Movement to the external mode permitted reduction of benefit in an entirely different (and more

politically palatable) way - restricting eligibility rather than reducing existing benefits of current students.³⁴ Equity, however, had been served by the National Scholarship Scheme's terms. Any eligible student, in whatever location, who gained acceptance by a tertiary institution, was entitled to full government financial support. Thus social background, location, political affiliation, tribal group and so on, were no bar to the student who made the grade. Blanket reduction of financial support to students might reduce equality of access.

An underlying assumption was that shifting from internal towards external mode would prove less costly, or at least no more costly, to the government, an assumption by no means tested in PNG at that stage. The Extension Studies Department was currently very costly, and existing research suggested that economies of scale could only be reached when an extensive system was operational. It was not known where that threshold would be in the PNG context. Savings would take some years to be realised, and meanwhile costs could well rise. Administratively, it would be several years before the Extension Studies Department could be built up sufficiently to cope with the additional load. Irrespective of this, however, substantial savings could have been realised by reducing the number of internal students and therefore of Natschol awardees. A plan period of at least ten years - possibly more - was presupposed.

This formulation was overtaken by events and never disclosed, remaining in a working file of the Planning and Research Division until the time of this study. As a general strategy, its feasibility was discussed with the University of PNG's Director of Extension Studies, as well as with other academics within the Education Faculty. Their reaction was positive, whilst realising that there was a very long way to go. The idea was at least not ruled out by some of those who stood to be most intimately involved.

On 7 November 1985 the Secretariat's key staff agreed that the three divisions of the Secretariat needed to work together according to a programme for the plan from now on, and that a major input from the

³⁴Confirmed by Chairperson, Commission for Higher Education and former Chairman, Interim Commission for Higher Education, June 1988.

Commissioners was desirable; many tasks already completed would be incorporated, and September 1986 was feasible for the first draft .³⁵

The issue of a philosophy for higher education was taken up by the Commission on 8 November 1985, when a paper entitled 'Towards a Philosophy for Higher Education in PNG' was considered. Unable to agree at the time, the Commissioners resolved to hold an extraordinary meeting on 11 December 1985 'for the purpose of debating the proposal and modifying it as necessary'. Members were to submit their written comments and amendments by 22 November, including any specific changes they would like to see occurring in higher education in PNG over the next twenty-five years, so that a revised version of the proposal could be prepared. At last the Commissioners were about to tackle the difficult question of values to be embodied in the plan. Three Commissioners submitted their proposals, but the meeting was never held. The Cabinet pulled the carpet out from under them.

Summary

The twelve month period December 1984 to November 1985 reflects a combination of themes. The first four months reflect continuing conflict between the Medium Term Development Strategy and the national plan for higher education, and at a deeper level, between planning for the short to medium term versus planning for the longer term. Confusion and uncertainty within the Secretariat regarding the future of the Medium Term Development Strategy also continued, despite official pronouncements.

Confusion and uncertainty were characteristic of much of the Commission's experience in 1984, probably related to the confusion and uncertainty inherent in the process of a major restructuring of the national planning system. The inexperience of the newly established Commission and its officers and its transition from the role of Office of Higher Education to that of the Commission's Secretariat also contributed, as did a series of changes at the national political level which affected higher education directly or indirectly. These were the December 1984 ministerial reshuffle, ending a twenty-six month period of stability under Sir Barry Holloway; the resignation

³⁵ Principal Project Officers' meeting 6/85, Minute 3, Commission for Higher Education, 7/11/85.

on 1 April 1985 of Pias Wingti from the Deputy Prime Ministership and his move to opposition; his replacement as Minister for Education by Sam Tulo; and the ousting of the Somare government in November 1985.

There was a general lack of clarity of thought within the Commission and within the Secretariat, exacerbated by omission of explicit debate on certain issues, and sometimes inadequate records of decisions. Considerable divergence in understanding resulted, which only became apparent later after much effort had been expended. There was insufficient effective communication between some members of the Secretariat, between members of the Commission, and also at times between the Secretariat and the Commissioners.

In the second phase of this period, from about the fifth to the twelfth month, there was much more focused activity in relation to the national plan for higher education, characterised by a 'technical' approach to planning. This focused attention on the absence of a guiding philosophy for the plan, and generated fundamental questions which the Commissioners found hard to resolve. This period also saw the birth and development of the consultancy study as an aid first to the Commission's response to the Medium Term Development Strategy and later, in lieu, to the national plan for higher education.³⁶

³⁶ Summary verified by five commissioners in June 1988.

CHAPTER 5

THE FORMULATION PHASE

Conflict and resolution: the higher education development plan as a working amalgam

Although the Medium Term Development Strategy receded into the background for the Commission during most of 1985, late in the year it suddenly re-emerged with new vigour, ultimately proving the critical determinant of the parameters of PNG's first national plan for higher education. The Medium Term Development Strategy formed a continual (if not constant) backdrop to nearly two years of the Commission's activity.

The production of the Higher Education Plan 1986 - 1990 was directly precipitated by Cabinet. On or about 19 November the Commission was informed of Cabinet decision 161/85 that it should both review the existing terms and conditions of the Natschol scheme, and prepare a 'higher education development plan' by 31 March 1986. The latter was to be considered by the Development Review Committee which formed part of the Medium Term Planning System, and was to meet in June 1986. This indicated clearly that the higher education development plan and the expenditure reduction in the universities were viewed as part of the Medium Term Planning System. It also directed that the expenditure of both universities be reduced by fifteen percent in real terms over the period 1987 - 1990, specifying that this should be achieved through cessation of certain courses and by 'cost effectiveness (e.g. by imposing appropriate staff:student ratios...)'. The emphasis was heavily on reducing university expenditure. (The full text of the decision is reproduced in **Appendix 8.**)

A philosophy of higher education was now superfluous. Cabinet specified not only what the Commission was to do but also how it was to be done. Despite this there were a number of ways in which the directive was not clear. What, for instance, was meant by a 'higher education development plan'? (The term 'development' implies growth and improvement, while the thrust of the Cabinet decision was for contraction and cost-saving.) How should the Commission define such a plan? It had previously decided to confine it to a strategy, but the directive implied a budgeted programme. What figure was to be reduced 'by fifteen percent in real terms'? The actual

expenditure for 1985 would not be known until about February 1986 at the earliest. Appropriations were often an inaccurate reflection of actual expenditure. Was the percentage reduction to be spread evenly over the period of five years, or would it be realised unevenly? How much would it be in Kina terms? A number of points needed discussion within the Commission and clarification with the Departments of Finance and National Planning and Development before the directive could be acted upon with confidence.

The bracketing together but separation of the recommendations on Natschol and on the plan respectively, and the coincidence of the specified dates, implied their treatment as two separate but related exercises. It proved bureaucratically convenient to assign them to different Divisions within the Secretariat.¹ This separation proved unfortunate towards the end of the plan preparation, when it was realised that the selective award of Natschol could have been the most powerful means for the Commission to influence the universities' internal resource distribution. Natschol could have been awarded only for students admitted to high priority programmes in terms of national manpower requirements and to programmes which were efficiently staffed and operated. Conversely it could have been withheld for low priority programmes, or for a variety of other reasons unrelated to the individual student. The Plan could have been much more powerful if student financing through Natschol had been treated as an integral part. However, any proposal to reduce Natschol benefits (which the Education Sector Strategy had favoured) was likely to be politically very sensitive. A plan which incorporated any such proposal might be abandoned as soon as there was any sign of protest from the students.

The specific mention of the Commission in each of the items relating to the universities suggested that cessation of courses and cost effectiveness measures were to form part of the higher education development plan. It would have been possible, technically, for various items (180, 184 and 196) to be treated quite separately, but a higher education development plan which omitted them would have made little sense. The fact that Cabinet specifically mentioned cessation of programmes suggests that it concurred with the Commission's view that selective rather than across the board cuts

¹ Verified with Chairperson, June 1988.

were preferable for the universities. Percentage cuts had been applied for several years previously to the budgets of each of the universities.

The Principal Project Officers met the same day for the sole purpose of considering the Cabinet decision and agreed that the higher education development plan would be a cost-saving strategy, incorporating the areas identified for potential savings² in this sector by the Planning and Research Division, as well as constraints imposed by Medium Term Development Strategy recommendations. The universities were to be advised of the approved criteria³ for reducing spending and invited to prioritise cuts by 1 March. Failing this, the Commission would forward its own recommendations to Cabinet.⁴

The Cabinet's directive precipitated a serious difference of opinion amongst key staff of the Secretariat as to whether the 'higher education development plan' commissioned by the Cabinet should be regarded as the national plan for higher education towards which the Commission and its Secretariat had been working over the past twelve months. The latter had previously been treated as a rational-comprehensive planning exercise for the whole higher education system which was distinct and different both in scope and schedule from the National Development Planning exercise of which the Medium Term Development Strategy had formed a part.

One view recognised the urgent need to produce the plan commissioned by the Cabinet within the time specified, but that it should be distinguished from the national plan for higher education. An amalgamation of the national plan for higher education with the Commission's response to the Medium Term Development Strategy represented a significant change of policy and grave reservations were held about focusing the national plan for higher education narrowly on high level manpower production. Others concurred with the Chairperson that although the present exercise was different from that of the national plan for higher education, political reality demanded that it be portrayed as the same, and that some of the objectives could be achieved. The extraordinary meeting of the Commissioners scheduled for

² A reference to the draft Criteria for Identifying Areas of Potential Savings in Universities, Technical Colleges and other institutions of higher education which had been presented to the Commission in March 1985 and shelved by the Commission.

³ See footnote 2 above.

⁴ Principal Project Officers' meeting 7/85, minute 1.2, 19/11/85.

11 December to consider a philosophy was cancelled,⁵ and despite the fact that the Secretariat adopted a major shift of policy, the Commission did not meet again until 7 February 1986.

Resort was now made to whatever data was currently available. The 'Criteria for Identifying Areas of Potential Saving in Universities, Technical Colleges and Other Institutions of Higher Education' (which had been shelved by the Commissioners in March) were resuscitated. Details of how they were applied are presented in **Appendix 9**.

An extraordinary event then occurred which stopped the Commission momentarily in its tracks. On 21 November 1985 the Somare Government was defeated in a no-confidence vote and Pias Wingti (former Deputy Prime Minister) was installed as Prime Minister. Thus, at the very moment when the Commission was gearing up to prepare the plan with all speed, suddenly and without warning a whole 'new ball-game' had started. The new government rejected the former Somare government's proposed budget for 1986, and passed an interim three-month supply Act, until a new budget was brought down in March 1986. It was not at all clear what the new government's position would be on the higher education development plan, nor indeed on the whole of the Medium Term Development Strategy exercise.

Planning in a policy vacuum

A number of important question marks hung over the higher education development plan. Was it still required? Did the 31 March 1986 deadline still stand? Did the Medium Term Development Strategy still exist? Was the new government's education strategy still to give highest priority to expansion of primary education? (A statement made by Wingti during a tour of the Highlands Region soon after he became Prime Minister indicated that he wished to see all those who started Grade 1 to progress through to Grade 10. At face value, this suggested different priorities and resource reallocation.) What was the new government's broad policy on education to be? It would be quite some time before the new government's intentions

⁵ The Chairperson subsequently confirmed by interview in May 1988 that she had cancelled it because she felt that agreement could not be reached on a philosophy and that this was taking too much time away from meeting the urgent political requirement for a plan.

were to be known regarding the higher education development plan and the Medium Term Development Strategy.

In the meantime, the Secretariat had to make some decisions as to how to proceed. If it waited for the situation to become clear, two or three months would be lost. The deadline of 31 March 1986 would come and there would certainly be no higher education plan. Irrespective of the government, the economy required savings, and higher education would be regarded as a potential source regardless, particularly the costly university institutions.

Preparation of the higher education development plan therefore proceeded with all possible speed in the hope of meeting the 31 March deadline. If it became clear that the deadline or, indeed, the plan was not required, the situation would be reviewed. It was assumed that, in the absence of a clear indication to the contrary, the Medium Term Development Strategy (or something very similar) would remain as the context of the higher education development plan. The overriding consideration was that savings would be required, possibly greater (and certainly not less) than those envisaged by the Education Sector Strategy of the Medium Term Development Strategy. These assumptions proved wise, although this was not confirmed until 16 January 1986 when the Prime Minister made an economic address to department heads.⁶

Steps were immediately taken to plan the production of the higher education development plan. The heads of the Planning and Research and Finance and Administration Divisions conferred and considered what was 'desirable, feasible and realistic for the Commission to achieve in terms of targets for the higher education development plan'.⁷ They proposed that the plan would target for efficiency. It would not specify quantified cost reductions, although cost reductions were implied and would result. It would aim for at least a fifteen percent reduction in real expenditure over the five years 1986 - 1990. No budgets or costings as such would be included. It would contain a statement of the plan's origins and rationale, a statistical review of the higher education sector, an analysis of the national priorities in terms of high level manpower, an examination of the present constraints, and an analysis of the

⁶ Economic Address to Department Heads made by the Prime Minister, Papua New Guinea, 16/1/86.

⁷ Minute from Principal Project Officer Planning and Research and Principal Project Officer Finance and Administration to Chairperson, Commission for Higher Education, 9/12/85.

policies defined in the Education Sector Strategy. In lieu of costings or budgeted programmes, it would contain a set of 'evaluation indicators'⁸ which would be relayed to institutions in advance of the Plan, to assist in preparing their draft 1987 budgets. Targets expressed in non-cost terms for 1988 - 1990 (e.g. student/staff ratios) would be included.

There would be three main kinds of evaluation indicators: a list of programmes offered by the institutions, prioritised as far as possible in terms of the second National Manpower Assessment (as yet unpublished, but obtained in final draft); the student/staff ratios recommended by the Education Sector Strategy of the Medium Term Development Strategy, to be used as the basis for calculating salary votes and related items; and a set of prescriptions for costing certain other items in institutional budgets, based essentially on historical costs with justifications for upward variations.

Consistent with the conceptual structure of the Medium Term Development Strategy/Medium Term Development Programme, the higher education development plan was conceived of as having two main phases: the strategy phase, which would be embodied in the Plan document with the schedule for further stages which it would contain; and the budgeting phase. These phases were represented in a diagram of the higher education development plan, reproduced in **Appendix 10**.

The Commission had to contend with a structural difficulty in developing any kind of plan for higher education: it had no direct control over the budgeting process of any of the institutions with which it was concerned. It was not involved in preparing those budgets, or developing the programmes with which they were concerned. Neither was it involved in the implementation of those programmes. The Commission's own funding was of two main kinds: that required for the operation of the Secretariat and the Commissioners meetings; and the much greater budget for the National Scholarships which were administered by the Commission.

The sole power of the Commission in relation to the budgets of institutions (which were to implement the Plan) was the power of the Chairperson to advise the Budget Priorities Committee, and to advise Cabinet through the

⁸ So called because they were to be used as indicators of the criteria by which the Commission for Higher Education would evaluate the budget estimates prepared by the institutions.

Minister for Education, as to the appropriateness of the budget estimates as submitted by the institutions or their parent agencies. This power had two further limitations: firstly it applied only to the declared institutions (thus those run by the disciplined forces, for example, were excluded); and secondly it relied on the cooperation of officials in the Departments of National Planning and Development and of Finance in liaising and allowing the Secretariat proper access to the critical bureaucratic committees which processed the budget estimates of the various institutions and agencies. (During 1985 the Secretariat's officers had sometimes been denied access to these committees, and countermeasures were not in place until 1986.)

The budgeting phase of the higher education development plan was a process of four successive main stages, corresponding to each of the years 1987, 1988, 1989 and 1990. By this stage (i.e. December 1985) the national budget for 1986 had already been brought down, and with it the institutional budgets. Substantial savings were unlikely to be made therefore in 1986. The institutional budgets for 1988 could not be planned with confidence until the effects of applying the evaluation indicators on the 1987 budget estimates was known. The budgeting phase of the remaining four years of the plan would be 'an evolving one, which will be progressively evaluated and modified in the light of improved information and progress.' The mechanism for achievement of these annual re-evaluations was provided in the plan, with improved information for setting target student/staff ratios and costs to be generated for the third and subsequent years by means of a consultancy study. (The selection of these targets was inspired by Dr. Robert Murray's comments earlier in the year.) The plan's targets were 'left deliberately general in order to allow for consultation, improved information, evaluation and change over the period.'⁹ Details of the targets are contained in **Appendix 11**.

Four main scenarios were considered for handling recommendations concerning amalgamation or closure of various institutions. It was decided to attempt to consult as much as possible over the following three months and list in the plan the possibilities for amalgamation/closure, indicating that consultations would take place with a view to decisions before the end of

⁹ Minute from Principal Project Officer Planning and Research and Principal Project Officer Finance and Administration to Chairperson, Commission for Higher Education, 9/12/85.

1986. (These would then be incorporated in budgeting for 1988 and implementation in 1988 - 1990, as appropriate.)^{10 11}

Implementation was to rely in part on the Finance Department's first circular of the year, containing instructions for budget preparations. Many of the institutions had failed to supply their budgets for the coming year direct to the Commission. The Commission needed to scrutinise them and make recommendations to the Budget Priorities Committee. A draft circular was submitted to the Department of Finance, explaining a change in the procedures governing the consideration of budget estimates. By this instruction the Finance Department would have required the institutions to supply such information to the Commission. When the Department of Finance finally issued its circular, there was no trace of this proposed change.

Evaluation indicators as the principal steering mechanism

In order to give institutions the maximum advance notice of the criteria which would be applied in assessing their 1987 budgets, the evaluation indicators were constructed. These were to have accompanied Finance Circular No. 1, anticipated for January 1986 (but which eventuated on 6 March, a fact which complicated matters for the Commission). A classification was made of all the programmes offered by the institutions (approximately 400 in total), in line with the Second National Manpower Assessment. Although the Assessment had many weaknesses, the Education Sector Committee had specified emphatically that it was to be the 'chief guide to requirements'. Details of how this classification was made are contained in **Appendix 12**.

The second set of evaluation indicators were straightforward enough - at least on the surface: target staff/student ratios by 1990 as recommended by the Education Sector Committee of the Medium Term Development Strategy.

¹⁰ Minute from Principal Project Officer Planning and Research and Principal Project Officer Finance and Administration to Chairperson, Commission for Higher Education, Subject: Targets for the Higher Education Development Plan 1986 - 1990, 9/12/85.

¹¹ On 17 December 1985 the first draft of a chapter entitled 'National Priorities: Requirements for the output of the Higher Education System' was submitted to the Chairperson. It examined the most recent draft of the second National Manpower Assessment, and analysed its implications for the period 1986 - 90.' A draft of 21 April 1986 included the results of the assessment of the current stock of graduates of all tertiary institutions and an analysis of its implications. The stock of graduates was completed on 30 April 1986.

The Commission allowed the institutions some room to move and sought their advice by adding that:

All programmes of higher education shall be classified as either certificate, diploma or degree level (or their equivalents if they are not yet designated as such). All institutions should put forward their proposals for such equivalence where it is not already apparent in the name of the programme. All degree level and equivalent programmes should further be designated as either Arts-based or Science-based. Post-graduate diplomas and higher degrees shall be treated as degree level programmes.

Definitions of 'staff' as 'equivalent full-time teaching staff (EFT staff) and 'student' as 'equivalent full-time student (EFTS) were also added, with a full description of the basis for calculating these two sets of units,¹² (reproduced in **Appendix 13**).

The third set of evaluation indicators, regarding costing various non-salary and related budgetary items, became the object of some confusion within the Commission's Secretariat, with flow on of confusion to the universities.¹³ Originally this indicator was to have been a standard costing per student per institution for student travel, materials and supplies; funding for various teaching support items to be based on historical costs with justification for any upward variations; and the budgeting of service activities at a level only just enough to maintain operation of these services. Appended to the Budget Circulars Nos. 1 and 2 which was issued in advance of Finance Circular No. 1, presumably due to a misunderstanding, was instead a prioritisation of budget activities of institutions of higher education.

The logic of this prioritisation was that no teaching programmes would be cut since no salaries or other teaching-related activities would be cut. Rather, in the case of the universities, first to be cut would be research. This led to a bitter internal conflict over the future of the Education Research Unit at the University of PNG, discussed in the next chapter. By the time the Commission became aware of the error, much water had flowed under the bridge. To publicly withdraw this set of evaluation indicators at this stage

¹² Budget Circular No. 1/86 from Chairperson, Commission for Higher Education to All Declared Institutions, Subject: 1987 Budget Estimates, ref. SO-240-10/00, Appendix C.

¹³ *Op. cit.*, Appendix B.

would have been to lose too much face. However, the evaluation indicators which appeared in the plan omitted this prioritisation, and substituted 'Guidelines for Funding Items in 1987 Budgets of Institutions of Higher Education' relating to budget items 1 - 10, referring explicitly to savings from closure of teaching programmes and from application of target student/staff ratios.

The first real evidence that the Secretariat was on the right course came with a Prime Ministerial statement on 16 January 1986¹⁴ commenting on the rapid deterioration of the economic climate and general downturn in the world economy. The budget had been divided into five priority areas: Economic, Infrastructural, Social Service (which included Education), Law and Order, and Administration. Priorities would be economic growth, increased investment, employment and participation. Resources would be redirected into the key economic sector in 1987 via budget cuts of five percent in the non-economic sector. Significantly, the Medium Term Development Strategy was to be reflected in each department's budgets. The Secretariat's assumptions had proved correct.

On 29 January 1986 an outline of the chapters and appendices for the Plan document was agreed, including a letter to the Minister, an executive summary, an introduction, a statistical review of the higher education subsector, and chapters devoted to national priorities, policy options and targets, respectively (see **Appendix 14** for outline in full).¹⁵

The second National Manpower Assessment largely omitted health manpower, but fortuitously the Health Department was assessing its future requirements in preparing its own plan. Information from this and the Commission's research on the Stock of Graduates were incorporated into the chapter on National Priorities.¹⁶ The Policy Options chapter comprised those options recommended by the Education Sector and specifically excluded those rejected by the Strategy. The real heart of the plan was a discussion of the implications of each of these recommended options for

¹⁴ Economic Address to Department Heads made by the Prime Minister, Papua New Guinea, 16/1/86.

¹⁵ Minute from Principal Project Officer Planning and Research to Chairperson, Commission for Higher Education 29/1/86.

¹⁶ First and Second Drafts of Chapter 3 of Higher Education Plan 1986 - 1990: A Strategy for Rationalisation, dated 13/12/85 and 21/4/86.

each of the individual and groups of institutions and took the form of prescriptions for consideration in relation to each of those institutions or groups.

Specific recommendations were deliberately avoided, although a considerable number were implied. This approach was to raise consciousness and generate discussions within and between institutions and the Commission, so that rationalisation would be participatory and not merely imposed by government through the Commission. This approach both recognised the importance of the professional experience and judgement of those concerned directly with the delivery of higher education and aimed at avoiding generating resistance from the institutions by dictating to them.¹⁷ The plan was primarily an agenda for further discussion and action.

The plan contained copious appendices containing basic data, for it was intended to serve as a major resource document and a directory of higher education in PNG, even if it were never formally adopted. It would then have lasting usefulness and some of its ideas would live on, for many documents, although not formally adopted, were equally seldom if ever refuted or withdrawn, and tended to create *de facto* policy.

Input of the Commissioners

On 7 February 1986 the Commission met for the first time since the Cabinet directive. Commenting on the chapter on National Priorities, the Secretary for Education (as a Commissioner) reported on discrepancy between the Education Department official statistics and those of the Manpower Assessment, sharing the Commission's reservations about the accuracy of the Manpower Assessment.¹⁸ Most of the chapters underwent between two and three drafting stages. The drafts were in general uncontentious, excepting matters relating to research in the chapter on Policy Options and their Implications, and criticism of the Manpower Assessment in the chapter on National Priorities. The Commissioners proposed few amendments, although they were given the opportunity to do so. Most of the amendments

¹⁷ First Draft of Chapter 4 of Higher Education Plan 1986 - 1990: A Strategy for Rationalisation, dated 4/3/86.

¹⁸ Letter from Secretary for Education to Chairperson, Commission for Higher Education, ref: SE3-10-1 re Comments on the Higher Education Plan (1986 - 90), 16/5/86.

the light of day. Although it presupposed a saving of K1.8 million, student protest would have ensued, which was probably the main reason for its being allowed to lapse into oblivion, despite having been explicitly commissioned by the Cabinet.

Consultation with the institutions

The Commission held a five-day session of hearings with the institutions from 25 June to 1 July 1986. The hearings were well attended by the Commissioners and the Acting Chairperson. They each took the chair in rotation.²⁷ The Universities, as the largest institutions, occupied a half day each and were represented by their Vice Chancellors, Registrars and one or two senior academic staff. The other hearings, each between one and three hours, involved institutional groups: technical and secretarial colleges; teachers colleges; forestry colleges; nursing schools and paramedical colleges; agricultural and fisheries colleges; colleges coming under the auspices of the Ministries of Justice, Finance, Public Services, Transport, and Civil Aviation and Tourism respectively. One non-cooperating college failed to attend. The institutional groups included representatives both of the institutions and also of their parent bodies. A few parent bodies or other interested parties were inadvertently omitted as a result of the Commission's inexperience.

After a few explanatory opening remarks, institutional representatives made their presentations in their chosen form. Informal, free and wide ranging discussions followed, which the Commissioners found extremely informative and interesting. As a group they had never previously had direct discussions with key personnel involved in the delivery of higher education. By the end of the five days those Commissioners who had attended most or all of the sessions felt they had a much better appreciation of the problems and concerns of the institutions.²⁸

At the end of each morning and afternoon, a closed session was held for between half an hour and an hour. The Commissioners summarised the points discussed with the institutions, and made recommendations. These

²⁷ Minutes of the Institutional Hearings 25 June - 1 July 1986, Commission for Higher Education.

²⁸ Verified by four Commissioners, Commission for Higher Education, by interviews, April - June 1988.

were progressively compiled into a draft letter to the Minister. By the end of the fifth day, the recommendations had been assembled. Before they dispersed, the Commissioners present each checked and approved the draft letter to be sent on their behalf to the Minister over the Acting Chairperson's signature. The letter was finalised the following day, 2 July 1986, and forwarded to the Minister.²⁹

The significance of this letter is that it contained the feedback from interested parties. The plan document had been circulated but was not subsequently changed. It was formally approved by the Commission, but constituted a draft so far as the Cabinet was concerned, particularly as the feedback had not been incorporated. The Commissioners' letter was the vehicle through which the institutions' reactions and the Commissioners' views on them were to be transmitted to the political level. At this time the plan should therefore be regarded as having three components: the plan document, the Commissioners' letter containing recommendations, and the Minister's submission which would accompany the plan to the Cabinet level. The Cabinet submission was therefore the more crucial document.³⁰

It is important to note that in February 1986, when the idea of institutional hearings had first been conceived, it was envisaged that the institutions would be given about three months to consider and respond. In the event, although they had received the draft evaluation indicators and other material in advance, they only received the plan between one and four weeks before the hearings. This was barely adequate to allow meaningful consultation. Some institutions probably felt it was inadequate. The Commission's credibility was certainly jeopardised by skimping on the consultation process, a situation which the Commissioners had wished to avoid but which arose as a result of political uncertainties and circumstances beyond the control of the Commission.³¹ The pressure placed on the Commission by the deadlines and evolutionary stages of the rest of the national planning system was a fundamental cause of weakness in formulation of the higher education plan.

²⁹Verified by four Commissioners, Commission for Higher Education, by interviews, April - June 1988.

³⁰Verified by Chairperson and four Commissioners, Commission for Higher Education, by interviews, June 1988.

³¹Verified by Chairperson and four Commissioners, Commission for Higher Education, by interviews, June 1988.

arose from within the Secretariat as further information became available with the passage of time.

At the eighth meeting the Commissioners criticised the tone of the draft Introduction as too neutral, and specified that a philosophy for higher education should be mentioned, that the limitations of any manpower approach to higher education should be discussed, and that the Commission had been forced into the present framework should be indicated. These points were incorporated in the final draft.¹⁹ The idea of a series of institutional hearings was generated at this stage, allowing institutions about three months to consider and prepare their responses. A week-long series of hearings would start on 9 June 1986 at which, if possible, all the Commissioners would be present. The draft Introduction was approved, subject to amendments, and the evaluation indicators were to be circulated to the institutions as soon as possible. The Commissioners also approved the draft Prioritisation of Budget Activities which was to prove so problematic later on.

These decisions were implemented and the drafting of chapters on Policy Options and Their Implications and on Targets continued. Research undertaken for the most substantial chapter in the plan ('The Development of the Higher Education System and Its Present Status') showed the extent to which the demand for tertiary education of various kinds was not being satisfied. Although included in the plan, this issue was not discussed in terms of the policy options, for the Education Sector Committee had explicitly rejected basing higher education planning on student demand.

An event of the greatest significance took place in early March. A second Cabinet directive to prepare a higher education development plan was conveyed to the Commission indirectly in a letter of 5 March 1986 to the Secretary for Education from the Secretary for Finance and Planning, copied to the Chairperson of the Commission. There was a striking similarity between this and Cabinet Decision 161/85 of November (see **Appendix 15** for full text). There were two main differences of substance: the words 'with a view to reducing costs' was added to the latter, with regard to reviewing the existing terms and conditions of the Natschol Scheme; secondly, the body

¹⁹ Principal Project Officer Planning and Research's shorthand notes of discussion at Commission for Higher Education Meeting No. 2/86 on 16/5/86.

which was to consider the higher education development plan was the National Planning Committee in the latter, instead of the Development Review Committee (of the Medium Term Planning System) in the former. The deadline for submission was changed from 31 March to 30 May 1986, a reasonable extension of time given the change of government and attendant circumstances.

The signature of 'Secretary for Finance and Planning' was indicative of the outcome of a major upheaval, perhaps more accurately a power struggle, between the Departments of Finance and of National Planning and Development. This peaked at around the time the Wingti government came to power, and was connected with a successful attempt to dismantle the Medium Term Development Strategy on which the previous government had been working for over twelve months.

The outcome of this struggle was signalled publicly by several vitriolic attacks in the local press by the Secretary for Finance and Planning on a number of expatriate public servants who had worked in both the Finance Department and the Department of National Planning and Development. These individuals he described as the 'Australian Mafia'. A sort of 'purge' of such officers ensued (with about fourteen leaving the country within the space of about three months, many of whom were not in fact Australians but who certainly constituted a powerful bureaucratic nucleus). Most were easily dislodged, either because their contracts were about to end and were not renewed, or their contracts had already expired and they were being retained on a month by month basis. By 5 March 1986 the Departments of Finance and National Planning and Development (which had previously reported to separate Ministers) had now been amalgamated, with Planning forming a Division within Finance.

Finance Estimates Circular No. 1 of 1986 belatedly eventuated on 6 March 1986, with no trace of the Commission's draft to be found in it. Instead the Circular was a long and complicated set of instructions reflecting a major restructuring of the budgeting process, introducing a programme approach focused initially on the Economic Sector, but to be extended to other sectors. A new five-year planning and budgeting model was to be introduced, integrating all Departmental activities, whether recurrent, ongoing or new into comprehensive programmes, providing a clearer picture of overall

departmental priorities and objectives and permitting all projects and activities to be designed and monitored on the basis of their contribution to individual programme objectives.²⁰ The process was to proceed to a very tight timetable, and those agencies that could not plan for future activities within the time allowed would suffer the consequences.

The location of some tertiary institutions, such as primary industry training colleges, functionally within the so-called Economic Sector resulted in some anomalies. Resources within the primary industry training colleges were demonstrably under-utilised, and substantial savings could have been made through closure of one or more campuses. The two National Manpower Assessments supported the need to cut back the production of primary industry trainees. The Economic Sector as a whole was to receive a boost of government expenditure of about five percent, undermining the Commission's pressure to find savings from this quarter, and encouraging the perpetuation and perhaps even further growth of small tertiary education 'empires'. Again the cross-sectoral nature of higher education proved problematic.²¹

The lateness of the Finance Circular and the Cabinet's extension of two months to the deadline of the plan, reduced the period allowed for the institutions to digest the evaluation indicators and the policy options, and collapsed the consultative process into a very short period - much less than the Commission had wished. By 20 March the plan's preparation was 'well in hand'²² and the final draft was anticipated by about 30 April. The institutional hearings were eventually rescheduled to commence on 4 July.²³

Consultancy study preliminaries

A two-man Asian Development Bank Technical Assistance Fact-Finding Mission visited from 10 - 21 March 1986 to draw up detailed terms of reference for the consultancy study (Advisory Technical Assistance as the Bank called it). A Memorandum of Understanding between the Government

²⁰ Letter from Secretary for Finance and Planning to Secretary, Department of Education, ref: 86/1, re 1986 Budget.

²¹ Verified with Chairperson, Commission for Higher Education, in interview June 1988.

²² Letter from Chairperson, Commission for Higher Education, to Minister for Education, ref. SO-125-07, re 1986 Budget, 20/3/86.

²³ Verified with Chairperson and Principal Project Officer Finance and Administration, Commission for Higher Education, in interview June 1988.

of the Independent State of PNG and the Asian Development Bank for the Advisory Technical Assistance on 'Rationalization and Savings in Higher Education' was signed on 19 March 1986. Unlike the Asian Development Bank funded Technical Education Project which had preceded it, the Advisory Technical Assistance was a grant rather than a loan, valued at nearly a quarter of a million US dollars. The study was designed very specifically to meet the Commission's needs, extending even to the choice of consultants. It was to commence in August/September 1986, with a view to generating data on unit costs and student/staff ratios which could be incorporated into the evaluation indicators for the 1988 budget which would need to be circulated at the beginning of 1987.²⁴

Conflict within the Commission's Secretariat

At a meeting of key staff on 29 April 1986 the word 'Development' was dropped from the title of the plan, and the qualifying phrase 'A Strategy for Rationalisation' was added. The plan thus achieved its final nomenclature: Higher Education Plan 1986 - 1990: A Strategy for Rationalisation'. Two aspects of the draft proved contentious at this meeting. The first of these was the stance to be taken on the question of research (at the universities). Up to this point in the drafting of the plan, teaching programmes and institutions had been the basic units of analysis. Non-teaching activities such as research had not been addressed for they had not been singled out by Cabinet. It had become apparent however that the University of PNG was ignoring the Commission's guidance as to priorities for selective cuts to teaching programmes, and focusing instead on cutting non-teaching units such as the Education Research Unit, whose primary client was the national Department of Education. Since its work supported primary and secondary (rather than tertiary) education, it was consistent with sectoral strategy priorities. The Commission did not anticipate financial savings from this area.²⁵

Furthermore it was precisely the research element which characteristically distinguished the universities from the more vocationally oriented training colleges. To weaken the research capacity of the universities (for which

²⁴Minute from Acting Chairperson to Chairperson, Commission for Higher Education re Asian Development Bank Funded Advisory Technical Assistance on Rationalisation and Savings in Higher Education, 28/7/86.

there was not generally much sympathy amongst PNG politicians in any case) might weaken the universities' capacity to contribute to developing the country through knowledge-generation - a role which the universities were best fitted to perform. Funds specifically for research and man-hours free from formal teaching contact were already small in the universities. To avoid this, it was necessary for the Commission to make an emphatic statement in the plan that the current research effort within the universities should not be eroded nor should financial savings be sought from this area. On Friday 25 April these concerns were discussed fully with the Chairperson who had agreed to the inclusion of specific statements to safeguard research in the draft Policy Options chapter. On Tuesday 29 April the other two key members of the Secretariat opposed these two statements and they were deleted.

The other main contentious matter was the tone of the chapter on National Priorities in commenting critically on the Manpower Assessment and its inadequacies as a detailed guide to output requirements of the higher education system. The chapter was structured first to present a systematic critique of the Manpower Assessment and its limitations, followed by health manpower requirements extracted from the draft Health Plan 1986 - 1990. Thirdly it presented the stock of graduates already produced in the various disciplines and related the major groups of these to the Manpower Assessment's forecasts of requirements. It concluded that there were many problems in using the Assessment and in basing the plan on it. An opposing view from within the Secretariat was that the Manpower Assessment was an official government document produced by another arm of government, and it was improper for one government document to criticise another government document. Furthermore it would weaken the Commission's ability to use the second National Manpower Assessment as an instrument for bringing about rationalisation.

Underlying these two viewpoints is a fundamental difference of perception as to the proper role of the Commission. One regarded the Commission as a body at arm's length from government, giving independent advice through the Minister for Education. The other saw the Commission's role as that of a line department - to implement government policy as handed down. This divergence had been manifest as early as September 1984, but it had never been explicitly addressed and resolved, either by the key staff or the

Commissioners themselves. (During Commission meetings it had been apparent that at least one Commissioner seemed to favour the former role, while another the latter.) It was agreed to erase all critical tone from the chapter in question, and the second draft was presented in neutral tone to the Commissioners for their meeting on 16 May 1986. The first draft had been circulated on 13 March 1986 to Commissioners for comment, together with a covering letter from the Chairperson's Executive Officer. None of the Commissioners had apparently felt unhappy with the critical tone, for no comments were sent back in response to the first draft.

The final draft was circulated to the Commissioners on 8 May and their meeting, originally scheduled for 9 May, was held on 16 May 1986. Two main items dominated the agenda: the higher education plan and the Cabinet submission on student financing. The Commissioners considered whether the plan was to be a document of the Commission or of the Government, as a decision had to be made regarding the inclusion of a letter of transmittal signed by the Minister for Education. The plan was to be the Commission's document. In considering the draft chapter by chapter, various specific textual amendments were agreed. The controversial issues of the plan's attitude to research and of the critical tone of the chapter relating to the Manpower Assessment were discussed, and in the final form of the plan the wording was once again reversed. This meeting also considered the problematic 'Prioritisation of Budget Activities', which resulted in an alternative, comprising a set of costing instructions.

Selective award of Natschol as a reallocative mechanism for the higher education plan

The second draft of a Cabinet submission on student financing was discussed, and the Commission recommended that the pocket allowance component of Natschol be abolished. Two amendments were also made, both relating to the selective award of Natschol. This was recognised at a late stage as having much potential for implementing the plan's thrust within the universities, despite their considerable autonomy. The Commissioners wanted to explore this potential, and asked that a simplified option on selective Natschol be brought back for further consideration.

The final draft of the Plan was approved by the Commission on 16 May, thus meeting the Cabinet's deadline of 30 May 1986. The first copies were

distributed immediately after printing to all the affected ministers and departmental heads.²⁵ By 13 June copies had also been delivered to all higher education institutions, and the members of the Budget Priorities Committee. The deadline for receipt of comments from these parties was 27 June 1986.

The Secretary for Finance and Planning acknowledged the plan cordially, commenting that it would be a useful adjunct to the Medium Term Development Strategy and the Manpower Assessment in project evaluation and other general purposes in the current budget preparation stages. The Commission's critique of the Manpower Assessment was vindicated by his acknowledgement of the Manpower Assessment's shortcomings and the need for further analysis and continuous updating of the study.²⁵ The Acting Assistant Secretary Social Services, Manpower and Education Economist also expressed personal appreciation of the comments on the shortcomings of the Manpower Assessment, indicating that another revision could not be envisaged for years. He also commented on the absence of any discussion on the plan's financial implications and minimal discussion of student financing, of importance in any discussion on higher education in PNG.²⁶

Twelve options for student financing through the Natschol scheme as well as the issue of bonding were considered on 2 June 1986. After discussion these were collapsed into five for presentation to the Minister, with the Commissioners recommending that the present system be continued but from 1987 the pocket allowance be abolished and Natschol awarded only for selected programmes. The resulting estimated savings of K2.3 million should be directed into two areas: K2 million to go towards primary education; and the remaining K300,000 be given to heads of institutions in trust for payment of hardship grants to students worst affected by the abolition of the pocket allowance. The Commissioners rejected the introduction of bonding.

The final draft Policy Submission for the Cabinet on Financial Support for the Students of PNG Institutions of Higher Education was forwarded in late June or early July 1986 to the Minister for Education for signature, but never saw

²⁵Letter from Secretary for Finance and Planning to Chairperson, Commission for Higher Education, ref. 6-0-15, re: Higher Education Plan (1986-1990), 26/5/86.

²⁶Letter from Acting Assistant Secretary Social Services, Manpower & Education Economist to Principal Project Officer Research, ref. 6-0-15, re Draft Higher Education Plan, 3/6/86.

The Cabinet submission: The final stage of plan formulation

Despite the Minister's signature, in reality the Cabinet submission was drafted by the same hand that both drafted the plan document and the Commissioners' letter to the Minister. By now the process had moved beyond the Commissioners and consisted of a series of interactions between the Minister, his Executive Officer, and the Commission's Acting Chairperson. The drafting of the submission generated a substantial amount of new data the inclusion of which, if it had been available earlier, would have made the plan document much more powerful. It was generated in the process of costing the implications of the commissioners' recommendations.

The recommendations fell into the following main categories: closure of particular university programmes; closure of certain non-university campuses; amalgamation of certain institutions. The costing estimated not only the extent of possible savings through these measures, but also their phasing across the four year period 1987 - 1990. A reasonable time for the phasing of campus closures or amalgamations was estimated, with the remainder of 1986 and a further year allowed as a minimum. Implementation was thus budgeted for 1988 or later. In those campuses proposed for closure or amalgamation, most of the programmes lasted for only one, or at most, two years. Phasing down could be accomplished within two and a half years, by the end of 1988.

Closure of selected university programmes was much more problematic. Whilst the Commissioners had favoured precipitating the closure of certain programmes by withdrawing government funding from them, they had not specified when such closure should take place. As most were at least four-year programmes, the question arose therefore whether continuing students should be allowed to complete their programmes, phasing closure over about three and a half years. Staffing (accounting for the majority of the cost) would be wastefully and progressively under-utilised during this period. Alternatively programmes could be truncated brutally, at the end of 1986, with all that would be entailed. The latter was feasible, since most of the teaching staff at the universities were expatriate contract staff whose

contracts made provision for their termination 'in the interest of PNG', with accompanying redundancy separation payment.³²

A greater concern, associated with potential political repercussions, was the fate of the students who had partially completed their programmes and could continue no further. The Minister requested the Acting Chairperson to take steps to try to ensure that an alternative could be found for them. She approached the Australian High Commission on a tentative basis as to whether it might be possible for the affected students to be placed in Australian tertiary institutions, in the event that this proved necessary. The Acting Chairperson, through the Minister's Executive Officer, sought guidance as to the Minister's feelings on phased as compared to immediate closure, as well as the political climate in general. Was the Cabinet really intent on maximising savings through the higher education plan? How far were the members prepared to go?^{33 34}

It was taken into account, amongst other things, that more than once during the period January - May 1986 one of the Economic Advisers to the Prime Minister had personally contacted the head of the Planning and Research Division, suggesting that the Prime Minister was taking a keen interest and anticipating recommendations that would produce significant savings. The approach appeared to have been made without the Minister for Education's knowledge.³⁵ Recognising the delicacy of the situation, it had been decided to co-operate fully with the Prime Minister's Adviser since the initiative had not come from the Commission. Resource documents and drafts of the plan had been supplied, as well as the final draft.³⁶ About this time press reports of incidents during parliamentary sessions suggested that the Education Minister was under pressure from the Prime Minister, including the possible removal of the Education Minister.³⁷

³² Working paper for Minister for Education 'Options for Rationalisation and their Implications', Commission for Higher Education, 4/7/86.

³³ Verified with Executive Officer to the Minister for Education, interview, June 1988.

³⁴ The former Executive Officer to the Minister for Education confirmed in an interview, June 1988, that there had been every indication from the Prime Minister that he was really intent on maximising savings through the Higher Education Plan. The extent to which the Prime Minister's views were reflected through Cabinet were not possible for him to assess, however.

³⁵ Verified by Chairperson, Commission for Higher Education, by interview, June 1988.

³⁶ Verified by Chairperson, Commission for Higher Education, by interview, June 1988.

³⁷ Verified by the former Executive Officer to the Minister, by interview, May 1988.

A second Economic Adviser, on the Prime Minister's personal staff, had confused the picture by making direct contacts with some Secretariat staff, causing concern to the Chairperson. (The same Adviser was subsequently barred by the Minister for Education from making any direct approach to the Department of Education without the consent of the Minister's office.) Inconsistency became apparent between the actions of the two Economic Advisers in relation to higher education. The Chairperson received a (leaked) copy of a letter from the Prime Minister, allegedly drafted by his personal Economic Adviser, directing the Commission to incorporate specific measures in the plan. These involved relocating a particular programme from one university to the other, and appropriating the campus of a third institution for the purpose of amalgamating it with one of the programmes at the recipient university. The letter appeared to aim at pre-empting some aspects of the Commission's Plan, for possibly personal rather than policy reasons.³⁸

The Chairperson ignored the copy until the original was received about ten days or more later. In the meantime the implications of the directive had been considered. Although the Commission was generally favourably disposed to the idea of amalgamating institutions, and if necessary, relocating programmes, this had to be justified on the basis of increased efficiency and better utilisation of resources. The main difficulty with the changes proposed in the letter was that the relocation of the programme in question would result in a large and unfillable hole in the university from which it was to be removed. The programme in question accounted for approximately forty percent of the institution's student numbers. As there was little prospect of alternative use of costly capital resources, it had been decided by the Secretariat that efficiency and economy were better served by leaving the programme where it was. It was tacitly decided to accept those aspects of the directive that were consistent with the plan, and ignore those which were not, providing arguments against their incorporation if necessary.³⁹

The Acting Chairperson and the Minister's Executive Officer selected the bolder option for the Cabinet Submission, i.e. for immediate closure of the

³⁸Verified by Chairperson, Commission for Higher Education, by interview, June 1988.

³⁹Verified by Chairperson, Commission for Higher Education, by interview, June 1988.

programmes in question. This decision was influenced both by the active interest shown by the Prime Minister's office during the preparation of the plan, and by the fact that the Prime Minister since taking office had shown remarkable toughness. If the political will to accomplish fundamental reforms in higher education, including the amalgamation of the two universities, were ever to exist, it would be at this particular point in time. Immediate closure was favoured, since delay could permit counter-lobbies to mobilise and frustrate the reforms. Cabinet could, if it wished, select the delayed mode, since both costings could be compared.⁴⁰

During the period 3 - 18 July, in which the Acting Chairperson drafted the Cabinet submission, the draft was discussed with the Minister, in the presence of the Executive Officer. The Acting Chairperson experienced some difficulty in gaining an accurate understanding of the Minister's wishes. Such understanding was of major importance since the Minister would need to concur with the submission's contents if he was to defend it in the Cabinet.⁴¹

At the Minister's request full details of the numbers of students and staff in the institutions, costs and other data were included. As a consequence the submission which, according to the rules governing such submissions, should not have exceeded six pages, eventually consisted of forty-five pages.⁴² Its length was discussed explicitly with the Minister and the Executive Officer, and the Acting Chairperson was assured that there was precedent for bulky submissions in cases of such complexity and scope.⁴³

The Acting Chairperson's dealings with the Minister were complicated by his vacillation over some of the crucial recommendations it contained. Initially delay had occurred through his reluctance to confirm the incorporation in the Submission of the Commissioners' recommendations, contained in their letter of 2 July 1986. Later instances of inconsistency resulted in several

⁴⁰Verified by the former Executive Officer to the Minister, by interview, May 1988.

⁴¹Verified by the former Executive Officer to the Minister, by interview, May 1988.

⁴²Verified by the former Executive Officer to the Minister, by interview, May 1988.

⁴³The hypothesis that the length of the Submission was a contributing factor to the deferral of the plan by Cabinet was probed during an interview with the former Executive Officer to the Minister. His view remained that a long and detailed submission was necessary in order that a matter of such complexity could be adequately presented. Bearing this in mind and noting that the second Cabinet Submission (made in 1987 which resulted in the Plan's approval) was itself 27 pages long with appendices suggests that the factor of length was, if at all, only a small contributory factor, and can probably largely be discounted.

revisions, with further loss of time. For the 22 July Cabinet meeting the deadline for submission was 9 July. The submission was eventually hand delivered in its final form to the Minister for signature on 10 July 1986. As the Commission had been working with all possible speed to meet this deadline, the Minister's procrastination was disappointing.

Further delay ensued. Fifty copies of the submission and the plan, delivered to the Minister's office on 30 July, were recalled on 18 August as about ten copies had disappeared and could not be accounted for. On 14 August it was learned that the financial implications necessitated their scrutiny by the Budget Priorities Committee before forwarding to Cabinet. The Budget Priorities Committee considered the submission on 21 August 1986 and supported the first twenty-seven recommendations, but not the last two. The twenty-eighth provided for seven taskforces to be set up immediately by the Commission to plan the implementation of the amalgamations and relocations of institutions, to complete their tasks and make their recommendations by 1 March 1987 in order for implementation to be budgeted for 1988. The Committee feared that the taskforces would not complete their tasks inside the time allowed (i.e. by 1 March 1987), and felt that the Commission itself should plan the implementation, rather than set up taskforces to do this work. The twenty-ninth recommendation was that all the monies saved through the Plan be reallocated within the education sector. This was not supported because it was now 'policy that the economic sector use up monies taken from budget cuts made on other sectors...'⁴⁴

The rejection of these two recommendations was extremely significant. Firstly the Commission was to be denied a crucial implementation mechanism involving institutional amalgamations administratively straddling seven different ministries. Secondly the entire rationale for the cost-saving exercise presupposed by the twenty-nine recommendations, namely to shift resources to primary education, was negated since the savings were to be ploughed into the Economic Sector (which omitted education). These implications were ignored by the Acting Minister for Education, Sir Iamakey Okuk, who advised all Ministers that the Budget Priorities Committee had

⁴⁴ Letter from Chairman, Budget Priorities Committee to Chairperson, Commission for Higher Education, 10/9/86.

given its full support to the submission.⁴⁵ They were also ignored by the Prime Minister, who responded immediately to the Acting Education Minister that he was extremely pleased with both the submission and the plan and fully endorsed and supported all of the recommendations, which also had the full support of the Budget Priorities Committee.⁴⁶

The twenty-nine recommendations ultimately contained in the Cabinet submission are reproduced in Table 1 (**Appendix 16**). If these had been approved as a package, an estimated minimum saving of K10 million (or 15.7 percent) could have been realised from the total higher education budget in 1987, with a K300,000 (or 0.5 percent) by 1988, assuming constant prices at 1986 level. (A further 0.3 percent could have been realised in 1989 and 1990, totalling approximately K430,000.) This allowed for one of the recommendations (concerning national scholarships in lieu of training allowances for trainee nursing officers) to increase the higher education budget by nearly K1 million through a transfer from the health budget to the higher education budget. Savings to the national budget would have been reduced by approximately K900,000 since one of the recommendations involved a transfer to the health budget from the higher education budget. Net savings to the national budget would have been approximately K9.4 million by 1988. In September the plan and submission were eventually considered by the Cabinet which deferred them pending the national elections to be held in mid 1987.

Summary

November 1985 to July 1986 was characterised by a sharply focused effort on plan preparation. The problems of defining its scope and schedule were overcome by Cabinet decision and its fairly short deadline. This necessitated key administrators determining what was feasible to comprise within the plan, and the Commissioners' subsequent ratification of those decisions. The Cabinet's decisions greatly simplified matters, for many more imaginative options were ruled out for practical considerations and time constraints. It was necessary to manage with whatever was available.

⁴⁵ Letter addressed to All Ministers, National Executive Council, signed by the Acting Minister for Education, Sir Iambakey Okuk, CBE, MP, 25/8/86.

⁴⁶ Letter from Prime Minister to Acting Education Minister, 27/8/86.

Although the first three months of preparation were undertaken with little reference to the Commissioners, thereafter their involvement became much more active and their relationship with the Secretariat became much more dynamic. This peaked with the week-long series of hearings with the institutions, during which a mild euphoria was experienced. At last the Commission was coming to life. Its various parts were pulling together in a major policy-making exercise which promised significant impact.

Although the change of government in November 1985 had an unsettling effect, the Medium Term Development Strategy had by now become sufficiently imbued in the thinking of both politicians and bureaucrats that it had acquired its own momentum, irrespective of its public denial as the policy of the new government. This created a certain stability, for it seemed unthinkable that all the effort invested by the whole government machine and its bureaucracy in redesigning the national planning system could be erased in an instant.

The world economy was also a factor that lent continuity to a discontinuous situation. Most major influences on the PNG economy were external, and a change of government could not radically alter the overall economic climate. Much of PNG's scope for responding to that climate was already prescribed by history and existing commitments, including loans from the international finance organisations.

Once the plan's scope had been defined, realistic ways to influence the determinants of higher education could be sought. These fell into three main categories: firstly, influencing the budgetary process of institutions both through issuing guidance for their preparations (evaluation indicators) and through advising the Minister for Education and the Budget Priorities Committee. Secondly, indirect influence of institutions' budgetary process by selectively awarding Natschol to priority programmes only. Thirdly, consulting the institutions and obtaining their advice.

A fourth and less obvious method was to heighten awareness of institutional staff of the issues at national level and the relationship of the individual institutions to the whole system. This aimed at eliciting co-operation through understanding of the overall context and of the relativities between the constituent parts. By promulgating contextual information (rather than by

coercive means) it was hoped to encourage institutions to adjust themselves appropriately. The last few weeks saw movement beyond the Commissioners' sphere - the interface between the bureaucracy and the politicians.⁴⁷

⁴⁷ Summary verified by Chairperson, Principal Project Officer Finance and Administration, and five Commissioners, June 1988.

CHAPTER 6

IMPLEMENTATION OF THE HIGHER EDUCATION PLAN

Overview of the implementation phase

Although the Higher Education Plan was deferred in September 1986, it was to be resuscitated in mid 1987 and was ultimately approved in December 1987 for implementation. This chapter firstly describes how in the intervening period two further developments took place: a bureaucratic attempt to partially circumvent the deferral of the plan by incorporating some of its recommendations into the 1987 national budget, and the fate of these; and the effects of a new economic strategy developed in 1986 which involved imposition of budget cuts on tertiary institutions and other organisations. The budget cuts of 1987 and those pending for 1988 had major implications for the modified form in which the plan was ultimately approved. A summary is presented of the changes in the Commission's position as reflected in the second Cabinet submission as compared to the first, in turn reflecting the events in the intervening period. It classifies the types of recommendations and traces the extent of the implementation of each of these so far as it could be determined by December 1990. The effects of the plan and the new economic strategy are discussed in some detail in relation to each of the main groups of higher education institutions in turn: the universities, the technical colleges, the teachers' colleges, the primary industry colleges, the nursing schools, the colleges of allied health sciences, and the miscellaneous institutions. Particular attention is given to the University of PNG's response to the 1987 budget cuts. The responses of three of the main areas it targeted for selective cuts are traced in some detail.

A bureaucratic sleight of hand

Despite Cabinet's deferral of the plan, matters did not go entirely into abeyance. Unbeknownst to the Commission, bureaucrats in the Prime Minister's Department extracted some of the plan's recommendations and incorporated them into the 1987 national Budget. Three recommendations were approved in this way (see **Appendix 16**, recommendations 14, 18 and 20). The Commission only discovered this in March 1987 when the

Chairperson heard about the decisions from the institutions or departments affected, never having been advised by the Cabinet Secretariat.¹

Two of these three recommendations were not implementable, since they were contingent upon others that had been deferred by Cabinet. The closure of the PNG Forestry College in Bulolo and the relocation of its students and staff at the PNG University of Technology in Lae was contingent upon space being vacated at the University. The recommendation to cease funding the forestry degree programme at the University, which would have made such space available, had been deferred together with the rest of the plan.

Similarly the relocation of the Legal Training Institute from its site in Hohola to the Waigani campus of the University of PNG was contingent upon two other recommendations which were in abeyance: the reduction of intakes to the law degree programme at the University, and the amalgamation of the Administrative College with the University. The former would have reduced pressure on existing accommodation at the University, and the latter would have increased the physical capacity of the University substantially. With these two deferred, there was no space at the University to absorb the Institute.

Failure to relocate the Legal Training Institute at this time meant that the critical moment for such a move was lost. In mid 1986 the Institute's Director had agreed to the relocation partly because the Institute's lease was about to expire. With the delay, the Institute entered into a new lease.² The deferral also allowed the Administrative College and the Law Faculty to muster their arguments and political support during the next sixteen months to resist the proposed contractions quite considerably. They were subsequently joined by the Legal Training Institute which, by September 1987 had changed its mind.³

The third recommendation, however, had the potential for implementation since it was not contingent on any deferred recommendations. It involved

¹ Letter from Chairperson, Commission for Higher Education to Secretary, National Executive Council, ref. SO-000-51, 25/3/87.

² Letter from Director, Legal Training Institute to Vice Chancellor, University of PNG, re: NEC decision No. 124/86, 11/3/87.

³ Letter from Director, Legal Training Institute to Secretary, Department of Justice, re: Policy Submission-Higher Education Plan: A Strategy for Rationalisation 1986-1990, 30/9/87.

only two main parties (the Commission itself and the Department of Health) and was operationally a paper transaction. The recommendation that all trainee nurses, whether in government or church nursing schools, be eligible for National Tertiary Scholarships in lieu of their present remuneration or allowances⁴ meant that the Commission would take over the responsibility from the Department of Health for payment of living allowances to nurse trainees. This arrangement would bring them in line with scholarships awarded to all other government sponsored tertiary students. This would produce savings of nearly K1 million to the national budget since nurse trainees were currently maintained year round at a higher level than that of tertiary scholarships, which were payable only for the duration of the academic year.

Despite the simplicity of this recommendation, its implementation in 1987 proved impossible because the Commission was not informed of the decision until after the start of the academic year, and no arrangements had therefore been made for phasing in the new arrangements or transferring funds. This took place the following year and in May 1988 was in the process of implementation, but even then had run into difficulty. The Commission and the Health Department had agreed that the scholarships would be phased in with the new intakes from 1988 onwards, while continuing nurse trainees who had commenced in previous years would remain on their former allowances. Thus the Commission had budgeted only for the first year intake in 1988. On requesting the transfer of the balance of funds (in order to administer disbursement to all trainees), it was discovered that the Health Department had not budgeted for the allowances of the continuing trainees for 1988. The matter was eventually resolved in later 1988 by means of a further submission to Cabinet to obtain the funds.

If these three recommendations which were approved through the 1987 national budget had been implemented in 1987 as planned, approximately K1 million of the national budget in 1987 would have been saved by 1988. In reality by May 1988 the higher education budget had increased by approximately K56,000 on account of the nurses scholarships, and it was impossible to determine whether any saving had been achieved in the national budget in this regard.

⁴ Policy Submission No. 193/86 for members of the National Executive Council.

The 1987 budget cuts

During the higher education policy vacuum generated by the deferral of the plan the Department of Finance and Planning announced budget cuts of five percent to the two universities as well as to a large number of government agencies. By this stage (i.e. late 1986) the government's economic thinking had changed. Instead of the twelve sectors and four cross-sectors of the Medium Term Planning System of 1984/5, a simpler approach had been adopted (described in Chapter 2). As higher education institutions were distributed between the five sectors (see Table 2, **Appendix 17**), the inter-sectoral resource shifts of the new economic policy were to have a profoundly illogical effect on the higher education policy embodied in the plan.

The plan, for example, recommended closing a number of institutions on grounds of cost-efficiency: there was duplication and surplus capacity in the system, and the same number of students could be accommodated by concentrating them in fewer institutions. The surplus institutions could either have been closed, producing very significant savings in terms of running costs, or converted into other kinds of educational institutions for which there was a need, for example, national high schools. The PNG Forestry College in Bulolo, the Sepik Agricultural College, two nursing schools and two technical colleges were cases in point. These institutions developed the argument that their institution or programme had high priority as it was aimed primarily at the service of the economic sector and must be exempt from cuts (regardless of inefficiency). Politicians readily accepted this 'economic sector argument' which rapidly became a ploy used by tertiary institutions wherever possible.

The plan also recommended the closure of certain high cost programmes for which the manpower requirement was small. These included the forestry degree at the PNG University of Technology and the fisheries degree at the University of PNG. The interested departments made representations to the relevant Cabinet Ministers using the economic sector argument, who then intervened to frustrate the plan's recommendations concerning these programmes. Furthermore the deferral of the plan for fifteen months allowed the interested parties plenty of time to marshal their arguments and lobby support very effectively.

Despite the government's rhetoric, however, that cuts of five percent of the previous year's allocation to the budgets of the three lower priority sectors were to be imposed in 1987, the 1987 budget allocations to higher education institutions reflected little consistency with this policy, nor indeed any consistent pattern. The treatment of higher education institutions in the high priority sectors was also inconsistent, with some receiving disproportionate increases and others cuts (see Table 3, **Appendix 18**).

In the Social Services Sector, which was to be cut by five percent overall (see Table 3, **Appendix 18**), both of the universities suffered a decline in Kina terms from the previous year: the University of PNG by about 4.8 percent (K877,400) and the PNG University of Technology by about two percent (K241,500). Technical colleges suffered a decrease of about 12.2 percent (K953,700). In the Law and Order Sector, the Legal Training Institute suffered a decline of about 3.5 percent (K7,500). This group was treated roughly consistently with the overall policy. However primary teachers' colleges were allocated an increase of about 9.5 percent (K312,000), health colleges were allocated an increase of about 11.6 percent (K662,800), and in the Administrative Services Sector, the Administrative College was allocated an increase of about 13.6 percent (K244,100), reflecting inconsistency with the overall policy (Papua New Guinea, Department of Finance 1985; Papua New Guinea, Department of Finance and Planning 1986, 1987.) Ignoring the distribution of cuts between individual higher education institutions or institutional groups, and looking at the movement of aggregate institutional resources within the low priority sectors, a total net decrease of approximately 1.6 percent (approximately K836,600) occurred.

The treatment of higher education institutions in the high priority sectors was also inconsistent with the overall policy: the Agricultural Colleges and the Fisheries College together were allocated an increase of about 2.8 percent (K73,000). The National Arts School enjoyed an increase of about eighty-one percent (K268,300) and the Civil Aviation Training College an increase of about 10.1 percent (K112,500). On the other hand, the PNG Forestry College and the Timber Industry Training College together suffered a decrease of about 3.6 percent (K20,400), while the PNG Maritime College suffered a decrease of about 5.8 percent (K800). Thus higher education

training institutions in the high priority sectors received a net total increase of K432,600 at 1986 prices or about 0.75 percent of the total higher education budget.

Taking both high and low priority sectors together, total savings to the government from these higher education institutions were about K430,600 in 1987 (approximately 0.7 percent) compared with estimated savings of over K10 million (or about 17.3 percent) which might have been realised in 1987 if the Higher Education Plan had been approved and implemented immediately. Thus the 1987 budget for higher education was consistent neither with the deferred Higher Education Plan nor with the government's stated policy of shifting resources into the economic sector.

The plan's resubmission

When the plan was resubmitted to Cabinet in November 1987 in association with the 1988 national budget, the plan document remained as it had, but the new Submission accompanying it incorporated significant changes. Interested parties had been afforded over a year to muster support and manoeuvre themselves into a more advantageous position in terms of the pending plan. Additionally the government's new economic strategy and the differential impacts of budget cuts on various higher education institutions served as constraints to some institutions, but provided others with fertile ground for launching tactical responses to pending threat. We may expect to find evidence of the political manoeuvres reflected in changes in the Commission's position on its plan by late 1987.

About the middle of 1987 the Commission held a series of hearings with all higher education institutions regarding their proposed budgets for 1988, and a revised Cabinet Submission was drawn up which contained twenty recommendations, thirteen of which had sub-divisions, bringing the total of recommendations in effect to thirty-seven. This revised set (see Table 4, **Appendix 19**) varied in a good many respects from those in the original submission of September 1986.⁵ As the recommendations in the second submission had many subsections, these subsections are treated for the purpose of this analysis as individual recommendations. The recommendations of the first Cabinet Submission are contained in Table 1

⁵ These variations are summarised and analysed in Tables 6 - 17 in **Appendices 21 - 32**.

(**Appendix 16**). The types of change envisaged by the recommendations were classified into nine discrete categories⁶ and used in the analysis presented in Tables 6 - 17 (**Appendices 21 - 32**).

Fourteen of the twenty-nine original recommendations were dropped at this stage, six were deferred for review, and nine were eventually approved (mostly after they had been modified and included in the second cabinet submission).⁷ Attempts, for example, to induce the PNG University of Technology to close high cost programmes with low student numbers were abandoned, as were attempts to induce the national Department of Education to close three technical college campuses. Recommendations to amalgamate the University of Technology and the PNG Maritime College with the Lae and Madang Technical Colleges respectively were also abandoned. Attempts to restrain Cabinet from cutting teachers' college funding and to constrain it to redirect savings within the education sector were abandoned. A number of recommendations, mainly concerning primary industry colleges, were deferred pending further review. Radical change recommendations concerning dental training and the amalgamation of the Administrative College with the University of PNG were carried forward, softened and eventually approved. Most of the recommendations involving radical changes or constraints placed on Cabinet were either softened or abandoned altogether.

In the second submission, twenty-six of the thirty-seven recommendations were approved, eight were dropped (ignored or rejected) and three were deferred for further review.⁸ Those that were dropped (i.e. rejected or ignored by Cabinet) involved the absorption of two primary industry colleges into the University of Technology, the amalgamation of a third with a technical college, quality improvement in teacher education, and the future of the Education Research Unit. Three that were deferred for further review all concerned primary industry training. It appears that the 'economic sector argument' was used effectively here.

⁶ see Table 5, **Appendix 20**.

⁷ See Table 6 (**Appendix 21**) for summary of the 29 original recommendations according to each of these categories and indication in general terms what happened to each of them. These are also presented as a frequency distribution in Table 7 (**Appendix 22**).

⁸ See Tables 8 and 9 (**Appendices 23 and 24**).

Four of the twenty-six approved recommendations were purely formal and cannot be evaluated in terms of implementation. Of the remaining twenty-two, only half were implemented by 21 April 1989.⁹ Of the eleven which had not yet been implemented, only three showed any prospect of implementation.¹⁰ Finally, of the four recommendations deferred by Cabinet for review, three were clearly unlikely to be implemented, and the outcome of the fourth was still unknown as at 21 April 1989.¹¹ Thus, despite the approval of twenty-two out of thirty-seven recommendations in the second submission, only eleven had been implemented by 21 April 1989 (i.e. some seventeen months later) and only a further three or four showed any likelihood of eventual implementation.¹²

During the fifteen months between the preparation of the first cabinet submission on the plan in July 1986 and the preparation of the second cabinet submission on the same plan, the Commission's position had changed considerably. This can be observed from an examination of some of the differences between the recommendations in the second as compared to the first Cabinet submission. It also reflects shifts in the positions of some of the institutions. Only one of the original twenty-nine recommendations remained essentially unchanged from the first to the second submission, being the overall recommendation to approve the plan. Nine were modified in such a way as to soften their impact on the institutions affected.¹³ Two represented a strengthening of the terms in which the proposed shift of resources was expressed.¹⁴ A total of eleven were dropped altogether.¹⁵ Two more¹⁶ were in the process of being implemented and were therefore also dropped from the second submission. In one case the direction of the proposed shift of resources was reversed in the second submission.¹⁷ The original key twenty-ninth recommendation (proposing that the savings from

⁹ See Tables 10 and 11 (**Appendices 25 and 26**).

¹⁰ See Tables 12 and 13 (**Appendices 27 and 28**).

¹¹ See Table 14 (**Appendix 29**). Tables 8, 10, 12 and 14 indicate the recommendation numbers so that they may be identified by reference to Tables 1 and 4.

¹² See Table 15 (**Appendix 30**).

¹³ Recommendation nos. 2, 7, 8, 13, 16, 17, 18, 19, 22.

¹⁴ Recommendation nos. 20 and 21.

¹⁵ Recommendation nos. 4, 5, 6, 9, 10, 12, 15, 24, 26, 27, and 28.

¹⁶ Recommendation nos. 14 and 23.

¹⁷ See Table 7, **Appendix 22**.

the rationalisation exercise presupposed by the plan be reallocated within the Education Sector) was dropped altogether.

In addition to these changes, a further twenty-two new or modified recommendations were incorporated. These could be characterised by the following broad categories: shifting resources in favour of the universities and to a lesser extent in favour of technical and secondary education (seven recommendations), increased power for the Commission (four recommendations), economy through staffing reduction relative to student load (four recommendations), resource cessation (three recommendations), strengthening primary teacher education (two recommendations) and one recommendation concerning each of the following: change of institutional mission, more coordination (unspecified), institutional rationalisation, and increasing the autonomy of one of the Health Department institutions.

More important however is the significance of these changes of position. The only one of the original recommendations which remained essentially unchanged was that dealing with approval of the plan as such, without any of the specifics. One would not have expected there to be any change to this recommendation. Of the thirteen that were dropped, two were in the process of being implemented by the Commission. One of these was a legal technicality, and the other concerned the Commission's own operations. Of the remaining eleven, three were concerned with cessation of programmes at the two universities: four programmes at the University of Technology and one at the University of PNG. One concerned the merger of the University of Technology with the Lae Technical College into the technical education system. The fifth involved the closure of three technical college campuses. A sixth dealt with enabling the Health Department to use university facilities for dental therapist training after the cessation of the B.Dental Surgery programme at the Taurama Campus of the University of PNG. A seventh involved the closure of a small training unit under the auspices of the Department of Finance and Planning. The eighth concerned rationalising the administration of the University of PNG Medical Faculty with an adjacent campus belonging to the Health Department. The ninth was an 'apple pie and motherhood' statement concerning Pacific regional funding for institutions performing a regional training role. The tenth concerned the setting up of taskforces as an implementation mechanism, which the Budget Priorities Committee had rejected in 1986. And the eleventh proposed that

no cuts be made to the budget of the Goroka Campus of the University of PNG. Eight of these concerned the Universities, directly or indirectly, and eight were dealing with radical rather than incremental change. In dropping these, the Commission was apparently backing away from confrontation, particularly with the Universities.

The next largest group of nine recommendations were ones the impact of which was softened in the second submission. Five of these concerned the universities in one way or another, and three dealt with primary industry colleges. In two of these, the notion of *quid pro quo* was introduced in the second submission, such that tertiary institutions were to be converted into secondary institutions - thought by some to be as much of an asset as tertiary institutions. Five dealt with radical change. Taken together, changes to these two groups (representing two thirds of all the original recommendations) seem to reflect a significant strengthening of the positions of the universities and to a lesser extent primary industry and technical colleges, compared with the first submission. This was also reflected in a further three recommendations which dealt with the University of PNG and were modified in such a way as to strengthen the position of the University of PNG.

In general terms there was a movement away from more radical recommendations towards more marginal ones. Two out of twenty-nine recommendations were approved in 1986, and one of these subsequently implemented. The overall approval rate of the first submission can be described as seven percent and the implementation rate as 3.5 percent. This may be compared with the second submission in which twenty-two out of thirty-seven recommendations were approved, and eleven implemented, producing an approval rate of sixty percent and an implementation rate of thirty percent. Examining the approval rates of recommendations in the second submission classified by different types of change,¹⁸ we can see that the approval rates for recommendations involving amalgamation or alternative use of resources were much less likely to be approved than those concerned with cuts of function involving single institutions. Despite the greater likelihood of approval of the latter, the likelihood of their implementation was much as low as those concerning amalgamation or

¹⁸ See Table 17, Appendix 32.

transfer of function. Recommendations for marginal changes involving reduction of function of single institutions or parts of institutions, cooperation between institutions, and formal approvals were highly likely to be approved. The implementation rate of marginal reduction of function recommendations was also high. Recommendations attempting to restrict the power of Cabinet were abject failures.

A review of institutional responses

Ministry of Education institutions were the two universities, the technical colleges and the teachers colleges. In the primary industry sector, the agricultural colleges were responsible to the Ministry of Agriculture and Livestock, the PNG Forestry College and the Timber Industry Training College to the Ministry of Forests, and from 1987 onwards the National Fisheries College was removed from the Ministry of Agriculture and Livestock and placed under a new Ministry of Fisheries and Marine Resources. The government nursing schools and the Colleges of Allied Health Sciences came under the Ministry of Health, which also had a shared and limited responsibility for the church operated nursing schools, providing part of their finance. The miscellaneous institutions came under the auspices of a variety of other Ministries.

This deconcentrated responsibility for higher education institutions had major consequences for the implementation of the plan. Although the Ministry of Education institutions constituted the bulk of enrolments, it would be mistaken to assume that the Commission was well placed to influence them. In reality it had no power to direct any of these institutions. Furthermore the universities through their legislation and the Department of Education through its experience, enjoyed a great deal of autonomy, over which the Minister himself had relatively little influence.

The universities

In the Cabinet directives of November 1985 the two universities were singled out for particular attention in terms of cutting costly programmes and the imposition of target staff/student ratios. These directives, together with advance notice from the Commission to the Universities concerning the implications of the forthcoming Higher Education Plan set certain internal university processes in motion. Later in 1986 the budget cuts announced for

1987 further impacted on these internal processes. The responses of the two universities were significantly different however.

The PNG University of Technology's response to the evaluation indicators for 1987 budget preparation (issued by the Commission in early 1986) was essentially to ignore them. Staff had little faith in the accuracy of the National Manpower Assessment which formed the backbone of these indicators. The University managed to avoid having to grapple with the painful prospect of cutting any of its teaching or research functions by spreading marginal cuts across a range of activities whilst still managing to maintain its operations more or less in full. The PNG University of Technology used the argument that all of its programmes served the economic sector and therefore should be regarded as high priority. It also sought to improve its position strategically, raising student/staff ratios by taking in increased numbers of students, and creating a preliminary year programme just as the University of PNG was abolishing theirs!

The response of the University of PNG was altogether different. The economic sector argument was not so applicable as the University incorporated a medical faculty, a teachers' college, and a faculty of arts. The evaluation indicators and/or the impending budget cuts precipitated contemplation of selective cuts of the teaching and research functions, striking at the very heart of the institution.¹⁹ In doing so, the University's Planning Committee in March ignored the Commission's guidance as to manpower priorities, and adopted four out of five criteria developed by the Law Faculty. These were:

- 1 Research activities will be cut before teaching programmes.
- 2 Teaching programmes which do not serve the government's stated manpower needs will be cut before those that do.
- 3 Inefficient programmes will be cut before efficient ones.

¹⁹ Memorandum from Acting Deputy Vice Chancellor, University of PNG, on Budget Cuts, 25/2/86.

- 4 Administrative services which do not provide necessary support for teaching or research will be cut before those that do, and those that support research before those that support teaching.²⁰

No rank ordering was determined, and all functions which failed to meet at least one of the criteria were to be scrutinised.²¹

At the next meeting, using these criteria, it was agreed to cut five positions from the Education Research Unit. Four teaching programmes also came under consideration: the B.Sc. Fisheries (which had been transferred to the University the previous year from the University of Technology) was to remain untouched but would come under scrutiny in case of further cuts; the Diploma in Journalism was to justify its existence on manpower needs; the Bachelor of Dental Surgery was to lose four positions; and Preliminary Year (a one year preparatory programme for university entrance) was to be phased out by the end of 1988. No faculty could bring itself to admit to any programme being inefficient according to Criterion 3. The committee agreed that if government insisted on more cuts then 'whole departments will have to go and the University will cease to be recognised as a university'.²²

During the course of the year the University moved away however from both radical cuts of function and from even marginal selective cuts distributed widely within the University. By 15 July a policy of percentage distribution of budget reduction related to student load, distributed proportionally between faculties was being considered.²³ The heat was taken off the Education Research Unit, Dentistry, Fisheries, and Preliminary Year.

Although the University was able to avoid radical cuts for the remainder of 1986, the problem was to return with greater force the following year. In early 1987 the Department of Finance and Planning instructed the universities to budget for a further five percent cut for 1988.²⁴ The University

²⁰ Memorandum from Faculty of Law to University Planning Committee re: Working Committee Report, University of PNG, 12/3/86.

²¹ Minutes of University Planning Committee, University of PNG, 14/3/86.

²² Minutes of University Planning Committee, Special Meeting 1/86, University of PNG, 21/3/86.

²³ Minutes of Special Joint Meeting No. 5/86 of Budgets Committee and University Planning Committee, University of PNG, 15/7/86.

²⁴ Minutes of Special Meeting No. 1/87 of University Planning Committee, minute 3.1, 11/2/87.

Planning Committee attempted to pass responsibility to the Government to indicate the functions and activities to be cut. Reserving a fall-back position however, the Committee developed a set of criteria it would use in the event of rationalisation through amalgamation or drastic cut of the disciplines and/or departments. These criteria, amongst other things, inverted the order of priority as given in the Commission for Higher Education rationalisation strategy! This inversion was to have far-reaching effect, particularly for the Education Research Unit.

By 4 March it was clear that the University was not going to be treated as a special case, and the Minister would not intervene. The Commission had been informed of the University's disagreement with the Commission's prioritisation. The Vice Chancellor submitted budget estimates for 1988 which did not reflect the five percent cut, but realised that the position of the Government (through the Department of Finance and Planning) was not likely to change, and a political decision was likely. He therefore submitted to the Commission a budget within the cash ceiling.²⁵

By 3 June 1987 the University of PNG and the Commission had agreed on the following: abolition of Preliminary Year, a firm decision to be made on the future of Dentistry, amalgamation of the Education Research Unit with the Institute of Applied Social and Economic Research, the merger of the National Arts School with the University of PNG, the partial amalgamation of the Administrative College with the University of PNG, rationalisation of the Land Administration Course with the PNG University of Technology, reduction of National Tertiary Scholarship for intakes to the Law degree programme and reduction of Law Faculty staff, and the incorporation of the National Fisheries College (Kavieng) with the Fisheries Department of the University of PNG. This collective position on rationalisation represents a considerable shift from that presupposed by the Higher Education Plan in mid 1986. The recommendations on cessation of the B.Dental Surgery, reduction of student intakes and staffing of the Law Faculty, and amalgamation of the National Arts School and of the Administrative College with the University of PNG were retained from 1986. Cessation of the Journalism and Media Studies programmes had been dropped from consideration. Two new elements had been introduced at the initiative

²⁵ Minutes of University Planning Committee Meeting No. 3/87, minute 3.1.2, 8/4/87.

directly or indirectly of the University of PNG's criteria for selective cuts: the abolition of Preliminary Year and the amalgamation of the Education Research Unit with the Institute of Applied Social and Economic Research. The notion of strengthening the Fisheries Department at the University of PNG by incorporating the National Fisheries College with it had been initiated by the Commission as the National Fisheries College had a history of inefficient operation. The rationalisation of the Land Administration course with the PNG University of Technology had been initiated by the two Vice Chancellors. The Legal Training Institute had reversed its stance on amalgamation with the University of PNG and preferred to stay as a separate entity.²⁶

By 29 July the University Planning Committee, having received no reassurance from the Department of Finance, resolved to prepare two budgets, one incorporating the cut and the other without any cut and to issue a press release expressing the University's dissatisfaction about the cut and indicating the programmes/departments which were to be abolished.²⁷ A telex was sent to the Secretary of the Department of Finance and Planning, who responded by citing the legal implications under Section 23 of the Public Finance (Management) Act and requested cooperation, adding that with the recent re-election of the Government there was no hope for change in government policy towards the university budget. The Vice Chancellor was bound by law to submit a budget incorporating the cut.²⁸ The Committee, with the support of Council, deplored the response from the Department of Finance and Planning and reaffirmed its previous decision not to agree to cuts in its budget.²⁹ Despite recognition that the Vice Chancellor could not, by law, refuse to submit a cut budget, and that he would therefore have to overrule the committee, the gesture was intended to emphasise the seriousness of the 'government's neglect of its responsibilities to the University of PNG, its students, and the country at large.' It was envisaged that public concern at the seriousness of this neglect would be highlighted by the Vice Chancellor being forced into the unusual position of having to executively overrule an authority of the University.³⁰

²⁶ Minutes of University Planning Committee Meeting No. 5/87, minute 3.1, 3/6/87.

²⁷ Minutes of University Planning Committee No. 7/87 (Part 1) minute 3.1.2, 29/7/87.

²⁸ Minutes of University Planning Committee No. 7/87 (Part 2) minute 3.1.1, 6/8/87.

²⁹ *Op. cit.*, minute 3.1.2, 6/8/87.

³⁰ *Ibid.*, minute 3.1.3.

Notwithstanding, the Committee discussed ways and means to accommodate the budget cut and assist the Vice Chancellor in meeting his constitutional requirements. The Vice Chancellor referred the Committee back to the criteria for selective cuts which had been proposed in early 1986 and the measures which had been identified at that time: abolition of Preliminary Year, the Fisheries and Dentistry Departments, and the Education Research Unit; reduction in student numbers and of staff in the Law Department. A working group was formed to assist the Vice Chancellor in preparing the budget incorporating these measures.³¹ The staff of the Departments of Fisheries, Dentistry and the Education Research Unit, as well as those involved in teaching Preliminary Year and Law were thus suddenly under attack again. In 1989 and 1990 the Commission's recommended ceiling on scholarships for law students were implemented. The responses of the three departments threatened with abolition are presented in some detail below.

Fisheries struggles to turn the tide

Twelve days later, on 18 August, the Chairman of the University of PNG Department of Fisheries wrote to Mr. Ted Diro, Minister without Portfolio, former Deputy Prime Minister in the Wingti government, and leader of the People's Action Party, of which the Education Minister was also a member. Citing a recent speech by the Governor General which commented that fisheries was one of the priority areas for economic growth in the country, the letter drew attention to the fact that it was the University's decision and allegedly not that of the government that the Fisheries Department should be closed.³² (The letter omitted to mention that government policy in 1986 as represented by the Commission's Higher Education Plan had itself proposed the cessation of the Fisheries Degree programme. In the meantime (in May 1987) the Commission had eroded this position by proposing to solve the inefficiency problem of the National Fisheries College in Kavieng by amalgamating it with the University of PNG Fisheries Department, thus strengthening the position of the latter.)

³¹ *Op. cit.*, minute 3.1.4, 6/8/87.

³² Letter from the Chairman, Department of Fisheries, University of PNG, addressed to Mr. Ted Diro, Minister without Portfolio, re: Fisheries Training in PNG and the Department of Fisheries, University of PNG, 18/8/87.

The Minister without Portfolio acted promptly and decisively, indicating that the contents of the letter had been 'noted with interest as this was one of the priorities of the government'³³ and that the matter could be taken up with other ministers for deliberations. The following day, 28 August, the Minister without Portfolio wrote ostensibly in his capacity as Member for Central Province to the Minister for Education (who was one of his party members and subordinates) stating his candid view on the matter that PNG should increase its potential in harvesting its marine resources, particularly Fishing, with emphasis on Papua New Guineans having meaningful and beneficial participation in the exploitation of these resources. The matter was therefore referred to the Minister for Education and Acting Minister for Foreign Affairs for his action. On 8 September the latter instructed his Executive Officer to liaise with the Commission for Higher Education and write a reply for his signature.³⁴ The Executive Officer advised the Chairperson of the Commission of the Member for Central's concern that the universities were to make cuts in areas which would adversely affect PNG later, commenting that guide-lines should have been given to them, and suggesting that Language, Anthropology, Archaeology, History and Philosophy might be more appropriate for scrutiny.³⁵

The University agreed to the amalgamation of the National Fisheries College (Kavieng) with the Fisheries Department of the University of PNG if the amalgamation would involve a significant saving, which would offset the difficulty of working with another geographically separate campus. The Vice Chancellor did not, however, foresee such significant savings.³⁶ The University had no strong objections to the National Fisheries College's becoming part of the University of PNG Fisheries Department and providing the practical training component of the Marine Biology degree programme

³³ Hand written note written by Mr. Ted Diro, Minister without Portfolio, dated 27/8/87, on copy of a letter from the Chairman, Department of Fisheries, University of PNG, addressed to Mr. Diro, dated 18/8/87.

³⁴ Handwritten note dated 8/9/87 from Mr. Aruru Matiabe, Minister for Education and Acting Minister for Foreign Affairs to his Executive Officer, on copy of letter from Mr. Ted Diro, Member for Central Province, addressed to Mr. Aruru Matiabe, Minister for Education and Acting Minister for Foreign Affairs, 28/8/87.

³⁵ Undated Minute from Mr. Anderson Agiru, Executive Officer to the Minister for Education, addressed to Chairperson, Commission for Higher Education, re: Proposed Closure of Fisheries Department, University of PNG, received on 24/10/87.

³⁶ Handwritten note from Vice Chancellor, University of PNG to Chairperson, Commission for Higher Education, responding to a request for comments on a revised draft Cabinet Submission dated 31 August 1987 on the Higher Education Plan, 14/9/87.

and a Fisheries certificate or diploma programme, provided all implications were worked out thoroughly before the decisions were taken. (The Department of Fisheries had itself been transferred to the University of PNG from the PNG University of Technology in 1985 as a result of a political decision to transfer the Faculty of Agriculture of the University of PNG to the PNG University of Technology at that time. It is probably true that as the University of PNG had not had a long-standing relationship with the Fisheries Department, it did not have a very strong commitment to the maintenance of the Department.) The recommendation remained unchanged in the final Submission considered by the Cabinet in late October and early November 1987.

The Fisheries Department was thus washed up unharmed once more onto the indifferent shore of the University of PNG, with perhaps a little more vigour restored to it than when it had been firmly cast adrift by the University in the early part of the year. Cabinet equivocated, however, about transferring the National Fisheries College to the Fisheries Department of the University of PNG, deferring this recommendation until a review of fisheries educational needs were determined jointly by the University of PNG, the Commission and the national Department of Fisheries and Marine Resources.

The review proved to be a protracted process, but was completed in mid 1989 and a report was made. By November 1990 the concept of transferring the National Fisheries College to the University of PNG had been abandoned. In the short term the College was to undergo a process of rehabilitation. The College was cooperating closely with the Commission and was trying to establish a governing council. In the longer term it was envisaged that the College would come under the auspices of a new Institute for Primary Industry Education which would oversee the academic development and financial requirements of all the primary industry colleges. The creation of this Institute had been approved by the Cabinet as part of a new National Higher Education Plan approved in August 1990. The Fisheries Department at the University of PNG had ceased to exist as such, but most of the staff had been absorbed into the Science Faculty of the University in the marine sciences area.

Dentistry fights tooth and nail

The saga of dental training was a sad one which originated well before the beginning of the period covered by this case study. Initially dental personnel were trained by the Health Department at the Port Moresby Dental College. In the 1970s with overseas aid a fine dental school for degree level dental training was established at the University of PNG's Medical Faculty (Taurama Campus). In 1981 the first National Manpower Assessment forecast that less than two graduate dentists per year were required by the country, and this was reiterated by the second Assessment, published in 1986. The cost of a dental student per year had been shown in 1982 to be approximately K16,000, compared with about K8,000 for a medical student at the same campus, the highest unit cost for any university student in the country by a large margin. Figures for enrolments in dental programmes 1983 - 1985 are shown in Table 18, **Appendix 33**.

The costliness had escaped the notice neither of the national politicians nor of the Finance Department. In the early 1980s the Cabinet had been on the point of abolishing the Dentistry Department and had only been dissuaded at the last moment by bureaucrats. Dissatisfaction had apparently also been felt with sub-degree level dental training as provided by the Health Department, for in late 1982 Cabinet resolved that the Dental College be closed, and its training programmes handed over to the Department of Dentistry at the University with effect from 1983. The decision was made without consulting the University nor was the University officially informed of Cabinet's decision. It was first relayed through a communication from the Health Department requesting discussions on the implementation. Thus there was precedent for political intervention in dental training in PNG. The University administration responded promptly to plan the transfer in consultation with the Health Department. The University's Academic Developments Committee however passed a resolution in 1983 that dental therapy students meet the University's matriculation requirements, whereas the Health Department had required only Grade 10. Consequently no Papua New Guinean students were admitted to the Diploma in Dentistry for the next two years³⁷ (see Table 18, **Appendix 33**).

³⁷ Memo from Principal Project Officer Planning and Research to Chairperson, Commission for Higher Education, 27/2/85.

In the early 1980s the Dentistry Department had been the centre of a scandal involving revenue from private practice at the Department which could not properly be accounted for. Costly materials and equipment provided by the University had been used in connection with this. During the enquiry which followed it transpired that the management of the Department had been poor and expensive equipment and supplies had been allowed to deteriorate from neglect. Several expatriate members of its staff departed from the country suddenly. This episode had been an embarrassment to the Faculty of Medicine and had also served to focus unwelcome attention on the phenomenon of private practice in general, which was a fairly widespread practice amongst medical staff of the university.

Structurally the Dentistry Department was a discrete entity within the Faculty. Its programmes were for the most part quite separate from the Medical programmes, and likewise its staff and physical facilities. Thus, if it were to be abolished, it would not represent any great risk or loss to the Faculty as a whole, while the vacation of its premises might even have constituted a gain.

Although the incumbent Professor had done much to revitalise and reconstruct the morale of the Department following his appointment after the scandal, perhaps all of the foregoing events had combined to ensure that Dentistry had few friends in high places, or even in the University. Thus when the University's finger pointed at Dentistry as a source of savings in early 1986, and this was renewed in 1987, Dentistry had little goodwill to draw upon. The Vice Chancellor's assessment was that, unless substantial increases in enrolment from PNG and the Pacific could be obtained, the Commission's proposal that the Dental Surgery Degree programme be phased out by means of no further intake of first year students was the only viable one, with the possibility of sending students abroad for studies to be explored.³⁸ (This was a considerable softening of the Commission's recommendation to Cabinet the previous year that from 1987, in effect the Dentistry Department be closed immediately rather than phased closure.)

When the writing appeared on the wall for the Dentistry Department in mid 1987, it had little alternative but to seek recourse from the Commission for

³⁸ Handwritten note from Vice Chancellor, University of PNG to Chairperson, Commission for Higher Education, responding to a request for comments on a revised draft Cabinet Submission dated 31 August 1987 on the Higher Education Plan, 14/9/87.

Higher Education. A well reasoned and documented case was put forward to the Commission,³⁹ but to no avail. The Dentistry Department staff took it on the chin when the University issued termination notices to the Dentistry staff on 30 September, to take effect on 31 December, to be withdrawn only if Cabinet decided to save the Department. Thus the University proposed more precipitate action than either the Commission or the Cabinet envisaged at that stage. Cabinet in late 1987 had concurred with the Commission's recommendation on phased closure, with the possibility of sending students abroad for studies to be explored. The impending budget cuts for 1988 were therefore responsible for the abrupt termination of Dentistry by the University, and the Commission was unable to prevent this precipitate action. Ultimately it proved to be the only one of the Commission's original twenty-nine recommendations that was actually implemented, despite its being a year behind schedule. It was as if the Dentistry Department became the sacrificial lamb of both the University and the Commission.

In 1988 the fine facilities at the Taurama Campus formerly occupied by the Dentistry Department were (through an arrangement between the University and the Health Department) being partially used for dental therapist training which had reverted once more to being the responsibility of the Health Department. The remaining space was being occupied by the Medical Faculty.

The Education Research Unit reaches out for life-rafts

The Commission when it prepared the Higher Education Plan 1986 - 90 and submitted it to Cabinet in September 1986 had no intention that the Education Research Unit should be in any way affected. The Unit's major role was to conduct policy-oriented research primarily for the national and provincial Departments of Education. As such it served mainly the primary and secondary levels of education, which were the focus of the educational sectoral strategy of the Medium Term planning exercise of 1984/5. In this regard it was consistent with national education policy priorities. Because of this, in formulating the Higher Education Plan it was not considered for a moment that the Education Research Unit should be targeted for such cost-savings.

³⁹ Professor J.D. Jago, Professor of Dentistry, University of PNG to Chairperson, Commission for Higher Education, 23/6/87.

The University, in identifying selective cuts, ignored the advice of the Commission and applied its own criterion: that the careers of the least number of students should be affected. According to this the Education Research Unit (being a research unit) had no students and therefore came up as first priority for cutting.

Underlying this however, for some years the Education Research Unit had attracted the envy of university staff in some disciplines (primarily science-based ones) which involved high class contact hours. Such staff tended to have high teaching loads and relatively little time for their own research. Staff in the Education Research Unit, being largely free of teaching commitments, were perceived and resented as being able to further their own careers through full-time research. There was also a perception that the research undertaken by the Education Research Unit, being policy-oriented, was not academically respectable: the Education Research Unit was not seen as enhancing the university from a research perspective. Furthermore there was a certain hostility within the university towards the personality of the Unit's Director. There was, thus, within the University a substantial lobby of opinion against the Unit. In addition to these three considerations, a fourth may have played a part. The University's offer to cut the Education Research Unit may have been a strategic manoeuvre to deter or deflect the impending cuts. The Education Research Unit enjoyed so much moral support from the national and provincial Departments of Education that it may have seemed unthinkable that the University would be allowed to abolish it. The government would surely intervene to rescue 'its' Education Research Unit.

By the middle of 1986 the whole policy of selectively cutting departments had apparently been headed off. It seemed that the danger to the Education Research Unit had passed. But the crisis re-emerged in March 1987 and the Education Research Unit was once more on the chopping block. Senior staff of the Unit mobilised as much support as possible from the national and provincial Departments of Education. Appeals were made for support from national and provincial government ministers. The University and the Commission received many such letters of support. In order to save itself from extinction, the Education Research Unit sought help from the Commission and together they developed a strategy of attempting to shore up the research activity (including the Education Research Unit) of the

University by drawing in two non-university research organisations, assuming that the amalgamation would take place within the University. (One of the Commission's concerns was that, by offering to cut the Education Research Unit, the University was delivering to government the message that it did not consider the research role of the University to be important.)

In August 1987 the Commission's revised submission to Cabinet recommended, amongst other things,

that the Education Research Unit be amalgamated with the Institute of Applied Social and Economic Research and the Institute of PNG Studies so that there will be only one government funded research organisation in the country at the same time reducing cost to the government.

That this amalgamation should take place at the University of PNG.⁴⁰

The Commission was aware that neither of the other two research institutions were within the education sector or came under the purview of the Commission, but did not consult or engage either of the other two organisations in any discussions.

Despite the Commission's recommendation, the Cabinet resolved on 28 October 1987

That the Institute of PNG Studies and Education Research Unit be transferred to a new Research Organisation that will include the Institute of PNG Studies and Institute of Applied Social and Economic Research.⁴¹

The three organisations would thus be merged into a new fourth organisation, the location of which was not specified. How Cabinet arrived at this decision and what gave rise to the events which followed are hard to piece together not least because of the secrecy surrounding Cabinet business. Certain facts are available however. On 1 December 1987 the National Parliament passed legislation amending the Institute of Applied

⁴⁰ Draft Policy Submission for Members of the National Executive Council, File: SO-000-51, Subject: Higher Education Plan: A Strategy for Rationalisation 1986 - 1990, 31/8/87.

⁴¹ National Executive Council Meeting No. NG.9/87, Decision No. NG 21/87 - Subject: 1988 National Budget and 1988 - 1992 Planning and Budgeting Strategy.

Social and Economic Research Act to incorporate the Institute of PNG Studies and the Education Research Unit into the Institute of Applied Social and Economic Research, such that the amalgamation was to take effect from 1 January 1988 (Papua New Guinea 1987 B). The previous legislation governing the Institute of PNG Studies was also amended (Papua New Guinea 1987 A). It thus became a *fait accompli* that the Institute of PNG Studies and the Education Research Unit were to be absorbed into the Institute of Applied Social and Economic Research.⁴²

The Commission's Chairperson evidently sensed some impropriety and requested the precise wording of the Cabinet decision, copying the letter to the Cabinet Secretariat.⁴³ Two conflicting replies were received. The acting Secretary of the Prime Minister's Department reasserted somewhat petulantly that the new research organisation was the new Institute of Applied Social and Economic Research, and that this had been determined by the Prime Minister.⁴⁴ The Cabinet Secretary, however, advised the Commission that the precise wording of the Cabinet decision was

that the Institute of PNG Studies, the Education Research Unit and the Institute of Applied Social and Economic Research are to be amalgamated to form a new Research Organisation and not a new Institute of Applied Social and Economic Research. Secondly, should the amended Act reflect a New Institute of Applied Social and Economic Research as indicated by you, I suggest you raise the matter with the First Legislative Counsel and the affected agencies prior to proposing further legislative amendments thus reflecting the true spirit of the decision.⁴⁵

In mid January 1988 a new Director of the Institute of Applied Social and Economic Research had been appointed by Cabinet and by the time the

⁴² Letter from Acting Secretary, Department of the Prime Minister, to Chairperson, Commission for Higher Education, copied to the Directors of the Institute of Applied Social and Economic Research and of PNG Studies, and the Vice Chancellor, University of PNG, Re: Amalgamation of Three Research Bodies, 7/12/87.

⁴³ Letter from the Acting Chairperson, Commission for Higher Education, ref: SO-405-00/00 to the Secretary of the Department of the Prime Minister, Re: Amalgamation of Three Research Bodies, 28/12/87.

⁴⁴ Letter from the Acting Secretary of the Department of the Prime Minister and National Executive Council, to the Acting Chairperson, Commission for Higher Education, Re: Amalgamation of Three Research Bodies, 7/1/88.

⁴⁵ Letter from the Secretary, National Executive Council, ref: 11-1-6, to the Acting Chairman, Office of Higher Education, Re: Amalgamation of Three Research Bodies, 8/2/88.

Cabinet Secretary's letter was received several high level meetings had taken place at which representatives of the three institutions, the Secretaries of the Departments of Finance and Planning, Prime Minister's Department and of the National Cultural Council were present. These meetings were to plan the implementation of the amalgamation decision. The parties (including the Commission) had thereby signalled their commitment to proceed with the amalgamation, thus reinforcing the *fait accompli*. Many weeks and months of sometimes bitter exchanges then took place thrashing out the many practical issues which had to be dealt with before the amalgamation could be fully accomplished.

The Commission probed the events which led to the legislative changes by means of unofficial channels within the Department of the Prime Minister. These sources alleged that the legislative changes were expedited by one or two individual staff members of the Institute of Applied Social and Economic Research who saw their personal positions threatened by the proposed amalgamation at the University. One of these staff had direct access to the Prime Minister and it was alleged that the Prime Minister's approval for the legislation was obtained by this means. If there is substance in these allegations, it appears that the enterprise and opportunism of one or two individuals acting primarily in their own personal interests played a key role in determining policy outcome. This outcome was diametrically opposed to the original policy objective of cost-saving, since the amalgamation at the Institute of Applied Social and Economic Research required a substantial building programme to provide office accommodation and housing for the enlarged institution!

A great many other events and strands in this complex story have been omitted for the sake of simplicity. From a policy perspective we may interpret this case in the following way. It was never the Commission's policy to abolish the Education Research Unit. Its merger with other research institutions was only a response to the University's proposal to abolish it. This in turn was generated by a combination of three main things: the Cabinet's deferral of the Higher Education Plan, the Finance Department's imposition of a five percent budget cut, and the opportunity this presented to organised interests within the university to settle old scores with the Education Research Unit. The Commission's policy of merging the Education Research Unit with two external research units to be brought

within the University was developed as a life-raft for the Education Research Unit and not primarily because it was an intrinsically meritorious concept. Most of the arguments launched in favour of a university location were based on economy and efficiency. Only the University was large enough physically to absorb the staff of the other two institutions without the requirement for a building programme and consequent increased costs. Despite the Government's professed concern for cost-saving, Cabinet evidently paid little regard to cost-efficiency arguments in the event.

Ironically the third party to the amalgamation, the Institute of PNG Studies had several years previously entered into discussions with the University regarding the possibility of its incorporation into the University, and its Director had been favourably disposed towards the idea. In this instance he was opposed since he perceived that to amalgamate with an institution that was being subjected to budget cuts was unlikely to be in the interests of his institution's future. This raises an important more general question: whether it is realistic to expect voluntary amalgamation in a climate where the host institution is experiencing resource contraction.

Although the amalgamation was fully accomplished by 1989, by mid 1990 it was once again being questioned. The new National Higher Education Plan approved by Cabinet in August 1990 had recommended that by December 1990 the Commission would make a submission to Cabinet setting out the options for the National Research Institute, including amalgamation with the University of PNG. By November 1990 the implementation of this recommendation was running behind schedule as the plan had been approved by Cabinet somewhat later than scheduled, and this issue was also not treated as a high priority by the Commission. The issue, however, was by no means dead.

Comparing the four functions on which the University ultimately focused its cuts with those which were identified by the Commission through applying the evaluation indicators, we see that in both cases the B. Dental Surgery and the B.Sc. Fisheries were identified. This coincidence is attributable to the low student numbers in both programmes, though in the Commission's position the primary argument was the high unit costs that such small numbers produce. Looking beyond this coincidence, and examining Fisheries, Dentistry and the Education Research Unit for common features,

the following three types of characteristics emerge: they were each in some way unpopular - Fisheries for being foisted on the University, Dentistry for its scandal, and the Education Research Unit for reasons described; they were each regarded more as liabilities than assets; and they were each in some way peripheral rather than core (and as such, more dispensable). The abolition of Preliminary Year was different in kind. It had no corporate identity, being staffed from a variety of departments, often on temporary terms of employment. Furthermore, at the time the Commission would have opposed its abolition on the assumption that it would also have been against the Commission's policy in as much as it would have further restricted the already short supply of university entrants. Data which has since come to light (on the growing demand for the Adult Matriculation programme offered externally) would however have brought the Commission's position on Preliminary Year in line with that of the University.

The technical colleges and primary teachers' colleges

In 1984 there were seven technical colleges and two secretarial colleges operated by the Technical Division of the national Department of Education. From 1985 the Rabaul Secretarial College and the Malaguna Technical College were incorporated into a single college, reducing the total to eight. Each of these colleges had very little autonomy, many of their functions being carried out centrally by the national Department. Although the Commission tended to treat these colleges as individual institutions, they may more accurately be conceptualised as individual campuses of a single multi-campus technical institution operated by the national Department.

The technical college system had experienced a major expansion (known as the Technical Education Project) supported by a large Asian Development Bank loan, based on forecasts of technical manpower requirements by the first National Manpower Assessment (Papua New Guinea, National Planning Office 1981 B). The second Assessment, used for the Higher Education Plan, showed a totally opposite picture: a fifty percent over-supply of pre-employment technical trainees (which formed by far the bulk of technical college student load)(Papua New Guinea, Department of Finance and Planning 1986). The Department itself had evidence of significant unemployment of some categories of pre-employment technical trainees. Many of the year-long pre-employment courses were replicated in several

colleges, with the result that technical equipment was also replicated on several sites. This presented certain maintenance difficulties. The Higher Education Plan estimated that the required number of technical trainees could be consolidated into five colleges and that up to three college campuses could be closed or converted to institutions serving other levels of education. The Commission's first Cabinet Submission accordingly recommended

that there be no further government funding for the Rabaul, Goroka and Arawa technical college campuses with effect from 1987. This would involve acquiring the campus of the Timber Industry Training College and concentrating more students at the integrated institution comprising PNG University of Technology and Lae Technical College.⁴⁶

In the second submission the Commission's position was substantially different:

- (a) that in relation to Technical Education the student:staff ratio of 15:1 remains;
- (b) that there be a reduction of thirty-five equivalent full time teaching staff at the technical colleges;
- (c) that every endeavour be made to maintain and purchase spare parts for equipment in the technical colleges.⁴⁷

According to this, the major savings that could be accomplished by campus closure were no longer being contemplated, a substantial softening of the Commission's position.

Only one of the eight primary teachers' colleges was wholly government owned. The remaining seven had been established by a variety of church agencies, but received a considerable amount of government support. They enjoyed somewhat more autonomy than the technical colleges, but were coordinated by the Teacher Education Division of the national Department of

⁴⁶ Policy Submission No. 193/86 from Minister for Education for Members of the National Executive Council, File No. S0-000-51, Subject: Higher Education Plan: A Strategy for Rationalisation 1986 - 1990, September 1986.

⁴⁷ Draft Policy Submission from Minister for Education for Members of the National Executive Council, File No. S0-000-51, Subject: Higher Education Plan: A Strategy for Rationalisation 1986 - 1990, 19/10/87.

Education. In terms of staff/student ratios and unit costs, the teachers colleges were by far the most economical group of tertiary education institutions. Furthermore as universal primary education was the highest national education priority, these colleges were expected to play a crucial role. Their outputs of graduates were thought to be sufficient to supply the requirement for primary teachers. For these reasons the Commission's first Cabinet submission recommended

that during the period 1987 - 1990 the teaching staff establishment of community⁴⁸ teachers colleges be maintained at least at their 1986 level in the interests of maintaining and upgrading the quality of teacher education.⁴⁹

Associated with the maintenance and upgrading of the quality of teacher education was a recommendation to Cabinet that all the monies saved from the rationalisation exercise be reallocated within the education sector. The second time around support for teacher quality upgrading was expressed more forcefully, with the Commission's recommendations being modified as follows:

(a) that there be an additional one full year above the present two year Community Teachers' Certificate in order to improve the quality of teachers produced by the teachers' colleges;

(b) that the Community Teacher's Certificate be upgraded to a three year diploma programme which would concentrate on professional studies throughout the three years while remedial effort on basic skills be built into the three years professional training.⁵⁰

In this recommendation the Commission was aware that the national Department of Education planned to mount a three year teacher training programme as compared to the present two years, but that the additional year was to precede the Certificate programme to improve the trainees' basic

⁴⁸ i.e. Primary.

⁴⁹ Policy Submission No. 193/86 from Minister for Education for Members of the National Executive Council, File No. S0-000-51, Subject: Higher Education Plan: A Strategy for Rationalisation 1986 - 1990, September 1986.

⁵⁰ Draft Policy Submission from Minister for Education for Members of the National Executive Council, File No. S0-000-51, Subject: Higher Education Plan: A Strategy for Rationalisation 1986 - 1990, 19/10/87.

skills in Maths, Science and English on entry. The Commission differed from the Department however in that it saw the improvement in basic skills as an interim measure, and that the emphasis in the long term should be on improved selection criteria and suitability of trainees for the profession. Hence it opposed an end-on approach and favoured an integrated approach to the additional year with an upgraded qualification. Improvement in primary teacher quality was seen as essential to the efficiency of higher education because of its flow-on effect through the education system. Cabinet presumably was not impressed with these arguments for it rejected both recommendations outright! Furthermore the Commission had apparently abandoned hope of savings being redirected towards primary education as it dropped its recommendation to this effect in the second submission.

In the event the budget cut to the technical colleges was accommodated mainly by reduction of teaching staff by thirty-five positions (mostly expatriate contract staff positions). No campuses were closed however, apart from that of Rabaul Technical College, which was at risk from an anticipated volcanic eruption in the close vicinity. Savings were therefore not maximised.

Bearing in mind the potential difficulty in convincing Ministers with portfolios other than Education to give up some of the resources devoted to tertiary education in their ministries, the best prospects for such resource shifts could be expected to be between institutions within the Education Ministry itself. We have seen above the experience of the universities. The Department of Education, however, having responsibility for both technical and teachers colleges, was well placed to effect an internal shift. It could, for example, have converted surplus technical college campuses to much needed National High Schools. In reality both student intakes and staff were reduced in technical colleges, but savings achieved thereby were much less than might have been achieved. On the other hand, intakes of student teachers were reduced despite the need for maintaining current levels of outputs of primary teachers. The Department therefore did not maximise its potential in achieving savings from technical education and redirecting these towards the accomplishment of universal primary education.

An explanation is to be found at a number of levels. Firstly, the Department had little faith in the predictions of the National Manpower Assessment, (and

had voiced these concerns to the Commission during the drafting stages of the plan). The over-supply of technical trainees was regarded as a short term problem, whilst it was envisaged that the prospects of a mineral exploration boom would demand expansion in the longer term. Thus the Department was reluctant as a matter of policy to dismantle or radically restructure the existing technical education system.

The situation in regard to teacher education was more complex and requires an understanding of the role that funding played in the accomplishment of national education policy. The overwhelming national priority in education was the accomplishment of universal primary education, although provinces placed greater emphasis on secondary level education. By the mid 1980s about ninety-five percent access to primary education had been achieved, but retention was seen as the main problem in achieving universalisation. Up to 1984 the Department had three main means to influence provincial Departments of Education to carry out national policy: financial inducement, conditions attached to the provision of finance (e.g. the requirement to prepare a Provincial Education Plan), and a combination of education and persuasion through the medium of quarterly workshops with key provincial personnel. The source of finance in this regard was the Second Education Project funded by a World Bank loan, which ended in 1984. From 1986 onwards the Department was subjected to a series of budget cuts, which were particularly severe in 1986 and 1988. From this point onwards the Department effectively no longer had the where-withal to exert much influence on provinces' policy: there was no longer any scope for financial inducement, the provincial education plans had expired in 1984, and funds for the quarterly workshops had been severely curtailed by the budget cuts. Provincial funding was also badly affected and their staff ceilings were cut such that the number of primary teachers employed in the provinces actually declined by ninety-five in 1987. Provincial resources were being directed away from primary schools towards other provincial priorities. Thus there was a difference between the number of teachers required in principle to meet the strategy, and the projected staff ceilings which would in fact restrict that expansion.

The national Department of Education, having little power to implement its primary education objectives, had little confidence that any savings made from technical education could in fact be redirected towards their

accomplishment. Thus in 1986 when the Commission was seeking to maintain intakes to the primary teachers colleges, the Department reduced them, reflecting both overall cuts to its own budget and the reduction in provincial demand for teachers.

The Department's budget cuts in 1986 amounted to roughly K3 million, representing almost seven percent less than 1985 expenditure in money terms. This was followed by cuts of about K1 million and K3.5 million in 1987 and 1988 respectively, representing a cut of approximately sixteen percent in money terms, and much more than that in real terms, over the three year period. The manner in which these cuts were imposed was different in each of the three years. In 1986 they were delivered to the Department of Education in the form of cuts to an assortment of line items, bearing little or no relationship to the contingent functions to which these items related. For instance, in some cases salaries were cut but operating funds relating to these positions were not, whereas in other cases salaries were not touched, but the operational scope of the staff to which they related was severely curtailed by cuts to related non-salary items. Decisions as to which items should be cut and by how much had been made, without reference to the Department of Education, somewhere in the financial system. The 1986 budget cuts precipitated the Department into crisis management, requiring negotiations with the Department of Finance during the whole year for approval to transfer funds between items. Small wonder then that there was little scope for policy issues to be addressed.

The situation in 1987 was altogether different. The cut was much less severe in magnitude and the Department was advised to budget for it, both in Kina terms and in staff ceiling terms. The Department of Finance accepted the Department's budget by and large, and allowed the Department to make its own decisions as to where cuts should be effected and produce a balanced budget. The Department's first criterion was not to cut teachers of any kind. This meant focusing cuts chiefly on the central administration and inservice training. Staff ceilings for each of the Department's Wings were negotiated by Heads of the Wings and the Secretary of the Department. Salaries and associated items were treated as sacrosanct, and savings were made on all other items. Cuts of positions were distributed throughout the Departmental administration, particularly in the sections which service the teachers in the field. The most severe cuts were in inservice staff development. The

reduction in staff to keep within the ceilings was made by natural attrition and non-replacement of staff. The reduction of intakes to the primary teachers' colleges combined with retention of their staff meant that there was surplus capacity within the colleges and created the potential to lengthen the course to three years without increasing costs. Quality improvement achieved thereby would have been consistent with the retention strategy in the achievement of universalisation. Cabinet, as we have seen, was not impressed.⁵¹

1988 saw a reversion to the 1986 mode of cut identification and imposition. The indicative budget ceiling for 1988 from the Department of Finance had been virtually the same as that of 1987. Only when the budget was actually published was it learned that there was to be another cut even greater than that of 1986. Staff were funded, but cuts were made arbitrarily through all the other items, without reference to the Department of Education, producing a completely unworkable situation. Funding was provided, for example, for the staff of national high schools, while the money allocated for running the schools was completely inadequate. All inservice money for provinces and half the inservice money for the national Department was cut to the value of about K0.5 million.

In slashing funds for inservice training, ironically it was not possible to close the Port Moresby Inservice College, which was an institution of higher education. Courses had been cut but staff were retained with much reduced teaching loads. The Department's scope to use those staff to conduct inservice training in the provinces, was severely limited by cuts to travel and transport votes. The effect of the cuts thus ran counter to efficiency.

By 1990, however, there had been a major change in the Commission's thinking regarding technical education. Greater autonomy and responsiveness to changing workforce requirements was to be promoted by creating a governing council for each institution, with the majority of members from the private sector. Colleges would increasingly be required to pay their own way, and failing this would be closed. They would be coordinated through an Institute of Technical Education separate from the Department of Education.

⁵¹ Source: Interview with Acting Deputy Secretary, Department of Education, April 1988.

By 1990 Cabinet had been persuaded of the need for quality improvement in teacher education for it had approved the introduction of a three year diploma programme for primary teachers. The current government ministers were more favourably disposed to expenditure on social services, and education had fared relatively well in the 1991 budget. The three year programme was to be phased in in 1991. Another aspect of the new National Higher Education Plan (of which this recommendation formed a part) was the creation of an Institute for Teacher Education, under which teachers' colleges would have more autonomy from the Department of Education and greater professional input (Papua New Guinea, Commission for Higher Education 1990). The Department, fearing to lose its control of the colleges, had moved to try to transform its Teacher Education Division into the Institute, but this was being strongly resisted by the principals of the teachers colleges, by the Commission and by the Faculty of Education of the University of PNG.

The primary industry colleges

This group included four agricultural colleges and a fisheries college (until 1988 when the latter became part of a separate Department of Fisheries and Marine Resources, with its own Minister). Like the technical colleges the agricultural colleges, despite being widely dispersed geographically, had very little autonomy and were treated by the Department of Agriculture and Livestock (formerly Department of Primary Industry) as training arms of the Department. Here too from the perspective of higher education, the Department's Training Division should more properly be regarded as a single multi-campus institution.

Over the previous five to ten years the Department had been unable to fill its campuses which had been operating thirty to forty percent below capacity. Two of these colleges offered a single programme, a duplication which had arisen as a result of the establishment of the Sepik Agricultural College as part of the East Sepik Rural Development Project (funded by an Asian Development Bank loan). The College, situated at a long distance from the nearest urban centre, had suffered chronic transport and equipment problems. Insufficient provision had been allowed for these when the Department took over the recurrent funding at the end of the project. As the original equipment and machinery broke down and could not be replaced,

the quality of the training had begun to deteriorate. To make matters worse, a land dispute had arisen concerning the site of the College.

The Higher Education Plan served to focus the Department's attention on the inefficiency of this situation, and it had come round to the view that the College should be closed and the resources shifted to the other college. It was envisaged that the Sepik college would be phased down so that it could be closed by about the end of 1989.

Uncertainty about the College's future had generated some instability amongst the staff and students. Students, the East Sepik Provincial Government, and members of the local community had petitioned the national government to prevent closure of the College. In 1988 the Minister for Agriculture and Livestock had intervened and assured the Prime Minister firmly that the Colleges would not be touched. The Minister's attitude was that the closure of any college would appear to be inconsistent with the national policy of encouraging the development of agriculture as the backbone of the economic sector. The closure of this college would also have been opposed by an outspoken bloc of national politicians from the MOMASE region⁵² in which the college was situated. This caused the Department to suspend its rationalisation programme. Ironically, despite the use of the economic sector argument, the flow of resources to the economic sector did nothing to assist the Department's training division which suffered cuts. In 1989 however no intake of new students had been made to the Sepik Agricultural College, and the Department was collaborating with the Commission and the University of Technology in examining whether the University might acquire any of the agricultural college campuses. By the end of 1990 the College was preparing to close down completely in the first quarter of 1991, its programmes having been transferred to the Popondetta College. Consideration was being given to acquisition of the site by the East Sepik Provincial Government, as well as its possible conversion to an agricultural high school.

The National Fisheries College in the remote island province New Ireland offered a single certificate programme. It operated with approximately seven students per staff member, less than half the recommended number. The first Cabinet submission on the plan recommended that the College be given

⁵² Morobe, Madang and Sepik Provinces.

the responsibility of training diploma level fisheries students as and when manpower requirements showed there was a significant need. This College would thus have become the sole centre for fisheries education, as the Fisheries Department at the University of PNG was recommended to close. By May 1987 however the Commission had reversed its position and recommended that the Fisheries College become part of the University of PNG Fisheries Department to provide the practical training component (see pp. 128 - 130 above). The second Cabinet submission also recommended that a rationalisation of administrative staff of the National Fisheries College be undertaken. A combination of the economic sector argument, with ministerial intervention, thus contrived to protect two tertiary education units both of which were operating at a high level of cost-inefficiency. The suspension of action for further review of fisheries education bought more time and allowed for more manoeuvring. But most unfortunate was the effect on the Goroka Teachers College of the University of PNG: in January 1987 the Budget Priorities Committee had directed that there be no further cut to the budget of the Goroka Teachers College. When the 1988 budget was brought down, unbeknownst to the University, it incorporated a cut of of K170,000 to the Teachers' College budget, whilst a corresponding amount appeared to have been added to the budget of the Waigani campus. It was believed that the transfer of this sum was made, in the face of political pressure, to save the fisheries programme.⁵³ For the first part of the year the Teachers' College operated as normal, but expected to run out of funds by August 1988. The situation was eventually saved by a further allocation of funds to the College by Cabinet.

Several meetings were held in 1988 between the Department of Fisheries and Marine Resources, the Commission, and private sector fisheries interests, and the review of fisheries education was still in progress by April 1989. Meanwhile the Fisheries Department at the University of PNG was still in existence but had made no further intakes of students. No rationalisation of the administrative staff at the National Fisheries College had been undertaken.

⁵³ Principal's Address to the 18th Annual Graduation Ceremony of Goroka Teachers College, 18/11/87.

The forestry colleges

Realising that savings would be maximised where campuses were closed (rather than operations scaled down), the Commission's first Cabinet Submission recommended that the funding for the Bulolo site of the PNG Forestry College (which offered a diploma course) cease with effect from 1987, and the College's programmes and teaching staff be transferred to the University of Technology. As we have seen above, this recommendation was in any case unimplementable at that time since it was contingent on space being vacated at the University by its Forestry Department - an event which did not happen. The second Submission once again recommended that the diploma course at the Forestry College be transferred to the University, and in this case that the College be turned into a fifth National High School.

The Minister for Forests responded to the draft Submission citing opposition voiced by the Acting Secretary for Forests and the Executive Director of the Forest Industries Council. To these he added his own objections chiefly on the grounds that the practical emphasis might be lost with relocation at the University, and his view that the Department of Forests should maintain management control. There was room for expansion at Bulolo as the forest industry grew, and the demand for forestry personnel was greater at diploma level than at degree level. The cost structure of diploma training at Bulolo was lower than that at the University, and he believed it was therefore more economical to maintain the existing location.⁵⁴ Cabinet rejected the Commission's recommendation to relocate the programme. Little is known about the circumstances which led to the Secretary's and the Minister's opposition to the proposal, although one informant claimed that the founding principal of the college was active in lobbying support. If this is true, the sixteen month deferral of the plan provided the perfect opportunity for such lobbying.

The Timber Industry Training College had been founded in Lae through aid and technical assistance from New Zealand. Its aim was to provide training

⁵⁴ Letter from Minister for Forests to Minister for Education, ref 3-2-3, Re: Policy Submission: Higher Education Plan: A Strategy for Rationalisation 1986 - 1990, 5/10/87.

for the timber cutting and wood processing industry.⁵⁵ It made its first intake in 1979, but by 1985 the timber processing sector of the industry had seriously declined, and with it enrolments. This, together with weak links with industry and poor accounting procedures, had led to a high cost per student. The Commission at first recommended to Cabinet that government funding for the Timber Industry Training College cease from 1987, and that its campus be handed over to the nearby Lae Technical College, on the understanding that its timber industry equipment plant be maintained for use by forestry students and staff.⁵⁶ (It was envisaged that the site could be used as an overflow campus for an enlarged Lae Technical College, in the event of the amalgamation of the University of Technology with the Lae Technical College to form a degree granting polytechnical college, or the closure of other technical college campuses and the consolidation of their students at Lae.) The subsequent recommendation to Cabinet was that the Timber Industry Training College be made a department within Lae Technical College, and its administrative functions be performed by Lae Technical College but the courses be run at the Timber Industry Training College Campus.⁵⁷ In this scenario the College would maintain its existing role, but the administration be taken over by the Department of Education through the Lae Technical College. This represents a much less radical proposal than the former recommendation.

Here again the Minister for Forests had strong views.⁵⁸ It emerged that aid-funded forestry infrastructure was to expand again to the tune of K14 million, with assistance from Japanese sources. Unbeknownst to the Commission, the Cabinet had approved this on 24 April 1986! Anticipating the completion in 1990 of the construction of a Forest Research Institute in Lae, the Minister saw the Timber Industry Training College as playing an important integral role in forest products research. The Research Institute staff would use the various facilities at the Timber Industry Training College, and residences for

⁵⁵ Timber Industry Training College Joint Review, Ministry of Foreign Affairs, New Zealand, and Department of Forests, PNG, August 1985.

⁵⁶ Policy Submission No. 193/86 from Minister for Education for Members of the National Executive Council, File No. S0-000-51, Subject: Higher Education Plan: A Strategy for Rationalisation 1986 - 1990, September 1986.

⁵⁷ Draft Policy Submission from Minister for Education for Members of the National Executive Council, File No. S0-000-51, Subject: Higher Education Plan: A Strategy for Rationalisation 1986 - 1990, 19/10/87.

⁵⁸ Letter from Minister for Forests to Minister for Education, ref 3-2-3, Re: Policy Submission: Higher Education Plan: A Strategy for Rationalisation 1986 - 1990, 5/10/87.

Institute staff would be erected on the Timber Industry Training College campus. If the College was placed under the control of the Education Ministry it could be difficult to collaborate effectively with the Forest Research Institute and the Department of Forests generally. Conceding that the College's enrolments slumped in 1985, the Minister claimed they rose again in 1986. Furthermore he took issue with the Commission over the rigid application of the staff/student ratio. Cabinet rejected the Commission's recommendations, judging perhaps that short term savings should not be allowed to prejudice longer term investments.

The health training institutions

In 1984 there were fifteen nursing schools in PNG, six operated exclusively by the Department of Health and nine by various church agencies with financial support from the Department. Most had less than forty students each and extremely low ratios of students to staff. The government operated nursing schools and the two Colleges were treated by the Health Department as operational units of its training division, rather than as individual higher education institutions, in a manner analogous to the reality of the agricultural, technical and primary teachers' colleges. The plan proposed that in the nursing schools there should be a steady movement over the following five years towards target student/staff ratios which would need to be discussed and agreed with the Commission, the Department and the institutions. It was also felt that there was great scope for rationalisation within this group through amalgamation and closure. The Commission and the Department, however, had little scope to influence the distribution of church agency nursing schools. The first Cabinet Submission therefore focused exclusively on the government schools, recommending:

that funding for nursing officer training at the Lae and Arawa Schools of Nursing be withdrawn with effect from 1987, and that numbers of trainee nurses be increased at the remaining four government nursing schools in Rabaul, Wewak, Goroka and Mendi; the physical facilities of Lae School of Nursing to remain available to the Health Department for training purposes outside the definition of higher education.⁵⁹

⁵⁹ Policy Submission No. 193/86 from Minister for Education for Members of the National Executive Council, File No. S0-000-51, Subject: Higher Education Plan: A Strategy for Rationalisation 1986 - 1990, September 1986.

The second submission preserved the same spirit of closure and consolidation, substituting the Wewak School for the Lae School. This was because the General Nurse Programme at Lae had in the meantime been discontinued and the Community Health Worker programme (non-higher education) substituted, reducing from six to five the government operated nursing schools that offered higher education programmes. The Commission felt this was a step in the right direction, but that scope existed for further rationalisation. Enrolments in these five schools showed they were still underutilised, hence the Wewak School was listed. (The Arawa School, for instance, had no intake in 1987 and appeared to be dying a natural death.)

On this occasion, however, the Commission also ventured into the realm of the church agencies with a recommendation:

That Dogura⁶⁰ only run the Community Health Worker Programme, and the General Nurse Programme be phased out and its students be enrolled at other church nursing schools.⁶¹

Cabinet approved both of these recommendations, but by mid 1988 only the Wewak School had been closed. The Health Department had decided to defy the Commission's recommendation to phase out the General Nurse Programme at Arawa and was in the process of building up student numbers there. The 1988 first year intake was at an unprecedentedly high level. The Department was also planning to resume General Nurse Training in Lae. Moreover the Commission was in the process of recommending to Cabinet that it reverse its decision on Dogura!

The closure of the Wewak School had been accomplished swiftly, making it a *fait accompli* before local pressure groups could intervene. This had been facilitated by the relative mobility of its teaching staff: a married male and a single female, both of whom could be relocated, and an expatriate whose contract was terminating. This was contrasted with the situation at Arawa where staff were females married to men who worked at the Bougainville

⁶⁰ One of two campuses of St. Barnabas' School of Nursing, Milne Bay.

⁶¹ Draft Policy Submission from Minister for Education for Members of the National Executive Council, File No. S0-000-51, Subject: Higher Education Plan: A Strategy for Rationalisation 1986 - 1990, 19/10/87.

Copper Mine and who were not free to be relocated. Another justification for retaining the Arawa School was that it was 'a good school', which presumably meant that there was student supply, satisfactory staffing, good facilities and so on, and no serious operational problems.

There were two main arguments for the reversion to General Nurse Training at Lae: the Community Health Worker programme, although regarded as a successful programme in itself, had run into practical difficulties in its field aspects; secondly General Nurse Training could benefit at Lae (as it had previously) from the presence of medical specialists and other facilities not available in smaller centres. The Commission was willing to be convinced by these arguments, but was concerned that the changes were *ad hoc* from year to year and did not appear to be supported by a longer term plan.⁶²

In late 1990 the reversion to General Nurse Training was confirmed as having taken place in 1989 or 1990. The Arawa School of Nursing, ironically, had been closed in 1990 indefinitely due to the secessionist crisis in the North Solomons Province.

The recommendation on the Dogura campus of the St. Barnabas School of Nursing had been made following consultation with the Health Department and was based chiefly on the fact that the campus was very old and run down, and most of the buildings and equipment were due for replacement. It appeared to be moribund. It was envisaged that its general nursing students could be relocated at the Rabaul School of Nursing and help to make that school more cost-efficient. Following the decision the Commission had immediately received representations first from the Catholic Archbishop, then the Anglican Archbishop, and then a United Church official. Perceiving that there was a problem with the churches as a group, the Chairperson convened a meeting with them as a result of which she agreed to make a visit with several other Commissioners to the Dogura campus. The provincial government also protested the decision. It transpired that a group of churches were cooperating in the provision of general nurse training and that most of it was undertaken at the other campus in Alotau, the Dogura site being used only for the rural community aspects of the programme. These aspects were, however, regarded as essential by the churches which were

⁶² Verbal report by Health Department Representative to Commission for Higher Education Institutional Hearings for 1989 budget, June 1988.

responsible for operating most of the rural health services in the area. The church representatives claimed that nurses trained in other areas of the country and in other conditions would be unlikely to be willing to serve in the rural conditions of this region and serious staff shortage would result. A Department of Health representative confirmed that this was likely to be the case, as the health centres were indeed mostly staffed with personnel trained at Dogura and Alotau. The Commission was persuaded by these arguments at least for the short term, and suspended implementation of the Cabinet's decision in 1988, with a view to seeking its reversal by Cabinet. Future requests for financial support from government to restore the decaying campus were unlikely to be treated favourably, and it was felt that the Dogura site might therefore die a natural death of its own accord. By the end of 1990 the situation was largely unchanged.

Two Colleges of Allied Health Sciences, one in the national capital Port Moresby, and the other in Madang, also operated with very low student/staff ratios. The plan pointed to the need for better use to be made of their capacity. The Port Moresby College was situated adjacent to the medical faculty of the University of PNG and it was recognised that there might be scope for economies if they shared a common system of administration. Accordingly the first Cabinet submission recommended:

that the medical faculty of the University of PNG and the College of Allied Health Sciences in Port Moresby be requested to participate in a Commission for Higher Education taskforce to develop a common system of administrative services.⁶³

The second submission recommended that specific student/staff ratios be applied to each of the two colleges, and also

that control over the budget of the College of Allied Health Sciences in Port Moresby be transferred from the Department of Health to the College without additional administrative staff.⁶⁴

⁶³ Policy Submission No. 193/86 from Minister for Education for Members of the National Executive Council, File No. S0-000-51, Subject: Higher Education Plan: A Strategy for Rationalisation 1986 - 1990, September 1986.

⁶⁴ Draft Policy Submission from Minister for Education for Members of the National Executive Council, File No. S0-000-51, Subject: Higher Education Plan: A Strategy for Rationalisation 1986 - 1990, 19/10/87.

The College claimed that there were two main reasons for the inefficiency of its operations. Firstly, the Department tended to require it to mount new courses at short notice, reflecting an absence of forward planning. Secondly, the College claimed that although it was advised by the Department of its budget at the start of the year, it had no control over the funds. It was claimed that for some years, without the College's knowledge, aspects of its budget had been diverted by the Department to other activities with the result that parts of teaching programmes had to be cancelled for lack of funds. The Port Moresby College of Allied Health Sciences evidently perceived an opportunity to use the Commission in its efforts to gain more autonomy through budgetary control. The Commission convened a meeting to bring representatives of the Department and the College together to discuss the matter, but the Departmental representatives failed to attend. Cabinet approved the Commission's recommendation, providing only that there should be no additional administrative staff and cost associated with the transfer. Despite Cabinet's approval, by June 1988 there was no evidence of this transfer having taken place. By the end of 1990 it had still not taken place, and a senior officer of the Commission believed that the Department intended to ignore the recommendation.

In approving the Commission's recommendations on student/staff ratios, Cabinet specified additionally that ratios for the post-basic diploma be 5:1 in 1988 and 8:1 in 1989, and for the certificate programme they be 9:1 and 15:1 respectively. By 1988 the Port Moresby College, according to the Department's presentation to the Commission's hearing in June 1988, had already achieved ratios of between 10:1 and 20:1 for post-basic courses and 15:1 for the certificate courses, at least in the classroom situation, though with much lower ratios in the clinical situation. No mention was made of the Madang College.

Thus it appears that by 1988 there had already been some significant improvement in efficiency, but no transfer of power. The Department was, however, trying to get its training house in order. It had produced a five year plan with detailed manpower projections to the year 2000, and recruited a consultant to work with the two Colleges of Allied Health Sciences in reviewing their roles and full range of courses. The Commission's

Chairperson commented that this review appeared to be a result of the impact of the plan.

The behaviour of the Department needs to be understood in the context of budget cuts which in many respects created problems analogous to those of the Department of Education. A particular feature which emerged, and which would have been shared with all other departments whose budgets were held constant or cut, was the effect of staff salaries. Public servants' salaries were indexed to increases in the Consumer Price Index which in turn was linked to inflation. This was the result of past negotiations involving the Public Service Association, which was by far the largest single union of employees in the country. Thus as budgets were held constant or declined in real terms, an increasing proportion of them was taken up by salaries, with operating expenses bearing the full brunt of reductions. Taken to its logical conclusion, the Health Department could eventually find itself fully staffed but unable to operate, according to a senior official.

The miscellaneous institutions

This group comprised fourteen institutions falling under a number of different ministries. Of these, five were not declared under the Higher Education Act 1983, and the Commission therefore had no powers to make recommendations on their resource allocation. These five, under the auspices of the Ministries of Police, Defence, Corrective Institutions and Posts and Telecommunications, are omitted from discussion. The remaining nine were distributed between ministries as shown in **Table 1** (overleaf). The Inservice Teachers' College and the Legal Training Institute have already been discussed above (see pp. 145 and 114). By the end of 1990 the University of PNG no longer had any interest in acquiring the Legal Training Institute and the issue was no longer being considered.

The Administrative College and the National Arts School were situated close or adjacent to the Waigani campus of the University of PNG. Both had low student/staff ratios and appeared to be operating inefficiently. An unsuccessful attempt had been made in 1980 to close the Arts School. This had been foiled at least in part by means of mobilisation of a pressure group and a violent student-led demonstration outside the national parliament building. The Administrative College was experiencing a crisis of mission at about this time. Because of their proximity to the University of PNG, the plan

proposed that administrative costs could be reduced by amalgamating the two institutions with the university. The first Cabinet submission specified that in both cases this should take effect from 1988. In the case of the Arts School, the character of its programmes and a reasonable degree of autonomy were to be preserved. In the case of the Administrative College, due regard was to be paid to preserving the vocational nature of some of its programmes. It was also to be accompanied by a thorough review of the role of the College and the training needs of the Public Service and Government Departments which it served.

TABLE 1: MISCELLANEOUS (DECLARED) INSTITUTIONS

Institution	Ministry
Administrative College of PNG	Personnel Management (Public Service)
National Arts School Civil Aviation Training College	Civil Aviation, Culture & Tourism
Legal Training Institute	Justice
Customs Training Centre	Finance and Planning
Fire Services Training Centre PNG Maritime College	Transport
Electricity Commission Training College	Minerals and Energy
Port Moresby Inservice Teachers' College	Education

By late 1987 the Commission's recommendation on the Arts School had been reiterated, but modified to provide for entry of artists who did not have grade 10 qualifications. The recommendation on the Administrative College had been substantially softened, removing the concept of amalgamation as such, but proposing a rationalisation of some of its courses, with the transfer of some to the University. Cabinet approved this recommendation unchanged, but deferred that concerning the National Arts School. A later meeting of Cabinet rejected the recommendation and ordered that a review of the School be made in 1988. An influential new Minister for Culture and Tourism had intervened to 'rescue' the School, despite the fact that the School had come round after protracted negotiations, to agreeing to the amalgamation! An alternative strategy was developed, envisaging that the

School could generate its own revenue in the service of tourism. In November 1989 Cabinet decided to transfer the National Arts School to the University with effect from 1 January 1990.⁶⁵ On 7 February 1990 it changed its mind and made another decision transferring the School to the Tourism Development Corporation.⁶⁶ On 11 April Cabinet had once again changed its mind and decided to transfer the School back to the University! For most of 1990 the National Arts School operated as part of the University of PNG, although attempts were made by the Tourism Development Corporation to reacquire it, with a view to using it in the promotion of tourism.

In June 1988 the Vice Chancellor of the University of PNG reported to the Commission that the Administrative College's reaction to and 'cooperation' with the Cabinet directive had been

...obstructive, duplicitous, self-serving, territorial, and in no way interested in furthering the interests of higher education as a whole.⁶⁷

The College was willing to transfer several major courses with substantial student load. A minimum of approximately twenty-two positions would be transferred. The College was unwilling, however, to vacate any of its physical facilities, thus blocking the possibility of absorbing the Legal Training Institute into the University, and creating intense pressure on teaching and office space, staff housing, and student accommodation at the University of PNG. The University of PNG therefore proposed that the College, as presently constituted, be abolished and its functions absorbed into the University of PNG.

By April 1989 the accountancy programme was being transferred to the University, despite resistance from the College. The issue was being forced by the Secretary of the Department of Personnel Management to which the College was responsible. With that programme transferred the case for the College to retain all its physical facilities would be substantially weakened. By the end of 1990 all degree and diploma programmes had been transferred to the University of PNG. A relevant development, however, was the establishment in 1989 of a National Training Council and the official

⁶⁵ The University This Week, 12/1/90.

⁶⁶ The University This Week, 9/3/90.

⁶⁷ University of PNG Briefing Paper for Commission for Higher Education Institutional Budget Hearing, 2 June 1988.

definition of 'training' as distinct from 'education'. A number of training colleges had as a result been removed from those declared under the Higher Education Act, and the removal of the Administrative College was being formalised. This brought the college under the auspices of a different national organisation and the acquisition of the College's campus by the University of PNG had become a dead issue. The cost of running the programmes transferred to the University of PNG, however, more than doubled since they involved four or five additional staff above the four positions transferred from the College. As for the College, far from going into eclipse, it was in the process of being rehabilitated and strengthened as a result of a World Bank sponsored study. It was to become a training institution for both the public and private sectors, for which it required to retain its premises.

One consideration which should not be discounted was the role of institutional housing in generating resistance to the amalgamation. In the national capital the shortage of housing, though common to all urban areas, was particularly acute. A colonial legacy throughout much of the tertiary education system was the creation of substantial on-campus housing areas. About two thousand housing units were associated with higher education campuses in the country (see Table 20, **Appendix 34**). Almost half of these were high cost, being mainly for teaching and very senior administrative staff. Out of sixty-three campuses surveyed in 1984, only six had no institutional housing. The universities had over three hundred houses each, and the primary industry, technical, teachers and some of the miscellaneous colleges also had fairly substantial numbers. Little housing was generally associated with the nursing schools however.

Institutional housing was officially for occupation by institutional staff and their families. In reality it was often also occupied by a great many extended family members and more distant relatives who were reliant on housing to get and maintain jobs in the formal sector or its periphery. A government policy to sell off government owned high cost housing in the capital had created even greater pressure on housing, including institutional housing. One manifestation of this was the occupation of institutional housing at the nearby campus of the Port Moresby Inservice Teachers' College by some senior staff of the Department of Education's Headquarters. Thus the Headquarters had an interest in ensuring the College was not closed. Very

plausibly some of the institutional housing of the Administrative College, being situated close to the central government offices, was occupied by senior public servants or other influential people. Whether or not this is true, for the existing staff of the Administrative College there was a strong personal incentive to resist amalgamation with the University of PNG, since it might involve relinquishing the roof over their head.

The potential for institutional housing to immobilise amalgamation or closure proposals was pervasive throughout the higher education system. If, for instance, a primary industry college was recommended to be converted to a national high school (as was proposed for the PNG Forestry College in Bulolo and the Sepik Agricultural College), this would have required displacing twenty-eight and twenty-two households respectively. Agricultural colleges generally employed considerable numbers of labourers and other ancillary staff. Many of these would be drawn from the local community. Thus some members of the local community would have a vested interest in preventing any change that would dispossess these employees of their homes. Proposed changes such as these examples would have involved handing the colleges over to the national Department of Education, and the risk of displacement of householders would have been maximal. Where the campuses were to be converted to different but associated purposes - e.g. for some other primary industry activity, there would have been a greater possibility of retaining some of the staff and consequently less resistance might have been expected. We may hypothesise that changes involving transferring resources between ministries and sectors would have less chance of implementation than changes within ministries or sectors.

The potential for institutional housing to interfere with alternative utilisation of higher education campuses was being perpetuated, since aid funded projects for innovations and expansions both within and outside the higher education sector almost invariably included a housing component - otherwise the projects could not be staffed. Thus we can see that the creation of housing was essential to enable certain changes to take place - e.g. the creation of a new college; but that with time the creation of campus housing had the effect of perpetuating that college and restricting the potential for change.

The Civil Aviation Training College was operating in 1984 on an extremely low student/staff ratio and its unit costs (if it had been possible to calculate them) would have been extremely high. The plan pointed to the need for the role of the college to be reviewed and investigations made as to more cost-effective methods of training the staff needed for civil aviation, including the possibility of overseas training. Although neither Cabinet submissions made specific recommendations concerning the College, the second commented that a reduction of ten teaching staff was indicated. The College was therefore still under scrutiny.

The Customs Training Centre and the Fire Services Training Centre, although being extremely small inservice training units, attracted comment in the plan because of their low student/staff ratios. It suggested that overseas training or in-country technical assistance might be considered as alternatives. The first Cabinet submission omitted mention of the Fire Services Training Centre, but recommended:

that the Customs Training Centre be closed down as an institution of higher education with effect from 1987, and students placed in appropriate overseas training programmes until such time as manpower requirements could be shown to justify the cost of mounting such programmes in PNG.⁶⁸

The matter was subsequently dropped and no recommendation appeared in the second submission.

The Electricity Commission Training Centre was also devoted entirely to inservice training, and although it had been operating inefficiently for some time, the plan recognised that the Electricity Commission was in the process of building up its training strength and envisaged that student/staff ratios would improve over subsequent years. The Electricity Commission was a commercially operating statutory authority and claimed that its Training Centre was therefore not in receipt of government funding. As such it should be deleted from the list of institutions declared under the Higher Education Act 1983. The Commission accepted this argument and accordingly

⁶⁸ Policy Submission No. 193/86 from Minister for Education for Members of the National Executive Council, File No. S0-000-51, Subject: Higher Education Plan: A Strategy for Rationalisation 1986 - 1990, September 1986.

recommended to Cabinet its deletion from the list. (The effect of this was that the Commission would have no power to recommend on the budget of the College.) Cabinet later accepted this recommendation and it was a simple matter to implement as it was purely a formality.

The PNG Maritime College (formerly the Nautical Training Institute) had a history of non-cooperation with the Commission. Early in the Commission's operations the College had sought the intervention of its Board and its Minister to endorse its non-compliance with requests for information. The Commission believed that there was scope for increasing its efficiency in terms of student/staff ratios, but the College's Principal was very hostile and refused to attend Commission hearings. Accordingly the first Cabinet submission recommended:

that a taskforce be set up to review the PNG Maritime College with a view to its amalgamation with Madang Technical College.⁶⁹

This recommendation was subsequently dropped and no mention was made of the College in the second submission. This was presumably because the Education Department had no interest in acquiring the College, rather than any change in the efficiency or policy of the Maritime College.

Having successfully stonewalled the Commission for years, the College then proceeded on another tack, perhaps taking the experience of the Electricity Commission Training College as a precedent. It applied for deletion from the list of institutions declared under the Higher Education Act. Its chief argument was that the Higher Education Act conflicted with its own act and with its responsibility to its own Board and Minister. Although the College was partially supported financially by the shipping industry, it nevertheless received a substantial budget from the government such that it could not validly claim exemption from the list of declared institutions. At the end of 1990 the impasse remained. This case is significant however because the College's strategic response of non-cooperation was extremely successful in warding off the Commission's intervention, and is illustrative of how lacking in power the Commission really was.

⁶⁹ Policy Submission No. 193/86 from Minister for Education for Members of the National Executive Council, File No. S0-000-51, Subject: Higher Education Plan: A Strategy for Rationalisation 1986 - 1990, September 1986.

One major difference between the first and the second Cabinet submissions was an attempt by the Commission to address the problem of its inadequate powers. It argued that the higher education budget should be regarded as a whole (approximating K82 million) rather than as fragments buried within the budgets of various agencies. Increases or decreases should be made on total higher education budget, and the Commission should be given the responsibility and the authority to ensure that reductions to higher education were made in the most rational manner and in the best interests of PNG. Cabinet approved, without amendment, its recommendation that:

in future all reductions in higher education financial allocation be made on total higher education budget, and individual institutional funding requirement be evaluated and determined by the Commission for Higher Education to ensure that rational evaluation and assessment is made in compliance with the Plan for Higher Education.⁷⁰

Hoping that the Commission would now at last achieve a much-needed breakthrough, a proposed set of procedures were developed, aimed at creating a mechanism by which the direct budgetary control presupposed by this decision might be implemented. It was submitted to the Department of Finance and Planning in early 1988, since that Department's cooperation was essential. In early 1989 it appeared that Department of Finance and Planning officials were proceeding along the lines of previous years. When reminded of Cabinet's decision they appeared to be surprised and to be hearing of it for the first time. Although the Commission's officials intended to pursue the matter relentlessly, they were not confident of a successful outcome. By the end of 1990 there was no significant change.

Cuts to the Commission's budget and its consequences

The Commission's efforts to implement the plan in early 1988 were interrupted by a strike by national academic staff and students of both universities. National academic staff had for several years been attempting to negotiate with government a 'single line salary scale' for both citizen and non-citizen academic staff. This was to eliminate the large differential between citizen and non-citizen scales, and would have involved a

⁷⁰ National Executive Council Meeting No. NG 9/87, Decision No. NG 21/87, 4/11/87.

substantial increase to the citizen scales. Government was attempting to resist this as the scales were linked to those of the public service and increases to academic staff would likely have been seen as a precedent and engendered pressure for rises more widely in the public sector. To make their feelings felt, national academic staff had planned to take industrial action at the start of the academic year 1988. Their prospects were not very good, because of the climate of severe budget cuts to the universities that had prevailed for two years already.

Prior to the start of the academic year two things happened simultaneously: the two universities selected a larger number of students than the previous year, presumably in an effort to build up numbers and make themselves appear more cost efficient by reducing student/staff ratios and unit costs. This was probably a response to the plan. At the same time the budget allocated to the Commission for payment of the national tertiary scholarships had been cut as part of the five percent cut to the social services sector. The Department of Finance and Planning had apparently assumed (wrongly) that the Cabinet would approve the Commission's proposals to reduce the value of the scholarships. The value of and policy on scholarships had not changed, so the Commission proceeded with the selection of students and the award of scholarships as usual. According to these procedures, the school leavers were considered first, followed by the non-school leavers. With the increase of students selected by the universities, and the decrease in funding, the Commission ran out of money for the non-school leavers' scholarships! The National Union of Students then called the students out to protest the treatment of the non-school leavers. As their action coincided with that of the national academic staff, both universities were completely immobilised at the start of the academic year. Following representations from the Commission, and protracted negotiations, the Cabinet eventually released additional funds for the scholarships.

Summary

When Cabinet was presented, in September 1986, with the opportunity to maximise its savings from higher education, it shied away, allowing the Department of Finance and Planning to tackle the problem. Many of the plan's recommendations were too radical. They impinged on the portfolios

of too many Ministers, who were conscious of a forthcoming national election.

The deferral of the plan for sixteen months enabled threatened institutions to take evasive action and allowed others to capitalise on their advantages as they saw them. The development of a new economic strategy had the effect of conflicting with the strategy for education and undermined the assumptions upon which the Higher Education Plan had been based. Changes in the recommendations of the second Cabinet submission suggest that between September 1986 and December 1987 the positions of the Commission, both Universities and some other institutions had tended to converge, with compromise solutions having been developed. Other institutions had successfully sought refuge and support from their Ministers and Departments, particularly those serving primary industry and those capable in any way of harnessing the 'economic sector argument'. Many of the more radical proposals were dropped by the Commission suggesting that it achieved not only a closer position with the affected institutions, but also with the interests and concerns of the Cabinet Ministers. Thus we may observe that a lack of opportunity to lobby support for the plan before the first submission was compensated for by an extended opportunity before its submission the second time. This suggests that there can be no short cut in the process of consensus building for the acceptance of change.

The power of the University of PNG, the national Department of Education and the Department of Health relative to the Commission and Cabinet is reflected in their responses to a number of recommendations. The University of PNG went well beyond the Commission's and Cabinet's recommendations on Dentistry, while the Department of Health felt confident in disregarding their recommendations on the closure of the Arawa School of Nursing, the reopening of the Lae School of Nursing, and the transfer of the budget of the College of Allied Health Sciences in Port Moresby. The Department of Education tended to pursue its own policies on technical and teacher education, ignoring its potential to maximise and redirect savings. The Department of Agriculture and Livestock remained unscathed by the Commission's recommendations. The power of the Department of Finance and Planning is reflected in its disregard of the Cabinet's recommendation on the higher education budget (and in many other respects). This suggests that these agencies and institutions, experienced in formulating and

implementing their own policies and predating Cabinet and the Commission by decades, were relatively powerful. Although they were each traumatised by budget cuts, they were each able to make adjustments and emerged to a greater or lesser extent unscathed.

CHAPTER 7

MAIN FINDINGS OF THE CASE STUDY

Introduction to the case study findings

The purpose of this chapter is to form a theoretical bridge between the case description presented in Chapters 3 - 6 and the discussion of the relevance of pluralist, Marxist and elite theoretical perspectives presented in Chapters 8 - 10. It describes the initial stages of a theory development process inspired by the strategy of grounded theory developed by Glaser and Strauss (1968). The process was adopted after a search had been made for relevant theory from a wide range of literature, including that on policy analysis, policy-making, planning, budgeting, implementation, education planning, higher education policy and coordination, political sociology and research methodology. Whilst many relevant theories were found, in most instances their explanatory power for our case study was only very limited and partial.

Grounded theory as a method of qualitative analysis was adopted for both theoretical and technical reasons. From a theoretical point of view, the purpose of applying this strategy to our case study was to avoid the limitations of existing theory and to attempt '...to develop....theory as it emerges...' through the joint process of collecting, coding and analysing data, and deciding what data to collect next and where to find it. In this way, Glaser and Strauss have argued, the '...process of data collection is *controlled* by the emerging theory, whether substantive or formal,' and '...the initial decisions are not based on a preconceived theoretical framework' (Glaser and Strauss, 45). The constant comparative method of joint coding and analysis, appropriately modified to suit application to our case description, was adopted because of its capacity '...to generate theory more systematically....by using explicit coding and analytic procedures...' (Glaser and Strauss, 102). It was felt that this approach would afford greater rigour to the development of theory from our case study than a more common-sense, less systematic approach. When adapted and put into practice, the method was immediately found to be extremely powerful as a tool in distinguishing the most important themes in the case description, in

examining the relationships between these themes, and in enhancing the understanding of an extremely complex and interdisciplinary phenomenon.

From a technical point of view, when this systematic, coding approach was combined with computerisation, it was found to be an extremely powerful technique for managing and, most particularly, manipulating a very large volume of qualitative data. The classification and coding of text as data enabled it to be sorted automatically or otherwise efficiently reorganised. This in turn greatly assisted the processes of comparison and analysis, and contributed markedly to the ease with which understanding and theoretical insight could be achieved. In this way a topic such as public policy process, which does not lend itself readily (if at all) to experimental research design, could be translated into a form in which themes and concepts suggesting key variables could be isolated and (literally) manipulated. This technique incorporated simultaneously both qualitative and quantitative treatment of data.

The original¹ draft of the case study was analysed and classified into the following categories: (a) factual passages supported by documentation; (b) factual passages reported by key informants but not supported by documentation; (c) analytical notes (including chapter summaries) and (d) technical notes. Text categorised as (a) or (b) was treated as data and subjected to a highly systematic analysis, whilst that categorised as (c) or (d) was omitted from the analysis. Inclusion of (c) would have resulted in distortion since it would have involved double-counting, while (d) was omitted as spurious in this type of analysis.

A crucial feature was the sequential numbering of the paragraphs in the text. These were used for referencing and reorganising the data in various manipulations. In each paragraph, all the substantive elements (usually nouns, or phrases involving nouns) was identified. These were treated as the basic analytic categories. The relative importance of these basic analytic categories was derived quantitatively: for each of these categories the paragraphs numbers of all references were collected and counted. Those categories that scored highest on the number of references were identified as the key elements.

¹This was the first unedited draft of Chapters 3 - 5, completed in August 1987. It was about one third longer and considerably more detailed than the description which currently appears in Chapters 3 - 5.

All passages containing references to these key elements were copied into discrete data files, so that all references to a given element could then be read as a group. For example, the references to the most important key element, the 'national plan for higher education', were assembled and read. The picture which emerged was very confused, and led to the separating out of the three different conceptualisations which we have called Plans A, B and C. The reference numbers enabled these three conceptual plans to be related back to the chronology of events described in the case study. Data files were set up for each of Plans A, B and C. This led to the construction of **Diagram 1** (overleaf) which revealed the conflict between Plans A and B, and the critical importance to them of certain points in time. These are discussed below under the Key Findings.

The key themes and concepts of the thesis were derived in this way, and were then explored through field interviews and the collection and analysis of further documentation using similar techniques. During the field visit particular attention was given to verification of all passages which had been classified as per (b) above as not supported by documentation. The purpose was to ensure the greatest possible rigour through establishing the reliability of the data which had been analysed in this way. Verification was made both by key informant interview and by collection of the necessary documentation wherever possible. As a general principle, triangulation was used as much and in as many forms as possible: in multiples of key informants, in documentary sources, and in observation, as well as by means of quantitative data and analysis. It was also used as far as possible at all levels: in preparing the case description, in its verification, and in its analysis.

The discovery during the field visit that Plan C had been approved and was in process of implementation greatly increased the scope of the thesis. Not only, therefore, were the case description and key ideas verified, but the latter were explored to the maximum possible extent, using the same general approach: key informants, documentation, observation, triangulation and systematic data management and analysis. A sustained

attempt was made to record these processes through the construction of 'audit trails'. The Qualitative Analysis Documentation Form of Miles and Huberman (1984, 245) was adapted and all analytic procedures and decision rules recorded. The attempt was eventually abandoned after the documentation forms exceeded sixty pages and it was realised that the documentation process was consuming too much time. The exercise was judged, nevertheless, to have been worthwhile. Despite its incompleteness, it had encouraged systematic and rigorous intellectual habits, since it required conscious reflection on the implications of the processes used and the decision rules governing them. This made the analytic process more rigorous and self-critical.

(The computerised management of the case study text as data and the paragraph numbering system were also used in systematically examining the relevance to the case of the three theoretical perspectives. The case study chapters were automatically searched using the relevant key words, and all paragraphs containing references were copied and pasted into separate working documents, one for each theoretical perspective. These three working documents containing the assembled references, including their paragraph reference numbers, could then be read with ease and each compared as a whole with the respective drafts of the theoretical chapters.)

The results of the grounded theoretical analysis of the case study will be discussed as findings below. They will then be summarised and presented as the desiderata for an adequate theory, in the light of which the relevance of three main groups of theory will be reviewed in the subsequent chapters for their respective relevance.

The key finding

The first and most important finding was that, within the formulation stage of a single episode of policy-making (i.e. the formulation of the Higher Education Plan 1986 - 1990) at least three distinctly different conceptualisations of the plan to be prepared were to be found within the same general group of people concerned with its preparation. These three conceptualisations were distinguished as Plan A, Plan B and Plan C, and plotted diagrammatically over the period of time from 1984 - 1986 (see **Diagram 1**). They represent sets of implicit assumptions and associated

values held by groups of individuals involved in the policy process during particular intervals of time. Chronologically Plans A and B coincided and competed with each other, with their conflict ultimately resolved in their replacement by Plan C, which bore some of the distinctive characteristics of both of its predecessors. It was thus a working amalgam. These three conceptual plans form the basic analytical framework within which the subsequent analysis was undertaken. In addition to these findings derived from analysis of the case description, as we have seen above, a major finding was made during the field research. This was that what has been described above as 'Plan C' had, in fact, been formally approved as the 'Higher Education Plan 1986 - 1990: A Strategy for Rationalisation' and had been adopted since commencement of the study. This resulted in a decision to add to the research design a study of Plan C's implementation. Accordingly the description of its implementation was added to the Case Study (as Chapter 6).

The analytic distinction between Plans A, B and C, and the identification of conflict between the former two resolved through their amalgamation as Plan C, highlight the relevance of conflict theory to any study of planning process. Any adequate theory must be capable of dealing with change over time, and with conflicts of values held by competing interests, and the resolution of such conflict.

Key themes and concepts

Three main sets of features distinguished these three conceptual plans:

- Level of decision-making and a number of features concerned with time and timing;
- Conceptualisations of the nature of higher education;
- Conceptualisations of resource pools.

In the first of these features, Plan A (the Commission's conceptualisation through its Principal Project Officer (Planning and Research)) differed both from Plan B (that of the Education Sector Committee of the Medium Term Planning System) and from Plan C (the Commission's Plan for 1986 - 1990 which the Cabinet eventually approved). In this feature, Plans B and C bore striking similarities to each other. Plan A, for instance, envisaged a ten-year

plan period, as contrasted with the five-year period of Plans B and C. The deadlines for preparation of Plan A were changed several times, and were under the authority of the Commission. Deadlines for Plans B and C were set by Cabinet and were immutable by any other party.

Regarding conceptualisations of the nature of higher education and resource pools, Plans A, B and C were each distinctly different from each other, suggesting that there was a particular relationship between concepts of higher education and concepts of resource pools, and that they differed distinctly in the case of each Plan. The matrix from which these observations were derived is shown below in **Table 2** (overleaf).

Findings: conceptualisations of higher education

Extensive and in depth interviews and analysis of key documents probed the notion of higher education as a system, a concept associated chiefly with Plan A. From this it emerged that the 'system' concept of higher education appeared to be held only by those concerned directly with the development of the Higher Education Plan: the members of the Secretariat and Commissioners for Higher Education. The concept seemed to be conspicuously absent both from the higher education institutions on the one hand, and from the Cabinet on the other, as far as could be determined. We may conclude that no group other than the Commission and its staff had any particular interest in this boundary definition of higher education. The significance of the 'system' concept is that it tended to be associated with a rational-comprehensive approach to planning, resting on abstract assumptions of the components of the system (in this case, higher education institutions) which are or can be integrated into a balanced, orderly (and perhaps harmonious) whole. Systemic change is 'second order' (Levy 1986) and fundamental rather than marginal. Thus the assumption of social order embodied in Plan A is at variance with our observation above of the relevance of conflict theory to any study of planning process.

The system concept of Plan A was absent from Plan B, which seemed to rest on notions of conflict and coercion. The Department of Education/Department of National Planning and Development 'coalition' in the Education Sector Committee of the Medium Term Planning System sought to suppress resistance to their proposed redistribution of resources. It was not interested in a fundamental restructuring of higher education in

TABLE 2: COMPARATIVE MATRIX OF ATTRIBUTES OF THREE CONCEPTUAL HIGHER EDUCATION PLANS

	Plan A	Plan B	Plan C
Ten year plan period	X		
Five year plan period		X	X
Ideal	X		
Real		X	X
Deadline set by Commission	X		
Deadline set by Cabinet		X	X
Deadline changed frequently	X		
Deadline unchanged or once only		X	X
Resource reallocation within Higher Education only	X		
Resource reallocation between subsectors within Education		X	
Resource reallocation from higher education to economy			X
System viewed as susceptible to fundamental reshaping	X		
System viewed as susceptible to coercive marginal reshaping		X	
System viewed as susceptible to marginal and indirect reshaping			X
Higher Education Only	X		X
Subsector of Education		X	
Programmatic		X	
Non-programmatic	X		X
Student financing integral	X		X
Student financing separate		X	

order to achieve the required savings, and it was not particularly concerned how those savings were to be achieved. Higher education was regarded as an entity or group of entities that had been wasteful and inefficient, and deserved to be punished. Plan B therefore seemed much more congruent with a conflict model of social change.

The system concept was also absent from Plan C, but once again a different conceptualisation of higher education was presupposed. In this model higher education institutions were envisaged as groups of human agents whose cooperation was elicited through education and consultation. Whilst the outcome in terms of resource shift envisaged in Plan C was much the same as that envisaged in Plan B, the methods to be used were altogether different. The process was to be participatory and flexible. Whilst this model recognised the potential for conflict in higher education, its emphasis was much more on conflict management than that of Plan B.

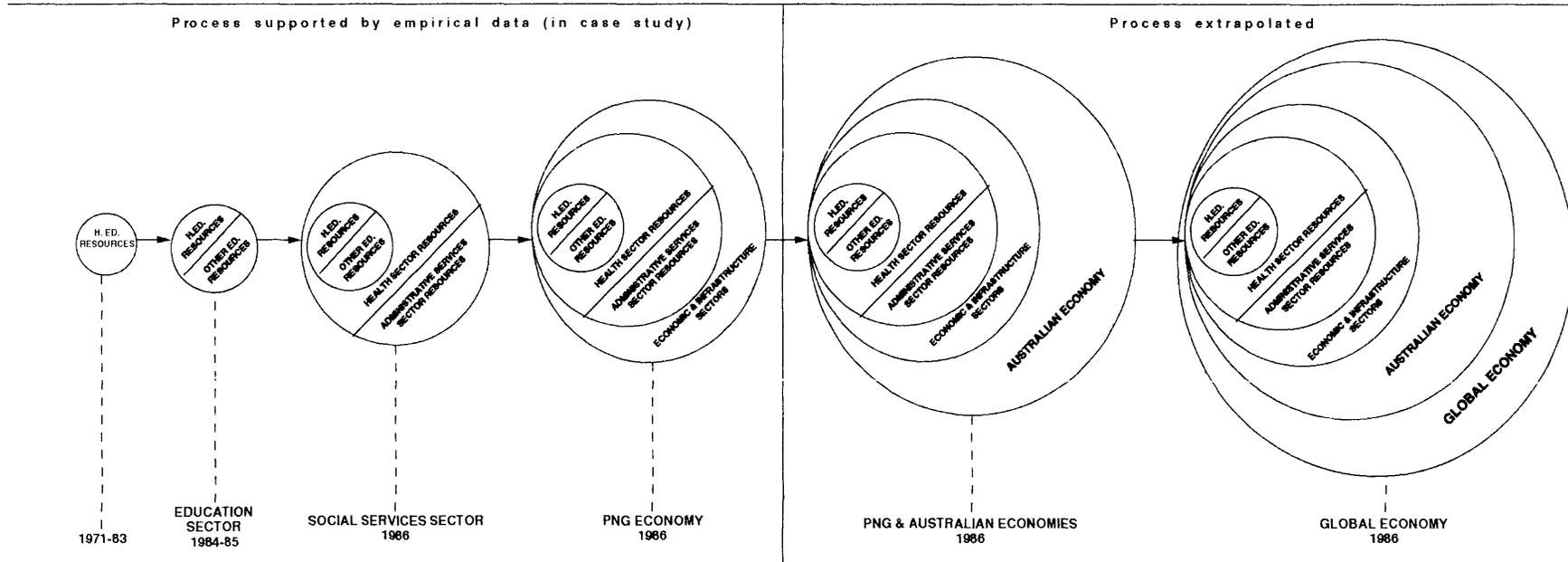
Findings: conceptualisation of resource pools

Observing that Plan A differed significantly from Plans B and C in terms of its preoccupation with higher education definition, and that differences in resource definition were linked with differences in higher education boundary definition, an extensive exploration was made of resource definitions associated with our episode of policy-formulation. A very distinct pattern of aggregation was found in the definition of resource pools which occurred in stages over the period from 1971 - 1986, a process which accelerated markedly between 1984 and 1986, and particularly during 1986. This process is illustrated **Diagram 4** (overleaf). The first three stages of the aggregation process are supported by empirical data from the case study. The extended process, showing the link with the global economic system, is derived by extrapolation. The factor linking the empirically supported process with the extrapolated global process is the progressive decline of Australian budgetary aid, a process itself linked indirectly with the global economic process.

It was realised that the 'system' concept of higher education signified the first of a series of higher education boundary redefinitions in our case study, which in turn were associated with these stages in resource aggregation. The 'system' concept allowed, potentially, for the movement of resources

DIAGRAM 4

DIAGRAM OF REDEFINITION OF RESOURCE BOUNDARIES ENABLING RESOURCE SHIFTS LEFT TO RIGHT



between higher education institutions. They had previously been largely immune from such movement by virtue of having been separately budgeted. The redefinition (by the Education Sector Committee of the Medium Term Planning System) of higher education as part of the Education Sector as a whole permitted, potentially, a shift of resources away from higher education. The function of the boundary definition of the Education Sector equally was to retain those shifted resources within the Sector. In other words, the national Department of Education (as well as the National Planning Office) had an interest in shifting some of the resources enjoyed by higher education institutions to finance activities (e.g. expansion of primary education) for which it was responsible. The subsequent redefinition of Education within the Social Services Sector, and within the lower priority sectors as a group, obliterated the Education Sector boundary and permitted the shifting of resources away from Education as a whole. This observation, together with its extrapolated link to the global economy through the Australian economy, suggests that the outflow of resources from higher education was ultimately destined for interests in the global economy and was a function of successive redefinitions of resource boundaries. Moreover, the redefinition process accelerated exponentially in the mid 1980s and this additionally strongly suggests a link with stresses in the world economy. The spread of the resource aggregation process within the broader PNG economy through budget cuts to the Social Services Sector was selectively probed² by interview and documentary analysis in the broader education and health sectors, and manifestations very consistent with these hypotheses were found.

Realising the importance of the economic context in which our case was set, an examination was made of the general economic conditions pertaining during the period of the case and the preceding period since self-government, together with a series of changes in the modes of national economic planning. (These are described in Chapter 2.) From this it was clear that changes in the modes of planning were associated with changes in the flows of national resources. These are illustrated in **Diagram 3**, p. 36. It was clear that changes in the global economy had impacted very

² As this finding was made during the field research, and had not been previously anticipated, it was only possible to undertake a very limited and selective probe due to time constraints. A thorough probe would have exceeded the scope and scale of this study, in any case.

significantly on the PNG domestic economy, and that this impact had accelerated markedly since independence and grown exponentially during the period of our case. The dependence of the PNG economy on the global economy and its impact on the PNG economy, both directly and through the Australian economy, needs to be understood as one of the major features which theory must address.

In addition to external influences, which were largely beyond the control of the PNG government, the aggregation process within the PNG economy was also found to be associated with certain domestic phenomena. Firstly, irrespective of resource scarcity dictated by global economic forces, resource scarcity was generated as a matter of policy in three of the five broad sectors of the domestic economy through the Wingti government's five percent cuts to the budgets of the social services, administrative services and law and order sectors, aimed at shifting resources into the economic and infrastructure sectors. In probing the effects of these resource shifts away from the health sector and from the education sector in general, two significant features emerged, both concerned with the priority in resources accorded to entrenched interests. These interests were, on the one hand, the international lending agencies, to which PNG was legally bound by loan agreements. On the other hand, they were the public sector employees, whose terms and conditions were linked to inflation and also protected by legislation and arbitration mechanisms. The combined effect of these two sets of interests, together with the deliberate contraction of resources for these sectors, was to constrain the Departments of Health and Education to pursue earlier policy objectives, and greatly restrict their ability to redirect their resources internally and pursue new policy objectives. The result was a kind of policy immobility combined with internal crisis management. Crisis management was a much greater preoccupation where the budget cuts were of greater severity and were imposed arbitrarily and in detail by the Finance Department, as in the case of the Education Department in 1986 and 1988, as compared to 1987. These observations indicate that any adequate theory must be capable of explanation in terms of changes in resource availability, and particularly, resource scarcity. It must also be capable of recognising the role played by organised and entrenched interests in preserving the existing allocation of resources, and in resisting policy change.

Findings: concepts of time and level of decision-making

The diagrammatic plotting of the three conceptual plans revealed that there were certain critical points in time in the conflict between Plans A and B. In particular the resolution of that conflict was precipitated by direct intervention by the Cabinet, in the form of the issue of a deadline for the Plan's completion. Deadlines had previously been set by the Commission itself, and by the Department of National Planning and Development. In the event, the Commission had been willing to change its deadlines, and the Department of National Planning and Development had been unable to enforce its deadlines. The power of Cabinet directive therefore emerged as a key factor in plan completion.

There were a number of time-related concepts and issues. The completion time associated with degrees of plan elaboration, and with overall scale of the plan (i.e. single sectoral or encompassing the entire range of sectors in the economy) were explored as possibly having had an impact on the plan's completion. On balance it was felt that the non time-related aspects of scale and elaboration were probably more important in accounting for plan completion or otherwise. For example, the specificity involved in elaboration may contribute to plan failure in so far as it would tend to restrict the freedom of those in power. Scale is also, to some extent, a function of specificity.

The link between the time required to prepare the plan and the political life expectancy of the elected politicians was found to be much more important. The weak evolution of political parties, and the tendency for political fragmentation, together with the use of the constitutional provisions for votes of lack of confidence in the government, combined to give Cabinet and individual Cabinet Ministers a very short political life expectancy: one which cannot be guaranteed for more than about six months. The reasons for this are fully discussed in Chapter 10. The significance in the present context is that any plan which takes more than six months to prepare and implement (as is the case with all national plans in PNG to date) is at risk. This indicates that any theory capable of explaining the failure of planning in PNG must deal both with the inherent fragility of democracy, as well as the particular weakness of PNG democracy.

Findings: implementation

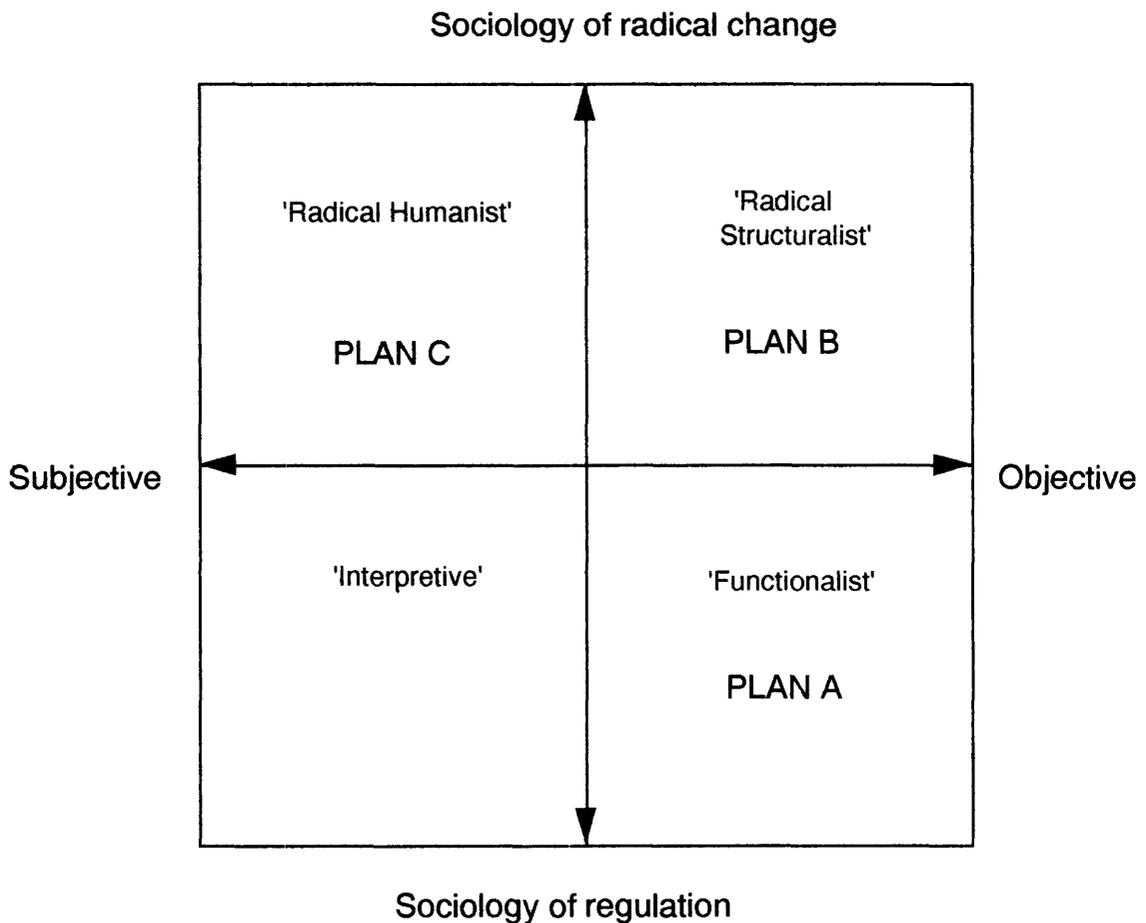
Chapter 6, describing the implementation phase of the plan, contains a wealth of findings from which much can be learned about the planning process, particularly the informal aspects. The activities of interests groups and their relationship to organisational structures are the most prominent features, and will be discussed in Chapters 8 and 10. Fixed capital assets, such as land, buildings and in particular, institutional housing, emerged as a feature of higher education in PNG around which some of that interest group activity centred, and accounted for some of the resistance to change. As institutional housing is generally uncharacteristic of higher education institutions in developed countries, its theoretical relevance will be discussed in each of the succeeding three chapters.

Synthesis of the key concepts and issues

A number of observations can be made from the foregoing analysis of key concepts and issues. The fact that Plan C succeeded both Plans A and B, and moreover was eventually approved by Cabinet for implementation, suggests that Plan C was qualitatively superior to each of the others. From an examination of the differences in assumptions embodied in each of these plans respectively, it emerged that Plan A approached its task from a primarily rational systems perspective, treating higher education objectively. Change, it was supposed, would come about because of the perceived objective merits of redirecting resources. Plan B, on the other hand, made virtually no appeal to reason. The approach was essentially coercive: higher education, once again treated objectively, was to be the residual factor in resource reallocation, and argument was to be suppressed as far as possible. Plan C, however, was much more negotiative in tone, at least in its publicly documented form. Institutions were invited to participate and advise, at least to a minimal degree.

If we plot these three conceptual plans within a quadrant diagram (see **Diagram 5** overleaf) based on the subjective/objective dimensions, and on the social organisation/radical change dimensions (Burrell & Morgan 1979), we can see that they may each be placed in a different quadrant.

DIAGRAM 5



Given that Plan C was the successor to each of the other two, we may see that its success seems to relate to its ability to deal with subjectivity and to change rather than stability. Given that all three of these modes of planning (or assumptions underlying them) were found to be present in a single episode, it suggests that the planning process consists, amongst other qualities, of an iteration between both subjective and objective dimensions. Consequently the planning process is at times covert and at other times overt. This can be readily understood by realising that the covert mode is necessary for negotiation with interests, while the overt mode is necessary for binding commitments (particularly commitments of resources). The iterative character, in its bi-modal subjective/objective form, is also strongly suggestive of the process of learning, whether formal or informal. The resolution of the conflict between Plans A and B, through their amalgamation

into Plan C reinforces two previous observations: that the planning process was inherently conflictual; and secondly, that it was a process in which learning took place - for once Plan C was commenced, there was no regression to Plans A or B.

A comparison of higher education planning with health planning in PNG from the early 1970s revealed that the latter also underwent three distinct phases. Unlike higher education, however, there had been essentially no conflict between the first and second, which had followed each other sequentially, the second stage having updated and elaborated the first. The case of health planning is particularly useful for comparison since, like the Higher Education Plan, it is a single sectoral plan and of similar scale in budgetary terms. The second and third stages correspond chronologically more or less exactly with Plans B and C, and were subject to the same national economic policy constraints. The absence of conflict in the health planning process seems to be associated with consensus concerning the value of health as a social good for the masses - assumptions elaborated in the First National Health Plan in 1973. The thrust was from the beginning redistributive and egalitarian. By contrast, there was no such consensus concerning the social value of higher education, and attempts to debate the issue failed. There was no attempt during the period in question to plan for mass higher education, and the view of higher education was instrumental rather than intrinsic. Any theoretical explanation of higher education planning must be capable of dealing with conflict of values, with an instrumental as contrasted with an intrinsic approach to educational values, and with inequality as contrasted with equality.

Desiderata for an adequate theory for national higher education planning in PNG

In summary, systematic analysis of empirical data demonstrates the need for theory capable, as a minimum, of explaining national higher education policy outcomes in terms of the following: the global impact on the PNG economy; changes in resource availability, and particularly, resource scarcity; growing inequality and the role played by organised and entrenched interests in resisting change and preserving the existing allocation of resources; the inherent fragility of democracy, as well as the particular weakness of PNG democracy; and the political nature of higher

education: conflict of values surrounding higher education, the dominance of higher education's instrumental value, and its contribution to inequality.

**PART III:
THEORETICAL
PERSPECTIVES**

CHAPTER 8

THE RELEVANCE OF THE PLURALIST THEORETICAL PERSPECTIVE

The pluralist perspective

The relevance of the pluralist theoretical perspective has been selected for study for a number of reasons. It is apparent that Papua New Guinea is linguistically and culturally extremely pluralistic: there are over 700 distinct languages within a population of about three million, each with its associated distinctive culture. There is no single numerically dominant group amongst these. The system of government is a variant of the Westminster style parliamentary democracy, and in this respect is compatible with the pluralist theoretical perspective. The case study, particularly that section covering plan implementation, reflects much interest group activity. The case study deals with a type of planning, and the pluralist perspective has been shown to have considerable relevance to the study of some types of planning, particularly the urban and regional type. Furthermore, it is of great importance because of its dominant position in American political science, and will serve as a useful contrast to the Marxist and elite theoretical perspectives which will be discussed in Chapters 9 and 10.

Following Dahl and the American tradition, pluralism will be understood as 'civic discussion.....a loosely bounded process of conversation and controversy among political elites, activists and citizens' (Dahl 1981, 306), and will include interest group theory as a type of pluralist theory. The discussion of the case study will draw on the following key pluralist assumptions: that the basic unit of political life is the group (Truman 1971, 23); that the maintenance of the stability of society is achieved through fragmentation and wide diffusion of power between groups (including agencies of the state as groups)(Polsby 1963, 95; Kirk, in Blowers, Brook, Dunleavy & McDowell 1982, 135-6); that market conditions prevail in the competition between interest groups (Dahl 1961, 323; Polsby, 112 - 113); that human behaviour is governed in large part by inertia (Dahl 1961, 264; Polsby, 113 - 116; King 1986, 116); that democracy essentially rests upon '...a rich texture of interest-group politics...' (Held 1987, 194); and that an empirical methodology focusing on actual decisions and how they are made

optimise understanding of policy process (Dahl 1961). The case will now be examined in terms of the relevance of the pluralist perspective, in the light of each of the key pluralist assumptions, commencing with the existence and role of groups, principally interest groups.

Interest groups and their activities

In Chapters 3 - 5, which deal with the formulation of the Higher Education Plan, there are relatively few references to interest group activity. One group stands out, however: university students (see Ch. 4, pp. 71, 81). This group dominated the National Union of Students, probably because the tenure of university students was generally longer than that of any other group of tertiary students since university courses tended to encompass four to five years, as compared to the typical one year certificate and two year diploma courses of many other institutions. This longer tenure was favourable to the process of organisation, and to accumulation of political skills and resources. University students, as the cream of tertiary students, also tended to be higher achievers and more articulate.

Chapter 4 refers to a boycott of classes by university students in support of a forty percent increase in their book allowance, and to the fact that on a number of previous occasions in recent years university students had engaged in violent demonstrations over various issues, chiefly related to their living conditions (e.g. Commission of Enquiry 1978) (see Ch. 4, p. 71). (Student unrest in the past had been manifest particularly at the University of PNG in the National Capital, the larger of the two universities.) The boycott in question caused a major disruption to the work of the Commission for Higher Education in early 1985. A violent student-led demonstration is reported in case study Chapter 6 as having taken place in 1980 when an unsuccessful attempt had been made to close the National Arts School (see Ch. 6, 156). In 1988 university students were active again in regard to the denial of scholarships to non-school leaver applicants to the universities (see Ch. 6, p. 164).

In addition to evidence of student interest group activity, a major theme which recurred throughout the case study period and which was entwined inextricably with the development of the Higher Education Plan was the issue of student financing and the National Scholarship Scheme (see Ch. 5, p. 85, 86, 102). The issue of alternative methods of student financing came

to the fore during the formulation of the education strategy for the Medium Term Planning System in late 1984. The strategy recommended that 'all options for student financing, including Natschol¹, Natschol at reduced level, selective award of Natschol for particular programmes, bonding at reduced salary level, graduate tax and student loans' should be considered (Papua New Guinea, National Planning Office 1984 C, 155). This was bound up with the notion that the students had both a moral and a financial obligation to society.

Cabinet focused particular attention on the possibility of changes to the existing terms and conditions of the National Scholarship Scheme in its decision 161/85 directing the Commission to carry out a review. Its second directive 9/86 was explicit that the review was to aim at reducing costs. The Commission in early 1986 recommended the abolition of the pocket allowance component of the Natschol benefit, but the recommendation was never forwarded to Cabinet by the Minister.

It is clear therefore that university students, who dominated the national student organisation, had proved themselves both to be a force to be reckoned with, and were directly threatened at the time of the case. The Commission was apparently willing to tackle the students, but the Minister and Cabinet were not (see Ch. 5, p. 103). In considering the Commission's recommendation for the abolition of the Dentistry degree course (see Ch. 4) the Minister for Education was particularly concerned that efforts be made to try to ensure that an alternative could be found for the small number of current students that would be affected (see Ch. 5, p. 106). (Perhaps the university and its staff were also deferring to students when they drew up their criteria for selective cuts, embodying a policy of affecting the least number of students - as a consequence of which the Education Research Unit was selected for cutting)(see Ch. 6, p. 124). In the United Kingdom,

the National Union of Students cuts across many of our interest group classifications. It is not part of a management system as, in a limited sense, teachers are. It is both legitimised and, in the technical sense of the term, irresponsible. Its internal government is essentially ephemeral. The committee is temporary and responsible only to its members (Kogan 1975, 210-211).

¹ National Scholarship.

In Papua New Guinea the irresponsibility of the National Union of Students has not been confined to the technical sense in which Kogan used the term. University students had been militant in seeking improvements to their conditions, whilst enjoying a standard of living luxurious compared to that of most of their families. Nor indeed it is safe, following Kogan, to assert that in Papua New Guinea

there is no danger that the organisation or ethos will become the mirror image of those it confronts (Kogan, 211).

For many of the younger and more outspoken national politicians have gained their initial political experience as student leaders, and served on the teaching staff of the universities. It is perhaps particularly this irresponsibility, both structural and occasional, and the recent memory of it, which sticks in the minds of national politicians and accounts for the remarkable power of the student body over the government.

The deference to university students contrasts sharply with the treatment of nursing students, whose living allowances were reduced and brought in line with the Natschol scheme (see Ch. 6, p. 115). The Commission, the Department of Health, and the Cabinet had no compunction about taking this decision. The major difference was that the nurse trainees only represented a potential interest group. They were outside of the Natschol Scheme and of the National Union of Students. They were numerically much smaller - approximately 600 students in 1984 and widely dispersed geographically, compared to over 2,000 university students, of whom over 1,000 were concentrated in the National Capital. They may have been unaware of the impending change to their conditions, but in any case their dispersion and lack of organisation would have made it difficult to mount a pressure campaign.

In addition to student activity, during the formulation stage of the plan there was also some evidence, albeit fairly minor, of the political activity of university staff. We saw in case study Chapter 4, for example, that two of the main recommendations of a major policy document on university development - the outreach function of the University of PNG and its amalgamation with PNG University of Technology - had been frustrated by internal university politics and the power of their interest groups (see Ch. 4,

78). There had been no confrontation on the issues - the document had simply been ignored to a large extent. The universities presumably did not feel threatened.

Both within the formulation phase and the implementation phase we find reference to a number of external agencies which, though not manifesting their interests actively, can certainly be claimed to have vested interests. These were the Asian Development Bank, which had provided loan funding for the expansion of the technical college system (see Ch. 4, p. 74, Ch. 5, p. 98, Ch. 6, pp. 139, 146), and the World Bank which had provided funding for a series of large education projects (see Ch. 3, p. 55, Ch. 4, pp. 71 - 74, 76 Ch. 6, pp. 143, 159). The government was legally committed to loan repayments at this time. The New Zealand Government had a current financial commitment to the Timber Industries Training College (see Ch. 6, p. 149), and the Japanese Government had committed funds for the development of a Forestry Research Institute which in turn depended on the Timber Industries Training College in certain respects (see Ch. 6, p. 150). Whilst not behaving as mobilised interest groups at this particular time, undoubtedly legal and moral commitments to these external agencies constituted pressure of a kind upon the PNG government and some of its agencies.

Two other kinds of interests can be discerned in the formulation phase: potential interest groups, and individual interests. We have already noted that the nurse trainees represented one of the former. However we may also deduce that the primary school age population and, by extension their parents and families (i.e. the general population), had a potential interest in the Higher Education Plan. Within the formal policy process, this potential interest was articulated chiefly by representatives of the Departments of National Planning and Development and of Education, in the formulation of the Education Sector Strategy of the Medium Term Planning System. It will be recalled that the thrust of that strategy was to make savings in higher education and redirect these towards the achievement of universal primary education (see Ch. 3, p. 55). Both these Departments had been influenced by the rate of return argument in education which had been promulgated by the World Bank. (This was contrary to the manpower planning emphasis which had hitherto been adopted by the PNG Government.) Thus we can see that these two Departments acted in this context as representatives of

the interests of the general population. This role was, however, only a part of the total role of each of the departments concerned. A key policy issue is reflected here: the shifting of resources from higher education to primary education, i.e. from the few to the many.

Individual interests are hard to decipher reliably, and in any case do not qualify within the pluralist perspective, since they do not by themselves constitute a group. Nevertheless the case evidence does suggest that the Prime Minister, for example, did take an active interest in the Higher Education Plan and did exert individual pressure (see Ch 5, pp. 106, 108). Individual members of the Prime Minister's personal and departmental staff apparently tried to circumvent the incumbent Education Minister and deal directly with the Commission and its Planning Division. The Prime Minister's letter of 28 August 1986, for instance, fully endorsing the plan is inconsistent with the Cabinet's deferral of the plan, and suggests that it was he personally who was attempting to expedite its formulation and conduct into the political arena for resolution (see Ch. 5, p. 110). Conversely, it appears that the lack of interest and lack of pressure exerted by the Education Minister was a significant factor in the delay in the plan's approval and the opportunity this created for counter-interest groups to mobilise and frustrate the plan (see Ch. 5, p. 108).

The implementation phase of the plan (Ch. 6) shows a markedly different picture of interest group activity. Here for the first time (with the exception of the University of PNG which has already been mentioned) a whole range of tertiary education institutions took on the role of interest groups. These include institutions as a whole, such as the Administrative College of PNG, the Legal Training Institute, the PNG Forestry College, the Sepik Agricultural College, two nursing schools, two technical colleges, the PNG University of Technology, the National Fisheries College, the Port Moresby Inservice (Teachers') College, the Timber Industry Training College, the National Arts School and the PNG Maritime College. They also include several Departments within tertiary institutions, such as the Fisheries and Dentistry Departments, and the Education Research Unit of the University of PNG.

Planned amalgamations or closures involving at least ten of these institutions would have dispossessed staff (and a range of other unknown persons including some bureaucrats), as well as some staff of each of the

universities, of their housing. It is plausible to explain at least some of the resistance to such changes in terms of the activity of interests associated with institutional housing, and this explanation is consistent with the pluralist theoretical perspective.

It is important to note that the institutional groups were, of course, organisations which pre-existed the Higher Education Plan (and indeed the Commission itself). Their activation as *interest* groups was a response to the perceived threat of the activities of the Commission and particularly of the Higher Education Plan. This gives the lie to the pluralist assertion that organisations have no 'structural' reality, but are temporary coalitions of diverse groups and individuals held together by a fragile consensus and a set of beliefs that successfully cause them to act as a coalition (Alford in Lindberg *et al.*, 155). Clearly these organisations possessed a structural reality related to other purposes, primarily the teaching of students (and in the case of the universities, to research also). Their mobilisation as interest groups was a secondary role, activated only by external threat. The significant point that this demonstrates is that the pluralist perspective has some relevance, but is quite inadequate **on its own** to explain the dual (or possibly multiple) roles of organisations such as these. In other words, any adequate theory must allow for organisations to have both a structural reality and to be capable of assuming the roles of active interest groups.

This evidence is also problematic for the pluralist conceptualisation of the state as comprising a mosaic of agencies and organisations, each of which is an institutionalised response to the historic sequence of demands and responses by elites to those demands (Alford in Lindberg *et al.*, 146). Whilst this may have been true for Western industrialised democracies, it has little relevance to a post-colonial Third World state such as Papua New Guinea. For in this case the big bureaucracies which form the administrative arms of government, and the universities as statutory authorities, were all created and installed by the Australian colonial government prior to independence. The bureaucracies were created to enable the administration of the territory.

Whilst the universities, on the other hand, were created in response to a number of pressures (Howie-Willis 1980, 31 - 42), external pressures played a significant role. These produced a major shift in Australian policy, for in 1959 the Education Department had formally inaugurated a scheme for

universal primary education, whereas by 1963 the administration was committed to producing an educated elite. One of the most important external pressures can be traced to forty-three African and Asian countries which sponsored United Nations Resolution 1514 of 1960 calling for independence for colonised countries. A United Nations Visiting Mission in 1962 called for the creation of a university in order to provide qualified personnel for an independent nation (Smith 1987, 215 - 224). The Commission on Higher Education in Papua New Guinea, chaired by Sir George Currie and appointed in 1962 following the United Nations Visiting Mission, recommended in its 1964 report that a university should be 'firmly established before there is any very considerable transfer of political responsibility' (Currie 1964, 8). This was to allow for two main things: the implantation of university organisation in an indigenous population which would at first be incapable of grasping fully 'the rationale of a university and its role in society'; and to guard against the university 'becoming an issue of partisan politics'. It needed to be allowed to build up before independence a 'tradition of autonomy, academic freedom, and useful service to the community at large', and could be 'one of the most powerful factors of unity imaginable' (Currie, 8). In mid 1964 Papua New Guinea was visited by Tom Mboya, Kenya's Minister for Economic Planning and Development. He urged that a university be set up immediately because there can be 'no proper growth of a people's personality under colonialism.' 'Australians who wanted their country to shed its colonialist reputation took up the issue' (Griffin 1988, 18), among them John R. Kerr (who later became Governor General). By February 1965 the Australian Cabinet approved the establishment of the University of PNG and the Institute of Higher Technical Education (which became the PNG University of Technology in 1973) (Griffin, 18). Thus if, following Alford's argument, the creation of the universities in PNG was an institutionalised response to the historic sequence of demands, these demands would need to be understood as the collective demands of the Australian elite which prepared PNG for statehood, the indigenous elites, and the elites of various Third World countries.

Within our case study, the case of the University of PNG is particularly informative and worth studying in detail. Unlike the PNG University of Technology which maintained its unity and succeeded in warding off the external threat without losing any of its constituent parts (see Ch. 6, p. 124), the University of PNG (albeit most reluctantly) took upon itself the role of

threat by embarking on selective cuts (see Ch. 6, pp. 113, 124). In doing so it converted its own Departments and units into potential interest groups, and mobilised as actual interest groups those which it singled out for cutting: Fisheries, Dentistry and Education Research Unit (see Ch. 6, p. 128). These then engaged in intense pressure group activity, to greater and lesser effect. Each attempted to engage external political resources to counteract the University as aggressor. Fisheries had the strategic advantage of the economic sector argument, and went straight to the relevant national Minister (see Ch. 6, p. 128). Dentistry's best hope was the Commission, which was itself politically weak (see Ch. 6, p. 132). The Education Research Unit launched an ambitious political campaign and is a particularly informative case. Having the advantage of national and provincial government clients, it mobilised a number of national and provincial politicians and departmental heads. It mobilised the Commission (for what it was worth), and it mobilised two research institutions. In this regard the Education Research Unit's and the Commission's political skills were poor, for they did not seek to win over these research institutions (see Ch. 6, p. 135). The result was that they in turn perceived themselves to be threatened and were mobilised as counter-interest groups. They then mobilised the support of the national ministers and departmental heads under whose responsibility they came - an extremely powerful group. One of these was the Prime Minister himself, such that he ended up supporting an amalgamation that logically ran counter to his own higher education policy (see Ch. 6, p. 137).

Another example of the dual (or multiple) role of organisations can be found in the case study. The first Cabinet submission was deferential to the church organisations which operated the majority of the nursing schools. It confined its recommendations to government schools. Consequently the churches appear, by implication, simply as potential interest groups. In the second submission the Commission was bolder: it ventured into the preserve of the churches in recommending the closure of the Dogura campus of the Nursing School in Milne Bay. Instantly a powerful interest group consisting of at least three church agencies was mobilised. Furthermore political leaders in at least two provinces were activated (see Ch. 6, p. 153).

So far we have considered mainly organisations which added to their role that of interest groups in relation to a perceived threat. But the case also provides some evidence of groups being constituted as interest groups *ab*

initio (see Ch. 6, pp. 147, 160). One such instance appears in connection with the Sepik Agricultural College. It is an interesting case since a very diverse cluster of interests surrounded the college. The Asian Development Bank was one of the first to have a formal interest in the college, since it was the funding agency for the East Sepik Rural Development Project. The Provincial Authorities had an interest in it, as did the Department of National Planning and Development, and the Department of Finance. The Department of Agriculture and Livestock had an interest since the College became one of its training arms when the College's funding was taken over at the Project's end. The College became surplus to requirements and the Department wished to dispose of it. The staff and students of the College were mobilised by the threat of its closure, and in turn mobilised support from the provincial public and authorities. By this means they prevailed on the national Minister for Agriculture and Livestock to overrule his Department and preserve the College. But the interest group to which we referred originally was not this cluster. It was instead the traditional tribal landowners from whom the college's site had been acquired originally as part of the East Sepik Rural Development Project. These landowners, for whatever reason, had been vandalising the College property. It is not clear whether they wished to reacquire the land, which had now been improved by various capital assets, or whether they were primarily seeking compensation for loss of the land. In any event their activity contributed to the wish of the Department of Agriculture and Livestock to close the College, which was frustrated by the successful pressure group activity described above.

The description (see Ch. 6, p. 143 - 145) of the Department of Education's response to the budget cuts of 1987 reflects the influence of a large, well organised and extremely powerful interest group. This group do not appear in the case study actively pursuing their interests, but rather their power is taken as given. This group is the public sector employees, represented by their union the Public Service Association, and they were by far the largest single labour organisation in the country. Their salaries and conditions had been determined and protected by indexation to the inflation rate in years gone by. Their battles had been fought in the past and their successes had been institutionalised. They encompassed citizen staff of the whole of the public sector. It was taken for granted by a top Education Department official, for example, that it was impossible to get rid of citizen staff. (Non-citizen staff in the public sector were represented by their own association, but from 1979

when the government instituted a new salary package this association lost most of its power. All such staff were on contracts which could be terminated in the undefined 'interests of Papua New Guinea'.)

University teaching staff were not eligible for membership of this union. The universities were the employers of their own staff, who had formed a corresponding set of academic and non-academic staff associations, citizen and non-citizen separately. Of these, only the national academic staff showed any real militancy, taking strike action in early 1988 in support of the so-called 'single line salary scale' (see Ch. 6, p. 163). By this stage national academic staff still represented only a minority of university academic staff and the government maintained tight control over the public sector salary structure to which their salary scales were directly linked. Their power was very much less than that of the national public servants as a labour group. However they did, thus, constitute an interest group for our purposes, albeit a fairly insignificant one when acting on their own.

To summarise thus far, we may see that prior to the Commission and the Higher Education Plan, two very large, very powerful interest groups - public servants and university students - had already organised themselves and assumed a dominating role in relation to government. The power of the students was enhanced when joined by the national academic staff, especially when both universities were involved simultaneously. Staff within the University of Papua New Guinea had manifested political activity, but this had been confined to the internal university process. With the threat posed by the Commission and the Higher Education Plan, a huge array of tertiary institutions and units within those institutions were activated as interest groups. To a large extent they were very successful in mustering political resources and countering that threat. More or less the whole of the higher education system (consisting of about sixty publicly funded institutions) was thus politicised at a stroke.

But we may look further than this. The Commission itself - having no direct responsibility for management of any of the tertiary institutions - can be conceptualised as an interest group, reliant upon whatever political resources it could accumulate. The only mode of operation open to it was to exert whatever pressure or influence it could. This pressure was very limited for it could not rely on Cabinet or its own Minister to support its efforts.

As it was dealing exclusively with reducing spending, it had no scope for wielding influence through financial inducement. It had very little experience and very little credibility, which must have given heart to those institutions which decided to ignore its attempts at intervention.

But even for an experienced, powerful organisation such as the Department of Education, there were two major factors at work which imposed severe limits on its activity. The introduction of Provincial Government in 1979 and the formal decentralisation of some of its former powers in 1983 had the effect on this organisation of diminishing its role as an administrative monolith, and adding to that a role as a political pressure group in relation to promulgating national policy at provincial level. In the early 1980s in this regard it purveyed national policy by two main means: on the one hand, provinces were offered financial inducement with conditions attached, the source of funding being from a World Bank loan; on the other, reliance was placed on education and persuasion through the medium of provincial and regional workshops, and field visits (see Ch.6, p. 143). When resources declined from 1986 there were no financial inducements to which conditions could be attached, and shortage of funds for travel curtailed the opportunity to educate and persuade through face-to-face contact. Thus, as for the Commission, lack of management control combined with resource reduction contributed significantly to immobilising this organisation in the national policy process.

The experience of the national Department of Education in handling internally the budget cuts of 1987, when contrasted with the University of PNG's difficulty in carrying out a similar activity, is illuminating. Left to its own devices (without the interference of the Finance Department) the Department of Education was able to make its cuts in a way it considered rational, and to the least detriment of its overall functioning (see Ch. 6, 144). Whilst there may have been some internal bureaucratic struggle of which there is no evidence in the case description, it does not appear that individual units within the Department of Education took on the role of active interest groups and mustered political resources externally to defeat the Department's policy. The obvious contrast with the University of PNG's experience suggests that universities as organisations are inherently highly political, especially when presented with resource threat, and inherently very different in some respects from bureaucratic organisations.

Having suddenly been cast in political roles, it appears that with the passage of time, and the experience acquired therein, the political and communication skills both of the tertiary institutions and the Commission improved. Rather than simply reacting to threat, they gradually found ways to work together to mutual advantage and achieved some convergence of interests (see Ch. 6, p. 164). The Commission in particular sought to accumulate political resources both through the acquisition of formal powers from Cabinet, but also in more subtle, political ways. The Commission's second National Higher Education Plan (published in 1990) reflects a further development, containing at least two significant new features: to enlist the private sector (currently a potential interest group) as an active interest group in technical education, with a view to reducing the power of the Department of Education over this sector of tertiary education (see Ch. 6, p. 145); and to create several new organisational structures (e.g. Institute for Teacher Education and Institute for Primary Industry Education and Training) which would act as interest groups counter-balancing the power of the Departments of Education, of Agriculture and Livestock, of Forests, and of Fisheries and Marine Resources respectively. The Commission's focus has thus been shifted from the universities to the powerful bureaucracies, with a view to reducing their power. This may enable the Cabinet and Commission to achieve greater coherence, as it may also be in Cabinet's interest to reduce the power of some of its bureaucratic arms. Whether there will be any inducement or threat sufficient to mobilise these organisations as interest groups remains to be seen.

Finally the case presents an instance which appears to lend strength to the notion of non-decision making elaborated by Bachrach and Baratz. It arose in relation, once again, to the threatened closure of the Sepik Agricultural College, to which we have referred above. The closure of this college would have been opposed by an outspoken bloc of national politicians from the Morobe, Madang and Sepik regions (see Ch. 6, p. 147). At least two of these had been radical student leaders, and subsequently achieved significance in provincial and national politics. The suggestion that this potential opposition to the closure may have played a significant role in saving the college is quite plausible. It also raises the question of the nexus between student leaders, national academic staff, and provincial and national political

leaders. This point will be taken up under the section devoted to a discussion of the relevance of elite theory.

To conclude our review of interest groups, we have seen that a large number of such groups were involved in the case, and a much smaller number of potential interest groups. The vast majority of these groups were clusters of staff of tertiary education institutions, striving to maintain their share of a declining supply of higher education financial resources. Students were competing for resources separately. There were several institutions which had a vested interest in segments of the tertiary education system. These were not active as pressure groups but were understood to wield substantial influence. There were also suggestions that several individuals wielded significant influence on the policy process in their own right, rather than as members of any group. On the general issue of competing for education resources, the bulk of the potential interest group was not organised and not represented other than by proxy. Although there were a few instances in which fairly small groups of the general public were activated, generally the vast majority of the population (which as we have seen had a potential interest in the reduction of higher education resources) was conspicuous by its absence (see Ch. 3, p. 55). On the general issue of competing for government resources, the public servants were in a commanding position.

The groups meet Goertzel's definition of making claims on other groups (1976, 31), in as much as they were all competing for a share of a diminishing pool of resources. However most of them do not meet King's definition (1986, 115) as articulating the claims and needs of society and transmitting them into the political process, since despite their rhetoric they were articulating primarily their own claims and needs, rather than those of society. It is not clear to what extent, if at all, these claims were actually transmitted into the political process, except in a very general sense (i.e. they were not transmitted in the formal, electoral, democratic sense). The role of government in this case bears little resemblance to that of a referee, and more that of an interest group whose claims are balanced by other competitors.

We also found that a number of the bureaucratic arms of government were activated as interest groups. According to pluralist theory, all such bureaucratic arms would have a potential interest in the redistribution of

public resources and would have an equal opportunity to compete for them. The inactivity of some but not others might be attributed to apathy, but as we have seen, it can be argued that the effect of entrenched public service labour interests and commitments to overseas lending agencies, combined with a reduction in resource availability, itself had an immobilising effect on some (and probably many) of these bureaucracies. Given the relationship between public employees as an interest group and government agencies as interest groups, neither of Playford's two slightly different roles for government seem to fit: the view of government's power as being balanced by the claims of interest groups, or of government acting as referee between competing claims of interest groups (Playford 1971 quoted in Kirk, in Blowers *et al.*, 135; King, 116). The evidence of interest group activity by and between various bureaucratic arms of government fits much more comfortably with a perspective of the state itself as an interest, within which a range of separate interest groups and individual interests may reside (Evans, Rueschemeyer & Skocpol (eds.) 1985).

The market assumption

There is no evidence in the case of the prevalence of market conditions. Groups did not, by and large, spring up freely, but were groups previously constituted for other purposes which became activated in particular conditions. There is no evidence that the greatest good for the greatest number resulted from this interest group activity (Goertzel, 33). The focus of the interest group activity was to frustrate change and preserve the *status quo*. This suggests an inherent rigidity in the distribution of higher education resources, quite the opposite of the free play of market forces. The picture is essentially static rather than dynamic.

The political process is ostensibly democratic, and access to decision-makers is fairly easy, particularly for those interests located in the National Capital. Whether the political process is 'open' in the sense meant by Kirk is open to doubt (Kirk, in Blowers *et al.*, 135-6). The decision-making process is by no means transparent, and the decisions that result often seem to have more to do with personal patronage than rationality or some conception of the common good. In this situation it is not safe to assume that individuals have equal status and equal opportunities for organizing themselves to press their particular interests. Take, for example, the cases of Dentistry,

Fisheries and the Education Research Unit at the University of PNG. Two of these were able to access government ministers directly, but Dentistry had no such connections. Compared to other sectors of the general community, tertiary education institutions as a group appear to have many political advantages: articulateness, intellectual resources, high social status, group coherence and the ability to mobilise relatively large numbers of individual supporters, to name but some.

Maintenance of social stability and the non-cumulative nature of power distribution

If maintaining the *status quo* equates with maintaining the stability of society as a whole, the case in this respect is compatible with the pluralist perspective. But if the latter were really to pertain, we should expect to see relatively free shifts in the balance of power within that stable picture. There is no evidence of any such variable shifts in this higher education case. Within the issue-area of redistributing resources within higher education, there was essentially no change, despite recommendations by the Commission for at least seven quite radical shifts. Within the issue-area of redistributing resources from higher education to primary education, there was barely any perceptible change. The existing pattern of decision-making reproduced itself quite consistently across most issue-areas within the higher education policy arena, a finding which does not lend strength to a pluralist explanation. This suggests that power was distributed both within higher education and between higher education and other sectors of the public policy arena in a fairly fixed and cumulative manner, contrary to Polsby's expectation (Polsby, 113-116; Cawson 1985, 4). It does not conform with the assumption that power is fragmented and widely diffused such that no one group can dominate any particular segment of society (Kirk, in Blowers *et al.*, 135).

The assumption of inertia

Examining the part played by inertia in our case, one must ask what were all these institutional interest groups doing before they became activated in their own defense? Clearly they were carrying out, more or less actively, their primary roles of teaching students (and in some cases researching). There is no reason to suppose that they were carrying out those roles apathetically, but there is good reason to imagine that those roles might suffer as they

turned their attention to the matter of self-defence. Furthermore it seems unlikely that the failure of the general population to mobilise itself as an interest group can be attributed to apathy and indifference. It seems much more likely that it can be accounted for in terms of its lack of organisation and inability to communicate coherently. This is inconsistent with Polsby's assumption that overt activity is a valid indication of involvement in issues (Polsby, 116). Doubtless for many of these people mere subsistence required all of their attention. Whilst a fairly high level of inactivity (as interest groups) may be necessary for the system to remain stable (King, 116), the concepts of apathy and inertia seem inappropriate since they imply that people are not doing anything and care for nothing when they are not actively engaged in interest group behaviour. It is not recognised that in a Third World country attending to daily survival needs often assumes a higher priority.

The pluralism/democracy nexus

Elaborating the relationship between pluralism and democracy, Dahl has argued that the achievement of the 'common good' rests essentially upon two elements: adequate and equal opportunity for each citizen to discover and validate the choice that would best serve the citizen's interests; and interpretation of a person's interest as whatever that person would choose with the fullest attainable understanding of the experience resulting from that choice and its most relevant alternatives (Dahl 1989, 307). These two elements enable us to perceive readily why pluralism cannot assure democracy in a Third World country such as PNG. For most of the members of a largely illiterate population living in isolated rural areas with limited scope for communication, the opportunity for each citizen to discover, and validate the choices that would best serve their interests '...within the time permitted by the need for a decision...' (Dahl 1989, 307), as well as communicate those choices, is an impossibility.

Clearly the American pluralist tradition developed in a large scale, highly educated, industrialised country, and was conditioned by that environment, leading to a certain ethnocentricity (Goertzel, 29 - 30). However the question of size and democracy has been explicitly addressed by Dahl and Tufte (1973), arguing that at the levels of both city-state and nation-state, the ideal policy must satisfy both the criteria of citizen effectiveness and of system

capacity (Dahl & Tufte, 20). PNG qualifies through its definition as a nation-state, but our case suggests that neither criterion can be satisfied, because of the general low level of education and development. It further suggests that size needs to be interpreted as scale, relative to the level of development of an '...underlying consensus on policy...' (Dahl 1956, 132), such consensus relying in turn upon a certain general level of education and development. And although Dahl and Tufte (91) have argued that conflict and competition increase with increase of size, it can as well be argued that conflict and competition increase with increasing resource scarcity (King, 117). This implies that although small as a nation-state, a country like PNG may have increasing difficulty in achieving that underlying consensus for democratic policy-making when it is faced with declining resource availability, a situation exacerbated by population growth. In PNG, and no doubt elsewhere in the Third World, '...many groups do not have the resources to compete in the national political arena...' and many '...do not have the minimum resources for political mobilization' (Held, 201).

Pluralist methodology

If our case study had been approached using a typically pluralist methodology, in which a number of 'key' as opposed to 'routine' political decisions were selected for study, only the people who took an active part in the decision-making process would have been identified, and their actual behaviour while the policy conflict was being resolved would have been scrutinised. The analysis would have rested on the specific outcome of the conflict and would have ignored all those issues which were excluded from the agenda by other factors (Bachrach and Baratz 1970). Our case suggests that the methodology, which rests on the assumptions discussed above, would fail to take account of many factors which impinge indirectly on policy process but which are not manifest overtly.

If the lack of success in the implementation of the Higher Education Plan 1986 - 1990 is to be explained according to the pluralist perspective, as the outcome of the exercise of power by higher education institutions (as well as by some units within institutions) acting as interest groups, their activity was directed chiefly at maintaining the *status quo*, and was very successful in achieving that objective. A general weakness of pluralism is reflected here in that the basis of their power is not explained (Alford, in Lindberg *et al.*,

151), and it must be assumed to be associated with their salient characteristics: large organisations (or units within large organisations) capable of mobilising large numbers of personnel (both staff and students), having large resource bases upon which to draw, and an atypical degree of unity and coherence as interest groups derived from living together in a close-knit community. It is also assumed to be associated with their knowledge, their tactical and communication skills, and their powers of persuasion as political agents. It was enhanced by personal connections with powerful individuals.

Conclusions on the pluralist perspective

As we have seen, interest group behaviour where a free market does not exist and where participants do not enjoy equality of opportunity, serves to perpetuate and entrench existing inequalities, if not exacerbate them. The assumptions of the free market and equality of opportunity are therefore key assumptions upon which pluralism depends. They in turn depend upon underlying assumptions about the educational level and homogeneity of society, a framework of cultural consensus (Alford in Lindberg *et al.*, 153) and about the media through which interest groups are able to communicate. Where these conditions are demonstrably absent pluralism's explanatory power of the policy process is necessarily very limited. PNG, in common with many less developed countries, presents conditions in which markets are highly imperfect. These 'markets', whether they be economic or political, exclude the vast majority of the population. Communities typically live in rural areas, engage in subsistence agriculture, do not participate in the formal economy, have limited education and literacy (if any), have limited transport and communications, and a conspicuous absence of cultural consensus. It must be concluded that the capacity of pluralism to explain our case, and no doubt many other Third World cases, is very limited.

If democracy essentially relies, following pluralist theory, on a balance of organised interest groups and their participation in the political process, it also follows that democracy may have very little relevance in a nation such as PNG in which many, if not most, potential interests have not been organised and remain incapable of organising themselves to defend or pursue their interests. Given that democratic political institutions have been developed in cultures which assume widespread participation in the policy

process by a very large number of organised interests, the installation of democratic political institutions in national contexts which do not possess those pluralistic characteristics may be inappropriate, and may serve to perpetuate, entrench and possibly exacerbate the inequalities which existed at the time of acquiring statehood.

Despite its obvious limitations, the pluralist perspective is useful in focusing attention upon the capacity of existing organisations to take on the role pressure groups and act very effectively in their own interests. It suggests that organisations have considerable inherent power in their shared values and their ability to mobilise political resources in support of those values. The mere existence of active interest groups, therefore, is not necessarily indicative of a pluralist interpretation. It can equally well form the basis of a stratificationist interpretation, as we shall see in the next chapter. But the understanding of the impact of interest group behaviour, derived from a pluralist perspective, is indeed essential for the study of policy process.

CHAPTER 9

THE RELEVANCE OF THE MARXIST AND DEPENDENCY THEORETICAL PERSPECTIVES

The Marxist perspective

Marxist, and particularly Marxist inspired dependency theoretical perspectives relating to the post-colonial era, promise relevance for our case study because of their capacity to explain global economic phenomena and the relationship of 'third world' economies (such as that of PNG) to the world economy (see Ch. 7). Marxist assumptions about the implications of capitalism are consistent with the conditions of economic scarcity suffered by PNG. As 'third world' countries such as PNG are defined as a group in terms of their level of economic development, it makes sense 'to analyze their politics in terms of conflicts between social classes' (Goertzel, 104). Insofar as the case is concerned with a capitalist state's attempt to redistribute economic resources through a central planning process, we may expect the Marxist perspective to be relevant. Marxist explanation in dynamic rather than static terms has inherent appeal for the study of planning as process, since it accommodates the potential for change over time. Planning process as purposive action of the state in attempting to induce change is consistent with the historic materialist and dialectic aspects of the Marxist perspective (McGinn, Scheifelbein & Warwick 1979, 237). Marxist theory, as stratification theory, also promises relevance for, as we have seen in the preceding chapter on the pluralist perspective, higher education in PNG manifests distinctly stratified characteristics.

The Marxist perspective also deserves consideration because of its dominant position in social theory in the twentieth century (Appelbaum 1988, 9). Karl Marx has been judged to be 'one of the most influential figures in human history' (Hook 1955, 11), and Marxism has become 'an organic part of modern culture' (Zdravomyslov 1986, 2), with many of its conceptions having 'been absorbed into the general intellectual stock of the social sciences' (Bottomore 1979, 4). His basic paradigm remains extremely fruitful for modern social science (Goertzel, 18) and it was partly in response to Marxist theory that pluralist theory was developed (Goertzel, 8).

The dependency theoretical perspective

As our case study is set in the context of a less developed country, any discussion of the relevance of the Marxist perspective would be incomplete without a discussion of the relevance of a group of twentieth century theorists who drew heavily on Marxist concepts. These are the dependency or underdevelopment theorists, represented most notably by the work of A.G. Frank and Samir Amin. Dependency theory is a close relative of imperialism theory, associated with Hobson, Hilferding, Rosa Luxemburg, Bukharin and Lenin in the early part of this century. These theorists' concern was chiefly with the motives underlying imperialist behaviour, whether capitalism needed imperialism for its continued existence, and 'with the consequences of the expansion or disappearance of imperialism...' (Reitsma & Kleinpenning 1985, 239-240).

In the wake of the decolonisation process following the second world war, and subsequent disillusionment with the linear model of economic growth for less developed countries presupposed by Modernisation theory, a radically different explanation of geo-political economic disparities was developed, particularly by Latin American theorists ('dependencistas').

The particular features of Marx's theory of society which will be related to our case study are: its conception of labour and the system of economic production as generating the forms of society, the division of labour and its alienation from the means of production, the formation of classes, the state as the instrument of the ruling class, and the development of political movements and ideologies. The general relevance of the dialectic and Marxism as a theory of social change are also important. The essential features of dependency theory (as a variant of Marxist theory) are that two groups of capitalist countries (dominant and dominated) form a single world-wide capitalist system in which the former occupy a central position and the latter a peripheral or dependent position (Amin 1973, quoted in Reitsma & Kleinpenning, 247). The dependent countries are exploited by the dominant countries, and development in one place is causally related to underdevelopment in another place (Reitsma & Kleinpenning, 247). By contrast with Marx's essentially positive view of capitalism (Reitsma & Kleinpenning, 216), dependency theorists envisaged colonialism and neo-colonialism through the international capitalist system as a pernicious

process, by means of which peripheral countries were being systematically and inexorably robbed.

A serious problem with discussing the Marxist theoretical perspective derives from the imprecision with which Marx formulated his ideas (Hook, 12, 35). Diverse formulations of Marxist theory, and indeed differing schools of thought have resulted from this ambiguity. With the passage of time 'the number of Marxisms tended to increase' (Simmie 1981, 66). Korsch and Lukacs, for example, were committed to active political involvement and revolution, by contrast with the Frankfurt School which preferred intellectual and philosophical detachment (Bottomore 1981, 3-5.) The lack of empiricism of the humanistically oriented 'critical theory' which developed from this School was at odds with the scientific version of Marxism which evolved Marxist structural theory and so-called 'economic reductionism' through the postwar French school led by Althusser. Consistent with the approach which emerged among social scientists in the 1980s out of the polarization in the 1970s of critical philosophy and Marxist structuralism (Appelbaum, 13-14), an eclectic approach will be adopted in the following critique. The extent to which it may be judged to do justice to Marx will depend upon one's commitment on the one hand to the generalities, or on the other to the specifics of Marxism as a theoretical perspective.

Relevance of historic materialism and the dialectic

Planning as the substantive matter of this thesis has a natural affinity with the Marxist perspective. If we conceive of planning in the most general sense as a policy process reflecting the human attempt to control the environment which constrains human activity, the planning process emerges as an admirable empirical context in which to examine Marx's historic materialism and the dialectic (McGinn, Scheifelbein & Warwick, 237). It is this general approach and his fundamental concepts which have withstood the passage of time more than the truth of his empirical propositions (Bottomore 1979, 40). Furthermore, the dialectical-materialist method has permitted the evolution of Marxist theory and its application to a whole series of new problems (Zdravomyslov, 11-12).

The dynamic explanation that Marx achieved by linking theory and practice as a dialectic process (Appelbaum, 40-45) are particularly appropriate to the study of planning process, for it can be seen as a process in which theory

(whether explicit or implicit) is put to the test in trying to overcome 'problems' in the real material world. According to Marx, the

...resolution of theoretical contradictions is possible only through practical means, only through the practical energy of man. Their resolution is by no means, therefore, the task only of the understanding, but is a real task of life,... (Bottomore & Rubel (eds.) 1963, 87).

In Chapter 7 we have, for example, observed planning as essentially a learning process: Plan C emerged from conflict between Plan A and Plan B, drew on both, and achieved a greater degree of success. We may relate this to Marx's philosophy of historic materialism, particularly the notion that mankind progresses through conflict. Planning, in our case, was found to be an inherently conflictual process: conflict both within and between institutions, between institutions and the planning body, between the planning body and other branches of the state institutional ensemble and so on. The theme of conflict lying at the core of Marxism is thus thoroughly consistent with our case. We have observed that, in the planning process, an iteration takes place between the subjective and objective dimensions, between the abstract and the concrete, the covert and overt (see Ch. 7). We may understand this as a dialectic process.

The interdisciplinary nature of our phenomenon, public policy, and our holistic approach (the case study), require a theoretical perspective transcending conventional disciplinary boundaries. Marxism has particular strength with its 'synthesis of ideas from philosophy, history, and the embryonic social sciences into an integrated social theory', which 'was one of the great intellectual achievements of the nineteenth century' (Bottomore 1979, 1). This explanatory power may be illustrated in relation to social stratification. Marxism explains the character of stratification in particular (economic) terms, whereas elite theory (which tends to be descriptive and classificatory) runs the risk of 'leaving unquestioned the causes of stratification' (Allen in Hunt 1977, 62-63).

Relevance of Marx's perceptions of capitalism

Marx's empirical propositions concerning human progress through the historic sequence of exploitation through slavery and feudalism to capitalism do not universally hold (Hook, 36) and do not appear to be supported by the

PNG case. Similarly, the experience of some countries, especially those that are undergoing rapid modernisation (such as PNG), has undermined Marx's claims that 'no social order ever perishes before all the productive forces for which there is room in it have developed, and that new higher relations of production never appear before the material conditions of their existence ... have matured in the womb of the old society' (Marx, quoted in Hook, 25).

Marx could not have foreseen the enormous 'growth in the economic productivity of the developed capitalist countries' and the evolution of monopolistic corporations which have emerged since Marx's time (the impact of which has certainly been felt in PNG) (Goertzel, 16). Another general criticism has relevance in the PNG context: that Marxism has over-emphasized the economic determination of political form, obscuring the possibility that 'the degree of democracy present or absent in any particular country may be explained by other than factors attributable to its mode of production', including factors such as characteristics of the decolonisation process (Hook, 36, 38). If, as Giddens has suggested, 'capitalism is not the high-point of an evolutionary scheme but a specific feature of the development of the European societies - and only one axis of their institutional organization at that...', Marx's thesis of the transition from capitalism to a global socialist order collapses (Giddens 1985, 336).

Dependency theorists are not constrained by these empirical propositions which have proven problematic with the passage of time. Lacking Marx's optimism, the failure in the emergence of global socialism preceded by proletarian revolution is to be expected. Both Marxist and dependency theories share the weakness, however that they cannot explain the existence of non-capitalist imperialism, nor indeed the underdevelopment to be found in some regions of the world, such as Ethiopia and Afghanistan, which have had very little contact with the capitalist world (Reitsma & Kleinpenning, 256; Ray 1973, 10, quoted in Reitsma and Kleinpenning, 260).

Capitalist relations of production, and the role of accumulation, which underpin both Marxist and Dependency theories, have much relevance to our case and will form the basis of a separate discussion below under the heading 'A Marxist interpretation of higher education policy process in PNG.'

The relevance of Marx's concept of class

Class, and the class struggle as the central dynamic of capitalism, has come to be regarded as the hallmark of Marxist theory, 'the symbol of his whole doctrine' (Ossowski in Bottomore 1979, 79). Marx himself never defined this key concept, consequently there is no agreement about the meaning of 'class', which has become 'one of the most confused and confusing of major sociological terms' (Allen in Hunt, 61). A painstaking examination of Marx's own writing has reflected both dichotomic and trichotomic conceptions of class divisions (Ossowski, in Bottomore 1979, 79-91). Marx's central concern, however, was not so much the characteristics of classes but the opposition between them. He was less concerned with the way in which individuals or agents were distributed to classes by their relationship to the productive process, than with the conflict generated by that division (Hunt, 9). However within Marx's own writings a shift in his conceptualisation can be discerned. In the earlier works a 'direct relationship is posited between contending economic classes in which the political class struggle is the reflex or result of their polar opposition,' while his later works posit 'contending political *forces*' (and not classes as such) as engaging in struggle (Hunt, 9-10). It is hardly surprising therefore that much of the debate within neo-Marxism has been about the meaning of this concept, and that a substantial literature has developed around this concept alone.

Predictably there is considerable difficulty in applying to our case the concepts of class and class relations rooted in capitalism. Although capitalism forms the backdrop to our case, it does not feature prominently. Capitalist relations of production are hard to observe in a country that is barely industrialised, and in which the vast majority of the population are engaged in subsistence activity, outside of the formal economy. The Marxist concept of 'strata', rather than 'class', more appropriately describes much of the PNG population. The largest single group of urban workers, who have formed their own organisation, are the public servants, and who, far from being the exploited class, the proletariat, are amongst the privileged groups. The urban under-class, who might be mistaken for 'lumpenproletariat', derive their living chiefly in the service, directly or indirectly, of the privileged. They do not generally derive it from association with an urban 'working class' which, in a Marxist perspective, might enlist them for revolutionary

purposes. Indeed, the potential for proletarian revolution in anything like the Marxist conception is conspicuously absent. (The nearest equivalent would be the tendency for law and order to break down in urban areas, associated particularly with urban drift, school drop-out and youth unemployment, although this is characterised more by anarchy than organisation.)

We have as much difficulty in defining and identifying the bourgeoisie. The indigenous groups that dominate PNG economy are principally the national politicians, the bureaucrats, and the highly educated. Only a tiny proportion of these are capitalists in the sense that they own productive enterprises through which they are capable of exploiting wage-labourers. Where, then, are the bourgeoisie? Whereas in London's Lambeth it is necessary 'to dissolve the borough boundary to see the real class divisions that exist' (Cockburn 1977, 45), in PNG it is the national boundary that must be dissolved. The majority shares of most large capitalist enterprises in PNG are owned by foreign interests, chiefly overseas, and to a lesser extent residents within the country. (For instance, local savings generated by foreign institutions and residents accounted for approximately 5.5 percent of Gross Domestic Product in 1984 (Brogan 1986)). In this regard dependency theory has considerable relevance.

We have observed in our case how resources were flowing out of PNG for a combination of reasons (see Chs. 2 and 7). Amongst these were the policy of progressive withdrawal of Australian aid, the fluctuations in currency values, the effect of world recession on commodity prices and other factors. Although it is not empirically demonstrable from our case study, it is likely that foreign capitalist interests contributed directly or indirectly to the outflow. We have noted how successive redefinitions of boundaries took place (see Ch. 7), within which higher education was encapsulated, and that these redefinitions were associated with intended shifts of resources: between higher education institutions; from higher education to primary education; from higher education and education as a whole (as part of the social services sector) to the economic sector. The dependency theoretical perspective enables us to understand these redefinitions as a reflections of the effects of world capitalism on the PNG economy.

This view, however, forces us to accept the

...'necessary non-correspondence' between political forces and economic classes. This position requires us to recognise that classes as such do not directly fight out the class struggle, but rather that it is political forces which cannot be analysed as 'representing' classes, which are the agents which engage in struggle (Hirst quoted in Hunt, 12).

Through what channels can foreign capitalism, as a political force, engage in struggle in pursuit of its interests within the national confines of PNG? The Marxist theory of class has been criticised for not lending itself readily to empirical testing (Etzioni-Halevy 1983, 82), and this is certainly true in this case. However, it is possible that foreign capitalism, in the guise of domestic private sector interests, percolate through the PNG state machinery at three levels at least. A number of national politicians and former politicians have established track-records in the private sector (particularly Chan, the late Okuk, Kaputin, Stack, Olewale). Each of these has held ministerial portfolios, and appeared in a series of successive governments. Sir Julius Chan in particular (who has held the Finance portfolio repeatedly) is symbolic of private sector interests, being the leader to whom these interests looked for restoration of confidence in the management of the economy when the Somare government lost power in late 1985 (see Ch. 2, and Ch. 5, p. 88). Such individuals provide a possible channel at the ministerial level through which private sector interests might influence government policy either through personal contacts or even direct involvement in business.

Another possible channel is at the senior bureaucratic level. A small but growing number of appointments have been made to senior private sector positions from individuals who have held very senior positions in the public bureaucracy. One such instance was the appointment of a former Secretary for Finance to the position of Executive Chairman of a large retail organisation.

Yet another possible channel is through the middle level bureaucrats. These people are potentially useful not only because they are highly educated, but also because they are thoroughly conversant with the bureaucratic heart of the government machine. They have the capacity to network and to cut their way through 'red tape'. Such people can often be induced away from the security and privileges of the public sector by

additional privileges: high quality housing, for example, and especially the payment of fees to enable children to attend the international (private) schools - fees which are often well beyond the means of many of the PNG elite.

Amarshi, Good and Mortimer (1979) have comprehensively argued the case for the relevance of dependency theory to PNG. Whilst the arguments concerning the economy and the global context, and the possible prognosis for the future appear quite sound even after a decade, the weak link is the discussion of the class structure. This presents the rich peasantry as the dominant class, and organised labour as the working class. The rich peasantry is seen as embodying the dependency relationship, for it invests in trading rather than manufacturing industry, and is the 'quintessential product of colonial agricultural capitalism' (Amarshi *et al.*, 118) conceding, however, that the entrepreneurial and innovative qualities of the rich peasant in PNG 'are present, if at all, only to a very limited extent.'

This definition of the dominant and subordinate classes in PNG is unconvincing and problematic in a number of respects. For instance, the 'educated petty bourgeoisie' are recognised as a 'new, active element' - '...a new administrative bourgeoisie which has limited but real freedom to choose national policy...', suggesting they should be regarded as a capricious factor, distorting the pure dichotomy between the rich peasantry and the organised labour (Amarshi *et al.*, 121-122). The discussion of the formation of the working class includes the Public Service Association and the Teachers and Police Associations. These are rightly recognised as the giants among the PNG trade unions, well organised and powerful - '...notably free of the disabilities that plague the unions of manual workers' (Amarshi *et al.*, 138).

Good (in Amarshi *et al.*) sensed that the 'educated petty bourgeoisie' presented some difficulty for his analysis:

...Defining the boundary between the working class and the educated petty bourgeoisie is complex...the better educated have profited from the organizational strengths of the unions...

and moved upwards to a position in the state which is in structural terms that of the petty bourgeoisie (Amarshi *et al.*, 139). The educated petty bourgeoisie

...acts as if the control of the state for administrative purposes was an end in itself (Amarshi *et al.*, 158).

The Public Service Association was recognised as the single most powerful pressure group in the country, '...determined to defend tenaciously its status, privileges and relatively high incomes' (Amarshi *et al.*, 230 - 231).

Given that the large public service unions represent state labour, and that no radical educated working class has emerged, it seems surprising that Good failed to recognise the dominance of this bureaucratic middle class. This group, and indeed organised labour in general in PNG (including the National Union of Students), are amongst the privileged, not the proletariat. They have more to gain by maintaining the state system than by revolution! This underemphasis of the power of organised labour can perhaps be explained in terms of a general criticism of Marxist and dependency theory: by limiting explanation to capitalist relations, which in this case tends to focus on external factors associated with foreign capitalism, there is a tendency to deflect attention away from the possible role of internal factors such as the domination of the domestic elite (Stansfield 1974, quoted in Reitsma & Kleinpenning, 253). It has also resulted in a tendency to overlook other types of class divisions - religious, cultural, national, ethnic, for example - around which significant struggles have centred, especially in new nation-states such as PNG (Hook, 39-49; Bottomore 1979, 26; Reitsma & Kleinpenning, 261). It also tends to obscure the possibility that climatic and environmental factors may account for underdevelopment. PNG's situation in that same tropical zone in which many Third World nations find themselves can be expected to account for the low level of development prior to colonisation. The extreme ruggedness of terrain, small size of the population and geographic area, remoteness from the historically core countries of the world capitalist system have certainly played a part. PNG aptly fits Reitsma & Kleinpenning's description of 'internal divisiveness resulting from differences in ethnicity, religion, language and life style, ... often leading to long-lasting 'tribal' jealousies, suspicions and outright animosities' (Reitsma & Kleinpenning, 261). Exclusive reliance on definition

in terms of capitalist relations also excludes from possible consideration the question whether underdevelopment might be 'a cause, rather than a result, of dependency' (Reitsma & Kleinpenning, 256).

General criticisms of Marxist and dependency theory for theoretical and conceptual vagueness, such as inadequate definition of the essential characteristics of dependency, are valid for our case (O'Brien 1974, 39, quoted in Reitsma & Kleinpenning, 254; Reitsma & Kleinpenning, 256). Whilst these interpretations are very plausible, it is difficult to demonstrate precisely how domination is exercised on a class basis.

The relevance of the Marxist concept of the state

Marxist theories of the state are 'a simultaneous analysis of economy, society and the state' ... 'combined within a framework of their discontinuous historical developments' (Simmie, 65-66). The forms and activities of the state are, accordingly, portrayed as dependent on the nature of the society in which they are found. The capitalist state is a 'complex collection of dependent manifestations of the struggles between social classes', in which 'the state is governed for the benefit of the bourgeoisie' (Simmie, 79).

The primary role of the state is to reproduce the conditions within which capitalist accumulation can take place. The early writings of Marx presuppose three fundamental ideas regarding the state. Firstly the state is 'specific to the mode of production'; secondly in capitalism, it is 'an instrument of class domination' (for the bourgeoisie are the dominant group in capitalism); and thirdly, 'its characteristic function is repression' of the working class in order to maintain that domination (Cockburn, 41-43).

We have already noted the difficulty of applying the concept of class to our case study. Apart from its lack of elaboration by Marx himself, a further important problem with the idea of the state as merely the instrument of oppression by the ruling class is its intractability to empirical testing. There is often an overlap of interests between the politically ruling elites and the economically dominant classes such that both are interested in maintaining the state system. It may be more realistic to view the state elites on the one hand, and the economically dominant class on the other, 'as two groups each of which is intent on using the other to serve its own interests', rather than as one the servant of the other (Etzioni-Halevy, 83). The Marxist

interpretation of the higher education policy process in PNG which follows will show that the case study tends to support this perception.

The other major problem is that the Marxist interpretation of the state ignores the possibility that power may reside within and between institutions, and that hierarchies of control correspond to hierarchies of power, regardless of the existence of social classes. In other words, Marxism ignores the possibility that organisations themselves may play an important part in structuring power relationships and indeed develop 'degrees of autonomy from outside pressures such as those of social classes' (Simmie, 98).

Electoral democracy may delude the working class from realising the extent of the state's domination by the capitalist class by giving the appearance of adequately providing for the representation of the working class (Cockburn, 41-43, 48). The state of PNG plays a central role in our case study. Higher education, being almost exclusively funded by government, is thus overwhelmingly a state activity. The vast majority of higher education institutions, including the universities, either form part of various arms of the state or are statutory authorities. From this perspective higher education planning can be understood as a process aimed at redistributing resources between various different agencies within the state ensemble.

The PNG state, acting in a capitalist system of production, is 'structurally constrained to serve the interests of capitalism' (Etzioni-Halevy, 75). If capitalist interests in PNG are primarily foreign, then the PNG state is constrained to serve these foreign interests. The state itself is not a producer, therefore the employees of the state are, following Marxist logic, alienated from the means of production. This means that the state and its employees are in a relationship of dependency on foreign capitalism.

Following the Marxist view, that separation of individuals from their own true nature as producers reduces them to individual competitors for the means of life, we should expect individuals and groups of individuals within the various agencies of the state ensemble to act as competitors for state resources as related directly or indirectly to their means of life. (Insofar as the state is a provider and distributor of housing, we should also expect them to compete for this aspect of their means of life (see Ch. 6, pp. 159 - 160).) Chapter 6 provides copious evidence of interest group activity in higher education exemplifying such competition. As we have seen in Chapter 2,

the initiative which precipitated this interest group activity can be traced to two main causes: the outflow of resources from PNG to the global economic system both directly and via Australia which exacerbated general scarcity within the domestic economy; and the government's policy of shifting resources between sectors of the domestic economy, which exacerbated scarcity in particular sectors. The intensity and bitterness of bureaucratic struggles (see Ch. 5, p. 97) manifested in our case study can be readily understood from this perspective. Ultimately the state was notably unsuccessful in achieving this redistribution. An explanation based on capitalist relations of production is presented below.

A Marxist interpretation of higher education policy process in PNG

The argument may be epitomised as follows: if accumulation is a defining characteristic of capitalism, we should expect empirical evidence of capital accumulation to be associated with the capitalist process. We may observe accumulation of capital within higher education institutions, most particularly within universities. We should therefore examine what role that accumulation is playing within the capitalist process. Within a capitalist system investment is expected to yield an economic return, directly or indirectly. The PNG state has so far obtained a negligible (McGavin 1991) - (some would argue a negative (Gannicot 1987)) - economic return for its investment. The principal function of the universities to date has been to supply manpower for the state and for extended state functions (e.g. education, health services etc.). To date there has been an aggregate shortage of highly educated manpower, most particularly of university educated manpower. The state is therefore in a dependency relationship to the universities, and vice versa. If both the state and the universities are alienated from the means of production, they are mutual competitors for the means of life. Within that mutual competition the universities tend to wield disproportionate power for two main reasons: on the one hand they derive power from the accumulated resources which they possess; and on the other hand they possess strong social and political skills with which to defend their position. In other words, in the competition for the means of life, the university and its members start from a position of relative advantage because of the prior investment of capital in both the institution and in the

intellects of its members. They maintain that advantage by their talent for recognising and using those resources.

Elaborating this argument, the role played by higher education in a capitalist system, and within the PNG capitalist system in particular, must be examined. Marxism has generally interpreted the role played by education, housing and welfare services as contributing to reproducing the labour force for the capitalist system (Cockburn, 54). Indeed Marx envisaged that a high level of general education was 'a precondition for the social transformation which will create a socialist society' (Bottomore 1979, 31). The industrialisation process in Britain was accompanied by state intervention regulating the condition of housing and providing basic free education, for capitalism needed labour that was 'skilled and appropriate to the job' (Cockburn, 54).

The formal education system in PNG, starting from primary schooling, not only reproduces the labour force, but generates it in the first place. Its capacity, in common with many less developed countries, to generate a labour force vastly beyond the capacity of the economy to employ it, generating in turn enormous social problems and systemic instability, suggests that its role extends far beyond that which is explicable in purely Marxist terms. A large proportion drop out during primary education, and many of those that complete primary education are then 'pushed out' because of the incapacity of the secondary school system to absorb primary graduates. Thus much of this labour force never achieves the 'high level of general education' which Marx saw as 'a precondition for the achievement of a socialist society' (Bottomore 1979, 31). The capitalist state in PNG, in assuming the major responsibility for all levels of education, therefore operates dysfunctionally, inducing the young to leave the subsistence production in which they would otherwise be involved, and drawing them into a formal economic system in which the majority of them are destined to be frustrated. The frustration of the dropouts of this process is manifest in high urban unemployment and crime rates, and a tendency for increasingly authoritarian measures by the state (e.g. curfew, state of emergency provisions) to maintain stability. This dysfunction, (which it could be argued relates indirectly to PNG's peripheral capitalism), renders state education an intensely political arena, particularly in terms of elite versus mass education.

Another aspect of the PNG state's involvement in the reproduction of labour is in the provision of housing. As we have seen in Chapter 6, the state has been involved in this activity to a significant extent through the majority of the higher education institutions. It is chiefly the elite, initially the foreign elite and increasingly the indigenous elite which has replaced it, who have benefited - not the poor. State provision of staff housing in higher education, with the aid of international donors and lending agencies through aid funded projects, has contributed more to the production and reproduction of the elite than the mass labour force. This process has been particularly marked in the higher education system, with the majority of campuses enjoying institutional housing to a greater or lesser extent, and with the universities being particularly favoured in this regard. This contrasts sharply with universities and higher education institutions in developed capitalist economies such as Australia or Britain, where institutional staff housing is minimal and the exception rather than the norm.

In Marxist theory the education system, like the state, exists to reproduce the capitalist mode of production. Thus if free education is provided in a capitalist state, it may be expected to play 'a decisive role in the reproduction of social classes' (Poulantzas 1978, 27). Groups with both financial resources and education tend to be able 'to adapt to changes in the urban system more rapidly than other groups' (Kirk in Blowers, Brook, Dunleavy & McDowell 1982, 141). Evidence abounds that higher socio-economic groups are disproportionately represented in education (including higher education) (Miliband 1970, 38 - 40; Floud 1957; Taylor & Ayres 1969; Miller 1971; Lynch 1989; Lee in Cole (ed.) 1989). PNG is no exception (Weeks 1976).

Equally, with technological advancement, the capitalist state requires a more highly specialised and trained workforce, requiring increased spending on education:

...each generation costs more to prepare for work and the state is more involved in its preparation (Cockburn, 63).

A university education is increasingly required to get a start in the race for positions within the managerial ranks of advanced capitalist enterprises (Miliband, 38).

Role of the university in the capitalist state

Universities in the western world (i.e. the capitalist world) have traditionally had three main roles: the preservation, transmission and generation of knowledge. They are normally distinguished from other types of tertiary education by their research role (i.e. the generation of new knowledge). As technological development has brought about a shift in advanced countries from manufacturing-based to knowledge-based industry, the research role of universities has acquired an increased importance in capitalist states. From a Marxist perspective, we may assume that higher education, and universities in particular, are required by capitalism to perform at least three main functions: to generate new knowledge that is actually or potentially commercially exploitable; to produce highly skilled and highly specialised types of labour for use both directly and indirectly in the processes of capitalist production; and to reproduce the highly educated manpower required by the state in order to maintain its stability and the conditions which are conducive to capitalism. It will be argued below that in PNG, to date, the contribution of higher education to the first two of these three functions has been minimal, and its overwhelmingly dominant function has been to produce highly educated labour for maintaining the stability of the state.

Capital accumulation in higher education

The three functions of higher education identified above, upon which increasing reliance is being placed because of the level of technological advancement, require the progressive concentration of capital. To the extent that this capital comes largely from public sources, (which is the case in many countries including PNG and Australia), the state can be seen to be serving capitalist interests.

The capital involved in higher education takes two major forms: capital assets of various kinds and intellectual capital. Both forms have associated recurrent costs. Both types tend to accumulate in higher education institutions, especially universities. As land, buildings and equipment accumulate both spatially and over time, the running costs associated with them tend to grow. Past investment decisions that result in these accumulations of capital assets tend to attract a continuing flow of resources

for their maintenance, for the upgrading of equipment and so on. As the cost structure of such assets increases, new investment tends to be concentrated with old investment, so as to take advantage of existing infrastructure. The concentration of such capital assets, often on university campuses, constitutes of itself a basis for institutional power, if only because of the magnitude of public investment which might otherwise have to be written off.

The other major form, intellectual capital, has the properties of being mobile, and of being able to reproduce and transform itself (Bourdieu 1988). These capacities are greatly enhanced by the ability to draw on the resource base made up of higher education capital assets and recurrent funding. These human qualities give the owners of intellectual capital the power to serve the capitalist system to a greater or lesser extent, as well as the power to serve other interests including their own (whether individually or as a group). Their resource base being so substantial, their power in this regard is also substantial. As universities tend to be amongst the larger national organisations, they tend to wield substantial power in the national context (Simmie, 306-307). The extent to which they serve the interests of capitalist production and reproduction depends upon the extent to which they subscribe to capitalist values. Intellectuals cannot be assumed to be a homogeneous group in terms of their values, however, despite the tendency to be drawn from the dominant classes, for they tend to be divided along ideological lines (Goertzel, 110). But

Labour power is obtained for its skill content and there are wide variations in its provision from individuals. The greater the specificity of the skill the greater the power the person who provides it in relation to an employer. But specificity is a two-edged thing. It hampers the short-run ability of an employer to get a replacement but it also restricts the manoeuvrability of the seller. On balance, however, the seller has the advantage from skill specificity but he never loses his power inferiority (Allen in Hunt, 66).

Thus, despite the inherent power of the university as a large organisation, government in a capitalist state may be expected ultimately to have the upper hand over public higher education.

In Chapter 2 we saw how the thrust of education policy in PNG changed in the 1960s from mass to elite education in preparation for statehood, which in

the Marxist perspective must be understood as capitalist statehood. There was a direct trade-off between the dispersion of resources for primary and secondary education on the one hand, in favour of the accumulation of resources for tertiary education on the other. In so doing a manpower approach to education was adopted, in contrast to a social policy approach. The manpower approach was aimed principally at the generation of an educated elite capable of manning the machinery of the state. From this point onward the process of accumulation of capital, both assets and intellectual capital, took off and accelerated with enormous rapidity, particularly in the form of the universities.

Return on capital invested in higher education

The first of the universities, the University of PNG in the national capital, was envisaged as 'one of the most powerful factors of unity imaginable' (Currie 1964, 8). From a Marxist or dependency theoretical perspective, the capitalist state may be expected to have a great interest in this unity, whether the capitalist nation-state of PNG, or the capitalist decolonising state of Australia, for this unity was essential for the maintenance of the current economic order. From this perspective it is also significant that the University of PNG was modelled on the traditional liberal arts type university, as contrasted with the scientific technological model on which the later PNG University of Technology was based. A very large part of the role of the University of PNG from its beginnings until the time of writing has been in producing the manpower for the PNG bureaucracy and politicians. Another role has been in producing the teachers and medical personnel for manning the public education and health services. A small part of the role has been in reproducing the manpower needed for the university itself. Thus an overwhelming proportion of the University of PNG's graduates have been produced for public sector employment (i.e. maintenance of the state system) and, importantly, **not for the productive aspect** of capitalism.

The mission of the PNG University of Technology has been significantly different. The range of disciplines offered by the university, e.g. engineering, surveying, chemical and mineral technology, accountancy and business studies, forestry, have a much closer intrinsic relationship to the requirements of capitalist production, and to private and commercial interests in general. Thus when the state applied pressure on the

universities to reduce spending, it was much easier for the University of Technology to argue convincingly that it was serving the interests of the 'economic' (surrogate for capitalist?) sector. It was much easier for the University of Technology to maintain its integrity and to deflect attempts to reduce its resource base and resource inflow (see Ch. 6, p. 124). Despite this closer relationship, however, relatively few of its graduates, particularly in the technological disciplines, have so far contributed directly to the productive function of capitalism. Many have been absorbed into the public sector, as techno-bureaucrats, and some have found themselves in subordinate positions to expatriate production managers in industries and mineral exploration. A very small number have so far found their way into truly managerial positions in industry. In the accounting and business studies disciplines, many have moved into private sector employment, but many of these employers are trading organisations rather than producers in the capitalist sense. The reasons for this pattern are various and would include the skill shortage areas which have occurred and been filled in the 1970s and 1980s. But they would also include the fact that international levels of scientific and technological expertise are achieved by only a small proportion of the graduates of the PNG University of Technology, and as a consequence many if not most tend to be employed in sub-professional roles (regardless of the titles which are attached to their positions).

The heavy emphasis on manpower policy combined with shortage of financial resources and a variable level of educational quality within the pool of students (and staff) has contributed to a heavy emphasis on the teaching role and minimal emphasis on the role of research in the universities, and particularly the role of research related to capitalist production. Thus although university academic staff represent a potential intellectual resource within the country upon which productive enterprises might draw, relatively little use has been made of these resources by industry and commercial enterprise, and there has been a tendency to recruit short-term specialist technical assistance personnel from overseas, especially from Australia, to fill such needs.

We have also seen national academic staff, as an interest group comprising owners of intellectual capital, attempting to exercise its self-interest in seeking an improvement in its remuneration (see Ch. 6, p. 163). The fact that such activity was relatively unsuccessful to date suggests that capitalist

enterprises are not dependent on university academic staff as an intellectual resource.

We may conclude, then, that in PNG up to the present the state's economic returns to its investment in university education have been barely if at all discernible. By contrast, the returns have been almost entirely political. Furthermore, as there remains to date an aggregate shortfall of university trained manpower, the state has been and remains dependent upon the universities for its own needs and those of the economy.¹ Thus we may see that the state is doubly dependent: on the one hand, dependent on foreign capitalism, and on the other, on its own universities. Despite the total financial dependence of the universities on the state, it appears that the balance of power is much more favourable to them than the comment of Allen (in Hunt, 66) quoted above would suggest. This power is made up of a number of factors, particularly the scarcity value of the universities' product in manpower terms, a historic pattern of investment which the state inherited from Australia and has since maintained, as well as the intellectual resources required to exploit these advantages in the competition for the means of life.

Competitors such as the universities and interests in the international capitalist system have been able to exploit to their own advantage the unique characteristics of democracy in PNG (which will be elaborated in the next Chapter), as well as its inherent fragility. Democracy helps create the illusion that the electorate has power to determine policy (Etzioni-Halevy, 76; Cockburn, 48). If this is true, then it is also true of PNG except that it is further complicated by chronic instability in the democratic system itself. This results in frequent changes of the ruling coalition and a lack of coherence in the policy process. The formal unity of the state

... depends in turn on the unity of the political executive at the top of the chain of command and can also be circumscribed or undermined through the resistance or non-compliance of officials at different levels of branches of the bureaucratic system (Jessop 1982, 231).

¹ This dependency relationship could be expected to change, however, if and when a significant surplus of university trained manpower has been produced and graduate unemployment begins to be felt.

This political executive in PNG is anything but unified. Its disunity erodes its ability to assert control of organisations such as the universities, as well as the outflow of resources to the international economy. This is consistent with the point that some commentators on Marxism have made that the appearance of democracy in a capitalist state is deceptive:

... the capitalist state has managed to promote the interests of the ruling class while appearing to be class neutral. It has managed to practise its class character and keep it concealed at one and the same time ... (Offe, quoted in Etzioni-Halevy, 76).

In summary, then, we have seen that, in terms of the three main functions of universities in a capitalist economic system, both the generation of new commercially exploitable knowledge and the supply of highly skilled and highly specialised types of labour for use both directly and indirectly in the processes of capitalist production have so far been minimal. To a large extent until the present in PNG the role of the universities in particular, and higher education in general, has been in supplying and reproducing bureaucrats and technocrats for the institutional ensemble of the state and more generally for the maintenance of the capitalist system. The important point, in this context, is not measuring precisely how much this is true, but to underline that the universities in particular and higher education generally have so far been expected to play an insignificant role in relation to capitalist production in PNG. This is readily explicable from a dependency theoretical perspective in terms of the flow of resources out from PNG to other destinations within the world capitalist system. In this conceptual scheme the role of the higher education system in PNG can be seen primarily as contributing the maintenance of the stability of the state system upon which the world capitalist system must rely in order to derive raw materials from PNG. Recent government initiatives to reduce the resource base of the higher education system through the Higher Education Plan have so far been largely unsuccessful, and attest to the resilience of the global capitalist system as manifest in PNG.

The capital accumulations in higher education may be understood, from this perspective, to perform the function of contributing significantly to the power base by means of which the universities and other higher education institutions are able to maintain the *status quo*. In so doing, they may be

understood to contribute to the maintenance of the current economic, social and political order from which the international capitalist system benefits. They may therefore, by extension, be understood to perform a role (whether they recognise it or not) as instruments of the international capitalist system, in addition to the other roles that they perform.

The lack of success in the implementation of the Higher Education Plan 1986 - 1990 is thus explained in terms of the extent to which the interests of international capitalism enhanced and reinforced the capabilities of the higher education institutions to defend their own interests. These in turn rested on the power derived from an historic pattern of higher education resource distribution associated with the capitalist colonial state and the creation of a modern 'independent' capitalist state.

Conclusions concerning the relevance of the Marxist theoretical perspective

We have seen that the Marxist perspective allows us to conceptualise a highly discontinuous and multi-disciplinary phenomenon in a unified and coherent way, and that the metatheoretical qualities of Marxism play an important part in this. The notions of historic materialism, the dialectic, the unity of theory and praxis, are all intrinsically relevant to this topic. Furthermore capitalism as the organising matrix is appropriate for our case both in terms of the political context and in terms of the economic nature of the planning process, fundamentally dealing with resource redistribution. Our data also concur with at least some aspects of the Marxist view of the state as the instrument of capitalism.

The major difficulty is with the key concept of class, and its manifestations as bourgeoisie and proletariat. Even if we interpret the former as comprising both state elites and foreign capitalists, Marxism portrays this as a one-sided relationship. But as Etzioni-Halevy (p. 83) has pointed out, state elites and foreign capitalists may be viewed 'as two groups, each of which is intent on using the other to serve its own interests.' On the other hand the proletariat (the urban working class) as Marx visualised it scarcely exists in PNG, and with current trends in the technology of advanced capitalism, and Papua New Guinea's basic economic characteristics, it seems doubtful if such a class will ever exist in the foreseeable future.

A second major difficulty is with the concept of revolution as the outcome of class struggle, and its outcome as the socialist state. Although there is evidence of social instability, it seems improbable that a socialist revolution could take place in PNG, not least because of its poor general level of education. It seems even more improbable that such a revolution could lead to the kind of socialist state that Marx envisaged since post-revolutionary states in other parts of the world have not emerged in this form. It seems much more likely that PNG will become increasingly unstable, and that government will resort to increasing authoritarianism in order to maintain state control. This has to do with scarcity of resources, which is another respect in which Marxism is inadequate, for it envisages that with technological advance, there will be plenty for all - an assumption which needs to be treated very sceptically.

In framing education in terms of reproduction of social classes, both Marxism and dependency theory tend to ignore the role of education, including education provided by the state, as a source of political power and a mechanism for the distribution of political power. We have seen that in Third World countries such as PNG, it is an extremely imperfect instrument of capitalism in terms of producing and reproducing the labour force, for it greatly overproduces. This suggests that the education system is by no means solely a capitalist reproductive instrument, that the education system is itself a source of power for the dominant class, and that capitalist relations of production alone cannot be held to account for that power.

Dependency theory presents an overwhelmingly negative view of the influence of capitalist penetration, and tends to ignore the positive effects of contacts with the West and of the integration into the world economy, such as infrastructural improvement, knowledge transfer, education and health care, reduction of internal political divisions and creation of larger political units (Reitsma & Kleinpenning, 262). Whether these changes are perceived as virtue or vice is a matter of value judgement, but dependency theory implies a tendency to idealize the pre-colonial situation irrespective of the hardships and sufferings which were subsequently ameliorated.

In presenting dependence and non-dependence as dichotomous variables, Dependency theory obscures the fact that in reality there are many gradations of dependence and dominance. For example, a

... socialist bloc ... country can only sell goods if another country is willing to be a customer. If an underdeveloped country wishes to export, it will have to structure its economy so as to meet the requirements of the international market, irrespective of whether it is a socialist or a capitalist country. In either case it becomes dependent and does so in the meaning given to that word by many *dependencistas* (Ray, cited in Reitsma & Kleinpenning, 262).

In other words, the international market transcends the capitalist system. 'A more or less dependent status is a fact of life', for even the developed countries depend on imports of raw materials and energy sources (oil) (Reitsma & Kleinpenning, 263).

Capitalist penetration has certainly led to the creation of infrastructure where none existed, and to the transfer of knowledge, education and health care. It has also led to a reduction in tribal warfare, although in the last decade this has seen a resurgence. The creation of the state upon independence was, par excellence, the creation of a 'larger political unit' - bringing together in one nation some 700 or more cultural groups. The people of PNG are best placed to judge whether these influences introduced by capitalist penetration are, on balance, positive or negative.

CHAPTER 10

THE RELEVANCE OF THE ELITE AND BUREAUCRATIC THEORETICAL PERSPECTIVES

The elite perspective

The origins of higher education as a form of elite, as distinct from mass, education make the perspective of elite theory an obvious choice for study in relation to our case. Elite theory also serves as an important contrast to the Marxist perspective (Goertzel, 19), arising as it did in opposition to Marx's conception of a 'classless society' (Bottomore 1964, 131). Although in its early form elite theory went into eclipse following the second world war and the social changes which resulted (Field & Higley 1980, 13), it has formed part of a substantial literature on the more general subject of social stratification (Heller (ed.) 1969), of which Marxism also formed a part, and has experienced a resurgence of interest amongst scholars in recent years.

In the discussion which follows, reference will be made to the following key features of the elite theoretical perspective. Whereas Marxism concerns itself with social change, elite theory concerns itself more with social equilibrium. Subject to this general perspective, elite theory emphasises inequality of individual endowment in every sphere of social life, with the corollary that members of the elite tend to be superior in those endowments. The maintenance of the stability of the system is effected through the circulation of elites: a circulation which provides for talented individuals from the non-elite to be incorporated into the elite, enabling the formation of a stable and closed ruling class. Although early elite theorists such as Pareto and Michels tended to emphasise inherent individual characteristics as the key determinants of elite status, modern theorists now generally use the term elite to denote 'functional, mainly occupational, groups which have high status (for whatever reason) in a society' (Bottomore 1964, 14). Modern theorists therefore tend to focus less on ideology and more on the characteristics of elites: their size, differentiation, their relationships with each other and to power, their open or closed character, and so on. Our discussion will rely chiefly on the more modern interpretation. The general incongruity with democracy reflected by the elite theoretical perspective will be given particular attention (Dye & Zeigler 1970). In the discussion of the

case study, it will be convenient to adopt Bottomore's terminology, thus: the **political elite** (a small group who actually exercise political power in a society at any given time, e.g. members of the government, high administration, military); the **political class** (a much larger group including all those groups which exercise political power or influence, and are directly engaged in struggles for political leadership (Bottomore 1964, 14).

Probably the greatest strength of the elite theoretical perspective lies, for our purposes, in the contrast it affords to the Marxist perspective, presenting a political view of social organisation, rather than an economic one. As such elite theory permits a wider range of possibilities, avoiding the necessity to show that a particular class, defined in terms of its economic position, dominates all spheres of social life (Bottomore 1964, 32). It also avoids some of the more dubious assumptions of pluralist theory which have been described in Chapter 8, such as equality of opportunity of interests to express themselves, free market conditions for interest groups, and so on. The 'special merit of the elite/non-elite distinction is the implication that power concentrations and elites are a necessary or unavoidable feature of society' (Higley, Deacon & Smart 1979, 1). Thus an interpretation of democracy as the competition between a plurality of elites is an 'entirely misleading view of political life' (Bottomore 1964, 125).

The case study approach adopted in this study suffers the same methodological weakness (i.e. intractability to empirical testing) of early elite theorists, one which has tended to be overcome by more recent theorists through quantitative survey methods. Field and Higley have attempted to overcome the problematic assumption of cohesion amongst elite groups by developing the notion of three types of elite: the disunified elite, the ideological unified elite, and the consensual unified elites. Each of these is associated with different historical periods, different levels of development, and different types of polity (Field & Higley, 35 - 47).

The most serious problem, however, is elite theory's tendency to describe rather than explain. Its explanatory power depends to a large extent upon the precise definition of the elite, and elite theorists have adopted quite distinctly different definitions: Pareto in terms of psychological characteristics; Mosca in terms of organisational coherence; Lloyd (regarding new elites of tropical Africa) in terms of 'those persons who were

western-educated and wealthy to a high degree relative to the mass of the population', with a minimum annual income limit of £250 as a guide (Lloyd (ed.) 1966, 4); and the current general use of the term implying an occupational definition.

Inconsistency in definition has some important consequences. For example, Bottomore, in his discussion of democracy and the plurality of elites, excludes voluntary associations from the category of elites, arguing that they are, on the contrary,

means through which government by the people is made more real and practical in a large, complex society (Bottomore 1964, 126).

By contrast, Higley, Deacon and Smart define elites as 'persons with power to affect organizational outcomes individually, regularly and seriously' (Higley, Deacon & Smart, 3), commenting that 'the only characteristics of elites that are implicit in their definition are their strategic organizational locations and greater power.' Thus

A national elite contains both relatively 'established' persons such as leading businessmen, recognized politicians and top public servants, and less 'established' or socially celebrated persons, such as trade union leaders and leaders of women's, ethnic and various minority, reform or protest organizations (Higley, Deacon & Smart, 4).

Both of these conceptualisations of voluntary associations can be reconciled if we conceive of such associations as themselves consisting of both elite members and masses. The terms 'elite' and 'mass' need to be understood, not as empirically definable terms, but as relative terms, such that the mass of one organisation may constitute part of the elite of a bigger group of which it forms a part. A comparable example would be the terms 'leaders' and 'followers', for an individual may be a leader in one situation and a follower in another. Such a conceptualisation in relative terms may help resolve the difficulty that many theorists have felt with the status of what Mosca termed the sub-elite (Bottomore 1964, 10).

Elitism as a consequence of decolonisation policy

The relevance of this perspective for higher education in PNG is striking. The existence of a modern national elite is a direct consequence of a policy

adopted by the Australian Government in the 1960s to grant independence to the former Trust Territory of Papua and New Guinea. The creation of a modern indigenous elite, particularly a bureaucratic elite, was essential for the creation of the Independent State, and higher education was seen as the principal instrument by which such an elite could be prepared. This was a radical departure from previous policy which:

... aimed to produce an indigenous society in which there would be no elite and no disparity between 'advanced' and 'primitive' or rich and poor ... (Smith, in Bray & Smith 1985, 49).

This policy shift was precipitated by the report of a United Nations Visiting Mission which recommended the deliberate creation of 'standards of professional, administrative and political leadership vital to any territory in preparation for self-government' (United Nations Trusteeship Council 1962, 24, quoted in Bray & Smith, 56).

The higher education system and the two universities owe their existence more or less directly to this policy decision. The creation of the two universities and a large number of other tertiary institutions were to a large extent linked directly with criticism by the Visiting Mission of failure to develop an indigenous political elite to lead the country to self government, and a wider class of individuals capable of replacing Australians in other than unskilled or semi-skilled positions. To this may be added a considerable number of other pressures, both domestic (Howie-Willis, 32) and external (Smith 1987, 215). In the post-Independence period, the adoption of a strongly manpower oriented policy for higher education (as contrasted, for example, with a social demand approach) (see Ch. 3, 46) has continued the elitist character of higher education and limited its development into mass education.

Origins of the modern elite

The relationship between education and the elite is particular clear in PNG. The elite of the traditional societies of PNG - masters of their mythological lore and possessors of magico-religious formulae - were replaced by the transitional elites, formed as a result of early contacts with Europeans, particularly missionaries. They consisted of deacons, pastors, laypreachers, teachers, medical orderlies, nursing aids, police, technicians, storemen, low

level clerks, community leaders and petty officials in the pre-war administration (Oram 1971, 128-129, cited in Latukefu, in Bray & Smith, 35). They were thus comparatively well educated and trained within the limited system of schooling then available. Their influence, however, was confined to the region or district where they were situated. The members of the present modern elite are predominantly the offspring of the transitional elite, and are the products of modern education in PNG (Latukefu, in Bray & Smith, 35). When tertiary education became available, the transitional elites were quick to seize the opportunity for their children. Amongst the present leaders of the country are a disproportionate number of coastal and island people, reflecting the pattern of missionary education in those areas. This imbalance is likely to be modified over time due to the increasing participation of highlanders in university enrolments (Murphy 1981).

Bi-modality of the education system and elite reproduction

Whereas in Marxist theory the education system functions to reproduce both the bourgeoisie and the proletarian class, in terms of elite theory it also functions bi-modally. This bi-modality is obvious in PNG: on the one hand the national Department of Education's major policy objective has been and remains mass education: the universalisation of primary education. To the extent that the Department achieves its primary education policy in terms of equality of both access and participation, and that the selection criteria for secondary and tertiary education operate strictly on the basis of merit, tertiary entrants, particularly those to the universities, may be assumed to represent the superior intellectual individuals of the nation. To the extent that resource scarcity requires a trade-off between tertiary and other levels of education, a conflict between elite and mass interests is created (see Ch. 3, p. 55).

Transition from elite production to elite reproduction

While equality of access to education at primary level has largely been achieved, equality of participation has not. Furthermore the safeguards to the merit criteria for selection to high school, in the form of provincial quotas, have been eroded (Bray, in Bray & Smith, 23), and a number of studies of the social background of students (Weeks, in Bray & Smith, 108) 'found that the system favoured the children of higher socio economic groups and blocked the progress of children from rural areas and uneducated parents. The international school system (intended originally for the children of

expatriate workers) is used as a private education system for those capable of paying the fees (Smith & Bray, in Bray & Smith, 115 - 145). Thus there is a growing tendency in the education system as a whole to reproduce the elite, and for the higher education system to become more 'closed'.

The period of the case study, 1984 - 90, coincides roughly with a transitional period from elite creation to elite perpetuation. Since the aggregate requirement of the economy for university trained manpower has exceeded the supply up to the present, it may be assumed that the movement of the indigenous elite has been more in the nature of 'flow' than of 'circulation', whether in terms of the replacement of expatriates by indigenous elite, or in terms of the expansion of elite positions for the indigenous.

Higher education, the political elite and the broader political class

We may now examine in more detail the relationship between higher education and the political elite in particular, as well as the political class more generally. In this discussion we will concentrate within higher education on the universities since they are both the elite group of institutions, and also the dominant group both numerically in terms of staff and students, and in terms of resources of all kinds. Some of the same considerations will apply, however, to other forms of higher education.

Following Bottomore, the political elite will be defined as the cabinet and members of parliament - i.e. those with formal responsibility for power within the democratic system of government, as well as the heads of government departments. While the latter are active participants in the policy process directly, they also constitute the leaders of the bureaucratic elite which forms the major part of the broader political class. As some of our discussion will concern the respective power of the elected members of the government on the one hand, and the bureaucratic members of the political elite on the other, we will subdivide the political elite into the 'elected elite' and the 'bureaucratic elite'. These key bureaucratic individuals have a dual role and blur the distinction between the political elite and the more general political class. Although Bottomore's definition of political elite would also include military leaders, the military is numerically very small and does not currently play a major role either in government or in civilian life in PNG. This group are treated as part of the wider political class, with the Defence Forces'

bureaucratic head forming part of the political elite in the same way as other departmental heads.

The political class in PNG will be defined as consisting both of the political elite, and of all those groups which have participated in the exercise of political power or influence. Following Etzioni-Halevy (p. 85), power is here defined as 'control over (or ability to determine) the allocation of resources on which others are dependent; and therefore, ability to influence other people's life chances.' Bureaucracy, also following Etzioni-Halevy (p. 85), is defined as a hierarchical organisation of state officials appointed to carry out certain public objectives. According to this definition the political class thus consists centrally and primarily of the heads and members of the bureaucracy, together with organised interest groups who have participated in the allocation of resources. It thus includes successful labour organisations such as the Waterside Workers Union and the Public Service Association, the universities and other tertiary education institutions, and the National Union of Students. For the purpose of the following discussion we will also need to distinguish the bureaucratic component of the broad political class, which will be described as the 'bureaucratic class' and will consist of both the 'bureaucratic elite' and all those individuals employed within the public service. The bureaucratic class will necessarily include all those members of the Public Service Association, since the latter represents the employees of the public service.

Education, universities and the political elite

Formal education in its broadest sense has been shown to have played a markedly increasing role in the formation of the elected elite. Whereas forty-five percent of national politicians in the first House of Assembly in 1964 had no formal education, all of those in the second National Parliament in 1982 had received some formal education, and thirty-eight percent had completed Grades 11 or 12. By contrast, the comparative figures for candidates in the national elections in the same years were sixty-two percent with no formal education in 1964, and five percent with none in 1982, with twenty percent having completed Grades 11 or 12 (Turner, in Bray & Smith, 78 - 84). It is thus clear not only that the formal educational level of national politicians had risen dramatically, but also that the electorate attached some significance to educational attainment. By 1987 the corresponding figures

for candidates were three percent and thirty-two percent respectively, and national members with a minimum of Grade 11 or 12 education had reached fifty-four percent, confirming these trends (Turner, in Oliver (ed.) 1989, 59 - 68). Furthermore there were twenty-six university graduates amongst them, representing about twenty-four percent of the elected members of the political elite. It is probable, by contrast, that 100 per cent (or close to that figure) of the bureaucratic members of the political elite were graduates of the universities, or otherwise of other forms of tertiary education.

The universities, and the University of PNG in particular because of its location in the national capital and its arts and social science orientation, have had close associations with the national political elite in a number of ways. A number of former students and office holders in the National Union of Students have become national politicians, Ministers and Prime Ministers, such as Gabriel Ramoi, Utula Samana and Pias Wingti. A number of former university staff or teaching fellows have followed a similar path, such as Aruru Matiabe and Rabbe Namaliu. The forum at the University of PNG was used by Ministers such as Iambakey Okuk as venues for political meetings. One case study informant described student leaders as the Education Minister's 'peer group', with whom he (Matiabe) was in frequent contact and upon whose advice he frequently relied. Some university staff resigned and took up positions in or were elected to provincial government. The universities have thus been a formal and informal training ground and a source from which future national and provincial politicians have been drawn.

Universities and the political class

The universities have had an even more significant role in producing the broader political class, particularly the bureaucratic class. We have already seen in Chapter 9 that to a large extent until the present the role of the universities in particular, and higher education in general, in PNG has been supplying and reproducing bureaucrats and technocrats for the institutional ensemble of the state. This role appears to have taken three main forms. Firstly the universities have formally imparted to this class much of the basic general and technical knowledge required by the bureaucratic and technocratic elite in the administrative arms of government. Secondly they have provided opportunity to acquire and, for some, to exercise general

political skills, for instance through student and staff association activity (see Ch. 4, p. 71, Ch. 6., p. 164). Thirdly they have provided a medium for socialising the elite towards values associated with national unity as compared to those of local and regional interests. Whilst they have by no means produced, in Field and Higley's terms, a 'consensual unified elite', they have moved some way in that direction.

Universities as members of the political class

In addition to producing and reproducing the bureaucratic class (see Ch. 4, p. 80), and to contributing to the preparation of the political elite, the universities themselves have constituted a powerful sub-elite within the broad political class. This has been possible because they have large organisational structures, substantial organisational resources upon which to draw, and themselves possess highly developed political skills. Their power, as interest groups, has been enhanced by the scarcity of the manpower which they produce and its importance both to the government machine and the future economy as a whole (see Ch. 4, p. 80). Despite their relative autonomy, they form part of the extended government machinery through their statutory body status. The universities are thus both producers of the political class and members of its political elite, as well as being members of that class themselves.

Universities as privileged communities

We have observed in Chapter 6 (see Ch. 6, p. 159) the extensive provision of housing on the campuses of higher education institutions for the exclusive use of their staff, a feature not normally associated with universities in developed countries. It is particularly marked in the case of the universities in PNG where virtually all of the teaching and of the senior administrative staff are either housed or have eligibility for institutional housing. Some junior staff and unskilled employees are also housed. In this regard the universities are much more privileged than any other public organisational group. Whilst many categories of personnel in the bureaucracy are eligible for public housing, the shortage of such housing relative to the numbers of bureaucrats ensure that relatively many fewer are housed. Furthermore university housing is generally of superior quality to other forms of public housing.

The fact that university housing is concentrated mainly on the university campuses has a number of consequences. Firstly it is relatively immune (because of its location) from claim by other organisations, and not readily available for alternative use. Secondly its maintenance and security require, as do all other university buildings and grounds, considerable expenditure in manpower and resources. It brings with it the requirement to employ (and to some extent also to house) members of the non-elite as carpenters, tradesmen, security guards and so on. It thus includes amongst those upon whom it confers privileges, some members of the underprivileged, uneducated mass. From an elite theoretical perspective, this inclusion helps to maintain the stability of the institutional privileges both in principle and in practice. Inevitably it also brings with it a degree of instability. University housing is always in short supply, and as a consequence gives rise to a good deal of competition and conflict within the community. There is a degree of incompatibility of life-styles between the elite and non-elite members of the university community, and the disparity in quality of accommodation according to status gives rise to certain tensions within the University. The settlement of these tensions requires policy deliberations, and the expenditure of staff time and resources. Such instability is readily managed, however. There is much less provision of non-elite than elite university housing, and it is located so as to minimise its impingement on elite areas. And once housing has been acquired, whether elite or non-elite, it acts as a strong incentive to remain in the university's employment and thus has an enormously stabilising effect on the composition of the institution. Indeed it is proposed that this stabilising quality is so strong as to contribute substantially to the enormous resistance to any proposals to amalgamate or close higher education institutions in PNG.

The political elite: The relative power of the bureaucratic elite compared to the elected elite

Of the two main components of the PNG political elite, it appears that the bureaucratic elite tends to be the more powerful. This can be attributed to two main phenomena. On the one hand, the elected elite suffer from the weakness and incoherence of the PNG party system; and on the other, the bureaucratic elite have a direct relationship with the hierarchical power and (relative) coherence of the administrative organisation of government.

The weakness of PNG democracy

The characteristics of the PNG party system have been well documented. Each of its six national elections has been the subject of a book. The most recent of these, on the 1987 elections, provides a particularly insightful critique of the PNG party system. The PNG system corresponds roughly with the Westminster style of democracy, which relies crucially on party governments. Party government assumes, amongst other things, that

the public service, the bureaucracy, either is under direct party domination or, more usually, that it is made up of bureaucrats who are neutral and act according to the direction of whatever party is in power. It assumes that only political parties exercise political power and therefore that all other organizations that want to advance their views and interests must seek to influence one or more parties (Oliver, in Oliver (ed.) 1989, 4).

Yet, as Oliver comments,

... it is hard to put PNG in the party government category because its political parties seem so weak and incoherent in comparison with the parties of other states who practice the same kind of democracy and have the same sort of elections. Yet there is no doubt that the national elections of PNG eventually produce party government (Oliver, in Oliver (ed.), 4).

PNG stands out, he suggests,

... because of the discontinuity between what the elections themselves decide ... and what the voters in the election are voting for and think they are deciding ... voters think they are choosing individuals who will bring them local development and the election in fact chooses which parties will have a chance to govern (Oliver, in Oliver (ed.), 6).

Crucial determinants of voting behaviour are clan loyalties and obligations, local popularity, the impact of local cult activity, the wealth of the candidates, the energy and skill they put into campaigning, but not party affiliation. Party membership either does not seem to count at all, or is inextricably mixed with personal and local factors. Paradoxically, party affiliation correlates quite

well with an appearance in the top group of candidates, listed in order of the votes cast for them. It appears that candidates do not win because they are endorsed by parties, but rather that parties endorse candidates who are going to win. Strong candidates seek party endorsement because it brings access to material resources which provide campaign advantages - such as money, posters, T-shirts, transportation (Oliver, in Oliver (ed.), 7). Also they are aware that the key positions in government tend to go to party members. In other words, the most promising candidates are those who are aware of the key characteristics of party government, and that they matter.

From these observations Oliver discerns a major weakness in PNG democracy: the gap between the voters' perception that party is irrelevant, and the politicians' knowledge that it is highly relevant. This gap places an 'impossible burden on the individual Member of Parliament', who will be held accountable if the anticipated goods and services are not delivered to the electors. For if there is no party linkage, punishing the Member of Parliament by non-re-election is irrelevant: it does not punish the government in power.

The failure to develop a mass base for the political parties in PNG has been attributed to the absence of a prolonged struggle for liberation prior to independence (Saffu 1982; Oliver, in Oliver (ed.), 9). In the years between the 1972 and the 1977 elections,

party organisations had generally atrophied. None had attempted to build a mass base and such organisation as existed was dominated by a core of leaders and officials in Port Moresby (Hegarty 1983, 6).

Oliver likened them to 'cadre' parties - parties of politicians and notables which became organizations for gaining access to governmental power pure and simple (Oliver, in Oliver (ed.), 10). The absence of necessity to mobilise mass support around a vital cause, such as liberation, has resulted in their adaptation to the culture of the village.

PNG is remarkable, if not unique, in grafting village political perceptions onto a system of party government that seems inherently to demand a political culture that leads voters to choose on the basis of parties (Oliver, in Oliver (ed.), 71).

A consequence of this phenomenon is that candidates and members tend to switch party allegiances unpredictably, and the determination of which party or parties shall govern is the result of a protracted bargaining process after the election, which may take several weeks. The tendency to switch allegiances persists even after formation of the government, and presents a more or less constant threat to the governing coalition. Since 1982 parties have become more factionalised and the character of government more fragmented. The threat and successful use of the lack of confidence vote in the government has resulted in an excessive preoccupation with maintaining power at the expense of policy-making. It has also resulted in repeated suspension of parliamentary sessions. The critical and strategic period for policy-making and the introduction of change has become the first six months of office, when the government is immune from the lack of confidence vote. Democracy has become more than usually fragile in PNG. Importantly for our argument, the discontinuity and incoherence of the elected elite has left unchecked the inherent power of the bureaucratic elite.

The power of the bureaucratic elite: personal and organisational resources

The PNG parliamentary system has been described as a departmental system in which, largely by ministerial default, bureaucrats have dominated the policy-making process, being the 'real initiators and selectors of policy' (Saffu, in King, Lee & Warakai (eds.) 1985, 195). Saffu's study of the mutual perspectives of bureaucrats and ministers showed that bureaucrats expected the ideas and inspiration for policy to come from the politicians, but that by and large these ideas had not been particularly forthcoming. The nature of decolonisation, the weakness of political parties and the necessity for coalition governments and coalition politics, the reinforcement of traditional pragmatism that undermines concerns of an ideological nature and the unsuitable quality of much past ministerial material were cited as having contributed to the dearth of ministerial leadership.

But lack of political leadership and coherence are by no means the only factors accounting for the power of the bureaucratic elite. Bureaucracy, for Weber, was the type of organisation which came closest to his 'ideal type' of a rational and effective organisation. As a precision instrument, bureaucracy could put itself at the disposal of a variety of interests: political, economic or

any other sort (Etzioni-Halevy, 29 - 33). In a typical democracy, bureaucracy is the 'precision instrument' of the elected politician. In PNG it is the instrument (whether precise or not) of whoever controls it - i.e. mainly the Departmental heads of that bureaucracy, the bureaucratic elite, whether individually or collectively.

This group of individuals, it is proposed, derived their power from both personal and organisational characteristics. On the personal side, most were highly educated individuals - more highly educated on average (it is proposed) than the elected politicians. Many in the past had spent their careers in the service of the departments of which they subsequently became head. Thus they had both extensive technical and/or professional knowledge, and long experience, gained in institutions which pre-dated the state itself. (These comments apply equally, if not more so, to the Vice Chancellors of the Universities.)

On the other hand, the power of these individuals is associated with the organisational resources available to them. The most salient feature of the bureaucracy as organisation in PNG is the extent to which it dwarfs all other organisations in terms of size and scale, as well as its tendency to expand:

PNG has a large public service relative to the size of the country's economy. By the middle of 1986 a total of 50,014 public servants were employed ... The public service currently represents about a quarter of all formal sector employment and there are the equivalent of approximately sixty-nine public servants per 1000 citizen population in PNG. This ratio is much higher than for most other developing countries and more than double that of many South East Asian and African nations (Papua New Guinea, Ministry for Finance and Planning 1986).

The same source indicated that there had been growth of fourteen percent in the number of public servants since 1978, despite a major retrenchment exercise in 1983.

Size, it has been argued, plays a major role in determining the structure of organisations, increasing specialisation and differentiation, requiring more formalisation and standardisation of rules and procedures to effect

coordination and control (Jackson, Morgan & Paolillo 1986, 202 - 228). In other words, hierarchy seems to be a function of size.

If, as Astley and Sachdeva have argued (cited in Jackson, Morgan & Paolillo, 290) structural sources of power are to be found in hierarchical authority, resource control, and centrality in the network of interactions, government bureaucracies and those control them can be expected to be pre-eminent in terms of structural power.

To structural sources of power may be added institutional resources such as knowledge, technical expertise, experience, organisational culture and coherence. All these contribute to the power of the institutional leaders, and are developed gradually over the longer term, as contrasted with the shorter term characteristic of the elected elite.

Etzioni-Halevy, adopting Weber's insights and a modified elitist perspective, regards political power as crucial in its own right rather than as an offshoot of ownership or of economic power. Accordingly, political and bureaucratic elites who wield such power are regarded as basically serving their own interests rather than those of property-holding classes (Etzioni-Halevy, 3-4.) Using these assumptions, she has comprehensively and cogently argued the case for the respective dilemmas posed to democracy by bureaucracy, and by bureaucracy to democracy. On the one hand:

Bureaucracy poses a threat to democracy because it may serve as a tool for the enhancement and greater efficacy of state domination ... (Etzioni-Halevy, 90)

because it has

increasingly gained the potential to exempt itself from the control of elected politicians and to infringe on their domain (Etzioni-Halevy, 90).

This potential is attributed to bureaucracy's 'monopolization of expertise and information and to the decline in power of parliament', and to the 'ambiguity of rules which demarcate bureaucracy's sphere of competence' (Etzioni-Halevy, 90).

On the other hand

the dilemma for bureaucracy in a democracy is that it must participate in politics, but not in party politics, and the demarcation is not clear (Etzioni-Halevy, 92-93).

Bureaucratic leaders inevitably participate in politics since they are involved in the allocation of resources. But whereas democratic power struggles are usually circumscribed by rules, and the adherence of political elites to such rules is widely considered to be the very essence of democracy, power struggles generated by bureaucracy occur at a point at which the rules are inadequate or at which they break down. Such bureaucratic power struggles are thus potentially more ruthless and disruptive (Etzioni-Halevy, 98).

Bureaucracy out of control and out of self-control

As we have seen, party politics in the commonly understood sense, does not really seem to exist in PNG. But Etzioni-Halevy's argument is not negated: for the important point is the absence or ambiguity of rules governing the 'no-man's land' between the elected elite and the bureaucratic elite. This 'no-man's land' may be entered by any members of the bureaucratic elite, and if the elected elite are unable or unwilling to assert control, the most ruthless and disruptive power struggles between different bureaucratic elites may take place. This may, for instance, involve

the abolition of bureaucratic agencies, the dismissal of senior bureaucrats or the electoral defeat of governments and senior politicians (Etzioni-Halevy, 203).

Our case provides evidence which lends strength to this argument in the form of the ascendancy of the Department of National Planning and Development in 1984/85 in the process of developing the Medium Term Planning System. The power struggle within Cabinet between Deputy Prime Minister Wingti on the one hand and the 'kitchen Cabinet' (Public Service Minister Siaguru and National Planning and Development Minister Holloway) on the other, led to the defection of Wingti to the Opposition and the forced resignation of Siaguru and Holloway. More importantly for this argument, it deflected the Somare Cabinet's attention away from the growing power of the Department of National Planning and Development

and the territorial dispute which this precipitated between it and the Department of Finance. Amongst the more significant outcomes were, consistent with Etzioni-Halevy, the effective abolition of a key bureaucratic agency (National Planning and Development) through the dismissal of many of its senior bureaucrats and its subsumption into the Department of Finance (see Ch. 5, p. 97). Whether as a result of bureaucratic struggle or struggle within the political elite, or both, the Somare government was voted out of office and Wingti became Prime Minister (see p. 88). The Commission felt the effect of this struggle from the sidelines: as incoherence in signals coming from the Departments of National Planning and Development and of Finance; breakdown in the Medium Term Planning System; fluctuating interest by the political elite in the forthcoming Higher Education Plan; and in a 'stop-go' arhythm in its own policy formulation work.

Etzioni-Halevy's contribution to the understanding of our case in terms of elite theory is significant, for it has exposed in particular the paradoxical relationship between bureaucracy and democracy, which has been sensed intuitively by earlier elite theorists. On the one hand, bureaucracies have become powerful enough to gain independence from elected politicians and thus pose a threat to democracy, and on the other hand, the independence of bureaucracy from elected politicians is also a necessity for democracy (Etzioni-Halevy, 159). From this paradoxical relationship we must conclude that for democracy what is required is an appropriate balance between the power of elected politicians and that of the bureaucratic elite. The problem in PNG is therefore principally one of imbalance within the political elite in favour of the bureaucratic elite.

The political class: The relative power of the bureaucratic class compared to the political class as a whole

The power of the bureaucratic class derives principally from those same individual and organisational characteristics and resources as were discussed above in relation to the bureaucratic elite. To this may be added the leadership qualities of the individual bureaucratic head, reflected on the one hand in the extent to which he or she is able to exert and maintain control of the relevant part of the bureaucracy, and on the other the extent to which he or she is able to prevail in disputes over territory with the elected elite or with leaders of other parts of the bureaucracy. The formal internal

structure of the bureaucratic class varies slightly from year to year as governments subdivide departments in line with the creation of new ministries for political reasons. Successive governments have, on coming into office, abolished and regrouped departments to reduce their overall number, but over the passage of time there has been a tendency towards subdivision again. Such reorganisations sometimes create strategic opportunities for the relevant departments. (In 1988 there were thirty-one National Departments and nineteen Provincial Departments (Papua New Guinea, Department of Finance and Planning 1987).)

We have already seen the scope for territorial disputes within the bureaucratic elite, and it follows that such scope also exists within the bureaucratic class. A major weakness of the Weberian view of bureaucracy, which Etzioni-Halevy has pointed out, is the extent to which it disregards the informal structure and informal power struggles of bureaucracy (Etzioni-Halevy, 35). For whereas the strict application of bureaucratic rules as Weber envisaged might in theory ensure the ultimate rationality of bureaucracy, in reality the informal mode in which bureaucracy may also function allows for the discretionary application of such rules, such that they may be used as rewards and punishments in the pursuit of internal and external bureaucratic political struggles. Thus a bureaucracy may be at the same time more or less rational and more or less political.

Thus, if bureaucratic elites (and by extension the broader bureaucratic class) are basically serving their own interests, as Etzioni-Halevy has suggested, and are essentially out of the control of a political elite committed to a party ideology (which, as we have shown, is the case in PNG), we may expect the bureaucratic class to exploit the rational-legal bureaucratic structure to their own political ends, for it affords both the mechanism and the basis for political activity.

Bureaucratic incoherence and ethnic divisions within the elite

We may add a further observation: the tribal and clan characteristics and interests of the bureaucratic class are as pluralistic as they have been seen to be in the elected elite. Thus, whereas in the USA, for example, ethnic minorities are chiefly found in the non-elite, and the ethnic struggle is polarised between elite and mass, in PNG ethnic struggle pervades both the

bureaucratic class and the very heart of the political elite. A degree of incoherence in national policy is to be expected in this situation.

The failure of the elected elite to achieve and maintain its internal coherence results in its failure to achieve and maintain control of the bureaucracy. This has a number of consequences: national policy making tends to be disjointed, incoherent, inconsistent and intermittent; much of it takes place by default, as for instance in the five percent budget cuts imposed on the universities by the Finance Department after Cabinet deferral of the Higher Education Plan in 1986 (see Ch. 6, pp. 116 - 165); and it is subject to a good deal of political opportunism (for example, in some of the instances of the successful use of the 'economic sector argument' by threatened higher education interests (see p. 116), or in the amalgamation of the Education Research Unit with the Institute of Applied Social and Economic Research (see Ch. 6, pp. 133 - 138). A further consequence is that the politicisation of the bureaucratic class greatly outweighs its rationality and coherence, and this - paradoxically - allows much greater scope for other organised interests (such as universities) to participate in the struggle to determine national policy.

The relative power of the universities and the bureaucratic class

Despite their formal links, the universities are largely outside the effective hierarchy of the government machine through the autonomy afforded by their status as statutory bodies. Thus they have no formal role in the policy-making process. And yet they as institutions, as well as some of their individual staff members and departments, have been extraordinarily successful in influencing, and particularly in resisting, national policy for higher education during the period of our case (see Ch. 6, p. 128).

We have already seen, however, in Chapter 7 the extent to which large sections of the population (and potential interests) are conspicuous by their absence from the broad political class, and that this can be accounted for in large part by their lack of education, political skills, and organisation. The political class is numerically dominated by the bureaucratic class made up of its various departments and agencies. It also encompasses the universities as large, powerful organisations, and a relatively small number of labour organisations, dominated once again by the public servants as a group.

Given the overwhelming size and scale of the bureaucratic component of the political class, it seems surprising that the universities (being organisationally much smaller) have succeeded as well as they have in resisting government intervention. It suggests that over and above a degree of organisation and numerical strength, higher education and university education in particular imparts powerful political skills: rationality (of a different kind from bureaucratic rationality), communication, political awareness, persuasion, the ability to make direct contact with the political elite. These kinds of personal attributes are powerful to the individual, but are even more so to the institution as a group. It also suggests that university institutional culture may play a part in creating the coherence necessary for effective political participation. But the universities are even more ethnically diverse in composition than the political elite and the bureaucratic class, still comprising a much larger proportion of non-citizen staff. They are highly differentiated internally by academic discipline, and as we have seen, are of mixed elite/non-elite status. This by no means adds up to a recipe for a 'consensual unified elite' in Field and Higley's terms. To what may we attribute the universities' coherence as organised interest groups? It is proposed that institutional housing plays a key role: it creates a 'university village' in which people of diverse origins and value systems live together. This greatly facilitates communication and development of close-knit social relationships, even between apparently incongruous groups. When this 'village' is threatened, it has disproportionately high intellectual resources upon which to draw and it is capable of mobilising these immediately. It also has the shared value of the roof over its head to unite it.

Certain other 'elite villages' also exist in PNG: the community centring (until recently) on Bougainville Copper Ltd., or the Postal and Telecommunications Training College in Lae, for example. But it is proposed that these are inherently different. Ultimately they are associated with commercially operating organisations, and may be expected to derive their coherence in the last analysis from the ability to perform commercially. This is not a requirement of a 'university village'. Separated from any direct link with economic productivity, this village may represent a purely political organisation. This accords with Etzioni-Halevy's assumption that political and bureaucratic elites basically serve their own interests rather than those of the property-holding classes (Etzioni-Halevy, 4).

Summary

From an elite theoretical perspective, modified by bureaucratic and democratic theoretical perspectives, the lack of success in the implementation of the Higher Education Plan 1986 - 1990 is to be accounted for chiefly by the superiority of the personal political skills and organisational coherence of the universities in particular, and the higher education institutions in general, in a political struggle with the bureaucratic class - a struggle based on the distribution of a diminishing supply of economic resources. This is not to suggest that factors not mentioned, such as the personal attributes of the Education Minister, the radicalness of the plan's proposals, various technical aspects of the plan itself and so on, did not also play a part. But all these additional factors were ones which could either be exploited or overcome by the political skills of the higher education institutions (and some of their individual members) acting in their own interests. The superiority was associated with intellectual ability, high educational level, articulation, intimate connections with the elected political elite, an advantageous position in terms of command of resources of many kinds, long experience as institutions (in many cases antedating the state itself), the scarcity value of their manpower products, and an unusual degree of institutional coherence resulting from close social bonds.

Although the Commission for Higher Education was central in formulating the Higher Education Plan, its activity thereafter was chiefly on the sidelines. The main interactions which dominated the higher education public policy process were those between the major government departments, particularly the central agencies, and the universities. At intervals, and for limited periods, these were moderated by decisions of cabinet. As there was limited consensus amongst members of the political class, and even less among the political elite, and for the present generation these had continuing ethnic and regional allegiances competing with national interests, the resulting pattern of policy-making tended to be disjointed, incremental and incoherent. In this situation, those with political skills as well as organisational resources tended to fare well. Universities in PNG were well endowed with these skills, relative to other parties. For even individual expatriate members of the university staff, who officially had no formal role in the indigenous political class, showed themselves capable of appealing successfully to national

politicians for support when their Departments (as in the case of Fisheries) were threatened by their home institution. Whereas the intellectual sub-elite in developed countries may be more peripheral within the political class, within the PNG political class they appeared to be relatively more powerful.

Perhaps the most important contribution that the elite theoretical perspective makes to our understanding of the case is the attention it focuses on the extent to which the weakness of democracy in PNG created incoherence in the policy process. The incoherence of the elected elite permitted incoherence in the bureaucratic class, and the outcomes of policy process were determined by struggles between different groups within the political class, including the universities and higher education institutions). The weakness of PNG democracy was and is exacerbated because of the relative absence of organised interest groups outside of the government machine - those voluntary associations which, in Bottomore's terms, are the 'means through which government by the people is made more real and practical' (Bottomore 1964, 126). And even where labour unions existed, as for example the Waterside Workers or the Public Service Association, the characteristics of their members in terms of incomes and lifestyles were much more akin to those of the elite than of the rural mass of the population engaged in subsistence agriculture.

In other words, the relationship between large scale organisation and the necessity for and power of elites, such as modern elite theorists such as Field, Higley, Deacon and Smart have recognised, is particularly apparent in the PNG context. Universities and other tertiary education institutions are prominent amongst the large scale organisations in PNG, and thus wield relatively more power than in countries where large scale voluntary and private sector organisations play a more prominent role. Relative to the mass of population, the entire modern sector (which is heavily dominated by the government machine) should be regarded as the elite, although the most powerful members were those heading the hierarchically structured organisations.

PART IV:
CONCLUSIONS

CHAPTER 11

CONCLUSIONS

Reviewing the research questions

The case study and its analysis have provided much evidence that between 1984 and 1990 elaborate national planning in PNG was indeed much less successful than anticipated. This was true both of higher education planning (at the system level) in particular, and national planning generally (e.g. the demise of the Medium Term Planning System in 1985). The question remains then: how do we best account for this lack of success?

There are potentially many different ways of answering this highly complex question. It could be explained, for instance, in terms of technical inadequacies of planning. These would include insufficient time and attention allowed for consultation and consensus building at the institutional level, and for lobbying at the Cabinet level. Added to this would be that the Cabinet submission was too long; the higher education plan document itself had no statement of the budgetary implications and so on. We might also explain it in terms of the inexperience and lack of political acumen of the Commission; or the equivocation and inexperience of the Minister; the failure to coincide with Cabinet's critical moment, and so on. Probably all of these explanations, and others, would be true - but they would also be only very partial. For this reason, and also because of our perception of planning as a particular type of policy process, three major contrasting theoretical perspectives were drawn from political sociology, selected on the basis both of their preeminence in that field of study, and of their apparent relevance to our case.

This chapter will discuss the respective explanatory capacity of each of these three perspectives with particular reference to the key findings of the case study as presented in Chapter 7. These were: the impact of the global economy on the PNG economy; changes in resource availability, and particularly, resource scarcity and growing inequality; the impact of organised and entrenched interests in preserving the existing allocation of resources, and in resisting policy change; the inherent fragility of democracy,

as well as the particular weakness of PNG democracy; and the political nature of higher education: conflict of values surrounding higher education, the dominance of higher education's instrumental value, and its contribution to inequality.

Merits of the pluralist theoretical perspective

Pluralist analysis was particularly useful in highlighting the extent to which higher education institutions were capable of mobilising themselves and performing as highly effective interest groups. Interest group activity was very much in evidence in the implementation stage of the Higher Education Plan (represented as Plan C in Chapter 7) and can account to a very large extent for the overwhelming frustration of the plan's recommendations. This activity was manifest at several levels: intra-institutional (e.g. Education Research Unit, Fisheries, Dentistry at the University of PNG) (see Ch. 6, pp. 123 - 138); inter-institutional (e.g. the University of PNG v. Administrative College, the University of PNG v. Legal Training Institute, the University of PNG v. National Arts School) (see Ch. 6, pp. 114,126, 156 - 159); between the Commission and institutions (e.g. the Commission for Higher Education v. PNG Maritime College) (see Ch. 6, pp. 119,162); between institutions and Cabinet (e.g. Sepik Agricultural College - through the Minister (see Ch. 6, p. 147)). The rational-comprehensive systems approach with which Plan A was associated failed utterly to recognise the potential of interest group activity to frustrate it. The coercive, conflictual approach of Plan B relied heavily on authority to deal with negative interests, an authority of which its proponents were ultimately to be divested. The capacity of Plan C, which recognised the necessity to accommodate a range of interests, was severely limited by having few if any inducements to offer.

Consistent with the pluralist perspective, the key issue was intensely political: the redistribution of economic resources. There were three main sub-issues in the form of three different types of proposed resource redistribution, which occurred in the following sequence: (a) within higher education (as per Plan A); (b) from higher education to primary education (as per Plan B); and (c) from higher education to the economic sector (as per Plan C in its finally approved form). In each case the outcome was essentially the same: virtually no change. From the pluralist perspective this implies that higher education interests were extremely successful in

resisting government intervention. It conveys a picture of a highly stratified power structure both within higher education, and between it and other organised interests. The picture is overwhelmingly static, with no evidence of a kind of democracy resulting from the interactions of a plurality of interest groups. The wider electorate have no discernible part in this balance of power.

A major limitation of this perspective is that, while it is descriptive of the distribution of power, it is not explanatory. How the power of higher education institutions was acquired and maintained, and what interactions were associated with it remain largely unexplained. We must assume that it was associated generally with the characteristics of higher education institutions: their missions, their organisational structures and resources, the numbers and concentrations of student and staff personnel they are capable of mobilising, the size of their budgets, the concentration of their resources in particular locations, the specialist expertise they possess and its overall scarcity, and so on.

For our purposes it neglects to explain how both global and domestic factors influenced resource availability; the growing inequality between higher education interests and the rest of the populace; and the particular problems associated with democracy in PNG. By itself it is the least powerful of the three perspectives, but it is a useful adjunct to each of the other two, especially the elite perspective.

Merits of the Marxist/dependency theoretical perspective

The Marxist perspective, through its reinterpretation as dependency (or underdevelopment) theory, is particularly powerful in explaining the successive redefinitions of the resource pools with which higher education was associated in terms of the outflow of resources resulting from global influences on the PNG economy. As a corollary, intensifying resource scarcity and growing inequality are also explained. It illustrates the pivotal role played by the state in forming a direct link between the domestic economy and the world capitalist system and the role that democracy may play in facilitating that link. From this perspective we may understand that the particular weakness of PNG democracy provides very favourable conditions for the neo-colonialist and imperialist tendencies of international capital. Examples of such international capitalist interests are evident both

in PNG's continuing dependence on Australia in the post-independence period, and in its reliance upon multinational companies and international lending agencies. According to this perspective the state, and the modern bureaucratic elite, are both the creation of, and the instrument of continuing domination by the foreign capitalist class - a class made up of a chain of foreign interests interlinked through a complex set of dependency relationships associated with capitalist relations of production. This perspective illustrates the extent to which higher education creates, reproduces and perpetuates the modern elite, and thus assists in maintaining the stability of the state in the interests of foreign capital.

Within the domestic context, the state employees who dominate the modern elite, can be understood, through their alienation from the means of production, to be engaged primarily in competition for the means of life. In the context of increasing resource scarcity, as illustrated above, the intensity of conflict, the bitterness of the struggles between various agencies of the state, and the pervasiveness of conflict throughout the public sector is readily appreciated. The conflict between conceptual Plans A and B represents a pertinent example of such a conflict between state agencies.

The great weakness of this perspective is the extent to which it is tied to the notion of class. The domestic bourgeoisie (as state elites) do not equate with foreign capitalist bourgeoisie, and the precise nature of the link between them is difficult to establish. Although in PNG some evidence exists of a relationship between the political elite and political class on the one hand and interests based on ownership and economic exploitation on the other (Hewison 1985, p. 252), it is by no means clear that state elites are dominated by the latter. It seems more plausible that they respectively cooperate insofar as it is in their mutual interests to do so (Etzioni-Halevy, p. 226). Evidence for the existence of a 'proletariat' capable of organising a revolution is even weaker.

Merits of the elite theoretical perspective

The strength of the elite perspective, when combined with bureaucratic theory in the context of democracy, lies particularly in the interpretation of struggles both within the modern bureaucratic class and between it and other organised interests. These struggles can be seen as essentially political, without any necessity for explanation in terms of capitalist relations

of production and associated class definitions. The relationship between higher education and the creation and perpetuation of the modern elite is particularly well explained, as well as the resulting growth in inequality between the elite and the mass. The threat to PNG's inherently fragile democracy posed by the bureaucratic class is readily appreciated from this perspective, and the inability of PNG's democracy to redirect resources, including higher education resources, can be understood to contribute to a growing level of political instability. In other words, the elite perspective deals directly and in detail with the internal interactions in the national policy process. It relates well to the conflict between Plans A and B, and to the failure in implementation of Plan C.

In elite analysis, resource scarcity and growth in inequality are explained only insofar as these are outcomes of policy. To a large extent, resources are taken as given: the conflicts are about how these are divided up, not about how they were acquired or how they will be acquired in future. Herein lies the chief weakness of the elite perspective: it ignores the external economic environment, and the changes in that environment, which impact strongly upon the availability of PNG's domestic resources, over which the various elite interests struggle for control.

Summary

The explanation of the lack of success of the Higher Education Plan 1986 - 1990 (Plan C, the successor to Plans A and B) offered by each of these perspectives may be summarised as follows. From a pluralist perspective, it can be accounted for by the acumen of the higher education institutions as interest groups in exploiting whatever strategic advantages they possessed. From a Marxist perspective, it may be explained in terms of the inability of a weak democratic government to make any significant inroads into a well established structure set up to serve the international capitalist system. From an elite theoretical perspective, it may be explained essentially in terms of the advantage afforded to a well-established and cohesive higher education elite by the incoherence of the state bureaucratic elite exacerbated by the incoherence of the elected political elite. The pluralist perspective is consistent with the Marxist perspective insofar as the capitalist system both contributed to and benefited from the success of interest group activity. It is

consistent with the elite perspective insofar as it illustrates the means by which the competing elite groups conducted their mutual struggles.

The following underlying elements are derived from key findings of the case study discussed in Chapter 7: Resources, inequality, interest group conflict, democracy, global environment. Using these key empirical elements, the explanatory power of the three theoretical perspectives for the case study may be summarised as follows:

TABLE 3: TREATMENT OF KEY EMPIRICAL ELEMENTS BY RESPECTIVE THEORETICAL PERSPECTIVES

Key Element	Pluralist	Marxist	Elite
Resources	YES	YES	YES
Interest Group Conflict	YES	YES	YES
Inequality	NO	YES	YES
Democracy	NO	YES	YES
Global Environment	NO	YES	NO

We can thus readily see that the Marxist and elite theoretical perspectives are both superior in explanatory terms to the pluralist, and that elite theory fails to offer explanation beyond the national boundary.

The case study suggests that economic exploitation is one of the major determinants, but not the sole determinant, of social inequality. Political power, however, seems at the same time to reside more or less independently in organisational resources, and in particular in those who occupy strategic positions within organisations such as the bureaucracy and the higher education institutions. It suggests that the political power associated with such organisations is particularly exaggerated in conditions where on the one hand, the political elite is incoherent, and on the other, where voluntary associations play no significant role as interest groups. It is also relevant to note that, although PNG is a capitalist state, it would have been necessary to create a modern indigenous elite for the achievement of independence irrespective of the political persuasion of that state. These

observations lend strength to the elite perspective as modified by Etzioni-Halevy.

Conclusions

Both perspectives have much utility in explaining different aspects of exploitation and domination (and the consequent frustration of Plan C), and are complementary to each other. It is therefore inappropriate to make a judgement between them and discard one in favour of the other. The justification for retaining both can be argued as follows. Following Marxist and dependency theory, we need to understand the dominant class to be foreign capitalism collectively, and the domestic political class consequently alienated from the means of production. Following elite theory, we may understand the political class to be dominated by the bureaucratic elite. It is precisely in the area of the bureaucratic elite that these two theoretical perspectives converge. Through the concept of alienation from the means of production, we can understand the struggles between competing elements of domestic elites in purely political terms (as represented by the conflict between Plans A and B). Through the notion that domestic political elites and foreign capitalists may act in their mutual interests, the link can be made between the struggles of domestic political elites and the global capitalist system. (The capacity of the higher education system to resist government intervention in the form of Plan C is reflective of this link.)

Domination by economic interests may exist simultaneously alongside domination by political interests, even where those interests are not identical. PNG provides such an example of two distinctly different types of dominant interests which do not cohere to any great extent. There is neither the coherence that one would expect to find if the state were the owner of the means of production, nor the coherence one would expect of a 'consensual unified elite' in a modern democracy. Both a Marxist and an elite theoretical interpretation are therefore appropriate, the former more relevant to PNG's international context and the latter more for its domestic context. Indeed, to opt for one or the other would be to discard and ignore important aspects of explanation. The relationship between the three theoretical perspectives and their respective merits may be best understood in terms of their utility for differing levels of analysis: pluralism for microanalytical purposes, elite

theory for national level analysis, and Marxism/dependency theory for analysis at the international or global level.

More precisely, it must be stressed that the link between the national and international levels of explanation is resource scarcity and the changing patterns of inequality associated with it. On the one hand, this factor characterised the relationship of the domestic capitalist state with the world capitalist system, with the latter contributing to resource scarcity in the former. Analysis of the case strongly suggests that the PNG state was incapable of restraining the outflow of its resources (as reflected in the differing resource boundary definitions associated with each of Plans A, B and C), and that democracy in the incoherent form found in PNG contributed significantly to this inability. On the other hand, it was precisely resource scarcity (and the threat of detriment associated with it) that was the key factor which initially activated the educated elites as interest groups: initially the higher education institutions, and subsequently bureaucratic elites spread much more widely throughout the public sector. (In other words, there was a direct relationship between the economic factors which gave rise to Plan C, and the capacity of higher education interest groups to resist its implementation.) Resource scarcity was, therefore, a significant factor contributing to the frustration of the Higher Education Plan 1986 - 1990.

Scope for generalisation

In Chapter 1 included in the research question was whether our explanation of lack of success in implementing the Higher Education Plan (Plan C) can be generalised to planning in the public sector in Papua New Guinea. This question can be examined against evidence from our case at two levels: the public sector as a whole, and other parts of the public sector separately.

The Medium Term Planning System, discussed in Chapter 2, provides a suitable example of planning for the public sector as a whole. In so far as a Marxist interpretation is adopted (in terms of the inability of the post-colonial state to resist exploitation by international capitalism), we can assume that planning as resource distribution in most if not all of the public sector was similarly affected. The Medium Term Planning System, as planning for the public sector as a whole, and its collapse, may be interpreted in this light - i.e. as having been a new planning system instituted in response to increasing resource scarcity, and as having failed to cope with the political

and other pressures exerted by that increasing scarcity. Plan B, which reflected one sector of the Medium Term Planning System, may be understood to have suffered from these same constraints. The collapse of the Medium Term Planning System is also well explained from an elite theoretical perspective in terms of the incoherence of the state bureaucratic elite and the opportunity afforded to it to play out its own internal struggles by the failure of the elected political elite to assert control of the bureaucracy. In this light, the failure of Plan B can be understood, on the one hand, in terms of the erosion of the power base of the national Department of Education/Department of National Planning and Development 'coalition' by the more general economic crisis, and on the other, the ascendancy this offered to the Department of Finance which was largely unrestrained by Cabinet.

Our account of the budget cuts to the Education and Health Sectors (in Ch. 6) afford separate examples of constraints on planning in other parts of the public sector. Although the health and education planning systems did not collapse in the spectacular manner that the Medium Term Planning System did, their planning effectiveness became severely curtailed as a result of two main factors. Clearly they were both affected by the growing scarcity of resources (manifest by the successive annual budget cuts in 1986, 1987 and 1988). This scarcity may be explained at two levels: the national outflow (explained in Marxist terms, as above), and the domestic redistribution (explained both in elite theoretical terms and in terms of adjustment to national outflow). Compounding the effects of growing scarcity was the impact of legal commitments to certain entrenched interests: external interests in the form of international lending agencies; and internal interests in the form of public servants (through their salary indexation). At this point it becomes very difficult to distinguish the effects of international capitalism and of privileged domestic interests. However the principal effect of resource decline combined with entrenched privileged interests (whether domestic or international) was to put both health and education planning into a state of impending immobility.

It is very clear therefore that our explanation of the failure of higher education planning is applicable very much more widely in the public sector in PNG. Other studies have shown, however, that external and internal security problems were also major factors which deflected and detracted from

coherent policy-making in PNG during the period of our case. For example in 1984

Internationally, PNG's relations with Indonesia reached a new low as the government accused the Indonesians of two border violations and as 11,000 Irian Jayan refugees crossed into PNG ... (In this area) ... where bipartisan policies had generally been maintained since 1975, albeit somewhat shakily, consensus began to crumble (Hewison, 249).

The internal issue that emerged as the most potent and pervasive in PNG in 1985 pertains to law and order. So acute was the problem that in Port Moresby, the nation's capital city of some 160,000, a state of emergency was declared (Premdas 1986, 197).

Undoubtedly external and internal security were major influences upon the general policy process, including that of higher education. Their absence from our explanation is because they were not manifest in any direct way within the sphere of higher education. Consequently they do not appear within our case study, which deals principally with the interaction of two different elite groups: higher education institutions and the bureaucracy. They can be traced, however, to some of the same conditions associated with our explanation. Growing inequality and urban poverty could be held to account for many of the domestic law and order problems. A significant element in urban crime, as in other less developed countries, was the activity of unemployed school drop-outs - people who by definition failed to qualify for participation in higher education and consequently were excluded from the highly educated elite groups. The border incursions were associated with West Irianese terrorist activity and refugee problems, which in turn were a result of the Indonesian policy of Transmigrasi - aimed at alleviating the problems of poverty and overcrowding by resettling Javanese in relatively underpopulated Irian Jaya.

If resource scarcity was the key factor that activated interest groups in PNG, we should expect to find evidence of interest group activity in less developed countries generally which, by definition, suffer chronic resource scarcity. Ours is a single case, and can provide no direct evidence for other countries. However literature on Third World experience of modernisation, as well as the general disillusionment with planning in the Third World, shows that many countries have not experienced growth and that in others, although

average per capita incomes may have increased, the level of inequality has grown (Reitsma & Kleinpenning, 13 - 14). Scarcity of resources has thus remained or become exacerbated for much or most of the population, whilst (by implication) elites have benefited. This suggests that interest group activity has been highly effective.

Other features which contribute to incoherent policy-making in PNG which are common in the Third World are the pluralistic nature of the population, based on ethnic, tribal and linguistic divisions. In PNG, as in many former British colonies in Africa, the pluralism is a consequence of the artificial and largely arbitrary boundaries delineated for the emerging state by the departing colonial power. Often these cultural divisions have led to secessionist movements and civil war. In PNG the island of Bougainville (North Solomons Province) has been a prime example, presenting a serious threat to the economy through forcing closure of the copper mine in 1990 and deflecting the attention of elected politicians from other aspects of the general policy/planning process. Generally low levels of formal education commonly found in Third World countries (as well as PNG) both exacerbate such cultural cleavages and place the educated elite in such countries in a favourable position to exploit their advantages.

Resource scarcity is, however, by no means confined to ex-colonies of imperialist capitalist nations, nor is it confined to capitalist democratic states. Often it stems initially from geographic and climatic factors (Reitsma & Kleinpenning). These intrinsic causes of inequality, which apply at all levels from local to global, have been exacerbated by population growth and associated pressures, particularly in the twentieth century. Even where Third World nations have never experienced colonisation, few if any have escaped the necessity to enter into relationships with international lending agencies. Thus dependency (a condition in which so many less developed countries find themselves) can be directly related to international indebtedness, irrespective of any legacy of colonialism or of the adoption of capitalism as the domestic economic base. Furthermore, projects funded by international loans aimed at raising the level of development have tended to fall well short of achieving their objectives. The problem of Third World poverty and inequality remains as intractable today as it has for decades. Borrowing from international lending agencies seems to play a greater role

in alleviating short term political problems than in achieving longer term economic development objectives.

International lending agencies are not themselves nation states, but are certainly the corporate agents of groups of capitalist nation states. As such they embody the values of and serve the interests of foreign capitalism, whether explicitly or implicitly. Third World indebtedness has become a major problem not only for the debtors, but also for the lending nations. In the late 1980s the stability of the entire international banking system was placed in jeopardy when major debtors such as Brazil and Mexico threatened to renege on loan repayments. The debt crisis has led to a growing awareness that the dependence of the 'First world' and the Third World is mutual. This awareness has not, so far, led to any substantial redistribution of resources other than by force. It also suggests that both the 'First world' and the Third World are living beyond their means, and that resource scarcity will increasingly impact indirectly or directly upon the policy process of the 'First world'.

In many Third World countries military dictatorships have replaced democratic systems of government (Almond & Coleman 1960). Using our combination of theoretical perspectives, this phenomenon may be interpreted as reflecting an extreme example of elite interest group response to acute resource scarcity. If this hypothesis is correct, it suggests that, as a minimum, democracy can only operate in conditions in which dominant interests are adequately served. In affluent countries there may be sufficient resources to serve both the dominant and subordinate interests. In two-party western democratic systems, we may assume that dominant interests are served by both parties, such that it makes little difference to them which party is in power. In PNG, and perhaps in other multiparty systems and fragile economies, we may understand the systemic instability of government in terms of the tendency for dominant (domestic) interests, if they are not served by the ruling coalition, to participate in the formation of an alternative ruling coalition in order to remain in a dominant position. If the most powerful interests in a nation are served by neither party, or, in the case of multiparty systems, fail to dominate the ruling coalition, we may expect that such interests will dispense with the democratic system of government.

If the failure of democracy can ultimately be linked with resource scarcity, we may conclude that survival of democracy in the less developed world depends significantly upon arresting the trend towards resource scarcity, whether of whole nations, or of large sections within nations. In other words, the preference of western governments for supporting 'democratic' political movements and channelling development assistance to them in line with this preference may be useless unless measures are also taken by western governments to address the problem of resource scarcity in the Third World by substantially redistributing the world's economic resources in their favour. Taken to its logical conclusions, the dependence of the western nations, through the international banking system, on the debtor nations of the Third World suggests that unless the net transfer of resources to the poorer nations is accompanied by a lowering of living standards in the west, the survival of democracy in the western world may even be threatened. If aid donors genuinely care about democracy, their assistance might be more effective if offered as grants (rather than loans), targeted on projects aimed at raising general educational and communication levels, so as to encourage the development of that underlying consensus on policy which, according to Dahl (1956, 132-133, quoted in Held, 194), usually exists in a society. Educational aid would thus be justified not directly in terms of economic returns to investment, but in terms of political returns which would indirectly contribute to the desired economic returns.

The chief contribution of the pluralist perspective to the understanding of our case is its ability to show to what extent democracy is not assured merely by the existence of a plurality of elites.

The policy-planning nexus

In Chapter 1 we distinguished planning, in the sense of elaborate national planning as used in this thesis, from incremental policy-making in terms of being more overt, specific, elaborated and integrated, particularly with respect to time and resource specifications. We have seen from our case that resource scarcity (and the inequality associated with it) played a major part indirectly in accounting for the failure of planning in terms of its contribution to general incoherence in the policy process. We may further argue that planning as a mode of policy-making has a special congruence with resource scarcity: the level of resource scarcity has a direct effect in

limiting the range of realistic policy options which can be considered. This means that many possible options are ruled out and moreover the decisions concerning the remaining options are commensurately more critical. The level of specificity of time and resource decisions characteristic of our conceptualisation of planning, and indeed the tendency for planning to strive for a longer time frame than incrementalist policy-making, may be understood to reflect the critical nature of these resource decisions. Such decisions are often major investment decisions. Once made, every effort must be made to derive maximum benefit from those decisions.

Paradoxically, it is precisely because resource scarcity threatens the stability of democratic government, that those critical resource decisions and extended time frames are undermined. Our case illustrates this vividly. Few countries can have (relatively) exceeded PNG's strenuous efforts at comprehensive, integrated, medium term planning, and yet we have seen that for a ruling coalition the window of opportunity for coherent policy-making in PNG is realistically probably not much more than six months. Policy-making in PNG is therefore *de facto* extremely incrementalist and often disjointed.

We may compare this with the situation in countries with which comprehensive national (i.e. central) planning is not typically associated: for instance the liberal-democratic developed countries of the western world, of which Australia is an example. In countries that are relatively resource abundant, such as these, resource and timing decisions are not as acutely critical, for the level of resources permits a wider range of options. Hence a broad policy objective might be achieved by more than one type of strategy, and resource and timing decisions might be quite different in each case. With the possibility of alternative strategies to achieve a similar end, an incrementalist approach can be seen to be more rational: if the preferred strategy proves unimplementable, then an alternative may be tried. In such a situation it makes sense to be flexible in forward commitments and proceed cautiously.

This is not to argue that policy-making process must be either in the planning or in the incrementalist mode. On the contrary, it is to argue that they are two rather extreme manifestations of a single phenomenon. In reality most national systems operate in varying combinations of these modes,

depending upon their aggregate resource availability and upon their political coherence. Nor indeed is it argued that resource availability is the only factor influencing their political coherence. Our case study shows, however, how it may be an important contributing factor. Other factors might, for example, include historical development, general educational levels, patterns of ethnicity and so on.

Relationship to other types of explanation

Some studies have framed their explanation of policy-process in markedly different terms. One such type, for example, is that in which primary importance is placed upon the impact of particular powerful or influential individuals. Davies (1989) has attributed the binary policy in Australian higher education in large part to the influence of Sir Leslie Martin. Gallagher (1982), for example, has highlighted the significance of the appointment of Mr. C.L.S. Hewitt as Chairman of the Australian Universities Commission. The impact of the individual is also reflected, in a particular way, in the Rational Actor Model of Allison (1971). Kogan also recognises the importance of individual impact, amongst other factors, in his study of educational policy making in Britain.

How then can the relative absence of emphasis on individual contributions to the policy process in our study be explained? Once again resource scarcity and its impact on the fragility of PNG democracy must be emphasised. Although our case included evidence of some very influential and significant individuals, such as Prime Ministers Wingti and Somare, their potential impact on the policy process seems to have been greatly reduced by their inability to achieve cabinet solidarity. Compromise inevitably resulted from the fragmentary composition of their ruling coalitions. This is particularly clear from the fact that the Higher Education Plan was deferred for 16 months despite Prime Minister Wingti's wholehearted expression of support for it. Education Minister Matiabe also played a key role in our higher education policy process - but it was principally a negative role, ending in direct confrontation with the universities and the Minister's removal from office. Undoubtedly, Matiabe contributed to the deferral of the Plan and its consequent diminished success, through his lack of whole hearted support for the plan, and his apparent failure to lobby support for it amongst his Cabinet colleagues. It is probably true, however, that it would have been

deferred in any case, because of the impending national election. In this instance the individual probably did not make a critical difference to the fact of its deferral. The difference in emphasis between Ballard and our explanation needs to be understood in the light of the fact that the major deterioration in PNG's economic situation occurred in the 1980s - after Ballard's time of writing. Instability in the PNG democratic system only became seriously apparent from about 1982 onwards, with the evidence increasing as the years progressed.

Minimisation of the impact of key individuals may also be explained in terms of a factor intrinsic to planning which distinguishes it from the incrementalist mode of policy-making: the overt aspect. One of the strengths of planning, as distinct from incrementalist policy-making, is its capacity to lay bare the policy choices, as a result of which the policy process is said to gain greater 'rationality'. Paradoxically this simultaneously creates a dilemma for planning, for in laying bare the policy choices which, for example, are supposed to enhance the Ministers' rationality, it also tends to lay bare the implications of those choices. Thus when a choice is made, the implications of rejecting other options are also laid bare. This factor tends to activate those interests that are denied by such choice. In so far as policy-making is covert through being incremental in style, there is greater scope for an influential individual to exercise personal skills in 'selling' the preferred option and underplaying the denied options, thus having greater scope for achieving agreement or general consensus. In so far as incrementalist policy-making styles are associated more with resource abundance than shortage, we may expect that studies of policy process located in more affluent countries will reflect a greater impact of key individuals, as appears to be the case. We should also expect that, within a given policy context, as resources become more scarce over time, the role of key individuals will tend to diminish, and that of resource-related factors will increase. Thus Ballard's emphasis (15) (amongst other things) on the importance of the link between ministers and those capable of providing technical advice is not inconsistent with the findings of our case, for as we have seen in Chapter 2, the PNG economy was buoyant until 1979, and the effect of the oil crisis and the world recession impacted chiefly from about 1981 onwards, including the period in which our case is set.

Another type of explanation of policy process is framed primarily in terms of bargaining games. Allison (1971) identifies this as one of his three models, and subsequently integrates it with his bureaucratic politics model (Allison & Halperin 1972). The earlier distinction between the two is a useful one, for in our case study we find considerable evidence of bureaucratic politics, but very little of bargaining games. For example, in the Education Sector Committee of the Medium Term Planning System (to which conceptual Plan B relates), bargaining was scarcely an element in the conflict of interests between the Commission on the one hand, and the Department of Education in alliance with the Department of National Planning and Development on the other. Only one implicit bargain can be identified: that if the Commission facilitated the rest of the Education Sector by agreeing to relinquish some of its resources in favour of improving the quality of primary, higher education would benefit indirectly by the general improvement in quality of entrants to tertiary education. No direct benefit could be offered since the Sector was involved, essentially, in a 'zero sum game'. Moreover the Department of Education/Department of National Planning and Development alliance were, in effect, attempting a bargain which they were powerless to honour. For with the fall of the Somare Government, the Wingti Government adopted an overall strategy of shifting resources away from the Education Sector as a whole (reflected in conceptual Plan C, in its finally approved form). This meant that savings from higher education could not be redirected to the quality improvement in primary education, despite the fact that the Commission had been persuaded by this argument to identify its proposed savings.

Here again we may note the role played by resource scarcity in limiting the scope for explanation in terms of bargaining games. The principle can readily be appreciated that the greater the general scarcity of resources, the less the scope for supporting or honouring bargains which have resource implications. Where there are no 'carrots' to offer, only 'sticks' may remain. We have already argued that planning as a mode of policy-making is congruent with resource scarcity. We may further argue, therefore, that explanation framed in terms of bargaining games is more likely to be associated with policy process in affluent countries. Once again, this does seem to be the case.

Moreover we may understand the characteristics of overtness and longer time frames associated with the conceptualisation of planning as used in this study as characteristics which tend to limit the scope for bargains. They represent, in a sense, qualities aimed at achieving a single, big bargain, rather than a series of smaller and not necessarily integrated bargains. Published comprehensive planning documents serve, amongst other things, as a kind of contract. Between international lending agencies and recipient governments, these 'contracts' are often legally enforceable. Between national government and the domestic parties which they concern and seek to bind, typically those same documents are both practically and legally unenforceable, for the very reason that many of those same parties have neither been consulted nor formally agreed to those 'contracts.' Those same documents then, in a sense, represent aggregations of 'bargains' which are highly susceptible to being dishonoured within the national context. Undoubtedly the scale of national planning can be held to account to a considerable extent for the susceptibility of these 'bargains' to being dishonoured. If a government is incapable of honouring its legally enforceable commitments to the external parties to its national planning 'contracts', and at the same time the commitment of the domestic parties is not enforceable by law, the government may have no other recourse than to resort to enforcement by its military. By this means it may be demonstrated that commitment to international lending agencies may contribute to the rise of militarism in resource scarce countries.

Is planning futile?

Given the intractability of the problems faced by public sector planners in countries like PNG, and the widespread disappointing experience of planning in general, it can legitimately be asked whether there is any point at all in engaging in national planning. Is it simply a waste of time and money?

A major argument in favour of planning, despite its abundant frustrations, is that the process constitutes a very important opportunity for learning, especially corporate learning. This learning is achieved in a number of ways, and is facilitated if the planning process incorporates evaluation as part of that process. The utility of that learning process is only fully realised if planning is on-going, so that the learning can be put into practice and refined. Broad participation in the planning process assists in maximising

the potential for learning. It may also assist in developing and fostering social cohesion.

Our case study supplies evidence of planning as a learning process (Pressman & Wildavsky, 1984, 255) at a number of levels. One of these was the resolution of the conflict between conceptual Plans A and B, and the replacement of both of these by a more successful Plan C. A similar pattern, reflecting a learning process, was evident in the three-stage formulation of health planning. The Marxist perspective, insofar as it embodies the dialectic principle, is highly congruent with planning as a learning process. National planning typically involves a considerable amount of research and data collection, essential for the predictive aspects of planning based on past trends. The processes of data collection, research and analysis contribute greatly to developing a knowledge base, and to informing otherwise subjective judgements. The publication of planning documents serves, amongst other things, to preserve, transmit and (indirectly) generate new knowledge - functions typically associated with institutions of higher learning. There is thus a very close relationship between the processes of learning, of planning and of research.

In PNG the experience described in our case study has led to a change of emphasis and of strategy in the subsequent plan (Papua New Guinea, Commission for Higher Education 1990). In this new plan the political nature of planning has been much better recognised. The general approach to instituting changes has been to create alternative political/organisational structures (Institutes), cutting across the responsibilities of the powerful departmental structures and incorporating in their membership a wider cross section of interests. It is implied that these Institutes will gradually erode the traditional institutional power bases of the colleges concerned, inducing them to become more responsive to other interests. Whether this strategy will be successful remains to be seen. It will certainly take some time and will depend to a large extent on the respective political skills (in the broadest sense) of the members of the old structures as compared to those of the new. Whatever the outcome, there will be further lessons to be drawn from the experience.

One of the consequences of the experience of planning described in our case was that over a period of time a change took place in the perceptions of

some higher education institutional heads such that a range of common interests were recognised. Although the concept of a unified national higher education system (as presupposed by Plan A) by no means came to be uniformly or even widely accepted, nevertheless a much greater coherence was achieved between the Commission for Higher Education and some institutions, especially the universities. This was consolidated when their mutual dissatisfaction with the incumbent Education Minister became so acute that they learned to communicate highly effectively with each other and pool their efforts to achieve a common goal. The Education Minister was eventually removed from office. It is probably also true that the publication of the Higher Education Plan 1986 - 1990 and the discussions that were entailed helped to inform the full range of higher education institutions and develop in them an awareness of their inter-relationships in the national higher education effort.

Whether the resources required for national planning can be justified is essentially a political question, and one very difficult to answer. It is as intractable as that of whether expenditure on research can be justified when the outcome cannot be accurately predicted. It can as well be argued that a nation cannot afford not to plan, when planning affords the only hope of overcoming or alleviating current problems which are unacceptable. The question is really one of judgement as to how much should be afforded, when contrasted with other alternatives for expenditure - truly a planning question.

Observing the tenacity with which governments and other organisations cling to planning in the face of widespread and manifest failure, this thesis concludes that the appropriate way to regard planning is not so much a means to specific ends (which it may also be), but as an end in itself. Viewed in this way, the chief value of planning is as an educational activity and a social process: one which heightens awareness of related issues and interests, which helps to focus research and analysis around key issues or problems, which stimulates an awareness of the wider environment, and which, perhaps most importantly, if managed appropriately may greatly contribute to developing social fabric.

For countries similar to PNG in terms of size and economic, political and social characteristics, and perhaps also for others, some implications for

national planning would, in principle, be as follows. The scope and scale of planning should be realistic both in terms of the resources available to the process, and general resources constraints. Flexibility should be preserved as much as possible, so as to allow longer range planning to take account of unanticipated circumstances such as unpredictable changes of government, changes in resource availability and other contingencies. Planning should avoid extremes of specificity and elaboration which are politically too restrictive. And perhaps most importantly, it should allow sufficient time and attention to maximise the scope for widespread participation. In situations of no growth or declining resources, particular attention needs to be given to achieving policy objectives as far as possible through identifying and exploiting the potential of areas of coincidence of interest and consciously avoiding generating unnecessary conflicts of interest. For the achievement of specific planned outcomes, generating support and political interest at all levels is essential, most particularly that of the elected politicians.

Implications for theory

In the current era the ideologies which underlie pluralism, Marxism and elite theory '...are like medieval maps of the world, charming but dangerous for navigating unfamiliar seas' (Dahl 1982, 3). The case study, the analysis of its empirical findings, and the comparison of alternative theoretical explanations suggest a need for theory which is capable of global level explanation and deals with the distribution of economic resources, but which is not restricted to class analysis nor to Marx's particular conceptualisation of capitalism. World systems theory may have relevance in this regard. At the same time such theory must be capable of recognising and explaining the sources of power and the mode of operation of interest groups, whether capitalist or not. Such theory must therefore be capable of both micro and macro application. The scope for further development of grounded theory from this case study was by no means exhausted but exceeded the scope and time limitations governing the preparation of this thesis.

BIBLIOGRAPHY^{1 2 3}

*Alexander, E.R. 1986. *Approaches to Planning: Introducing Current Planning Theories, Concepts and Ideas*. Gordon & Breach Science Publishers S.A., P.O. Box 161, 1820 Montreux 2, Switzerland.

Allan, B. & Hinchliffe, K. 1982. *Planning, Policy Analysis and Public Spending - Theory and the Papua New Guinea Practice*. Gower Publishing Co. Ltd., Aldershot, Hampshire, U.K.

Allison, G. T. & Halperin, M. H. 1972. Bureaucratic politics: A paradigm and some policy implications. *World Politics*, 24, Spring, pp. 40 - 79.

Allison, Graham T. 1971. *Essence of Decision Explaining the Cuban Missile Crisis*. Little, Brown & Co., Boston.

Almond, G.A. & Coleman, J.S. (eds.). 1960. *The Politics of the Developing Areas*. Princeton University Press, Princeton, New Jersey.

Amarshi, A., Good, K. & Mortimer, R. 1979. *Development and Dependency - The Political Economy of Papua New Guinea*. Oxford University Press, Melbourne.

Appelbaum, R.P. 1988. *Karl Marx. Masters of Social Theory Volume 7*, Sage Publications, Newbury Park - Beverly Hills - London - New Delhi.

Bachrach, P. & Baratz, M.S. 1970. *Power and Poverty - Theory and Practice*. Oxford University Press, Oxford.

*Baldrige, J. Victor. 1979. *Power and Conflict in the University: Research in the Sociology of Complex Organizations*. Wiley, New York.

¹ For general political background, reference was made to the 'Political Chronicle' in the *Australian Journal of Politics and History*, Vol. 24, 3; Vol. 25, 1; Vol. 26,3; Vol. 28, 3; Vol. 29, 1; Vol. 30, 2 and 3; Vol. 31, 2 and 3; Vol. 32, 3; and the 'Australian Political Chronicle' in Vol. 19, 1, 2 and 3; Vol. 20, 1; Vol. 21, 1; Vol. 22, 1 and 3; and Vol. 23, 1 and 3.

² An asterisk (*) denotes an item which formed an important part of background literature, but which is not specifically referred to in the text of the thesis.

³ For statistical background to the PNG higher education system, reference was made to the Papua New Guinea Commission for Higher Education Annual Survey of Institutions of Higher Education 1983, 1984 and 1985.

Ballard, J.A. (ed.) 1981. *Policy-Making in a New State: Papua New Guinea 1972 - 1977*. St. Lucia, University of Queensland.

*Barth, F. (ed.) 1978. *Scale and Social Organization*. The Norwegian Research Council for Science and the Humanities, Global Book Resources Ltd., 109 Great Russell Street, London WC1B 3ND.

Baxter, Carolyn, O'Leary, P.J. & Westoby, Adam (eds.) 1977. *Economics and Education Policy: A Reader*. Longman in association with The Open University Press, Longman Inc., New York.

*Bell, C. (ed.) 1973. *The Diseases and Health Services of Papua New Guinea*. Department of Public Health, Port Moresby.

*Berdahl, Robert O. 1959. *British Universities and the State*. University of California, Berkeley.

Bleau, B. L. 1981. Planning Models in Higher Education: Historical Review and Survey of Currently Available Models. *Higher Education*, Volume 10, (Issue 2), pp. 153 - 168.

Blowers, A., Brook, C., Dunleavy, P. & McDowell, L. *Urban Change and Conflict: An Interdisciplinary Reader*. Harper & Row Publishers, London.

Bolman, L.G. & Deal, T.E. 1984. *Modern Approaches to Understanding and Managing Organisations*. Jossey-Bass Publishers, San Francisco and Oxford.

Bottomore, T. & Rubel, M. (eds.) 1963. *Karl Marx - Selected Writings in Sociology and Social Philosophy*. Pelican Books, Penguin Books Ltd., Harmondsworth, Middlesex.

Bottomore, T. (ed.) 1979. *Karl Marx*. Basil Blackwell, Oxford.

Bottomore, T. (ed.) 1981. *Modern Interpretations of Karl Marx*. Basil Blackwell, Oxford.

Bottomore, T.B. 1964. *Elites and Society*. Penguin Books Ltd., Harmondsworth, Middlesex, England.

Bourdieu, P. 1988. *Homo Academicus*. Policy Press (in association with Basic Blackwell), Cambridge.

Bray, M. & Smith, P. 1985. *Education and Social Stratification in Papua New Guinea*. Longman Cheshire, Melbourne.

*Bray, M. 1984. *Educational Planning in a Decentralised System - The Papua New Guinea Experience*. University of Papua New Guinea Press, Waigani.

*Brindley, R., Rydin, Y. & Stoker, G. 1989. *Remaking Planning*. Unwin Hyman, London.

Brogan, B. 1986. Economic Policy in 1986. Working Paper No. 4, Institute of National Affairs, P.O. Box 1530, Port Moresby.

Brown, A. (Chairman), Cohen, S.W., Eri, V.S. & Nash, A.H. 1971. *Report of the Committee of Inquiry into Higher Education in Papua New Guinea*. Canberra. (The Brown Report).

*Burgess, R.G. (ed.) 1982. *Field Research: A Sourcebook and Field Manual*. Allen and Unwin, London.

Burrell, G. & Morgan, G. 1979. *Sociological Paradigms and Organisational Analysis*. Heinemann, London.

Cawson, A. 1985. *Organized Interests and the State - Studies in Meso-Corporatism*. Sage Series in Neo-Corporatism, SAGE Publications, London, Beverly Hills, New Delhi.

*Clark, Burton R. 1983. *The Higher Education System: Academic Organization in Cross-National Perspective*. University of California Press, Berkeley/Los Angeles/London.

Cockburn, C. 1977. *The Local State - Management of Cities and People*. Pluto Press, London.

Cole, M. (ed.) 1989. *The Social Contexts of Schooling*. The Falmer Press, East Sussex, U.K.

Commission of Enquiry 1978. *Report of Commission of Inquiry into Unrest at the University of Papua New Guinea in April and May of 1978 and Into Other Related Matters*. White, P. (Chairman), Papua New Guinea.

*Conroy, J.D. 1978. *National Education Strategy - Papua New Guinea Education Plan Review and Proposals*. IASER Monograph 9. Institute of Applied Social & Economic Research, Boroko.

*Conyers, D. & Hills, P. 1984. *An Introduction to Development Planning in the Third World*. John Wiley & Sons, Chichester.

*Crittenden, R. & Lea, D.A.M. 1989. *Integrated Rural Development Programmes in Papua New Guinea*. IASER Monograph 28, PNG Institute of Applied Social and Economic Research in conjunction with the Department of Geography, University of New England, Armidale.

Currie, G. 1964. *Report of the Commission of Enquiry on Higher Education in Papua New Guinea*. Canberra.

*Daalder, H. & Shils, E. 1982. *Universities, Politicians and Bureaucrats*. Cambridge University Press.

Dahl, Robert A. 1956. *A Preface to Democratic Theory*. University of Chicago Press, Chicago.

Dahl, Robert A. 1961. *Who Governs? Democracy and Power in an American City*. Yale University Press, New Haven and London.

Dahl, Robert A. 1982. *Dilemmas of Pluralist Democracy. Autonomy Vs. Control*. Yale University Press, New Haven and London.

Dahl, Robert A. 1989. *Democracy and Its Critics*. Yale University Press, New Haven and London.

Dahl, Robert A. & Tufte, Edward R. 1973. *Size and Democracy*. Stanford University Press, Stanford, California.

Davies, Susan 1989. *The Martin Committee and the Binary Policy of Higher Education in Australia*. Ashwood House, Melbourne.

Dore, Ronald 1976. *The Diploma Disease*. George Allen & Unwin Ltd., London.

Dye, T.R. & Zeigler, L. H. 1972. *The Irony of Democracy: An Uncommon Introduction to American Politics*. Duxbury Press Series in Politics, Wadsworth Publishing Co. Inc., Belmont, California, U.S.A.

Ehrlich, S. 1982. *Pluralism On and Off Course*. Pergamon Press, Oxford.

*Etzioni, A. 1967. Mixed-Scanning: A 'Third' Approach to Decision-Making. *Public Administration Review*, Volume 27, December, pp. 385 - 392.

Etzioni-Halevy, E. 1983. *Bureaucracy and Democracy - A Political Dilemma*. Routledge & Kegan Paul, London, Boston, Melbourne and Henley.

Evans, P., Rueschemeyer, D. & Skocpol, T. (eds.) 1985. *Bringing the State Back In*. Cambridge University Press, Cambridge.

Faber, M.L.O. (Team Leader), McFarquhar, A.M.M., Hart, J.K., & Diddens, J.D. 1973. *A Report on Development Strategies for Papua New Guinea, Port Moresby*. Prepared by a Mission from the Overseas Development Group (University of East Anglia) for the International Bank for Reconstruction and Development.

*Faludi, A. 1973. *A Reader in Planning Theory*. Pergamon Press Ltd., Headington Hill Hall, Oxford.

Field, G.L. & Higley, J. 1980. *Elitism*. Routledge & Kegan Paul, London, Boston and Henley.

*Finch, J. 1986. *Research and Policy - The Uses of Qualitative Methods in Social and Educational Research*. Social Research and Education Studies Series: 2, The Falmer Press, London.

Floud, J.E. 1957. *Social Class and Educational Opportunity*. William Heinemann Ltd., London.

*Friedmann, J. & Hudson, B. 1974. Knowledge and action: A guide to planning theory. *Journal of American Institute of Planning*, January, 1974, pp. 2 - 16.

*Friedmann, J. 1973. *Retracking America - A Theory of Transactive Planning*. Anchor Books, Anchor Press/Doubleday, Garden City, New York.

Gallagher, A.P. 1982. *Coordinating Australian University Development A Study of the Australian Universities Commission 1959 - 1970*. University of Queensland Press, St. Lucia.

Gannicot, K. 1987. Education in Papua New Guinea: A Case of Wasted Resources. Islands/Australia Working Paper No. 87/5, National Centre for Development Studies, Australian National University, Canberra.

Giddens, A. 1985. *The Nation-State and Violence*. Polity Press, Cambridge, in association with Basil Blackwell, Oxford.

Glaser, B.V. & Strauss, A., 1968. *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Weidenfeld and Nicolson, 5 Winsley Street, London W.1.

Glenny, Lyman A., Berdahl, Robert O., Palola, Ernest G., and Paltridge, James G. 1971. *Coordinating Higher Education for the '70s*. Centre for Research and Development in Higher Education, University of California, Berkeley.

Goertzel, T.G. 1976. *Political Society*. Rand McNally College Publishing Company, Chicago.

Grewe, T., Marshall, J. & O'Toole, D.E. 1989. Participative planning for a public service. *Long Range Planning*, Volume 22, (Issue 1), pp. 110 - 117.

Griffin, J. 1988. The great university debate: Origin and development, Part 2 in *The Times of Papua New Guinea*, Week 14 - 20 January, 1988.

Gris, G.B. (Chairman), Avei, M., Crocombe, R.C., Harvey, V., Kilage, I., Low, D.A., Rooney, N., Pochapon, K., Sarei, A., Waiko, J. 1974. *Committee of Enquiry into University Development (Gris Report)*. Ministry of Education, Port Moresby.

- Gross, E. & Western, J.S. (eds.) 1981. *The End of A Golden Age - Higher Education in a Steady State*. Scholars' Library, University of Queensland Press, St. Lucia - London - New York.
- *Hall, P. 1980. *Great Planning Disasters*. Weidenfeld and Nicolson, 91 Clapham High Street, London SW4 7TA.
- *Ham, C. & Hill, M. 1984. *The Policy Process in the Modern Capitalist State*. Harvester Press, Wheatsheaf Books Ltd., Sussex, U.K.
- *Harman, G.S., Miller, A.H., Bennett, D.J. and Anderson, B.I. 1980. *Academic Becalmed: Australian Tertiary Education in the Aftermath of Expansion*. Australian National University, Canberra.
- *Heclo, H. & Wildavsky, A. 1974. *The Private Government of Public Money*, The Macmillan Press Ltd., London & Basingstoke.
- Hegarty, D. & King, P. 1983. Papua New Guinea in 1982: The election brings change. *Asian Survey*, 23, (Issue 2), pp. 217 - 226.
- Hegarty, D. 1983. *Electoral Politics in Papua New Guinea - Studies on the 1977 National Elections*. University of Papua New Guinea Press, University P.O., Papua New Guinea.
- Held, D. 1987. *Models of Democracy*. Polity Press, in association with Basil Blackwell, Cambridge.
- Heller, C.S. (ed.) 1969. *Structured Social Inequality - A Reader in Comparative Social Stratification*. The Macmillan Co., New York, Collier-Macmillan Ltd., London.
- Hewison, K. 1985. Papua New Guinea in 1984 - Consensus Crumbles. *Asian Survey*, Volume 25, (Issue 2), pp. 249 - 256.
- Higley, J., Deacon, D. & Smart, D. 1979. *Elites in Australia*. Routledge & Kegan Paul, London, Boston and Henley.
- Hogwood, B.A. & Gunn, L. 1984. *Policy Analysis for the Real World*. Oxford University Press, Oxford.

Hook, S. 1955. *Marx and the Marxists*. D. Van Nostrand Co. Inc., Princeton, New Jersey - Toronto - London.

*Horowitz, D.L. 1989. Is there a third-world policy process? *Policy Sciences*, Volume 22, pp. 197 - 212.

Horowitz, I.L. 1972. *Three Worlds of Development*. Oxford University Press, New York.

Howie-Willis, I. 1980. *A Thousand Graduates - Conflict in University Development in Papua New Guinea, 1961 - 1976*. Pacific Research Monograph No. 3. The Australian National University, Canberra.

Hunt, A. (ed.) 1977. *Class and Class Structure*. Lawrence and Wishart, London.

Jackson, J.H., Morgan, C.P. & Paolillo, J.G.P. 1986. *Organization Theory: A Macro Perspective for Management*. Prentice-Hall, Englewood Cliffs, New Jersey 07632.

Jessop, B. 1982. *The Capitalist State - Marxist Theories and Methods*. New York University Press, New York.

King, P., Lee, W. & Warakai, V. (eds.), 1985. *From Rhetoric to Reality? Papua New Guinea's Eight Point Plan and National Goals After a Decade*. Papers from the Fifteenth Waigani Seminar, University of Papua New Guinea Press, University P.O., Papua New Guinea.

King, R. 1986. *The State in Modern Society - New Directions in Political Sociology*. Chatham House Publishers, Inc., Chatham, New Jersey.

Kogan, M. 1975. *Educational Policy-Making: A Study of Interest Groups and Parliament*. George Allen and Unwin Ltd., London.

Lee, J. Social Class and Schooling, in Cole, M. (ed.) 1989. *The Social Contexts of Schooling*. The Falmer Press, East Sussex, U.K.

Levy, A. 1986. Second-Order Planned Change: Definition and Conceptualization. *Organizational Dynamics*, Volume 15, (Issue 1), Summer, pp. 5 - 20.

Lindberg, L.N., Alford, R., Crouch, C. & Offe, C. 1975. *Stress and Contradiction in Modern Capitalism - Public Policy and the Theory of the State*. Lexington Books, D.C. Heath and Co., Lexington, Massachusetts, Toronto and London.

Lindblom, C.E. 1968. *The Policy Making Process*. Prentice Hall, Eaglewood Cliffs, New Jersey.

Lloyd, P.C. (ed.) 1966. *The New Elites of Tropical Africa*. Published for the International African Institute by the Oxford University Press, Ely House, London W.1.

Lynch, K. 1989. *The Hidden Curriculum: Reproduction in Education, A Reappraisal*. The Falmer Press, East Sussex, U.K.

*Mazmanian, D.A. & Sabatier, P.A. 1981. *Effective Policy Implementation*. Lexington Books, Massachusetts.

McGavin, P.A. 1991. Reform in the Financing of Higher Education in Papua New Guinea, *Higher Education*, Volume 21, pp. 27-48.

McGinn, N., Schiefelbein, E., & Warwick, D. P. 1979. Educational Planning as Political Process: Two Case Studies from Latin America. *Comparative Education Review*, Volume 23, (Issue 2), pp. 218 - 239.

*McKinnon, K. 1973. *Realistic Education Planning*. Fundamentals of Educational Planning No. 20. International Institute for Educational Planning, UNESCO, Paris.

Miles, M.B. & Huberman, A.M. 1984. *Qualitative Data Analysis - A Sourcebook of New Methods*. Sage Publications, Beverly Hills - London - New Delhi.

Milliband, R. 1969. *The State in Capitalist Society*. Quartet Books, London - New York.

Miller, G.W. 1971. *Educational Opportunity and the Home*. Longman Group Ltd., London.

Millett, John D. 1984. *Conflic in Higher Education - State Government Coordination Versus Institutional Independence*. Jossey-Bass, San Francisco - Washington - London.

*Moodie, Graeme C. & Eustace, Rowland. 1974. *Power and Authority in British Universities*. George Allen & Unwin, London.

Moses, I. (ed.) 1990. *Higher Education in the Late Twentieth Century: Reflections on a Changing System*. Higher Education Research and Development Society of Australia (HERDSA), 1990.

Murphy, P.S. 1981. *Enrolments by Province - University of Papua New Guinea 1970 - 1980*, Planning Office, University of Papua New Guinea, Port Moresby.

OECD 1965. *Mediterranean Regional Project*, OECD, Paris.

Oliver, M. (ed.) 1989. *Eleksin - The 1987 National Election in Papua New Guinea*. University of Papua New Guinea, Port Moresby.

Painter, 1987. *Steering the Modern State - Changes in Central Coordination in Three Australian State Governments*. Sydney University Press, Sydney.

*Painter, M. & Carey, B. 1979. *Politics Between Departments*. University of Queensland Press, St. Lucia.

Papua New Guinea 1973. *Higher Education Bill 1973 (draft of 8.4.1973)*.

Papua New Guinea 1974. *Strategies for Nationhood - Policies and Issues*. December 1984, National Planning Committee of Cabinet, Central Planning Office, Port Moresby.

Papua New Guinea 1976. *Programmes and Performance 1976-77*. National Planning Committee of Cabinet, Central Planning Office, Port Moresby.

Papua New Guinea 1983. *Higher Education Act 1983*.

Papua New Guinea 1987 A. *Cultural Development (Amendment) Act 1987*.

Papua New Guinea 1987 B. *Act No. 44 of 1987 entitled Institute of Applied Social and Economic Research (Amendment) Act 1987, 1/12/87.*

Papua New Guinea, Central Planning Office 1976. *The Post-Independence National Development Strategy (White Paper).* National Planning Committee, Port Moresby.

Papua New Guinea, Commission for Higher Education 1984 A. *Higher Education - A Review of Trends in Papua New Guinea.* Port Moresby.

Papua New Guinea, Commission for Higher Education 1984 B. *Higher Education Issues and Options for Papua New Guinea.* Port Moresby.

Papua New Guinea, Commission for Higher Education 1984 C. *Towards a Strategy For Higher Education in Papua New Guinea - Papers from a seminar sponsored by the Commission for Higher Education in conjunction with the University of Papua New Guinea, 19 - 21 June 1984, Port Moresby.*

Papua New Guinea, Commission for Higher Education 1986 A. *Higher Education Plan 1986 - 1990 - A Strategy for Rationalisation.* Port Moresby.

Papua New Guinea, Commission for Higher Education 1986 B. *1984 Annual Report of the Commission for Higher Education to the National Parliament.* Port Moresby.

Papua New Guinea, Commission for Higher Education. 1986 C. *Annual Survey of Institutions of Higher Education in Papua New Guinea - 1984 Part C: Staffing Statistics.* Commission for Higher Education, Port Moresby.

Papua New Guinea, Commission for Higher Education 1990. *National Higher Education Plan.* Port Moresby.

Papua New Guinea, Department of Finance and Planning 1986. *National Manpower Assessment 1982 - 1992.* Port Moresby.

Papua New Guinea, Department of Finance and Planning, 1987. *Vote Index and Budgetary Notes for the year ending 31/12/88.*

Papua New Guinea, Department of Health 1986. *Papua New Guinea National Health Plan 1986 - 1990.* Port Moresby.

Papua New Guinea, Department of National Planning and Development 1985. Unapproved Draft: National Development Plan: The Medium Term Development Programme 1986 - 1990, Port Moresby.

*Papua New Guinea, Department of Public Health 1974. *Papua New Guinea National Health Plan 1974 - 1978*. Port Moresby.

*Papua New Guinea, Independent State of. 1980. *Constitutional Laws and Documents*. Waigani.

Papua New Guinea, Ministry for Finance and Planning 1986. *Planning and Budgetary Strategy for the Year Ending 31st December 1987, Budget Document No. 1*. Port Moresby.

Papua New Guinea, National Planning Office 1978. *The National Public Expenditure Plan 1978 - 1981*. Port Moresby.

Papua New Guinea, National Planning Office 1979. *The National Public Expenditure Plan 1980 - 1983*. Port Moresby.

Papua New Guinea, National Planning Office 1980. *The National Public Expenditure Plan 1981 - 1984*. Port Moresby.

Papua New Guinea, National Planning Office 1981 A. *The National Public Expenditure Plan 1982 - 1985*. Port Moresby.

Papua New Guinea, National Planning Office 1981 B. *National Manpower Assessment 1979 - 1990*. Port Moresby.

Papua New Guinea, National Planning Office 1982. *The National Public Expenditure Plan 1983 - 1986*. Port Moresby.

Papua New Guinea, National Planning Office 1983. *The National Public Expenditure Plan 1984 - 1987*. Port Moresby.

Papua New Guinea, National Planning Office 1984 A. Paper on the Introduction of a Medium Term Planning System. Port Moresby.

Papua New Guinea, National Planning Office 1984 B. Medium Term Development Strategy: Interim Report: A Statistical Review of the Education Sector, Education Sector Committee, Port Moresby.

Papua New Guinea, National Planning Office 1984 C. Medium Term Development Strategy: Education Strategy: Discussion Papers, Port Moresby.

Papua New Guinea, National Planning Office, 1984 D. Administration and Organisation of the Work Programme of the Medium Term Development Plan.

*Parkes, D. 1977. *On the Significance and Role of Time for Human Geography and Social Science*. Research Papers in Geography No. 14, University of Newcastle, New South Wales.

Parry, D.W. 1984. The Establishment of the Commission for Higher Education in Papua New Guinea: An analysis of the process of policy formulation in higher education with particular reference to the universities in Papua New Guinea between 1971 and 1983. A Thesis submitted in partial fulfilment of the requirements of the degree of Master of Educational Administration of the University of New England, Armidale.

Polsby, N.W. 1963. *Community Power and Political Theory*. Yale University Press, New Haven and London.

Poulantzas, N. 1978. *Political Power and Social Classes*. Verso Editions, 7 Carlisle Street, London, W1.

Premdas, Ralph R. 1986. Papua New Guinea in 1985 - The Tenth Anniversary of Independence. *Asian Survey*, Volume 26, (Issue 2), pp. 196 - 206.

Pressman, Jeffrey L., & Wildavsky, Aaron. 1984 (Third Edition). *Implementation: how great expectations in Washington are dashed in Oakland*. University of California Press, Berkeley.

Psacharopoulos, G. 1983. Education Research at the World Bank, *The World Bank Research News*, 4 (1).

Regan, A.J. 1987. *Operation of the Financial Arrangements for Provincial Government: The Eastern Highlands Case*. A Report prepared for the Eastern Highlands Provincial Government. Institute of Applied Social and Economic Research, Boroko, Papua New Guinea.

Regan, A.J. 1988. *Decentralisation of Health Functions: The Legal Basis for the Exercise and Funding of Health Functions of Provincial Governments*. Institute of Applied Social and Economic Research, Boroko, Papua New Guinea.

Reitsma, H.A. & Kleinpenning, J.M.G. 1985. *The Third World in Perspective*. Van Gorcum, Assen/Maastricht, The Netherlands.

Sabatier, P.A. Top-down and bottom-up approaches to implementation research: a critical analysis and suggested synthesis. *Journal of Public Policy*, Volume 6, (Issue 1), pp. 21 - 48.

Saffu, Y. 1982. Aspects of the Emerging Political Culture of Papua New Guinea, Proceedings of Politics Conference on Evolving Political Cultures in the Pacific Islands, Institute for Polynesian Studies, Brigham Young University, Laie, Hawaii.

*Sillince, J. 1986. *A Theory of Planning*. Gower Publishing Company Ltd., Gower House, Croft Road, Aldershot, Hampshire, England.

Simmie, J. 1981. *Power, Property and Corporatism*. The Macmillan Press Ltd., London and Basingstoke.

Slaughter, C. 1985. *Marx and Marxism - An Introduction*. Longman Inc., New York.

Smith, P. 1987. *Education and Colonial Control in Papua New Guinea - A Documentary History*. Longman Cheshire, Melbourne.

Sobel, I. 1978. The human capital revolution in economic development: Its current history and status. *Comparative Education Review*, Volume 22, (Issue 2), pp. 278 - 308.

Spaulding, S. 1981. Needed research on the impact of international assistance organisations on the development of education. *Comparative Education*, Volume 17, (Issue 2), pp. 207 - 213.

Stein, R. H. 1982. Review article: Planning models in higher education. *Higher Education*, Volume 11, (Issue 6), pp. 725 - 729.

Still, K. & Shea, J. 1976. *Something's Got To Be Done So We Can Survive In This Place: The Problems of Women Students at UPNG*. Education Research Unit Research Report No. 20. University of Papua New Guinea, Port Moresby.

Taylor, G. & Ayres, N. 1969. *Born and Bred Unequal*. Longman Group Ltd., London.

*Thrift, N. 1977. *An Introduction to Time-Geography*. CATMOG, Geo Abstracts Ltd., University of East Anglia, Norwich, NR4 7TJ.

Tilak, J.B.G. 1982. Educational planning and the international economic order. *Comparative Education*, Volume 18, (Issue 2), pp. 107 - 121.

Truman, D.B. 1971 (Second Edition). *The Governmental Process*. Alfred A. Knopf, Inc., New York.

*Van de Graaff, J.H., Clark, B.R., Furth, D., Goldschmidt, D. & Wheeler, D.F. 1978. *Academic Power*, Praeger Publishers, New York.

*Van Maanen, J. (ed.) 1979. *Qualitative Methodology*, Sage Publications, Beverly Hills/London/New Delhi.

Watson, C. 1991. *Encyclopedia of Higher Education*. Pergamon Press, Oxford (in press).

Weeks, S. G. 1976. *The Social Background of Tertiary Students in Papua New Guinea*. Education Research Unit Research Report No. 22. University of Papua New Guinea, Waigani.

Weiler, H. N. 1978. Education and development: from the age of innocence to the age of scepticism. *Comparative Education*, Volume 14, (Issue 3), pp. 179 - 198.

*Wildavsky, A. 1973. If planning is everything, maybe it's nothing. *Policy Sciences*, Volume 4, pp. 127 - 153.

Wildavsky, A. 1975. *Budgeting: A Comparative Theory of Budgetary Process*. Little, Brown and Co., Boston & Toronto.

Wildavsky, A. 1980. *The Art and Craft of Policy Analysis*. The Macmillan Press Ltd., Houndmills, Basingstoke, Hampshire RG21 2XS.

Wildavsky, A. 1983. The transformation of budgetary norms. *Australian Journal of Public Administration*, Volume 42, (Issue 4), pp. 421 - 432.

Wildavsky, A. 1984. *The Politics of the Budgetary Process*. 4th Edition, Little, Brown and Co., USA and Canada.

*Woolmington, E., Parkes, D. & Golledge, R. 1977. *Time and Mental Ecology*. Occasional Paper No. 11, Department of Geography, Faculty of Military Studies, University of New South Wales, Royal Military College, Duntroon, ACT 2600.

*Woolmington, E.R. 1979. *Time as a Human Artefact*. Occasional Paper No. 22, Department of Geography, Faculty of Military Studies, University of New South Wales, Royal Military College, Duntroon, ACT 2600.

World Bank, 1983. *Public Sector Management in PNG: An Administrative Overview, Report No. 4396-PNG*. World Bank, April 1986, Washington, D.C.

Zdravomyslov, A.G. (ed.) 1986. *Developments in Marxist Sociological Theory - Modern Social Problems and Theory*. Sage Studies in International Sociology 35, Newbury Park - London - New Delhi.

APPENDICES

**PROPOSED TIMETABLE FOR DRAFTING THE NATIONAL PLAN FOR
HIGHER EDUCATION**

A tentative schedule for drafting the plan is given below:

March 1984:	Discussion at the first meeting of Commissioners of topics to be covered and schedule for production of plan. Circulate these ideas widely for comment both within Papua New Guinea and to selected people overseas.
June 1984:	Responses to the circulated letter of March considered by second meeting of Commissioners. Broad format of plan fixed. Higher Education Seminar 'Towards a Strategy for Higher Education' to be held at University of Papua New Guinea.
September 1984:	Draft I of the plan considered at the third meeting of Commissioners incorporating ideas arising out of the Seminar.
October 1984:	Draft I circulated for comment.
November 1984:	Draft I revised and Draft II produced.
December 1984:	Draft II of the plan considered at the fourth meeting of Commissioners and instructions for a final draft given.
January 1985:	Draft II circulated for comment.
February 1985:	Draft II revised and Final Draft produced.
March 1985:	FINAL DRAFT considered at the fifth meeting of Commissioners.
April/May 1985:	National Executive Council Decision on National Plan for Higher Education.
June/July 1985:	Incorporate initial thinking contained in the plan into the 1986 Budget and 1986 to 1989 NPEP cycle. Circulation of National Executive Council approved plan.
January 1986:	Implementation of the Plan.

Source: Background Paper CHE1-3-1 to the first meeting of the Commission for Higher Education held on 2 March 1984.

Appendix 2

**ADVICE GIVEN TO THE COMMISSION FOR HIGHER EDUCATION
BY THE ACTING PRINCIPAL ECONOMIST, MANPOWER PLANNING UNIT,
NATIONAL PLANNING OFFICE**

- '(i) that under the organisational framework of the Medium Term Planning System, Sectoral Committees would be required to agree to a set of drafting instructions for each strategy paper on identified issues;
- (ii) that the Education Sectoral Committee would have two working sub-committees; one to be responsible for first and second level education and other (sic.) to have the responsibility of identifying issues on higher education;
- (iii) that sub-committees would need to meet on a regular basis, possibly each fortnight;
- (iv) that the higher education working sub-committee would be required to agree immediately on procedures, agenda and detailed work programme and report to the Education Sectoral Committee on matters relating to issues and options applicable to the National Plan for Higher Education;
- (v) that by the end of September 1984 the sectoral strategy issues paper on education, with interim reports, would need to be submitted to the Budget Priorities Committee by the Sectoral Committee, for inclusion in the 1985 - 1988 NPEP;
- (vi) that recommendations made to BPC would be looked at as a whole and if education was to retain its percentage of the total allocation, specific projects would need to be identified (sic.) or there could be a reduction;
- (vii) that 40 percent of the Education budget went to higher education. If this was to be retained there had to be specific recommendations made to government for certain areas, therefore mechanisms to generate revenue e.g. grants, loans must be identified.'

Source: Commission for Higher Education meeting No. 2, 22 June 1984, minute 3.

Appendix 3

**COMMISSIONERS AND ALTERNATE COMMISSIONERS FOR
HIGHER EDUCATION (INITIAL APPOINTMENTS)**

Chairperson: Ms. Mina Siaguru

Commissioners

1. Ms. Kikising Gwalau Salley
Goroka Teachers College
University of PNG
2. Brother Barry Louisson
Goroka
3. Mr. Paul Raki
Dobel Farming & Trading Pty Ltd
Mt. Hagen
4. Professor Michael Oliver
Professor of Politics
University of PNG
5. Mr. Geno Roakeina
Secretary for Education
Port Moresby
6. Mr. Mali Voi
Department of Central Province
Port Moresby
7. Mr. Bryan Roper
Port Moresby Chamber of Commerce

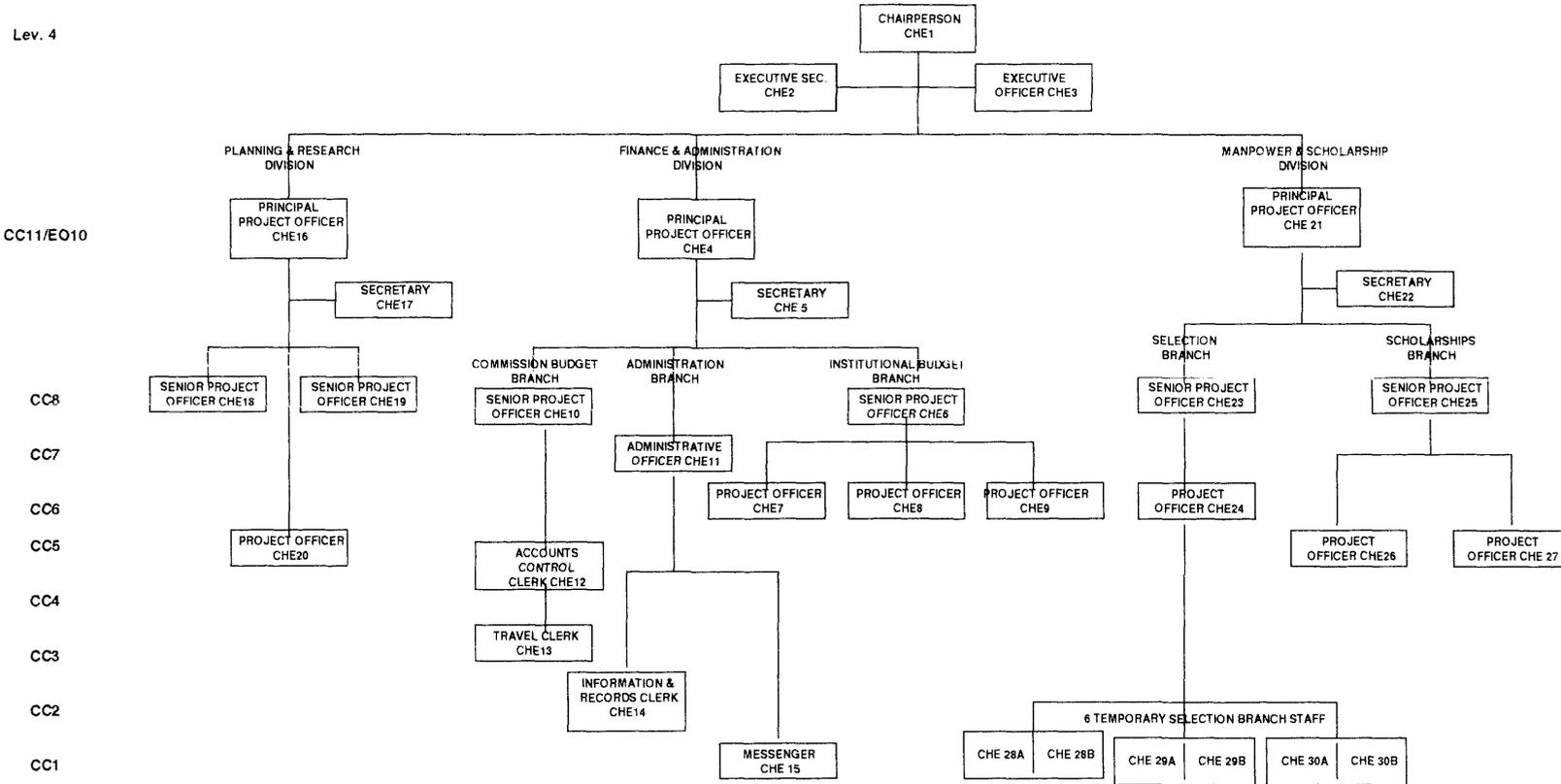
Alternate Commissioners

- Ms. Meg Taylor
Port Moresby
- Father Henry Esch
Catholic Education Office
Rabaul
- Mr. Joseph Banam
Medical Training Division
Department of Health
- Mr. Daniel Kunert
Principal
Aiyura National High School
- Mr. Edward Laboran
Provincial Education Office
Vanimo
- Mr. Gei Ilagi
National Cultural Council
Port Moresby
- Mr. John Girling
Lae Chamber of Commerce

Source: Background paper CHE 1-1-1 for 1st meeting of Commission for Higher Education, 2 March 1984.

DIAGRAM 1

COMMISSION FOR HIGHER EDUCATION SECRETARIAT ORGANIZATIONAL CHART



Lev. 4

CC11/EO10

CC8

CC7

CC6

CC5

CC4

CC3

CC2

CC1

Appendix 5**RESOLUTIONS OF THE COMMISSION FOR HIGHER EDUCATION
ADDRESSED TO THE EDUCATION SECTOR COMMITTEE OF THE MEDIUM
TERM PLANNING SYSTEM**Resolution 1

The Commission for Higher Education in its meetings of 21st and 22nd of November 1984 considered the draft report of the Medium Term Development Strategy - Sectoral Committee for Education: The Commission expresses its disappointment in the manner the report is presented and opinions expressed,...

Resolution 2

The Commission for Higher Education instructed the Secretariat of the Commission to inform the Sectoral Committee on Education that by virtue of the powers conferred by Section 12 of the Higher Education Act on the Commission, it strongly objects to any hasty decisions on resources to be made available to Higher Education.

Source: Minutes of Commission for Higher Education Meeting No. 4, 21-22 November, 1984.

Appendix 6

To: Chairperson

CRITERIA FOR IDENTIFYING AREAS OF POTENTIAL SAVINGS IN THE UNIVERSITIES, TECHNICAL COLLEGES AND OTHER INSTITUTIONS OF HIGHER EDUCATION

I would suggest that the following criteria, in the given order of priority below, be applied to the various programmes in the search for areas of potential savings:

- (1) Any programme whose output as at 1984 exceeds the projected requirement derived from NMA1, except in those cases where NMA1 requirements are known to be incorrect (eg. requirements for B.Ed.s) or are highly improbable (eg. B.Tech. Computer Studies).
- (2) Any such programme in a department whose cost per enrolment is higher than average for that institution.
- (3) Any such programme taught by a department whose staff/student ratio is lower than average for that institution.
- (4) Any such programme with five or less full-time enrolments in the last streaming point for that programme.
- (5) Any such programme which has consistently failed to attract student intake close to the quota set by CUTM ('consistently' could be for the past three years; 'close' could be at least 3/4 of the quota).

I would suggest that all programmes that meet (1) above should be scrutinized, as well as those where NMA1 has made no specific recommendation. Higher priority should be given to looking for savings in those programmes where criterion (1) and one or more of the other criteria above have been met - i.e. the more criteria met, the higher the priority.

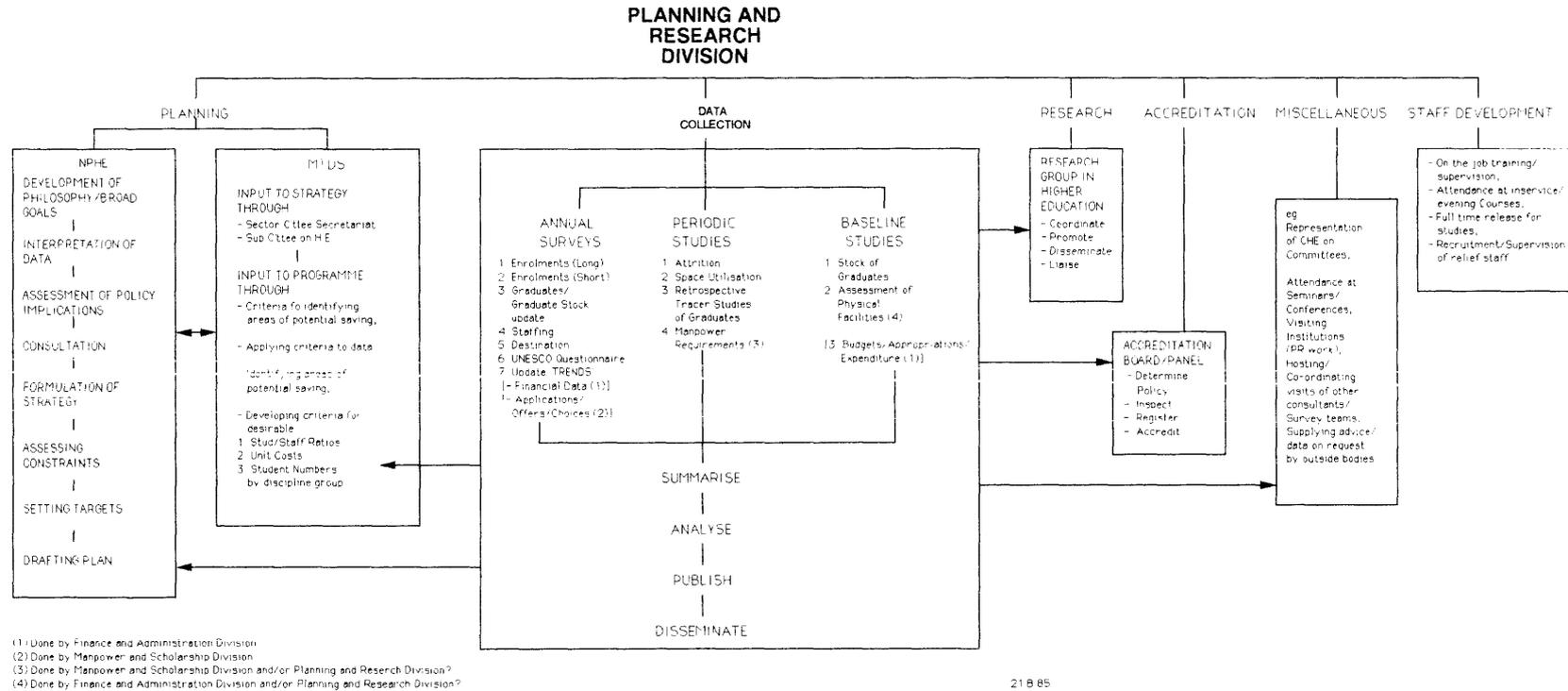
Where no breakdown by programme is available, criteria should be applied to the institution as a whole.

Principal Project Officer - Planning & Research Division

27 February 1985

Source: Internal memo of Commission for Higher Education

DIAGRAM 2



Source: Working File 'Work of the Planning & Research Division', Commission for Higher Education

Appendix 8

CABINET DECISION 161/85

'73. DIRECTED THE COMMISSION FOR HIGHER EDUCATION:-

(A) TO REVIEW THE EXISTING TERMS AND CONDITIONS OF NATSCHOL SCHEME BY 31ST MARCH, 1986 AND OBTAIN NATIONAL EXECUTIVE COUNCIL APPROVAL PRIOR TO PREPARATION OF 1986¹ (*sic.*) ESTIMATES: AND

(B) PREPARE A HIGHER EDUCATION DEVELOPMENT PLAN FOR CONSIDERATION BY THE DEVELOPMENT REVIEW COMMITTEE BY 31ST MARCH, 1986.....

UPNG - MAIN CAMPUS

180. APPROVED THAT FUNDING FOR 1986 TO BE HELD AT 1985 LEVEL AND OVER THE PERIOD 1987 - 1990 UNIVERSITY TO REDUCE EXPENDITURE BY 15 PERCENT IN REAL TERMS. COMMISSION FOR HIGHER EDUCATION (CHE) TO LOOK AT WAYS - OF ACHIEVING REDUCTION THROUGH CESSATION OF CERTAIN COURSES AND THROUGH COST EFFECTIVENESS (EG. BY IMPOSING APPROPRIATE STAFF:STUDENT RATIO BASED ON AGREED PROGRAMME OF LOCALISATION) IN OTHER AREAS. BUDGET PROPOSAL FOR THE PERIOD 1987 - 1990 CLEARLY IDENTIFY SOURCES OF SAVINGS, SHOULD BE BE PRESENTED TO THE 1986 DEVELOPMENT REVIEW;

UPNG - MEDICAL COLLEGE²

184. DIRECTED THAT THE COMMISSIONER FOR HIGHER EDUCATION TO CARRY OUT AN EXERCISE BY 31ST MARCH, 1986, WITH THE OBJECTIVE OF RATIONALISATION AND ACHIEVING COST SAVING OBJECTIVE;

UPNG - GOROKA TEACHERS COLLEGE

185. APPROVED THAT 1986 APPROPRIATION BE HELD AT 1985 LEVEL;

¹ Thought to be a typographical error in place of 1987.

² Should read 'Medical Faculty'.

UNIVERSITY OF TECHNOLOGY

186. APPROVED THAT IN GENERAL FUNDING FOR 1986 BE HELD AT 1985 LEVEL AND, OVER THE PERIOD 1986 - 1990 UNIVERSITY TO REDUCE EXPENDITURE BY 15 PERCENT IN REAL TERMS. COMMISSION FOR HIGHER EDUCATION (CHE) TO LOOK AT WAYS OF ACHIEVING REDUCTIONS PRINCIPALLY THROUGH CESSATION OF COURSES AND THROUGH COST EFFECTIVENESS (EG. BY IMPOSING APPROPRIATE STAFF:STUDENT RATIOS BASED ON AGREED PROGRAMME OF LOCALISATION) IN OTHER AREAS;...'

Source: Minutes of Papua New Guinea National Executive Council.

Appendix 9

APPLICATION OF CRITERIA FOR IDENTIFYING AREAS OF POTENTIAL SAVINGS

The following were combined, in priority order: excess manpower production; high unit cost; low student/staff ratios; low absolute student numbers; low student demand.¹

For the universities, only those programmes that were over-producing manpower in terms of the Second National Manpower Assessment were identified. Such programmes were then rank-ordered in terms of costliness per student unit. Costliness was often, though not exclusively, associated with a high number of staff relative to student numbers. For some programmes the irreducible minimum number of staff was relatively high. For some, the manpower requirements for certain kinds of graduates was so low as to present a permanent structural inefficiency. An example was the Bachelor of Dental Surgery, with less than two graduates per year required. Some programmes, such as B.Ed. (Science) and B. Forestry, despite a need for increased output of graduates, were unpopular with students. Some programmes were simply over-staffed.

The approach was to identify possible selective cuts, and leave the rest of the institutions' operations intact. The universities in particular had responded to percentage cuts to their budgets for several successive years by reducing support staff and various services, maintaining the number of teaching staff and programmes of study. Ultimately this approach could lead to the universities trying to do too much with too little support, risking the quality of their programmes. Selective cuts high cost programmes was thought the best way to protect the universities' total operations and cause least interference. Overall student numbers would not reduce since the same students would be spread between fewer programmes. Consolidation of the universities in this manner would strengthen rather than weaken them. Certain categories of manpower would no longer be produced within the country and for these small numbers of personnel reliance would still have to be placed on the importation of foreign expertise indefinitely. There was no shortage of aid funding for overseas training of PNG students.

¹ Memo from Principal Project Officer Planning and Research to Chairperson, Commission for Higher Education, 26/11/85.

For the non-university institutions heavy reliance was placed on student/staff ratios, as much less information existed. Both the first and second National Manpower Assessments were silent regarding requirements for many of the non-university programmes. Standardised ratios for all institutions had been constructed from data obtained in the surveys of enrolments and of staffing. Computing the actual ratios for 1984 and comparing them with the arbitrary target ratios recommended by the Education Sector Committee, two rank orderings of 'worst offenders' were produced. The first rank ordering was based on the absolute number of staff in excess of the ratios recommended by the Education Sector Strategy; the second rank ordering was based on the percentage to which the institutions were over-staffed relative to the recommended levels. The first rank ordering indicated those institutions which might be most fruitful in absolute terms for making savings through reduction of staffing levels. The second indicated those which might be using staff extravagantly.

The Education Sector Strategy of the Medium Term Development Strategy had recommended ratios as follows: Certificate programmes 15:1, Diploma programmes 12:1, Degree programmes 8:1 for science-based, and 15:1 for Arts-based. A great many programmes bore no such labels, so assumptions were made as to which category they most closely resembled. Some very uneconomical levels of staffing led to the following assessment:

- Most of the Nursing Schools appear to be non-viable on the grounds of scale combined with low student/staff ratios;
- The Paramedical Colleges appear to be extremely extravagant in staffing resources;
- The Primary Industry Colleges as a group and individually are over-staffed, especially the Highlands Agricultural College and the Timber Industry Training College;
- The Civil Aviation Training College and Elcom Training College are top of the league in relative requirement for staff;
- All of the Miscellaneous Colleges are heavily over-staffed except for the Legal Training Institute;

- The Technical Colleges both individually and as a group enjoyed generous staffing according to these criteria;
- The Community Teachers Colleges are the most economical group in terms of staffing.

The number of teaching positions which would be cut if the criteria were applied strictly would be approximately of the following order:

Universities	Not known as yet
Technical/Secretarial Colleges	145
Community Teachers Colleges	8
Nursing Schools	55
Paramedical Colleges	55
Primary Industry Colleges	61
Miscellaneous Declared Colleges	<u>69</u>
TOTAL ²	393

i.e. 52% of Actual 1984 level

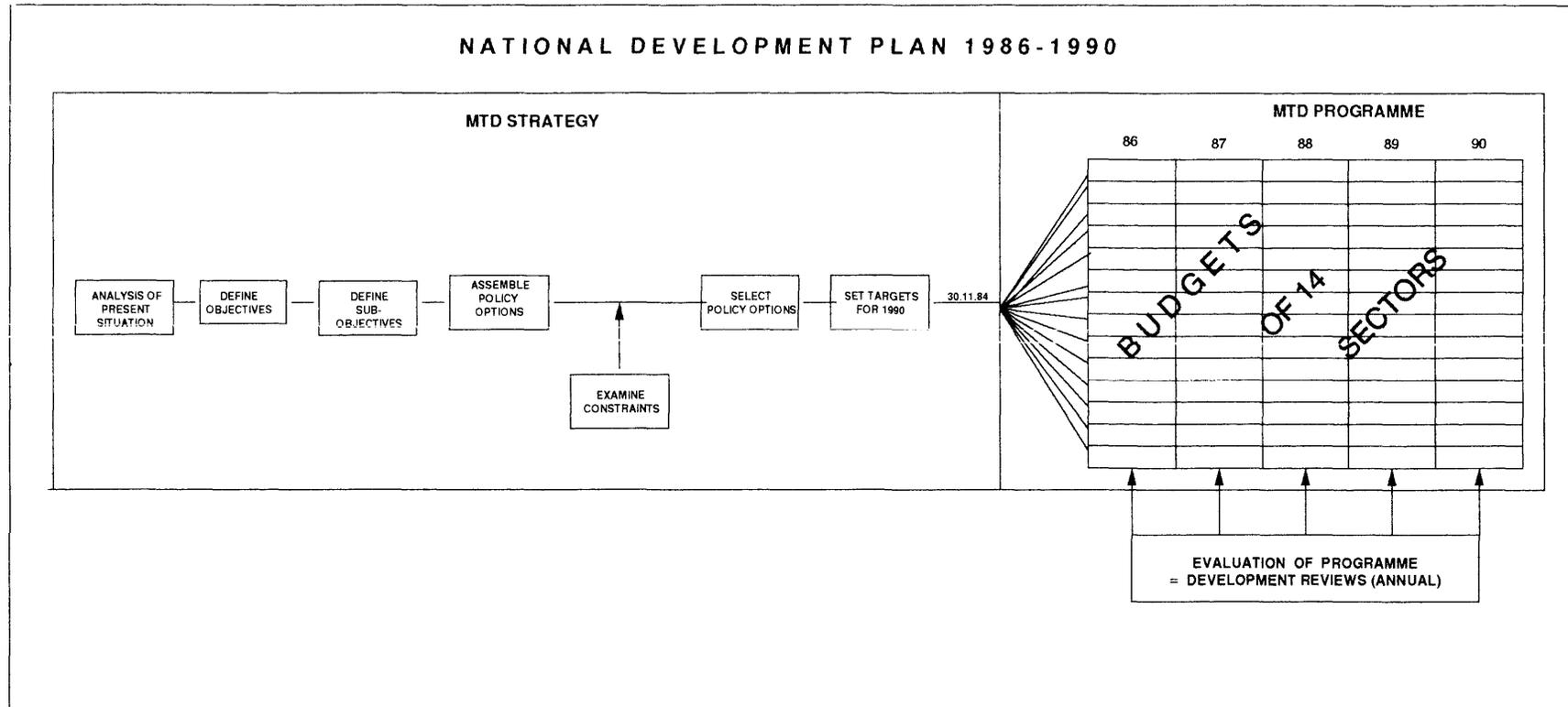
It seems certain, however, that across the board cuts of this magnitude if applied to all institutions would make a great many of them non-viable.

These measures were not applied simplistically but were used as adjuncts to a critical evaluation of what might be reasonable to expect of those institutions given their present circumstances.

Source: Memo from Principal Project Officer Planning and Research to Chairperson, Commission for Higher Education, 26/11/85.

² Excluding Universities, Non Declared Institutions and Port Moresby Inservice Teachers' College.

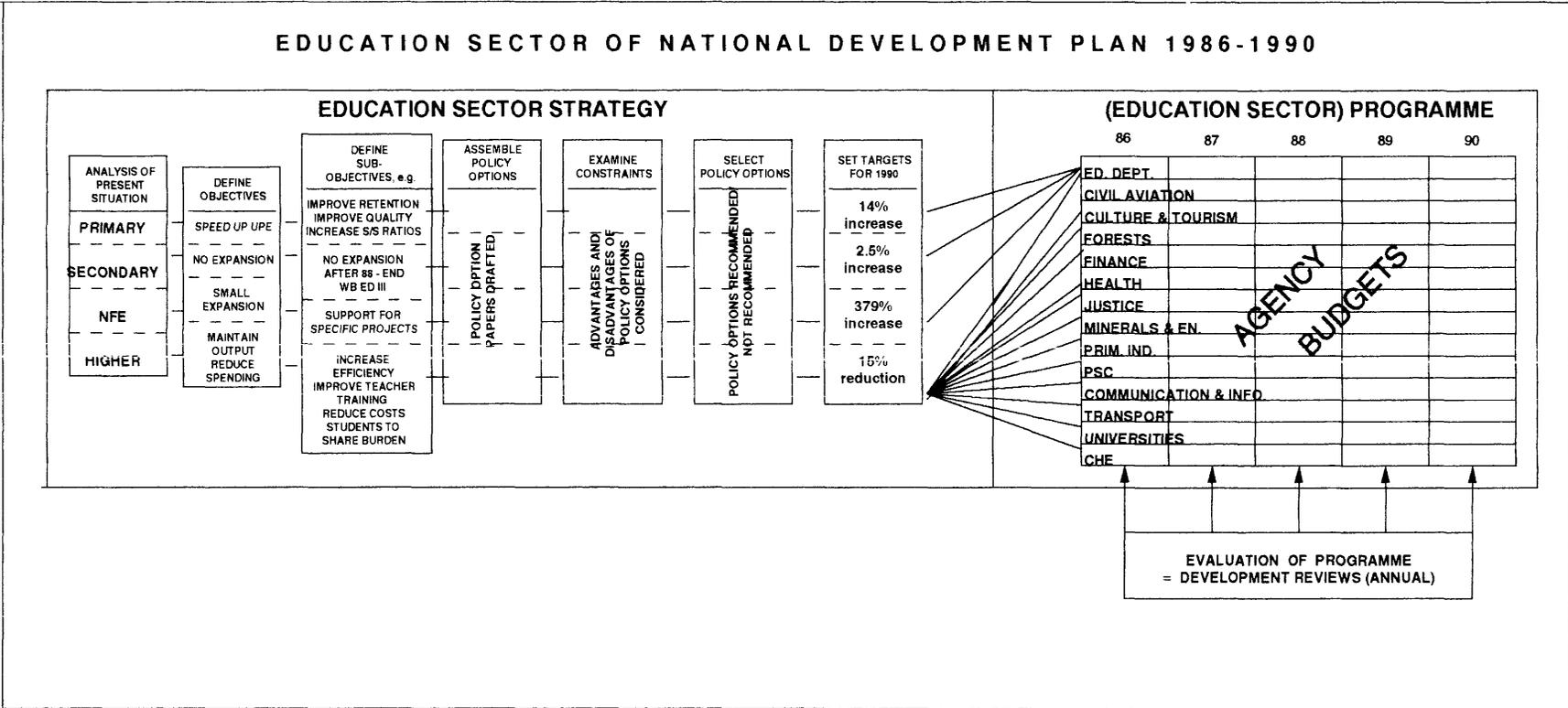
DIAGRAM 3



PSM 4.12.85

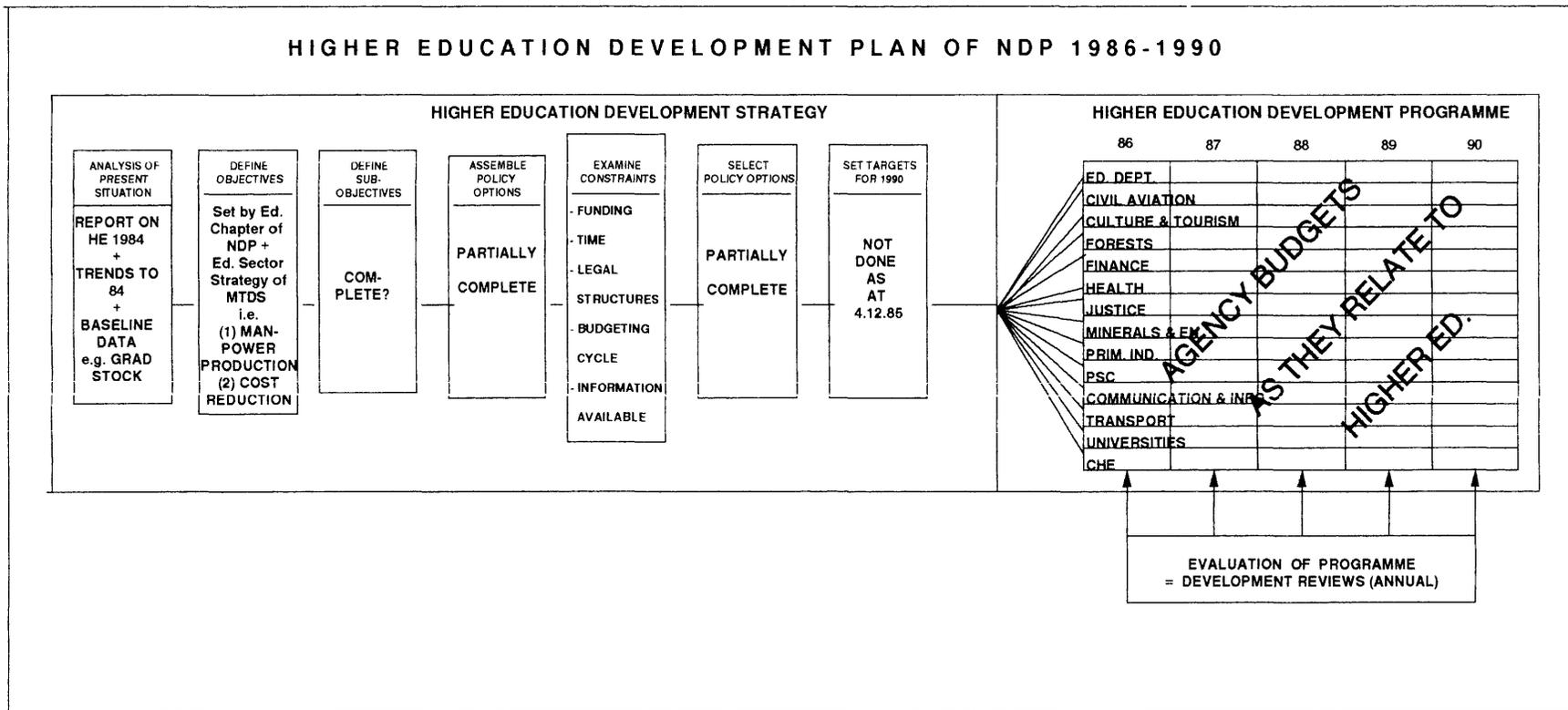
Source: Working File 'Work of the Planning & Research Division', Commission for Higher Education

DIAGRAM 4



Source: Working File 'Work of the Planning & Research Division', Commission for Higher Education

DIAGRAM 5



305

PSM 4.12.85

Source: Working File 'Work of the Planning & Research Division', Commission for Higher Education

Appendix 11**TARGETS FOR THE HIGHER EDUCATION DEVELOPMENT PLAN**

The targets were, by the end of 1987, to produce:

(1) Improved evaluation indicators for guiding the 1988 budgetary process, particularly for items 3, 5, 6, 7 and 8.¹

(2) Recommendations on: - Desirable student/staff ratios² for given types of programmes; - Standardised unit costs by programme type; - Desirable unit costs³ for given types of programme.

(3) Recommendations on amalgamation and closure of various institutions (discussions to take place with institutions and agencies between 31.3 and 30.9.86). Amalgamations and closures may be budgeted in 1987 and implemented in 1988.

The Plan document as at 31.3.86 will indicate amalgamation and closure as one of the strategies for achieving efficiency during the Plan period.

Source: Higher Education Plan 1986 - 1990: A Strategy for Rationalisation, Commission for Higher Education, Port Moresby.

¹ i.e. most of the budget items not related to staff salaries and benefits.

² i.e. target ratios developed as a result of a study of the needs of the respective disciplines and the particular conditions of PNG. They were to be an improvement on (i.e. better researched than) the arbitrary ratios recommended by the Education Sector Committee for want of a better alternative.

³ i.e. target unit costs developed as a result of a study of the needs of the respective disciplines and the particular conditions of PNG. They were to be an improvement (i.e. better researched) on the inadequate data held by the Commission for Higher Education which was based purely on historical costs.

CLASSIFICATION OF PROGRAMMES IN TERMS OF NATIONAL MANPOWER ASSESSMENT

The following discrete categories were used in the classification: 1 - highest priority; 2 - high priority; 3 - fully manpowered in the sense of being sponsored exclusively by employers¹; 4 - Programmes which cannot be prioritised in terms of the Manpower Assessment²; 5 - low priority; 6 - lowest priority; 7 - programmes which had already been identified for phasing out.³ By dividing the programmes into several broad groupings, it was intended to target only the 'worst offenders', i.e. those in Categories 5, 6 and 7, (and possibly also 4), which seemed to be in a variety of senses marginal. Although the classification was in some ways problematic, it was felt to be the best available means of interpreting national manpower priorities and relating these to the programmes offered by the institutions. It was particularly intended to lead the universities in certain directions whilst at the same time allowing them a good deal of flexibility. Without this, it was feared university politics would frustrate decisions of their own on selective cuts. The classification was completed by 29 January 1986.

Source: Revised Draft List of Higher Education Programmes Conducted in PNG by Miscellaneous Institutions Classified in Accordance with Priorities Indicated by the Second National Manpower Assessment, Planning & Research Division, Commission for Higher Education, received by Chairperson 29/1/86.

¹ There was no entry to these programmes except by virtue of being in certain kinds of employment. It was therefore assumed that there was a *de facto* requirement for the manpower.

² i.e. the second National Manpower Assessment gave no indication as to the requirement for these programmes.

³ In most of these instances the institutions themselves had already made plans to phase these programmes out for a variety of reasons.

BASIS FOR CALCULATION OF EQUIVALENT FULL TIME STUDENTS AND STAFF

Some institutions offer only programmes of less than one year, others only programmes of at least one academic year or more, and yet others which offer both. Some have considerable numbers of part-time enrolments, while others do not. Some institutions employ only full-time teaching staff, whilst others employ one or more part-time teaching staff in addition to full-time teaching staff.

In order to obtain student/staff ratios which are standardised across the various enrolment and staffing patterns of different institutions, it is necessary to take account of part-time and short course enrolments, as well as part-time staff. There follows a description of how equivalent full-time students (EFTS) and equivalent full-time staff (EFT Staff) are calculated for the purpose of this report. They are primarily intended to act as rough indicators of the economy or lack of economy of institutions (or programmes) in their requirement for or use of teaching staff.

In this report 'student/staff ratio' is defined as total equivalent full-time students divided by total equivalent full-time staff on strength.

Equivalent full-time students are calculated from raw data on enrolments obtained from institutions and/or their parent bodies in response to the Annual Survey of Enrolments 1984 conducted by the Commission for Higher Education. For programmes of at least one academic year, enrolments are intended to be those as at 30 March 1984, being a date at which it is assumed that most of the early withdrawals will have taken place. Where particular institutions supply statistics reflecting enrolments as at the official last date for withdrawal, this date has been accepted in lieu (e.g. UPNG). For programmes of less than one academic year, all enrolments up to the end of the academic year have been included.

Equivalent full-time staff have been calculated from raw data on staffing obtained from institutions in response to the Annual Survey of Staffing 1984 conducted by the Commission for Higher Education. The data used was for staff on strength, not staff ceiling,

nor official staff establishment. Trainee staff (overestablishment), such as teaching fellows at UPNG, have not been included.

Equivalent Full-Time Students

One equivalent full-time student (EFTS) at a given institution is defined as one full-time enrolment for one academic year's duration or its equivalent.

An academic year is defined as the normal length of the academic year for a given institution. (No weighting has been made for variations in length of academic year between different campuses of UPNG.) Where an institution offers exclusively programmes of less than one academic year (effectively this means 30 weeks or less), and no norm for an academic year can reasonably be determined, the normal length of the academic year has been assumed to be 40 weeks. This assumption was made because most of the enrolments in programmes of less than one year are in programmes of a technical nature, e.g. National Postal and Telecommunication Training Centre, Elcom Training College, Civil Aviation Training College, Fire Services Training Centre, PNG Maritime College, Timber Industry Training College, Mine Training College, technical and secretarial colleges. In view of the fact that the technical and secretarial colleges of the Education Department operate on a 40 week year, it was assumed, in the absence of a reasoned alternative, that this should be used in lieu of a norm.

It is understood that community teachers colleges and DPI colleges also use a 40 week academic year. For the sake of consistency this was also assumed for paramedical colleges and nursing schools, although it is realised that the latter may not operate on the basis of a formal academic year.

Equivalent full-time students are calculated according to the following equations:

- (a) For full-time enrolments in programmes of at least one academic year: 1 EFTS
= 1 Enrolment
- (b) For full-time enrolments in programmes of less than one academic year:
EFTS = enrolments x proportion of academic year (e.g. 8/40 weeks for apprentice block course)

(c) For part-time enrolments:

EFTS = enrolments x proportion of academic year x proportion of student contact hours per week (e.g. 4/30 for shorthand evening course)

A norm of 30 student contact hours per week was assumed, except in cases where other norms were known to exist (as at the universities), because this is the official maximum student contact per week in technical and secretarial colleges.

In cases where part-time enrolments do not exceed five in total in an institution which otherwise has only full-time enrolments of at least one academic year or more, (e.g. National Arts School) one part-time enrolments has been assumed to equal half an EFTS.

In the case of UPNG Waigani campus it has been assumed that part-time and non-degree enrolments are shared equally between 3 point and 6 point courses. This resulted in one part-time or non-degree enrolment equalling 0.375 of an EFTS.

These assumptions were made in the interests of simplifying calculation, at the same time ensuring that EFTS calculations are not significantly distorted thereby.

Equivalent Full-Time Staff

The vast majority of teaching staff in higher education institutions in Papua New Guinea are full-time staff. Those institutions which employed part-time teaching staff usually had no more than one or two. A few institutions such as PNG University of Technology had larger numbers and particular care was taken in these instances.

Data was obtained on full and part-time teaching staff from institutions through the Annual Survey of Staffing 1984 conducted by the Commission for Higher Education. This was intended to reflect staffing around the middle of the academic year. In a few instances this information was obtained in lieu through person interview (as at the National Postal and Telecommunication Training Centre and the Mine Training College). Institutions were asked to indicate the maximum number of hours per week staff may be required to teach in that institution.

Equivalent full-time staff were calculated according to the following equations:

(a) For full-time teaching staff:

1 EFT Staff = 1 full-time teaching staff member

(b) For part-time teaching staff:

EFT Staff = $\frac{\text{Total no. of hours per week taught by part-time staff}}{\text{Normal maximum staff contact hours per week}}$

Where it was not possible to obtain information on the number of hours taught per week by part-time staff, and/or the norm for that institution, and part-time teaching staff did not exceed two in total for that institution, it was assumed that one part-time teaching staff equalled half of an EFT Staff.

Source: Higher Education Plan 1986 - 1990: A Strategy for Rationalisation, Commission for Higher Education, Port Moresby.

FORMAT OF THE HIGHER EDUCATION DEVELOPMENT PLAN

Contents:

1. Letter to Minister
2. Summary (Abstract)
3. Introduction (setting out the origins, parameters, rationale, and general methodology of the plan.)
4. Statistical Review of the H.E. Subsector of Education (This will consist of an amalgamation of Guthrie's Review in MTDS as it relates to H.E., of an update of Parry's Trends, and Murphy's Report on HE 1984 as it appears in the Annual Report. It will be a much more detailed review than Guthrie's. Discussion of what essential information is missing, proposal for consultancy study).
5. National Priorities: the 2nd National Manpower Assessment and its implications for higher ed. programmes. (This will also review the manpower chapter of the new National Health Plan, the Commission Assessment of the Stock of output as at 1984, and discuss the difficulties and limitations of NMA2 as a guide to requirements.
6. Policy Options (as identified by the Commission and reflected in MTDS, + a discussion attempting to relate these to each of the 8 groups of higher education institutions. This will include Student Financing).
7. Targets (Discussion of Evaluation Indicators, their application, + non cost targets for the years 88 - 90)

Appendices:

1. Terms of reference (revised) for Consultancy Study on H.E. Rationalisation.
2. Complete list of programmes prioritised as per NMA2.
3. Tables containing the Commission's Assessment of Graduate Stock.
4. List of H.E. Policy options considered and rejected by the Education Sector Committee.
5. List of possibilities for Amalgamation and Closure.
6. Evaluation Indicators for preparation of 1987 Budgets.

7. Draft Schedule for ongoing phases of Plan.

Source: Minute from Principal Project Officer Planning and Research to Chairperson, Commission for Higher Education 29/1/86.

Appendix 15

EXTRACT FROM CABINET DECISION 9/86

'(H) Education

1 (a) That the Commission for Higher Education review the existing terms and conditions of Natschol Scheme by 30 May, 1986 with a view to reducing costs and obtain National Executive Council approval prior to Preparation of the 1987 Estimates; and

(b) That a Higher Education Development Plan be prepared for consideration by the National Planning Committee by 30 May, 1986.'

Source: Minutes of Papua New Guinea National Executive Council.

Appendix 16

TABLE 1: RECOMMENDATIONS IN 1ST CABINET SUBMISSION

No.	Rec.No. 1st Sub	Recommendation	Type of change	Classi- fication	Anticipated savings	NEC Deci- sion 9/86	NEC Deci- sion 11/86
1	1	That the NEC approve the Plan for Higher Education: A Strategy for Rationalisation 1986 - 1990.	Formal	8	0	deferred	
2	2	That with effect from 1987, no further government funding be provided through the budget of UPNG and no further National Scholarships be awarded for the Dentistry Degree programme.	Closure	1	556130	deferred	
3	3	That with effect from 1987, no further government funding be provided through the budget of UPNG and no further National Scholarships be awarded for the Fisheries Degree programme.	Closure	1	439725	deferred	
4	4	That with effect from 1987, no further government funding be provided through the budget of PNGUT for the Chemical Technology Department and no further National Scholarships be awarded for the degree streams of Food Technology, Applied Chemistry and Mineral Technology.	Closure	1	659669	deferred	
5	5	That with effect from 1987, no further government funding be provided through the budget of PNGUT and no further National Scholarships be awarded for the Forestry Degree programme.	Closure	1	83968	deferred	
6	6	That with effect from 1987, no further government funding be provided through the budget of UPNG and no further National Scholarships be awarded for the Journalism/Media Studies Diploma and Degree programmes.	Closure	1	559130	deferred	
7	7	That CHE and UPNG jointly determine an appropriate reduction of intakes of the first year of the law degree at UPNG to be applied with effect from 1987 taking into account manpower requirements as determined by NMA2, and that UPNG be required to plan a progressive reduction in Law Department teaching staffing by eight positions for the period 1987 - 1990 to take account of the reduction in student numbers; the number of National Scholarships available for first year students would be limited to a maximum of 25 per year as from 1987.	Contraction	6	368108	deferred	
8	8	That CHE review annually the list of programmes for which Natschol is to be awarded and if appropriate recommend its total or partial withdrawal for selected programmes as indicated by manpower requirements and the need for further savings.	Centralisa- tion	4	0	deferred	
9	9	That with effect from 1988 the PNGUT and the Lae Technical College be integrated into a single, degree granting politechnical college, in order to respond more effectively to provision of the full spectrum of technically trained manpower, to make fuller use of the existing physical facilities, and in order to reduce administrative staff and costs.	Amalgama- tion	2			
10	10	That there be no further government funding for the Rabaul, Goroka and Arawa technical college campuses with effect from 1987. This would involve acquiring the campus of the Timber Industry Training College and concentrating more students at the integrated institution comprising PNGUT and Lae Technical College.	Closure	1	1870662	deferred	
11	11	That during the period 1987 - 1990 the teaching staff establishments of community teachers colleges be maintained at least at their 1986 level in the interests of maintaining and upgrading the quality of teacher education.	Restraint of Cabinet	9	N/A	deferred	
12	12	That no cuts be made in the budget of the Goroka Teachers College due to the Plan's emphasis on teacher education in terms of improved quality.	Restraint of Cabinet	9	N/A	deferred	
13	13	That funding for nursing officer training at the Lae and Arawa Schools of Nursing be withdrawn with effect from 1987, and that numbers of trainee nurses be increased at the remaining four government nursing schools in Rabaul, Wewak, Goroka and Mendi; the physical facilities of Lae School of Nursing to remain available to the Health Department for training purposes outside the definition of higher education.	Closure	1	1676999	deferred	
14	14	That all trainee nurses, whether in government or church nursing schools, be eligible for Natschol in lieu of their present remuneration or allowances.	Centralisation	4	927865	deferred	approved
15	15	That responsibility for dental therapist training be given back to the Health Department, and that the physical facilities of the Department of Dentistry at UPNG Taurama Campus be made available to the Health Department for that purpose.	Cooperation	7	-412560	deferred	
16	16	That funding for the Sepik Agricultural College cease with effect from 1987, and the Department of Primary Industry be required to conduct a feasibility study to justify the continuation of the other three agricultural colleges.	Closure	1	593079	deferred	

TABLE 1 (CONTD.): RECOMMENDATIONS IN 1ST CABINET SUBMISSION

No.	Rec.No. 1st Sub	Recommendation	Type of change	Classi- fication	Anticipated savings	NEC Deci- sion 9/86	NEC Deci- sion 11/86
17	17	That the National Fisheries College in Kavieng be given the responsibility of training diploma level fisheries students as and when manpower requirements showed there was a significant need.	Amalgamation	2	N/A	deferred	
18	18	That funding for the Bulolo site of the PNG Forestry College cease with effect from 1987, and the College's programmes and teaching staff be transferred to the PNGUT.	Amalgamation	2	266589	deferred	
19	19	That government funding for the Timber Industry Training College cease with effect from 1987, and its campus be handed over to the Lae Technical College, on the understanding that its timber industry equipment plant be maintained for use by forestry students and staff.	Amalgamation	2	215434	deferred	
20	20	That the Legal Training Institute as an autonomous institution be relocated in existing facilities at the UPNG Waigani Campus with effect from 1988, and that UPNG absorb its general administrative services.	Amalgamation	2	51540	deferred	approved
21	21	That the National Arts School be amalgamated with UPNG with effect from 1988 in such a way that the character of its programmes and a reasonable degree of autonomy for the School is preserved, with UPNG absorbing its general administrative services.	Amalgamation	2	241007	deferred	
22	22	That the Administrative College of PNG be amalgamated with JPNG with effect from 1988 having due regard to preserving the vocational nature of some of its programmes. A thorough review of the role of the College and the training needs of the Public Service and Government Departments would be an integral part of the amalgamation exercise. UPNG would absorb the general administrative services for the College after amalgamation.	Amalgamation	2	316350	deferred	
23	23	That the Elcom Training College be deleted from the list of declared institutionsdemonstrates that it is not in receipt of any government funding.	Formal	8	0	deferred	
24	24	That the Customs Training Centre be closed down as an institution of higher education with effect from 1987, and students placed in appropriate overseas training programmes until such time as manpower requirements could be shown to justify the cost of mounting such programmes in PNG.	Closure	1	0	deferred	
25	25	That a taskforce be set up to review the PNG Maritime College with a view to its amalgamation with Madang Technical College.	Closure	1	-	deferred	
26	26	That the Medical Faculty of UPNG and the College of Allied Health Sciences in Port Moresby be requested to participate in a CHE taskforce to develop a common system of administrative services.	Cooperation	7			
27	27	That in the event that institutions wished to develop a pacific regional training role, the recurrent funding of such role must also be fully regional.	Centralisation	4	?	deferred	
28	28	That the CHE, in consultation with the appropriate institutions as listed below plan their amalgamation and relocation. Recommendations on this should be made by 1 March 1987 in order that it be incorporated in the 1988 Budget : 1. Integration of PNGUT with Lae Technical College and Timber Industry Training College. 2. Relocation of the Legal Training Institute on UPNG Waigani Campus. 3. Amalgamation of the Administrative College of PNG with the UPNG. 4. Amalgamation of the National Arts School with the UPNG. 5. Amalgamation of PNG Maritime College with Madang Technical College. 6. Relocation of staff & students of PNG Forestry College (Bulolo) to PNGUT campus. 7. Rationalisation of administrative services of College of Allied Health Sciences (POM) and the Medical Faculty of UPNG. CHE should complete its findings by 1 March 1987.	Formal	8	-	deferred	
29	29	That all the monies saved from this exercise be reallocated within the education sector.	Restraint of Cabinet	9	-	deferred	

TABLE 2: SECTORAL DISTRIBUTION OF HIGHER EDUCATION INSTITUTIONS

Priority	High	High	Low	Low	Low
Sector	Economic	Infrastructural	Social Services	Law & Order	Administrative Services
Higher Education Institutions	Highlands Agricultural College Popondetta Agricultural College Sepik Agricultural College Vudai Agricultural College National Fisheries College PNG Forestry College Timber Industry Training College National Arts School Civil Aviation Training College	PNG Maritime College	University of PNG: Waigani Campus University of PNG: Taurama Campus University of PNG: Goroka Teachers' College PNG University of Technology 8 Technical Colleges 8 Primary Teachers' Colleges 18 Nursing Schools	Defence Force Academy Defence Force Trade Training Unit Police College Bomana Corrective Institutions Service Staff Training Centre Legal Training Institute	Administrative College of PNG Customs Training Centre

TABLE 3: PERCENTAGE CHANGES TO HIGHER EDUCATION BUDGET APPROPRIATIONS

Priority	Sector	Institution	1986 Appropriation	1987 Appropriation	1988 Appropriation	% Change in 1987	% Change in 1988
High	Economic	Agric. & Fish. Colleges	2650.50	2723.50	3368.90	2.80	23.70
		Forestry Colleges	560.10	539.70	593.30	-3.60	9.90
		National Arts School	331.30	599.60	640.30	81.00	6.80
		Civil Av. Training	1112.60	1225.10	981.40	10.10	-20.00
High	Infrastructural	PNG Maritime College	471.90	444.50	433.90	-5.80	-2.40
Low	Soc. Services	University of PNG: Waigani	13117.00	12577.60	12499.10	-4.10	-0.60
		University of PNG: Taurama	2529.30	2446.10	2317.80	-3.30	-5.30
		University of PNG: Goroka Teachers College	2459.00	2264.20	2092.90	-7.90	-7.60
		University of PNG - Total	18165.30	17287.90	16909.80	-4.80	-2.20
		PNG University of Technology	12169.20	11927.70	11745.60	-2.00	-1.50
		Technical Colleges	7827.70	6874.00	5850.30	-12.20	-14.90
		Primary Teachers Colleges	3270.90	3582.90	3670.40	9.50	2.40
		Health Training	5697.10	6359.90	6366.60	11.60	0.10
Low	Law & Order	Legal Training Institute	215.90	208.40	204.90	-3.50	-1.70
	Admin. Services	Administrative College of PNG	1795.90	2040.00	1617.10	13.60	-20.70
Grand Total			58072.40	57641.80	55425.20	-0.70	-3.80

Source: Vote Index & Budget Notes 1986, 1987, 1988, Department of Finance and Planning, Waigani.

Appendix 19

TABLE 4: RECOMMENDATIONS OF 2ND CABINET SUBMISSION

No.	Rec.No. 2nd Sub	Recommendation	Type of change	Classi- fication	Anticipated savings	NEC Deci- sion 11/87	Modification
30	1	That the Higher Education Plan: A Strategy for Rationalisation 1986 - 1990 be approved for implementation. ?	Formal	8	K0	Approved	
31	2	That in future all reductions in higher education financial allocation be made on total higher education budget, and individual institutional funding requirement be evaluated and determined by the Commission for Higher Education to ensure that rational evaluation and assessment is made in compliance with the Plan for Higher Education.	Centralisation	4	-	Approved	
32	3	That recommendations made thus far that are contradictory to the Plan be held in obedience i.e. the abolition of the Education Research Unit at the UPNG	Restraint of Cabinet	9	-	Ignored	
33	4	That the Legal Training Institute be transferred to the Law Faculty UPNG and still retain its autonomy and that UPNG perform its administrative functions. (See also no. 20 above)	Amalgamation	2	-	Approved	
34	5a	That the National Arts School be amalgamated with the Arts Faculty UPNG, while retaining its identity.	Amalgamation	2	K94,405	Approved	
35	5b	That the UPNG Arts Faculty entry criteria for National Arts School programmes be reviewed to cater for those artists who do not have grade 10 qualifications. Existing purpose and objective of the school.	Formal	8	-	Approved	
36	6a	That there be an additional one full year above the present two year Community Teachers' Certificate in order to improve the quality of teachers produced by the teachers' colleges.	Expansion of function	5	Cost implica- tions not quantified	Rejected	
37	6b	That the Community Teachers' Certificate be upgraded to a three year diploma programme which would concentrate on professional studies throughout the three years while remedial effort on basic skills be built into the three years professional training.	Expansion of function	5	Cost implica- tions not quantified	Rejected	
38	7a	That in relation to Technical Education the student:staff ratio of 15:1 remains.	Formal	8	-	Approved as modified	Student:staff ratio 20:1 instead of 15:1
39	7b	That there be a reduction of 35 equivalent full time teaching staff at the technical colleges.	Contraction	6	K486,462	Approved	
40	7c	That every endeavour be made to maintain and purchase spare parts for equipment in the technical colleges.	Formal	8	-	Approved	
41	8a	That the diploma course at the Forestry College be transferred to PNGUT and the modular scheme be strengthened.	Amalgamation	2	K64,078	Rejected	
42	8b	That the Forestry College be turned into a fifth National High School.	Alternative use	3	-	Rejected	
43	9	That the Timber Industry Training College (TITC) be made a department within Lae Technical College, and its administrative functions be performed by Lae Technical College but the courses be run at the TITC campus	Amalgamation	2	K52,790	Rejected	
44	10a	That the Sepik Agriculture College cease from providing certificate programmes and that this programme be centralised at the Popondetta Agriculture College.	Closure	1	No info. available	Ignored	
45	10b	That the Diploma Programme at Vudal amalgamate with the Agriculture Department of the University of Technology.	Amalgamation	2	K54,545	Rejected	
46	11	That rationalization of administrative staff of the National Fisheries College be undertaken.	Contraction	6	K44,750	Approved	
47	12a	That the General Nurse programme be phased out at Arawa and Wewak Nursing Schools and proportionately increase the intakes at Goroka and Rabaul Nursing Schools. The Community Health Worker programme which is now being promulgated by the Health Department be taught instead at Arawa and Wewak.	Closure	1	K275,615	Approved	
48	12b	That Dogura only run the Community Health Worker Programme, and the General Nurse Programme be phased out and its students be enrolled at other church nursing schools.	Closure	1		Approved	
49	13	That based on the current equivalent full time student enrolments at the College of Allied Health Sciences in Madang, its equivalent full time teaching staff be reduced by 16 from the present 32 equivalent full time teaching staff on strength.	Contraction	6	K87,264	Approved as modified.	That the College of Allied Health Sciences staff/student ratio for 1988 be 1:5 for the post-basic diploma programme, and 1.9 for the certificate programme and that for 1989 to be 1:8 and 1:15 respectively.
50	14a	That control over the budget of the College of Allied Health Sciences in Port Moresby be transferred from the Department of Health to the College without additional administrative staff.	Transfer	2	-	Approved as modified	+ without additional cost.

TABLE 4 (CONTD.): RECOMMENDATIONS OF 2ND CABINET SUBMISSION

No.	Rec.No. 2nd Sub	Recommendation	Type of change	Classi- fication	Anticipated savings	NEC Deci- sion 11/87	Modification
51	14b	That based on the College's equivalent full time student enrolment of 198 this year (1987), the College warrants only 15 equivalent full time teaching staff as opposed to the present strength of 37. Of the 15 recommended staff required, 11 should be teaching the certificate programmes and 4 be allocated to the Post Basic Diploma programmes.	Contraction	6	K81,810	Approved as modified.	That the College of Allied Health Sciences staff/student ratio for 1988 be 1.5 for the post-basic diploma programme, and 1.9 for the certificate programme and that for 1989 to be 1.8 and 1.15 respectively
52	15a	That all pre-service courses at the Administrative College of PNG be transferred to appropriate departments at the UPNG with the appropriate level of funding.	Transfer	2	K519,178	Approved	
53	15b	That the Public Service Higher Certificate Course be abolished in its present form and be externalised either through the Regional Centres or Department of External Studies UPNG.	Closure	1	See above	Approved	
54	15c	That the College concentrate its resources to the inservice training needs of the public and private sectors.	Alternative use	3	See above	Approved	
55	16a	That the Dental Surgery Degree programme be phased out by means of no further intake of first year students and that the possibilities of sending students abroad for studies be explored. That the above recommendation be cancelled only if there are substantial intake to the course from the Pacific Island countries as a result of the closure of the Medical School at the University of the South Pacific, Fiji.	Closure	1	K0	Approved as modified	Inclusion of "however that dental therapy is to be maintained." 2nd clause on Pacific Island students ignored.
56	16b	That the National Fisheries College become part of the UPNG Fisheries Department to provide practical training component of the Marine Biology degree programme and a Fisheries certificate or diploma programme.	Amalgamation	2	See no. 46 above	Deferred, pending review	
57	16c	That a number of Natschol sponsorship for first year law intakes be reduced to a maximum of 25 students per year as of 1988. (See no. 7 above)	Contraction	6	K368,608	Approved as modified	+ inclusion of "and similar criteria be adopted for other disciplines."
58	16d	That the Education Research Unit be amalgamated with the Institute of Applied Economic and Social Research and the Institute of PNG Studies so that there will be only one government funded research organisation in the country at the same time reducing costs to the government. That this amalgamation should take place at the UPNG.	Amalgamation	2	-	Approved as modified	Amalgamation at UPNG dropped Recommendation reworded as: "That the Institute of PNG Studies and ERU be transferred to a new research organisation that will include the IPNGS and IASER."
59	16e	That the Preliminary Year at the UPNG Waigani be abolished as a full time residential programme and that the programme be externalised and coordinated by the Department of External Studies of UPNG.	Closure	1	K0	Approved	
60	17a	That the PNGUT restructure all its programmes in order to make them more cost effective.	Contraction	6	K402,120	Approved as modified	+ "and a report to be submitted to the CHE by 31 March 1988."
61	17b	That the programmes at the Forestry College Bulolo be transferred to PNGUT.	Amalgamation	2	K559,180	Rejected	
62	17c	That Vudal Agricultural College become part of the Agriculture Department of the PNGUT.	Amalgamation	2	?	Rejected	
63	18a	That if there is any foreign aid made available to higher education institutions for training, this should be carefully scrutinized for purposes of coordination to avoid duplication of courses and for long term planning and financial implications.	Centralisation	4	-	Approved	
64	18b	That the Commission for Higher Education in coordination with departments involved with receiving and controlling aid funds, be given this function of scrutiny and the necessary authority to make this recommendation effective.	Centralisation	4	-	Approved	
65	19	That the College of External Studies, Extension Studies UPNG and the Regional Training Centres come under one coordinating body for purposes of better utilisation of resources.	Cooperation	7	-	Approved as modified	Omission of Extension Studies, UPNG.
66	20	That the Sepik Agriculture College be converted into an Agriculture High School.	Alternative use	3	-	Deferred pending review	

TABLE 5
KEY TO CLASSIFICATION OF TYPES OF CHANGE RECOMMENDED
IN BOTH CABINET SUBMISSIONS

Type of change recommended	Classification
Radical: Loss of function	1
Radical: Transfer of function	2
Radical: Substitutions of function	3
Radical: Gain of function	4
Marginal: Increase of function	5
Marginal: Decrease of function	6
Marginal: Sharing of function	7
Formal: No substantial change	8
Prevention of change	9

Note: Formal is used to denote recommendations which ratify, approve, place on record and similar. These tend to be general or covering recommendations, and expressions of intent - recommendations the outcome of which is not readily measurable. Prevention of change recommendations are those which sought to restrict the decision making of Cabinet and to protect some existing function from change.

Appendix 21

TABLE 6

SUMMARY OF RECOMMENDATIONS IN THE 1ST CABINET SUBMISSION BY NUMBER, TYPE OF PROPOSED CHANGE AND OUTCOME

Type of proposed change		Dropped	Deferred for review	Eventually approved
1 Closure	University courses	4, 5, 6	3	2 modified as 55
	Technical Colleges	10		
	Nursing Schools			13 modified as 47, 48
	Primary Industry Colleges Customs Training Centre (Finance Dept.)	24	16	
2 Amalgamation/ Transfer	To Universities		21, 18	20 modified as 33, 22 modified as 52, 53, 54
	From Universities	9	17	
	To Technical Colleges Health Department to CHE	25	19	14 (Natschol for nursing students)
3 Alternative use				
4 Centralisation	To CHE		8	
	To PNG generally	27		
5 Expansion				
6 Contraction	University course			7 reiterated as 57
7 Cooperation	UPNG and College of Allied Health Sci.(Pom)	26		
	UPNG and Health Department			15 modified as 55
8 Formal		28		1 reiterated as 30, 23
9 Restraint of Cabinet	Community Teacher Training	11, 12		
	Resources for the Education Sector	29		

Appendix 22

TABLE 7

**FREQUENCY DISTRIBUTION OF RECOMMENDATIONS IN THE 1ST CABINET
SUBMISSION BY TYPE OF PROPOSED CHANGE AND OUTCOME**

Type of proposed change		Dropped	Deferred for review	Eventually approved
1	University courses	3	1	1
	Technical Colleges	1		
	Nursing Schools			1
	Primary Industry Colleges		1	
	Customs Training Centre (Finance Dept.)	1		
	TOTAL	5	2	2
2	To Universities		2	2
	From Universities	1	1	
	To Technical Colleges	1	1	
	Health Department to CHE			1
	TOTAL	2	4	3
4	To CHE	1		
	To PNG generally	1		
	TOTAL	2		
6	University course			1
7	UPNG and College of Allied Health Sci.(Pom)	1		
	UPNG and Health Department			1
	TOTAL	1		1
8		1		2
9	Community Teacher Training	2		
	Resources for the Education Sector	1		
	TOTAL	3		
GRAND TOTAL		14	6	9

Appendix 23

TABLE 8

SUMMARY OF RECOMMENDATIONS IN THE 2ND CABINET SUBMISSION BY NUMBER,
TYPE OF PROPOSED CHANGE AND OUTCOME

Type of proposed change	Dropped (rejected or ignored)	Deferred for review	Approved
1			55, 59 47, 48
		44	53
2	61, 62, 41, 45 43	56	33, 34*, 52, 58** 50
3	42	66	54
4			31, 63, 64
5	36, 37		
6			57, 60 39 49***, 51*** 46
7			65***
8			30, 35, 38***, 40
9	32		

* Subsequently deferred for review. ** Direction of transfer reversed. *** Approved as modified.

Appendix 24

TABLE 9
FREQUENCY DISTRIBUTION OF RECOMMENDATIONS IN THE 2ND CABINET
SUBMISSION BY TYPE OF PROPOSED CHANGE AND OUTCOME

Type of proposed change	Dropped (rejected or ignored)	Deferred for review	Approved
1			
University courses			2
Nursing Schools			2
Primary Industry Colleges		1	
Administrative College of PNG			1
TOTAL			
2			
To Universities	4	1	4
To Technical Colleges	1		
Health Dept to Coll. Allied Health Sci. (POM)			1
TOTAL			
3			
Primary Industry Colleges to High Schools	1	1	
Admin. Coll. PNG to public/private sector			1
TOTAL			
4			
To CHE			3
5			
To Community Teacher Education	2		
6			
Universities			2
Technical Colleges			1
Colleges of Allied Health Sciences			2
National Fisheries College			1
TOTAL			
7			
Coll. External Studies & Adcol R.T. Centres			1
8			
			4
9			
	1		
GRAND TOTAL	8	3	26

Appendix 25

TABLE 10

SUMMARY OF OUTCOME OF APPROVED RECOMMENDATIONS IN THE 2ND CABINET SUBMISSION
BY NUMBER AND TYPE OF PROPOSED CHANGE

Type of proposed change	Approved	Implemented in 1988	Implemented by 21/4/89	Approved but not implemented by 21/4/89
1	University courses Nursing Schools Primary Industry Colleges Administrative College of PNG	55, 59 47, 48 53	55, 59 47*	48
2	To Universities Health Dept to CHE Health Dept to Coll. Allied Health Sci. (POM)	33, 34, 52, 58 14*** 50	52**, 58** 14***	34, 33 50
3	Admin. Coll. PNG to public/private sector	54		54
4	To CHE	31, 63, 64		31, 63, 64
6	Universities Technical Colleges Colleges of Allied Health Sciences National Fisheries College	57, 60 39 49, 51 46	60 39@ 49	57 51 46
7	Coll. External Studies & Adcol R.T. Centres	65		65

* Half implemented - i.e. one of two schools closed. No intention to close the other school. ** Partially implemented.
*** Approved in 1987 Budget Session for implementation in 1987. @ Implementation more on paper than anything else.

Appendix 26

TABLE 11
 FREQUENCY DISTRIBUTION OF OUTCOME OF APPROVED RECOMMENDATIONS IN THE 2ND CABINET
 SUBMISSION BY TYPE OF PROPOSED CHANGE

Type of proposed change	Approved	Implemented in 1988	Implemented by 21/4/89	Approved but not impl.
1				
University courses	2	2		
Nursing Schools	2	1		1
Primary Industry Colleges				
Administrative College of PNG	1	1?		
TOTAL	5			1
2				
To Universities	4	2		2
Health Dept to CHE	1	1		
Health Dept to Coll. Allied Health Sci. (POM)	1			1
TOTAL	6	3		3
3				
Admin. Coll. PNG to public/private sector	1			1
4				
To CHE	3			3
6				
Universities	2	1	1	
Technical Colleges	1	1		
Colleges of Allied Health Sciences	2	1		1
National Fisheries College	1			1
TOTAL	6	3	1	2
7				
Coll. External Studies & Adcol R.T. Centres	1			1
GRAND TOTAL	22	10	1	11

Appendix 27

TABLE 12

SUMMARY OF OUTCOME OF APPROVED RECOMMENDATIONS IN THE 2ND CABINET SUBMISSION BY
NUMBER AND TYPE OF PROPOSED CHANGE

Type of proposed change	Approved but not impl. by 21/4/89	No prospect of implementation as at 21/4/89	Approved & still capable of implementation
1 University courses Nursing Schools Primary Industry Colleges Administrative College of PNG	48	48	
2 To Universities Health Dept to CHE Health Dept to Coll. Allied Health Sci. (POM)	34, 33 50	33*, 34** 50	
3 Admin. Coll. PNG to public/private sector	54		54
4 To CHE	31, 65, 64	31***, 63***, 64***	
6 Universities Technical Colleges Colleges of Allied Health Sciences National Fisheries College	51 46		51 46
7 Coll. External Studies & Adcol R.T. Centres	65	65@	

* No prospect of vacant space at UPNG to enable the amalgamation. ** Approval reversed, future of National Arts School subjected to review. Outcome: proposal to privatise the School. *** No sign of progress in CHE's attempts to set mechanisms in place. Lack of political commitment. @ No evidence of willingness by Adcol to cooperate on shared use of resources.

Appendix 28

TABLE 13

FREQUENCY DISTRIBUTION OF OUTCOME OF APPROVED RECOMMENDATIONS IN THE 2ND CABINET
SUBMISSION BY TYPE OF PROPOSED CHANGE

Type of proposed change	Approved but not impl. by 21/4/89	No prospect of Impl. as at 21/4/89	Approved & still capable of implementation
1			
University courses			
Nursing Schools	1	1	
Primary Industry Colleges			
Administrative College of PNG			
TOTAL	1	1	
2			
To Universities	2	2	
Health Dept to CHE			
Health Dept to Coll. Allied Health Sci. (POM)	1	1	
TOTAL	3	3	
3			
Admin. Coll. PNG to public/private sector	1		1
4			
To CHE	3	3	
6			
Universities			
Technical Colleges			
Colleges of Allied Health Sciences	1		1
National Fisheries College	1		1
TOTAL	2		2
7			
Coll. External Studies & Adcol R.T. Centres	1	1	
GRAND TOTAL	11	8	3

Appendix 29

TABLE 14

SUMMARY OF RECOMMENDATIONS DEFERRED FOR REVIEW FOLLOWING THE 2ND CABINET SUBMISSION
BY NUMBER, TYPE OF PROPOSED CHANGE AND OUTCOME

Type of proposed change	Deferred for review	Review completed in 1988	Review in progress at 21.4.89	Comments
1 Primary Industry Colleges	44		44	Dept. of Agriculture & Livestock, Minister & PNGUT investigating possibility of incorporating agriculture colleges as campuses of PNGUT Recommendation 44 likely to be dropped.
2 To Universities	34*, 56	56?	34?	Following review of Nat. Arts School, attempts are being made to privatise the School so that graduates would serve tourism industry. Recommendation 34? dropped. Review of Fisheries education to be completed in mid 1989. Anticipated outcome unknown.
3 Primary Industry Colleges to High Schools	66		66	Dept. of Agriculture & Livestock, Minister & PNGUT investigating possibility of incorporating agriculture colleges as campuses of PNGUT Recommendation 66 likely to be dropped.

* Originally approved, subsequently deferred for review.

TABLE 15

**SUMMARY OF THE OUTCOME OF ALL RECOMMENDATIONS MADE TO
CABINET IN BOTH 1ST AND 2ND SUBMISSIONS**

	No. of recommendations
Total recommendations in 1st submission	29
Less recommendations dropped after 1st submission	14
Reiterated or modified from 1st submission in 2nd submission	<hr/> 15
New recommendations introduced in 2nd submission	22
Total recommendations in 2nd submission	<hr/> 37
Dropped (ignored or rejected) after 2nd submission	8
Approved, Implemented in 1988	10
Approved, Implemented by 21.4.89	1
Approved, no prospect of implementation	8
Approved, implementation still possible	3
Deferred for review and dropped subsequently	3
Still under review	1

Appendix 31

TABLE 16
SUMMARY OF OUTCOME OF BOTH FIRST AND SECOND CABINET SUBMISSIONS BY TYPE OF CHANGE

Types of change		No. of recommendations in 1st NEC Submission	No. of recommendations in 2nd NEC Submission	No. of recommendations in 2nd NEC Submission approved	No. of recommendations in 2nd NEC Submission implemented by 21.4.89
RADICAL	1 Closure	9	6	5	3.5
	2 Amalgamation/transfer	9	11	5	1.5
	3 Alternative use	-	3	1	0
	4 Centralisation	2	3	3	0
MARGINAL	5 Expansion	-	2	-	-
	6 Contraction	1	6	6	4
	7 Cooperation	2	1	1	0
	8 Formal	3	4	2	N/A
	9 Restraint of cabinet	3	1	0	N/A
TOTAL		29	37	23	9*

*Excluding formal recommendations.

Appendix 32

TABLE 17

FREQUENCY DISTRIBUTION OF RECOMMENDATIONS OF BOTH 1ST AND 2ND CABINET SUBMISSIONS AS A PERCENTAGE OF TOTAL, AND RATES OF APPROVAL AND IMPLEMENTATION AND BY TYPES OF CHANGE

Types of change		Types of change as a % of total recommendations in 1st NEC Submission	Types of change as a % of total recommendations in 2nd NEC Submission	Rate of approval: approved recommendations as % of recommendations (2nd submission)	Rate of implementation: recommendations implemented by 21.4.89 as a % of approved recommendations (2nd submission)
RADICAL	1 Closure			83	70
	2 Amalgamation/transfer			46	30
	3 Alternative use	69	62	33	0
	4 Centralisation			100	0
MARGINAL	5 Expansion			-	-
	6 Contraction	10	24	100	67
	7 Cooperation			100	0
	8 Formal	10	11	10	N/A
	9 Restraint of cabinet	11	3	0	N/A
TOTAL		100	100	62	39

TABLE 18
ENROLMENTS - DEPARTMENT OF DENTISTRY UNIVERSITY OF PNG¹

	1983		1984		1985	
	Cit.	Non Cit.	Cit.	Non Cit.	Cit.	Non Cit.
Bachelor of Dental Surgery						
2nd year	4	3	5	3	6 ²	1 ³
3rd year	2	1	3	2	3	1
4th year	5	-	2	1	1	2
5th year	-	-	5	-	4 ⁴	1
Total	11	4	15	6	14	5
Graduated	-	-	3	-	N/A	N/A
% non citizen		27		29		26
Diploma in Dentistry (Therapy)						
2nd year	-	-	-	-	-	1
3rd year	-	-	-	-	-	1

Source: Faculty of Medicine, University of PNG, 1985.

¹ In Table 3, Cit. = citizen of PNG, Non Cit. = non-citizen.

² 2 citizens repeating.

³ Repeating.

⁴ 2 citizens repeating.

Appendix 34

TABLE 19: DISTRIBUTION OF HIGHER EDUCATION INSTITUTIONAL HOUSING

Institution	High Cost	Medium Cost	Low Cost	Total Housing
University of PNG: Waigani Campus	204	27	92	323
University of PNG: Goroka Teachers College	42	15	14	71
PNG University of Technology	201	57	87	345
Subtotal: Universities	447	99	193	739
Arawa Technical College	11	2	6	19
Goroka Technical College	0	0	0	0
Lae Technical College	19	3	8	30
Madang Technical College	13	3	6	22
Malaguna Technical College	6	2	6	14
Mount Hagen Technical College	6	15	8	29
Port Moresby Technical College	25	7	1	33
Port Moresby Secretarial College	0	1	2	3
Rabaul Secretarial College	4	4	0	8
Subtotal: Technical Colleges	84	37	37	158
Balob Teachers College	9	16	9	34
Dauli Teachers College	12	2	11	25
Gaulim Teachers College	0	22	0	22
Holy Trinity Teachers College	9	12	6	27
Madang Teachers College	26	0	11	37
Our Lady of the Sacred Heart Teachers College	0	2	1	3
St Benedict's Teachers College	14	0	5	19
Subtotal: Teachers Colleges (1)	70	54	43	167
APCM School of Nursing	0	0	0	0
Highlands Regional School of Nursing	0	0	2	2
Kapuna School of Nursing	0	1	2	3
Lae School of Nursing	0	0	0	0
Lutheran School of Nursing	5	0	0	5
Mendi School of Nursing	0	6	1	7
Nazarene College of Nursing	0(2)	0	2	2
Rabaul School of Nursing	0	2	0	2
Sacred Heart School of Nursing	0	0	28	28
Sopas School of Nursing	0	1	0	1
St Barnabas School of Nursing	0	0	0	0
St Gerard's School of Nursing	0	2	0	2
St Mary's School of Nursing	0	0	2	2
Tinsley School of Nursing	0	1	3	4
Wewak School of Nursing	1	0	1	2
Subtotal: Nursing Schools	6	13	41	60
College of Allied Health Sciences (Port Moresby)	0	2	2	4
College of Allied Health Sciences (Madang)	12	0	0	12
Subtotal: Colleges of Allied Health Sciences	12	2	2	16
Highlands Agricultural College	8	10	14	32
Popondetta Agricultural College	18	39	51	108
Sepik Agricultural College	6	2	14	22
Vudal Agricultural College	58	6	31	95
National Fisheries College	1	11	12	24
PNG Forestry College	11	0	17	28
Timber Industries Training College	6	1	17	24
Subtotal: Primary Industry Colleges	108	69	156	333
Administrative College	51	8	8	67
Legal Training Institute	2	0	0	2
National Arts School	1	17	0	18
Defence Force Academy	16	0	21	37
National Postal & Telecommunications Training Centre	58	10	42	110
Civil Aviation Training College	5	0	1	6
Corrective Institutions Service Staff Training Centre	2	2	45	49
Customs Training Centre	0	0	0	0
Electricity Commission Training College	11	4	5	20
Fires Services Training Centre	0	0	0	0
Pt Moresby Inservice Teachers College	14	2	7	23
Subtotal: Miscellaneous Institutions(3)	160	43	129	332
Bankers' College	0	1	6	7
Divine Word Institute	11	1	2	14
Pacific Adventist College	18	11	6	35
Sonoma Adventist College	9	16	0	25
Newton Theological College	4	1	2	7
Christian Leaders Training College	0	29	14	43
Martin Luther Seminary	7	14	0	21
Subtotal: Priv. Funded Institutions(4)	49	73	30	152
GRAND TOTAL (5)	936	390	631	1957

(1) Excluding St Paul's Teachers College, for which there was no information available in 1984.

(2) Excluding missionary housing which can be used for tutors.

(3) Excluding Defence Force Trade Training Unit and PNG Maritime College (Nautical Training Institute).

(4) Excluding Mine Training College, Holy Spirit Seminary and Rarongo Theological College.

(5) Excludes six institutions listed in (1), (3) and (4) above.

Source: Commission for Higher Education Survey of Physical Facilities 1984, + University of PNG Housing List 25/4/88.

Note: Off Campus housing excluded.