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A Cost-Benefit Analysis of the University of the South Pacific to the Region

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Preface

This report was prepared for the Pacific Islands Forum Secretariat (PFIS) in Suva, Fiji Islands. The report is one output of an Asian Development Bank (ADB) technical assistance project (TA 6226 REG): “Developing and Implementing the Pacific Plan for Strengthening Regional Cooperation and Integration.” The Commonwealth Secretariat provided funding to the project.

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The report is published in three volumes. Volume 1 is the Executive Summary. Volume 2 is the main report. Volume 3 contains the working papers commissioned for the report—a series of independent studies assessing potential benefits and costs of implementing a variety of possible regional initiatives. Volume 3 has been printed in hard copy in only limited numbers. However, it is available on the websites of ADB (www.adb.org) and at www.pacificplan.org.

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CONTENTS

	Page
PREFACE	ii
ACKNOWLEDGEMENT	iv
EXECUTIVE SUMMARY	v
I. APPROACH ADOPTED IN CONSTRUCTING THE COST-BENEFIT ANALYSIS	1
II. THE UNIVERSITY OF THE SOUTH PACIFIC – AN OVERVIEW	1
A. USP Academic Programmes	
III. UNIVERSITY GRADUATES CONTRIBUTIONS TO SOCIETY	3
IV. THE PRE-DEGREE STUDIES UNIT	4
V. UNIVERSITY INSTITUTES	4
VI. USP SOLUTIONS	5
VII. NON-QUANTIFIABLE BENEFITS	5
VIII. BENEFITS OF USP’S PRESENCE TO THE HOST ECONOMY	6
IX. MEASURES CONTRIBUTING TO AN ASSESSMENT OF COSTS AND BENEFITS	6
X. MEASURES OF COSTS AND BENEFITS TO REGIONAL GOVERNMENTS	10
XI. NATIONAL UNIVERSITIES OPERATING IN THE PACIFIC ISLAND SOCIETIES	11
A. Atenisi University, Tonga	
B. The National University of Samoa (NUS)	
C. University of Fiji	
XII. REGIONAL VERSUS NATIONAL, OR REGIONAL AND NATIONAL INSTITUTIONS	14
XIII. SUMMARY OF COSTS AND BENEFITS	15

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Professor Michael White

EXECUTIVE SUMMARY

Universities in general are complex organisations with many distinct albeit interdependent activities. The University of the South Pacific (USP) is no exception. As such a comprehensive analysis of costs and benefits, which seeks to generate a single statistic is hardly likely to be meaningful. The paper therefore considers each aspect of the University's work identifying costs and benefits in each case. Where costs and benefits cannot be reliably quantified no attempt has been made to apply a value. The analysis however does enable a very clear conclusion to be drawn that USP generates a substantial net benefit to the region. The following points are salient. External advisers to the University consistently confirm that USP's programmes are comparable in quality to those offered at their own institutions and USP's comparator Universities. The recurrent costs of operating the University to the regional governments however amounts to less than Fiji dollars (F\$)60 million. In contrast the cost of having students studying at overseas comparator Universities would be in excess of F\$120 million.

The existence of the University within the region not only provides a considerable cost saving, but also leads to a substantial foreign exchange saving. Indeed, as USP attracted aid funding in 2004 in excess of F\$24 million, it may actually attract foreign exchange to the region.

Certain University activities, applied research, consultancies, the pre degree programme and the Masters in Business Administration qualification generate incomes for the University. Intangible benefits are enjoyed from pure research activities, much of which relate specifically to the region and are unlikely to be undertaken by Universities elsewhere. Similarly, non-quantifiable benefits are obtained through the work of the Oceania Centre for Arts and Culture housed at the University. Costs to the University associated with these two activities are of the order of F\$150,000 and F\$220,000, respectively. The greatest intangible benefit the University offers is however undoubtedly the opportunity it offers the cadre of the region's youth from whom the future leaders will be drawn to interact with each other.

This paper notes that while the net benefits the region enjoys from the University are substantial they are not necessarily distributed equitably among the member countries. Countries where the University has its strongest presence, by way of its campuses (Fiji Islands, Samoa and Vanuatu) almost certainly enjoy the greatest direct economic benefits. Costs to each country per graduating student however offers a cost benefit measure that suggests USP may prove to be a more efficient institution from the view point of other countries.

I. APPROACH ADOPTED IN CONSTRUCTING THE COST-BENEFIT ANALYSIS

Cost benefit analysis is a widely employed tool for decision-making and evaluation, despite its generally accepted conceptual limitations. Determining a single cost benefit ratio that can be used as a basis for an informed decision as evaluation is not possible in all save the simplest of situations. Costs and benefits cannot be fully quantified. Quantifications that can usefully be made may require the use of more than one measurement scale. Comparisons between alternatives made on the basis of ratio calculations are consequently not always meaningful.

Universities are complex organisations. Mission statements are typically coined in philosophical rather than operational terms. While their *raison d'être* is invariably the accumulation and dissemination of knowledge their operations are many faceted.

Rather than attempting to assess the costs and benefits of the University of the South Pacific in aggregate to member countries, this paper therefore reviews the range of the University's operations, assessing the costs and benefits that accrue. Where these can be reliably quantified, measures have been provided. Where this is not possible the analysis directs the reader's attention to the financial and/or non-financial consequences of a University service not being available from the regional provider. In doing so comparisons have been typically drawn against Universities in Australia and New Zealand, which the University of the South Pacific identifies as comparators. That is to say institutions the University uses to benchmark its academic standards, resourcing, etc. in order to sustain its recognition in the international community as a provider of quality tertiary education. Australian and New Zealand comparator Universities have been referred to as these are seen the countries Pacific Islanders would most likely look to for degree level education if USP did not exist as opposed to other comparator institutions in Great Britain, Singapore and the West Indies. A number of Pacific Islanders do indeed secure their University education in Australia and New Zealand. Reference is made to comments from academics from beyond the University region who serve as external academic advisers to USP, that serve to confirm the University's academic standing in the international community.

Consideration is also given to the distribution of benefits derived by the states, which subscribe to the University. The analysis offered is inevitably partial. However it does serve to suggest that while all jurisdictions benefit from USP's operations, the benefits do not necessarily accrue on an equitable basis.

All financial amounts in this analysis are expressed in Fiji dollars except where another currency is specifically referred to.

II. THE UNIVERSITY OF THE SOUTH PACIFIC – AN OVERVIEW

The University of the South Pacific (USP) was established under royal charter in 1968, operating out of plant located at Laucala Bay, Suva, inherited from the New Zealand Royal Air Force, when it closed its flying boat base. Its initial remit was to develop all graduate cadre of secondary school teachers for the region. Consequently degree programmes were initially established with students taking a major programme of study in Education and a joint major in these subject specialism. The subject specialisms initially available where: Biology, Chemistry, Economics, Education, Physics, Public Administration and Sociology.

Early developments in the University's operations included the establishment of USP centres in the participating countries to provide a conduit for the provision of University programmes on a distance education basis to promote awareness of the University's activities in the region and involve the communities in continuing education activities.

Since its inception, USP has grown to the point that it now has accumulated Property, Plant and Equipment with a value of Fiji dollars (F\$)281,128,919 (insurance valuation provided in the University's financial report for the year ended 31st December 2004), most of which has been acquired by way of aid funding.

Full time student equivalent numbers stood at 10,163 in 2004, of which 3,944 are enrolled through distance and flexible learning. The curriculum encompasses the following disciplines, with established programmes in all areas up to the Masters level.

Additionally the University offers Masters programmes in Business Administration, Governance, Pacific Media Studies and Social Policy.

Funded research across the University curriculum. The 2003 research report itemises 114 different ongoing research activities, 202 referred publications and books produced and 131 conference papers delivered (funding for the latter activity is restricted). By far the greater part of the work was directed to issues that are pertinent to the region served by the University. As such, it is research work, which in most cases would not have been carried out if USP had not existed. F\$145,845 of the University funds were applied to research in 2004. Research funds will also have been accessed from other sources.

A. USP Academic Programmes

The quality of USP degree programmes is reflected in the recognition its graduates receive overseas. USP graduates with good bachelor degrees have no difficulty securing admission to postgraduate programmes elsewhere, particularly in commonwealth nations. External advisors to the University's academic departments are asked to assess the standing of the department's undergraduate that of their own department and others they are familiar with. The comparison drawn almost invariably is one that puts the USP department on par with better resourced departments from economically developed societies. Holders of bachelor degrees from USP have gone on to senior academic positions overseas, notably Brij Lal and Satendra Nandan (ANU), Tupeni Baba (Auckland). There has been a significant migration of the holders of Bachelor of Education qualifications, particularly to New Zealand and of BA degree holders with an Accounting major, particularly to Australia. While these observations serve to demonstrate USP's international standing as a University of reputable academic quality, the outward migration of USP graduates represents a loss in skilled person power to the region.

Quotes from departmental external advisors, (all received in 2004):

"Overall I am satisfied that the courses constitute a menu of offerings that meet the normal scholarly and professional expectations and requirements, without wasteful duplication. More specifically, I am satisfied that the courses are appropriate for the various degree and diploma programmes of which they form a part.

Professor Malcolm Treadgold External Advisor to the Department of Economics

"I have no serious criticisms to make of the Department in terms of teaching, administration, research and related activities. All staff have a strong sense of

professionalism and Professor Campbell is well equipped to lead the Department in introducing measures to improve aspects of the student experience and performance, as well as stimulate research in what little time the staff have available for it.”

Professor Stephenie Lawson External Advisor to the Department of History.

“It is evident that within the department there is a good term spirit, good support for students and a keenness and professional attitude to the teaching and research of chemistry. The teaching is generally of a high standard. The research undertaken is of international standard as well as often bring of immediate relevance to the region.

Professor M.J. Adams External Advisor to the Department of Chemistry (2004).

In general the measurement for the units under consideration was both challenging and adequate for the purpose. The examination scripts demonstrates that there was a wide variety of competency levels but that by and large the assessments were able to be adequately dealt with by the students. It also implies that the quality of teaching was adequate for the purpose. I congratulate all of the academic staff that contributes to this educational program and deem that their work is satisfactory and equivalent to other institutions of higher education elsewhere in the English-speaking world.

Professor Keith Houghton External Advisor to the Department of Accounting and Financial Management.

Holders of bachelors degrees from USP have gone on to senior academic positions overseas, notably Brij Lal (ANU) and Vijay Naidu (Auckland). There has been significant migration of the holders of Bachelor of Education qualifications, particularly to New Zealand and of BA degree holders with an accounting major, particularly to Australia. While these observations serve to demonstrate USP’s international standing as a University of reputable academic quality, the outward migration represents a loss of skilled person power to the region.

III. UNIVERSITY GRADUATES CONTRIBUTIONS TO SOCIETY

For the period 1994-2004 USP has graduated from all credit programmes, a total of 9,599 regionals. (Small number from Papua New Guinea and Tahiti have also graduated.) As noted elsewhere some 20% of these graduates are lost to the region through migration. (Fiji Islands for example experienced outflows of 171 teachers and 91 accountants in 2002 (Reserve Bank of Fiji), almost all of whom would be USP graduates.

While these outflows diminish the benefits the region enjoys from this human resource, it must be born in mind that almost certainly more regional graduates will be lost to the region if they are educated outside it. Such persons become knowledgeable of the opportunities for overseas employment and associated lifestyles during their period of study. The breakdown of USP graduates can be reflected by a review of the completions of studies by programme and country for 2003.

Unfortunately surprisingly little information has been formally collected on USP graduate participation in the workforce. The University undertook a traces study on 2002 graduates. This identified that six months after graduation 81.4% of graduates were in formal employment, 14.8% were unemployed, with the balance not being available in the job market.

USP graduates permits the senior available positions in both the public and private sector. As with the Universities of Oxford, Cambridge and the London School of Economics their numbers include heads of state, prime ministers and cabinet ministers.

IV. THE PRE-DEGREE STUDIES UNIT

In addition the bachelors and post-graduate programmes USP offers pre degree programmes, equivalent to secondary studies at the Fiji Islands form 6 and 7 level. These programmes confer a qualification in their own right and also offered a means for those who successfully complete the programme to secure admission to undergraduate studies. The unit offers its courses as an adult education programme and to students living in parts of the region where sixth form and seventh form studies are not otherwise available.

The academic results from this programme are deemed disappointing, but the pass rates achieved are not out of line with those found in adult education programmes elsewhere. The unit generates a financial surplus, contributing F\$500,000 to the University's income in 2004.

V. UNIVERSITY INSTITUTES

The University has established institutes in the following fields.

Applied Sciences

- Education
- Justice and Applied Legal Studies
- Marine Resources
- Advanced Studies in Development and Governance
- Management and Development
- Research Extension and Training in Agriculture
- Additionally the University has established the Oceania Centre for Arts and Culture.

These institutes conduct applied research and are largely self-funding. Their current activities include the following.

Institute of Applied Science:

- Dietary studies, analysis of the quality of water and foods
- DNA work on flora and marine life.
- Coastal management
- Waste management
- Marine resources and conservation
- Intellectual property rights relating to traditional knowledge of regional resources

Institute of Education

- The generation of educational material of regional relevance to be used in the primary and secondary school systems..

Institute of Justice and Applied Legal Studies

- Conduct professional education and continuing education for legal practitioners
- Development of a regional strategy to conduct HIV/Aids bearing in mind ethical and human rights issues.

Institute of Research Extension and Training in Agriculture

- Organic farming in atolls
- Training pertaining to the regulation of food in international trade

- Food processing
- Sustainable agroforestry and farming systems
- The production of manuals and other educational material.

Institute of Advanced Studies in Development and Governance

- This institute is newly established. Its primary rate is to offer postgraduate studies in Development and Governance issues. It also undertakes consultancy work and runs workshops on governance issues.

Institute of Management and Development

- This institute is core responsibility is to offer the University's MBA programme. It also offers workshops to officers in both the public and private sectors up to the seniors executive level and undertakes consultancies on management issues.
- Both of these institutes have been involved in work relating to public sector reform in the region.

If USP did not exist, it would seem almost certain that much of the work of these institutes would be undertaken by other agencies in the region.

However, it is by no means clear that these agencies would be regional as opposed to national institutions. As a part of a regional institution the institutes enjoy economies of scale, receive support services from a central administrative facility and avoid duplication of effort that would occur if their work was done at a national level.

The Institutes contribute F\$100,000 to the University's annual income. The MBA programme contributes a further F\$100,000 to annual income through the full cost tuition fees charged. Programmes offered through the Institute of Advanced Studies in Development and Governance will make a similar contribution once fully established.

VI. USP SOLUTIONS

The University established USP Solutions in 1999 to promote and manage University consultancy activities. In 2003 USP activities generated total services of consultancy and related F\$776,663 of which F\$5,444,560. Academic departments received a comparable amount. The Universities Research Institutes are funded from these earnings accrued to the University. Much of this work would be undertaken by overseas consultants had the expertise vested in the University not been available. Costs of such expertise would inevitably exceed that available at the University owing to saving in travel costs and subsistence allowances. Consultancy activities in some cases create foreign exchange inflows to the region. In other cases they alleviate the need for foreign exchange outflows.

VII. NON-QUANTIFIABLE BENEFITS

USP provides the region with a number of non-quantifiable, but nonetheless valuable benefits. These include the following:

- (i) An opportunity for young people from around the region from whom the future leaders will for the most part be drawn, to live and work together for a period of three or more years. This efforts on opportunity to obtain an understanding of the hopes and

aspirations of regional partners as well as their cultures, that could not be practically provided by any other forum.

- (ii) USP, like many other Universities, has provided the societies it serves with a consciousness of moral issues. The University became the focal point on the need for good governance in the region under Vice Chancellor Siwatibau. This has actually served to foster the University's Pacific Institute of Advanced Studies in Development and Governance. While it can certainly be argued that the issue of governance and other matters that need to be drawn into the social consciousness can be, and are, raised elsewhere Universities are perhaps better placed to address such issues. USP addresses such issues detached from political, religious and possibly commercial pressures in a way that NG's are not able to do.
- (iii) The Oceania Centre for Arts and Culture serves as a means of preserving Pacific cultures, disseminates these cultures within and beyond the region, fosters artistic talents and encourages a cross fertilisation of artistic ideas from persons of differing ethnic backgrounds. While such centre could of course be established outside of a University environment it seems unlikely that its regional dimension would flourish as an independent entity.

The total cost of operating the Oceania Centre for Arts and Culture in 2004 amounted to F\$226,491.

VIII. BENEFITS OF USP'S PRESENCE TO THE HOST ECONOMY

While the participating jurisdictions carry the bulk of the University's recurrent expenditures with 6% contributed by Australia and 4% by New Zealand the University's institutional presence in itself generates economic activity and thereby benefits the participating nations. Periodic lobbying for decentralisation of the University is partly motivated by the economic benefits that are seen to accrue to a nation, which hosts a part of USP operations.

IX. MEASURES CONTRIBUTING TO AN ASSESSMENT OF COSTS AND BENEFITS

It is not practical, nor is it necessary, to endeavour to reduce a cost benefit analysis of USP to a single measure. A range of indicators can however be supplied, which serve to demonstrate the benefits that the states which fund USP derive from its operations, including Australia and New Zealand.

This paper has argued that USP's academic programmes stand comparison with those offered in better resourced University's elsewhere. The following indicators of costs are instructive.

- (a) USP's recurrent income per are equivalent full time student. (Figures are unadjusted for inflation). The spike in unit costs in 1998 is explained by a 20% devaluation of the Fiji dollar and in 2000 by the reduction in student numbers resulting from the political instability at that time. Clearly, even allowing for inflation the University has succeeded in containing costs. Indeed it is necessary to go back to 1991 to identify a lower value for this statistic than in 2004.

1998	F\$7,6
1999	23
2000	7,070
2001	7,514
2002	7,216
2003	6,551
2004	6,637
	6,523

- (b) USP's staff student ratios have varied between 21.5 and 26.5 over the period 1995-2003. This is materially higher than the areas set by the ACVC. However as already noted the rigour of the academic programmes do not seem to have been compromised.
- (c) Staffing costs. University Council has resolved that academic and equivalent staff salaries are to be set at 81.5% of the average salaries for equivalent staff at USP comparator Universities. The comparator Universities are: University of New England, Central Queensland University and the Australian National University (Australia), Auckland University, Massey University and Canterbury University (New Zealand), Warwick University and Strathclyde University (United Kingdom), National University of Singapore and the University of the West Indies.
- (d) If USP had not been established it would be necessary for the participating nations to either establish their own national Universities or send students to institutions overseas. Samoa and Tonga both have such institutions, but these each have a restricted curriculum. The University of Fiji opened its doors to students in March of 2005. The alternative to directing students to USP is to send them to overseas institutions, most usually in Australia or New Zealand, or more recently for study with an overseas University through distance mode or in the case of Fiji Islands through study at the University of Central Queensland campus established in Suva.

The following lists the manual tuition fees for the various lowest cost bachelors programme offered at these institutions for international students:

Auckland New Zealand dollars (NZ\$)9,480
 Australian National University Australian dollar (A\$)14,400
 Central Queensland University FF\$7,665 (fees for Fiji Islands students at the Fiji Islands campus)
 Massey University NZ\$15,500
 University New England \$12,000

- (e) In assessing the costs of an alternative University education the following also have to be considered.
- (i) Air fares between country of residence and country of study. As over 75% of USP's students originate in Fiji Islands and therefore in most cases have no airfare to meet, this cost will be material. The cost of annual return flights for these students alone from Nadi to Auckland and Brisbane at least cost fares, will amount to over F\$3 million. Students from other countries in some cases will experience a net increase in cost and a net saving in others.

Costs of living at Australian and New Zealand University towns can in general be taken to be higher than Suva, but perhaps lower than Port Vila and Apia. Most USP campus based students are located in Suva.

- (ii) While costs associated with cultural adjustment are not subject to quantification they can be expected to be lower for students in the region attending USP consciously establishes support systems for overseas students, which will not be provided elsewhere.
 - (iii) While it has been demonstrated that USP graduates emigrate in significant numbers, the losses in graduate person power can be expected to be higher if among Pacific Island graduates from other Universities can be expected to be and is, higher. Such graduates have already adopted to overseas life styles and are knowledgeable about overseas labour markets. As far back as 1983 the Hon Chief Executive Officer of the Fiji Sugar Corporation stated “We sent ten engineers for degree studies in the United Kingdom. Eight passed their course and two came back to Fiji Islands.
- (f) The following calculation compares the cost of the lowest cost on face to face bachelor’s programme available to Fiji¹ students from USP’s comparator Universities, with the highest cost face to face bachelors programme offered by USP. The comparator programme used is that offered by Central Queensland University at its Fiji Islands Campus.

Tuition fees for CQU bachelors programme	F\$22 995
Tuition fees for a USP bachelors programme with a joint major in Accounting and Information Technology ²	(11 340)
Member country contributions to the USP budget for 2004÷EFTS ³	<u>(6 256)</u>
Net saving	<u>5 399</u>

This is a telling statistic notwithstanding the fact that the calculation does not include contributions to the University’s recurrent budget from Australia and New Zealand or other aid funded projects. However, it is reasonable to assume that not all of these benefits from aid would flow to other projects in the region if USP did not exist.

The following points are pertinent:

- (i) USP attracts aid funding because of its regional status. As such USP can achieve economics of scale that national institutions cannot enjoy. As such USP is an attractive institution to donors.
- (ii) USP has a good track record of maintaining plant, almost all of which was acquired through aid. USP’s maintenance budget is maintained at or above the generally accepted benchmark of 1.25% of replacement cost of assets (The 2004 budget figure stands at 1.3%).

¹ Students from elsewhere in the University will be classed as international students and would pay international student fee rates for a total cost of F\$34, 020.

² Two courses in Information Technology at year 1 (F\$500 each) and two in each of years 2 and 3 (F\$660 each). Two courses in Accounting at year 1 (F\$685 each). These courses in Accounting in each of years 2 and 3 (F\$635 each). 4 other 1st year courses (F\$385 each). 1 course from other areas in year 2 and 3 (F\$510 each).

³ Member country contributions for 2004: F\$43,257,150. EFTS for 2004: 10,163.

- (iii) USP has a good track record in achieving project objectives. In view of the above observations the opportunity costs associated with aid funding of the University are likely to be low.
- (g) Economic activity generated within the region by USP's operations, and associated foreign exchange savings

The following calculation is pertinent.

		F\$
Total operating expenses for the year ended 31.12.04 as per the University's annual financial report		64,667,708
less, payments made outside of the region	167,60,814	
less Australia/New Zealand contribution to recurrent funding		
	<u>5,621,446</u>	<u>11,139,368</u>
Finance potentially retained in the region.		<u>53,528,340</u>

Of this sum F\$2,050,778 was utilised for foreign exchange payments. Part of these payments will relate to movements of resources between countries in the University region. The balance (F\$514,775,620 will represent the sum used to finance the University's operations that is spent in the region, apart from any portion of staff emoluments expatriate staff may remit to their home country.

In contrast the cost of sending the USP student population for studies overseas, or by distance education through overseas universities and the foreign exchange outflows incurred can be estimated as follows,-

USP's full time student equivalents 10,163 lowest cost annual tuition fee at an Australian/New Zealand comparator university for international students (in this case the comparison has not been made with fees charged at the Fiji CQU campus as a restricted curriculum only is available at that campus) is at Auckland (NZ\$9,480).

Cost of tuition for 10,163 students	NZ\$96,345,240
Applying an exchange rate	F\$1 = NZ\$0.80
the cost in Fiji dollars will be	F\$20,431,550.

This sum represents an outflow of foreign exchange to the region. The sum is a clear understatement of the true outflow as many students, for example those studying science subjects will pay higher fees. Further, the calculation makes no provision for student living allowances, or airfares. As has been noted, if USP's students from Fiji Islands were to be sent for studies in Australia or New Zealand the air fares alone would add over F\$3 million to the total cost of education per annum.

In summary, USP's operations generated economic activity in the regional economies in 2004 in the order of F\$50 million. At the same time it enabled regional economies to make foreign exchange savings in excess of F\$120 million.

X. MEASURES OF COSTS AND BENEFITS TO REGIONAL GOVERNMENTS

- (a) Of the University's total financial outlays in 2004, F\$7,207,446 was applied to direct taxation and superannuation payments. Additional resources would be returned to governments through the indirect taxation process. It is not possible to identify the amount, but it can be expected to be considerable.

Some countries recoup a material proportion of this contribution to the University's recurrent funding through direct taxation and superannuation payments. The percentage of contributions recouped in this manner are as follows:

Cook Islands	9.8
Fiji Islands	20.3
Kiribati	3.2
Marshall Islands	35.4
Nauru	nil
Niue	16.1
Samoa	nil
Solomon Islands	2.0
Tonga	3.6
Tuvalu	1.4
Vanuatu	5.8

Graduates who continue to work in the region also contribute to government revenues through the tax system at higher rates than would be expected had they not secured a tertiary education.

- (b) Costs and benefits derived by the individual countries can also be viewed by comparing the governments' contributions to the University's recurrent budget with the number of graduating students. Contributions are based on number of students from each nation participating in the University's programmes. The ratio will therefore provide some indication of the success rate of students at the University. Care however has to be applied in reviewing the cost-graduate ratios as different programmes of study have different time frames and costs. The low ratios enjoyed by the Cook Islands, the Marshall Islands and Nauru particularly, are explained by the fact that most of the graduates from these countries have completed one on two year programmes as opposed to a full first degree. The abnormally high ratio for Samoa is explained by the uncharacteristically low numbers of graduates in 2003 (37). There were 61 graduates from Samoa in 2004. Figures provided relate to 2003.

State	Cost per One Graduate
Cook Islands	F\$10,500
Fiji Islands	27,188
Kiribati	16,417
Marshall Islands	6,232
Nauru	9,828
Niue	20,335
Samoa	51,583
Solomon Islands	13,195
Tokelau	-*
Tonga	12,878
Tuvalu	10,568
Vanuatu	31,221

*There were no graduates from Tokelau in 2003. Tokelau's contribution to USP's budget was F\$19,246.

The overall benefits of economic activity generated by the University will inevitably accrue disproportionately to the member countries. Fiji Islands, hosting the main campus will be the prime beneficiary. Samoa and Vanuatu, hosting the other University campuses can also be expected to enjoy a greater stimulus to the economy from the University's presence than other countries.

The net benefits to be obtained from a further decentralisation of the University are not readily determinable. No attempt to identify and address all the pertinent issues is made here. It is however appropriate to note that while considerable benefits accrue to the region from USP's presence, the benefits are not equitably distributed. The stimulus offered to the regional economies by USP's expenditures is a case in point.

XI. NATIONAL UNIVERSITIES OPERATING IN THE PACIFIC ISLAND SOCIETIES

Although none of the national Universities established in the Pacific Island societies are designated as comparator institutions to USP, it is pertinent to consider the costs of these entities operations and the benefits they offer to the societies they serve. They clearly contribute to the availability of services associated with Universities, around the Pacific region.

A. Atenisi University, Tonga

Atenisi is a private institution established in 1975. It consists of a high school, a University and a foundation for performing arts. Atenisi's financial resources are meager. Year long courses tuition fees at 2002⁴ were set at Tonga pa'anga (T\$)270. (The Fiji dollar and Tongan Pa'anga stood at par mid 2002). The University's bachelors programme consists of seventeen courses. Total tuition fees will therefore amount to T\$4,590. Students are however expected to 'contribute' to University fund raising activities a sum of T\$700 per annum. The total cost of a bachelors education at Atenisi is therefore T\$7,390 as compared to F\$8,370 for a USP bachelors education at 2002 fee levels. However, graduates of Atenisi are also 'expected' to contribute to its ongoing operations in either cash to kind. Modest donations to its operations also accrue from other sources. Atenisi's other sources of income are limited in the extreme. It

⁴ These are the latest figures available.

receives an annual capitation grant from the State for its high school operation, but at only half the rate provided to State run schools. Its Performing Arts division tours widely, but it is not clear as to whether revenues from its performances more than cover the costs of this dimension of its operations. As such it obtains no direct funding from the state or any other institution.

Four programmes are offered, a four years Bachelor of Arts and Sciences (17 courses) and a two year Associateship (half a bachelors programme) of Arts and Sciences (9 courses). The curriculum encompasses courses in Anthropology, Arts, Astronomy, Biology, Chemistry, Economics, English language and literature, German, Greek, History and Culture, Latin, Mathematics, Music, Philosophy, Physics, Psychology, Sociology and Tongan language, history and culture.

Atenisi advertises both Masters and PhD programmes, the latter being offered in collaboration with Auckland University. However, there does not appear to have been any enrolments at the postgraduate level either currently or in the past.

Apart from the association with Auckland University at the PhD level there seems to be no independent quality assurance process.

Student numbers at Atenisi appear to be currently in decline. In 2002 student numbers at the high school and University together totaled 500. Current enrollments are no more than 200, with the most significant decline being seen at the high school level. Entry to the University is open to all who have reached the appropriate standard in their secondary education. However the majority of admissions to the University have been drawn from the associated high school. Consequently a decline in student numbers at the University level may be anticipated in the near future. The small enrolments lead to some courses, particularly in the Science field being offered intermittently.

Staffing at the University is also limited. Staff is drawn primarily from two sources. Firstly, Atenisi is able to attract volunteers from overseas (through programmes such as VSA, VSO, and the equivalent from European countries). These faculty serve to explain the somewhat disparate range of courses in European languages, culture and history in the curriculum, which may not be of any great relevance to Tongan society. However, high turnover of such staff make it particularly difficult to sustain the courses. Secondly, Atenisi draws on its own graduates to contribute to the teaching programme, in most cases on a part time basis.

Despite its limited resources and apparent lack of external quality assurance, Atenisi produces graduates, who enjoy some standing in the local and international community. There are certainly instances of Atenisi graduates, being accepted for postgraduate studies in Universities of standing overseas. Many of Atenisi's graduates are employed in New Zealand's primary and secondary education system. In Tonga, graduates are employed in some number in schools run by the Mormon church (Atenisi has no affiliation with the Mormon church) They are also employed across the private sector. Atenisi's graduates are not found employed in Tonga's public sector.

Atenisi can therefore be seen to have made a meaningful contribution to the Tongan society at a cost to its graduates and/or their sponsors of something less than that which would have to be met from study at U.S.P. The cost savings become more substantial when airfares and relocation costs avoided are taken into consideration. The cost to the Tongan's state in nominal in the extreme, whereas Tonga's contribution to USP's recurrent budget in 2002 was of the order of F\$700,000.

A secure source of funding for Atenisi would doubtless enable the institution to restructure and refocus its curriculum and eliminate the ad hoc nature of its operations. Atenisi's site offers scope for expansion if funding is available. Such developments can only be forthcoming if a substantial ongoing financial commitment is made to Atenisi. Government funding is the only conceivable source. However, Atenisi values its autonomy from government, which it sees as being open to compromise if it became dependent on state funding.

B. The National University of Samoa (NUS)

The National University of Samoa was founded in 1984. Its current curriculum encapsulates the following disciplines: Accounting, Biology, Chemistry, Computing, Education, English, Environmental Science, Geography, History, Mathematics, Nursing, Physics, Samoan Language and Culture and Sociology.

NUS has succeeded in securing substantial aid funding from Japan, which has served to provide its current plant. The programmes provide a low cost option for bachelors programmes to Samoans. Student tuition fees for a full bachelors programme amounts to no more than Samoa tala (ST)3,840 (F\$2,560), compared with the tuition cost of F\$9,200-11,340 for USP bachelors degree. Students enjoy further savings vis a vis a USP education, as air travel and other dislocation costs are avoided. Quite clearly the institution cannot sustain its operations purely on income from tuition fees. The bulk of NUS's recurrent budget will therefore be drawn from government funding.

Unfortunately information regarding the country's financial commitment to NUS is not available. Funding available must be quite substantial. Surprisingly NUS pays sessional faculty at a higher rate than USP. However, it seems fair to assume that overall the institution's operating costs per student are lower than these at USP. NUS places a greater emphasis on low cost, non science programmes than USP. Further NUS, understandably has a far lower profile in University activities such as research, which are a charge against recurrent income. NUS draws almost all of its faculty from Samoa. In so doing it limits the need to make payments to officer relocation costs incurred by staff drawn from the world at large and to offer remuneration packages that are competitive internationally.

Operating in such a context it is clearly necessary to consider the quality of the NUS degree programmes and its graduates. Unlike USP, NSU does not have an established external advisers programme. External assessments are however undertaken on an ad hoc basis. A review of the Science and Mathematics faculty was undertaken in 2003. The faculties of Arts and Education were reviewed in 2005. In each case the review has been undertaken by staff from USP.

It is apparent that graduates from NUS are well received in the community, particularly those drawn from the vocational programmes in Accounting, Education and Nursing. Recognition of NUS qualifications overseas is not clear. An NUS accounting graduate seeking to emigrate to Australia may not get the same recognition as a graduate from USP. On the other hand, a number of Samoans are employed in New Zealand's school system. This suggests that NUS's programmes enjoy some measure of international credibility.

C. The University of Fiji

The University of Fiji (UOF) opened its doors to students in March of 2005. As such it is premature to make any assessment of the contribution it is able to make to Fiji Island's society, or any comparison with USP. While it is sensitive to the need to provide quality assurance to the society it serves, these processes have yet to be put in place. Its curriculum at present is narrowly based, focusing on vocational programmes in commerce and information technology. Part of its programme is sustained through partnership arrangements, whereby it utilizes distance education materials, notably where they are web based from other institutions, which are on open access as means of providing tuition.

UOF clearly has a lower operating cost structure than USP. This is reflected by the lower student fees charged. UOF has been established by Arya Prathinidhi Sabha. However the extent of its financial commitment to the University is not clear. There is no state funding for UOF at present.

XII. REGIONAL VERSUS NATIONAL, OR REGIONAL AND NATIONAL INSTITUTIONS

The review of Atenisi, NUS and UOF demonstrate that these three institutions each operate with lower unit costs than USP. This is clearly true even though unit costs cannot be clearly determined for NUS or UOF. However, the national institutions cannot truly be regarded as comparable to USP. Atenisi's curriculum has been developed on an ad hoc basis, dependent on the academic talents it has been able to attract rather than the needs of the students or Tongan society. While NUS's curriculum better reflects the range of subjects found in an established University, it offers limited programmes only in the traditionally high cost academic disciplines. It also retains an element in its curriculum, which is uniquely Samoan, something that USP or any institution outside Samoa would not see as part of their mission. UOF currently, has a restricted vocational curriculum, which it is able to deliver at low costs. Its ability or disposition to develop a wider curriculum has yet to be tested.

The activities of these three institutions do serve to provide direction to the form that regional co-operation could take in tertiary education. USP already recognizes prior learning from certain other institutions in its admission procedures. Cross credits can be secured by students completing programmes at the Fiji College of Higher Education, The Fiji Institute of Technology and The Solomon Islands College of Advanced Education. No such arrangements exist between USP and Atenisi or NUS. It might be argued that such arrangements are not necessary. This is unfortunate. National institutions may have the capacity to offer certain programmes in part, but not in their totality. This may be true of existing programmes at Atenisi given its limited and restricted resourcing. If recognition for learning completed at national institutions was provided, students could undertake part of their studies in a low cost environment, transferring to the relatively high cost USP programmes only where necessary. Such arrangements could of course only be put in place when there is satisfaction with the national institutions' quality assurance procedures. While this may be a sensitive issue, USP could offer assistance in this area. Collaboration between the institutions could also serve to develop national institutions capacities in research and consultancy.

A view has evolved in Pacific Island societies that USP and its national counterparts might best be seen as complementary institutions, rather than alternative means of providing the benefits of Universities to the peoples of the Pacific Islands. This analysis endorses that view.

XIII. SUMMARY OF COSTS AND BENEFITS

<u>Benefits</u>	<u>Costs</u>
1,684 completion of formal tertiary qualifications (2003)	F\$59,046,262 born by regional governments and sponsors.
Minimum tuition costs and air fares avoided by not sending students to composites Universities overseas and therefore foreign exchange saved F\$123,431,550	Nil
Pre-degree studies unit, providing second chance opportunities to enter University studies, generating a surplus of F\$500,000	Nil
University Institutes undertaking applied research in a range of areas contributing a surplus of F\$100,000.	Nil
Masters of Business Administration programme offered at full cost recovery basic contributing a surplus of F\$100,000.	Nil
Consultancy activities generating revenues of F\$776,663, some of which would have been paid outside the region if not undertaken at USP, contributing F\$54,560 surplus to the University.	No incremental costs
Provision of a forum for the future leaders of the region to meet and work together.	
Preservation and development of the region's arts and cultures.	Operating cost of the Oceania Centre for Arts and Culture F\$226,491
A range of research activities much of which is of specific relevance to the region that may not have been undertaken if the University was not in existence.	Research and conference expenditures totaled F\$145,845

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