



Technical Vocational Education and Training: 'The Master Key'

'The Review of the Functions of FIT, TPAF and other TVET Providers'

For the Ministry of Education, Youth and Sports, Arts, Culture & National Heritage

June 2008

Prepared by:

Dr Akhilanand Sharma of the University of the South Pacific and Eci Naisele of the Ministry of Education TVET Section

This report does not reflect the views of the University of the South Pacific or the Ministry of Education

















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Table of Contents

Acknowledgement Executive Summary Acronyms Definitions		v vi xiv xv		
Chapter 1	Introductory Chapter Rethinking Technical Vocational Education and Training: Vocationalising Education			
Chapter 2	TVETProgrammes 2.1 TVET administration Managing Authorities TVET Characteristics Different TVET Programmes	14 14		
	2.3 Types TVET Programmes 2.3.1School Based 2.3.1.1 Formal TVET Education-Pre-Vocational 2.3.1.2 Curriculum 2.3.1.3 Vocational Education Training	17		
	2.3.2 Private Vocational Training Institutions2.3.2.1 Monfort Boys Town2.3.2.2 Private TVET Providers	22		
	 2.3.3 Non Formal TVET 2.3.3.1 Advanced Vocational Training (AVT 2.3.3.2 Ministry of Youth, Sports and Productivity, Department of Youth Training Scheme 2.3.3.3 Tutu Vocational Centre 	24		
	2.3.4 TVET Tertiary Institutions 2.3.4.1 Fiji College of Agriculture [FCA] 2.3.4.2 Fiji Forestry School	27		
	 2.3.5 Teacher Preparation Institutions 2.3.5.1 Fiji College of Advanced Education 2.3.5.2 University of the South Pacific [USP] 	29		
Chapter 3	FIT and TPAF	30		
Chapter 4	Presentation and Discussions of the Findings	45		
Chapter 5	The Way Forward for TVET in Fiji: Recommendations for Policy and Practice	77		
References		86		
Appendices (A) 1-9	List of people met and places visited (A1), schools visited (A2), Correspondence (A3) Interviews (A4), Report on Business Excellence Award (A5), FEA – A Case Study (A6), Key Economic Data (A7), Statistics (A8), Projected Budget (A9)	90		

Acknowledgement

We were inspired to name this review report as 'TVET: The Master Key' after attending a very successful workshop on TVET in the Republic of Palau in 2006. In particular, the term is mentioned in the editorial section of the prospects, quarterly review of the comparative education (UNESCO, vol. XXXV, no. 3, September 2005) and it became very popular in the workshop. This title sets the conceptual basis of this review.

We are grateful to numerous persons, institutions and organizations that have provided valuable information as well as documents for this review. Firstly, we thank the former Interim Minister for Education, Science and Technology, Mr. Netani Sukanaivalu, for giving us the opportunity to conduct this review. We also acknowledge, with appreciation, the contribution made by the current Education Minister, Mr Filipe Bole, while he was a senior lecturer at the University of Fiji and now in the office of the Minister.

This review was of great educational value to us. We also acknowledge the Permanent Secretary for Education, Mrs Rabukawaqa and the Deputy Secretary for Education, Administration and Finance, Mr. Filipe Jitoko, for their assistance throughout the review process and for seconding Mr. Eci Naisele of the TVET section of MOE as the project secretary. The Human Resources Planning Committee of the Ministry of Finance, National Planning and Sugar Industry has also made useful input in this review exercise and for that we are indeed grateful.

We are indebted to the Directors of FIT and TPAF for providing valuable documents and time for discussion and consultation. Both Mr. Jone Usamate and Dr Ganesh Chand deserve our heartfelt gratitude. The staff members and students of FIT and TPAF are also thanked for their contributions. We also express our gratitude to the industry representatives for discussing the work of FIT and TPAF and for providing valuable information on the effectiveness or otherwise of the courses and the programs of the two institutions.

We acknowledge with appreciation the input provided by the appropriate sections, Government and NGOs to this exercise. The University of the South Pacific (USP) and the University of Fiji (UOF) have freely discussed the rationale for establishing the National University of Fiji and the ways in which USP, UOF, FIT and TPAF can function as a team to provide relevant and authentic education to Fiji citizens within the confines of limited resources available. The valuable input of FESP and TVET Vocational Adviser, Mr. Donald de Klerk also needs mentioning in this submission.

Selected secondary schools that provide franchised TVET programs have also made considerable contribution to this review. Their critical examination of the strengths and limitations of the franchised programs provided insights that were helpful in suggesting ways in which the limitations may be addressed.

We also like to put on record, with appreciation, the contribution made by USP, the Ministry of Education and the Forum Secretariat for making available the necessary documents for our desk study.

Finally, we thank everyone who has contributed in this review and wish them success in their future TVET endeavours.

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Executive Summary

1.0 Introduction

The review of the functions of FIT, TPAF and other TVET providers was commissioned by the Minister of Education. A clearly articulated 'Terms of Reference' (TOR) was provided for the review. In conjunction with this work, the TOR also expected the review team to look at TVET in totality especially the initiatives of MOE in secondary schools and those of private providers and the University of the South Pacific.

This review is seen as increasingly necessary for two reasons. Firstly, TVET plays an equally important role in the social, economic and political development of any nation together with its academic counterpart. However, Fiji has not fully realized its potential and has treated it as a 'second best option' to academic education. TVET is gradually gaining the attention it deserves in the total learning system of all Fiji citizens. Education is regarded as the key to development, however, TVET is seen as 'the master key' because it has the ability to open all the 'doors' of life-long learning and improve the vocational expertise and consequently the quality of living. It is expected that this review report would empower the stakeholders, especially the policy-makers, so that they can genuinely accept TVET as an equally important component of the total learning system providing relevant knowledge, skills and competencies for employability, quality living and learning communities.

Secondly, FIT and TPAF are the two main institutions responsible for training skilled human resources for various industries in Fiji. The review examines the extent to which these institutions are fulfilling this need and how they could work as a team to avoid any unnecessary duplication of functions and reach-out to the other sectors of the economy. To locate FIT and TPAF in the realistic TVET scenario, it became necessary for the review team to examine TVET programs in secondary schools and private organizations. After studying these organizations, the review team strongly recommends the setting up of an overarching national coordinating authority for policy, quality assurance and monitoring.

Furthermore, the team stresses the need to vocationalise education beginning right from pre-school through secondary to tertiary programs of study. The vocationalising initiative, it is emphasized, is concerned with educating the 'whole person' by providing life-skills including values education and preparation for the 'world of work', self-employment and ongoing learning. In this regard, it becomes a learning strategy destroying the dualist nature of our education system, that is, the academic education stream for the majority and the vocational for slow learners. Therefore, this review report takes a visionary approach and goes beyond the review of the functions of the TVET providers and suggests the 'restructuring of the whole education system' to enable students to acquire academic as well as vocational education within the same program of the schooling process.

2.0 Terms of Reference

- 2.1 To compare the FIT Act, TPAF Act and the Education Act with the view to identifying areas of duplications in terms of responsibilities. It would be relevant to the understanding of the Taskforce for FIT and TPAF to provide an interpretation of their roles and core responsibilities according to their Acts and what links they have with the other institutions such as USP and MoE.
- 2.2 Make recommendations to the review of the three Acts to clearly demarcate responsibilities of the three institutions in terms of training activities. FIT and TPAF may need to identify areas they are currently working with that lie outside of their Act.
- 2.3 Consider the robustness of the Acts in terms of meeting the country's demands for skill training and requirements.
- 2.4 Define and assess the target audience for each institution.

- 2.5 Ensure that the two institutions have greater accountability to the responsible Minister for meeting their core functions within the resources provided by government.
- 2.6 Review the current structure of accountability with the two institutions coming under two different Ministers and Ministries.
- 2.7 Review the training programmes of FIT and TPAF and identify areas of duplications in training.
- 2.8 Make recommendations on how to streamline the training activities in the two institutions to better show their core functions in terms of meeting the skilled manpower of the industries and determine future of excess programmes.
- 2.9 Look at major pathways, in connection with the National Qualifications Framework, for learning in the area of TVET between the schools, FIT, TPAF and the USP.
- 2.10 Assess the fees structure of FIT and TPAF and make recommendations on how learning can be more affordable to the public.
- 2.11 Make any other recommendations to the Minister for Education for improving effectiveness and efficiency of FIT and TPAF and issues for future research and considerations.

3. The structure of the Report

The report is presented in five chapters. Chapter 1 discusses the background of TVET, concentrating on its concept, orientations, locations, potential and challenges. It also succinctly explains the review methodology. In the second chapter, TVET programs in Fiji are discussed briefly with particular reference to TVET administration and types of programs. The third chapter examines FIT and TPAF in some depth. Chapter 4 reflects broadly on the overall findings of the review and the last chapter presents recommendations for policy and practice. In each chapter, some implications for policy and practice are made. These are consolidated in Chapter 5. The recommendations for policy and practice relate to (a) the overall structure of TVET, (b) the specific pre-service and in-service functions of FIT and TPAF respectively, (c) quality TVET centres and the delivery of skill-based training in rural and remote areas, (d) National Qualification Framework (NQF), (e) empowerment programs for the stakeholders, (f) research, and (g) leadership and staff professional development.

4 Data Management Approach

This report is the product of extensive consultations with the relevant TVET stakeholder community that included the members of the taskforce, industries, respective institutions, educators, policy-makers, employers, informal sector, and selected primary and secondary schools and their communities and students. Moreover, documentary analysis and observation were the other strategies to gather relevant data. The relevant literature was also studied and it provided us the appropriate conceptual base to anchor the report.

The two institutions, namely, FIT and TPAF, that were studied provided valuable submissions based on the TOR of the review and their appropriate documents including handbooks, strategic plans, annual reports and the like. This information was useful in formulating the recommendations that are provided in various sections of the review report.

Qualitative data collecting approaches employed in this review enabled us to collect information that represents the views of a diverse section of the relevant stakeholder-family. Thus, it was possible to draw policy-makers, policy-users, employers, private sector, students and self-employed persons into TVET policy development and management. The interview and discussion transcripts were returned to the principal informants for validation and comments. The draft review report was also presented to FIT and TPAF Boards and staff academic committees. It was also presented to the Human Resources Planning Committee of the Ministry of Finance, National Planning and Sugar Industry. Both the Ministers, mentioned above, and the Permanent

Secretary of Education were given copies of the draft review report in December 2007. The comments and suggestions made during the presentation and discussion were accommodated and accordingly further additions and deletions were made. In this way, most of the complexities and uncertainties were cleared in the terrain. Apparently, this approach lands itself into the democratic process.

The two universities in Fiji, namely, the University of the South Pacific (USP) and the University of Fiji (UOF) were also consulted and their views have found expression in this report especially the recommendations regarding the proposed Fiji National University (FNU). Perhaps, it is untimely to establish another national university on national funding at the present time. It is suggested that a more partnership relations be established amongst USP, UOF, FIT and TPAF in order to avoid unnecessary duplication of courses and programs. Through pathway or cross-credit arrangements, the certificate and diploma graduates from FIT and TPAF should be able to complete their degree studies at USP or UOF. If and when established, the proposed FNU could have a College of TVET comprising FIT and TVET as well as other TVET providers. This would locate TVET in a "bigger picture' of social, economic and professional development. The proposed structure would also make it possible for TVET to receive the respect and attention it deserves, enabling it to exist as an equally important component of the total learning system and not as the 'second-class option' to academic education (Fiji 1969; Fiji 2000; ADB 2007). The proposed College would also create better cooperative relations among TVET providers especially between FIT and TPAF. To rationalize TVET courses and programs and foster teamwork, the College should be established as soon as possible.

The strength of any research-based report depends on interrelated variables such as the availability and accuracy of data, the timeframe of the study and the funds available to conduct it. There was hardly any funding allocation for this project. However, the accuracy and the consistency of data were not compromised and were achieved through the triangulation approach within the limited timeframe of the project.

5 TVET programs

- 5.1 Education systems in many developing countries are highly dependent on Western intellectual models, which are essentially academic in content and orientation. In recent decades, however, such systems have faced difficulties that are seen by many to represent a 'crisis' in formal education for developing countries. Major problems include access to educational opportunities, high school push-out rates and the worsening phenomenon of educated unemployment. The problem of a large number of school push-outs exists especially among poorer sections of the population. Educated unemployment and associated social problems have arisen because job opportunities fail to keep pace with the rising expectations of those with formal education qualifications. In this context, the concept of technical and vocational education remains attractive to many educational policy-makers. Consistent with this world-wide trend, Fiji has for some time attempted to incorporate significant technical and vocational initiatives within its educations system.
- 5.2 The Education Commission Report 1969 proposes the introduction of vocational education in secondary schools in Fiji to cater for the needs of school leavers providing education and training for paid employment that would lead students to higher education, to equip students for self employment and to provide life skills for those who would return to a rural life. This notion was further endorsed by Fiji Islands Education Commission Report 2000. The report stresses that 'dualism' in secondary schools will always be a threat to technical and vocational education. Over the years, technical and vocational education has struggled to get recognition form all sectors leaving a rather vague picture that skill-training is meant for those who are academically weak.
- 5.3 The present structure in the current TVET system saw it being offered and housed in more than one government ministries. The Ministry of Education, (MoE) manages the school-based TVET systems at primary, secondary and post-

secondary school levels. Despite its semi-autonomous arrangement, FIT comes under MoE. The Monfort Boys' Town is classified as a private provider of TVET programs but currently receives an annual funding grant from MoE. The Advanced Vocational Training (AVT) program provides short-term training to the non-formal sector. It is managed by TVET section of MoE but is funded by the Ministry of Planning and National Development under its Integrated Human Resources Development Program (IHRD).

- 5.4 Private TVET vocational training institutions, such as the APTECH Computer School, are registered by MOE that recognises their qualifications and graduates. However, they are not closely monitored and do not receive financial or resource assistance from the Education Ministry. Other private TVET providers with agriculture-based training such as Tutu Vocational Centre are supported and funded by the Ministry of Agriculture.
- 5.5 The Fiji College of Agriculture is a fully government agricultural institution and provides a Diploma in Tropical Agriculture and this qualification is accredited by USP.
- 5.6 The Ministry of Forestry provides forestry skills training at its Forestry School in Colo-i-Suva and TITC in Nasinu. These organizations also provide short-term 'up skilling' courses for the workers of the forestry/timber industry.
- 5.7 The Technology sections of USP's School of Education, FIT Learning Centre and FCAE provide TVET teacher training programs at certificate, diploma and degree levels for those who wish to pursue 'TVET teaching' as a career.

6 Fiji Institute of Technology

- 6.1 FIT was established in 1964 with its initial name, the Derrick Technical Institute. The main purpose of the Institute was to prepare human resources for the technical and vocational needs of the country especially for skilled work in commerce, trade and industry. This was consistent with the Colonial Government's policy of national development.
- 6.2 Most of its programs then were provided by off-shore providers such as the City and Guilds of London Institute and the articulated trade programs from New South Wales, Australia. With sponsorship from private companies such as FSC, Emperor Gold Mine, PWD, Carpenter, Mallows and Millers Limited students were able to complete their studies. The apprenticeship scheme was one of the driving forces behind the existence of FIT.
- 6.3 Since 1996 FIT has moved forward in terms of its structure and functions. Firstly, it became a semi-autonomous corporate entity, however, operating under the confines of a Government Act and with approximately 67 percent of grant towards it annual budget. Secondly, it now provides a broad spectrum of post-secondary programs in TVET in response to the economic and educational development policies of the Government and the needs of the industries and the marketplace.
- 6.4 According to FIT Act, a 12-member Council is the managing authority of the Institution. About 80 percent of the council members are representatives from the private sector. The Chair of the Council is also from a private organization.
- 6.5 Since 1996 the demand for places in FIT courses and programs has increased considerably and this is putting undue pressure on its limited resources, equipment and facilities. In the recent years it has been enrolling yearly over 3000 equivalent full-time students and this comprises around half of all Fiji students undergoing post-secondary training programs. FIT has nine schools offering a wide range at certificate, diploma, advanced diploma and degree levels.
- 6.6 Through 'franchise' mode of delivery, FIT offers opportunities to vocational centres and secondary schools around the country to teach FIT programs. The purpose is to allow students who have completed their secondary education get qualifications and continue with their education at the tertiary level.

6.7 FIT is strategically assigned to provide pre-service post secondary TVET programs.

7. Training Productivity Authority of Fiji (TPAF)

- 7.1 The Training and Productivity Authority of Fiji (TPAF) is a statutory organization. Its genesis lies in the Fiji National Training Council (FNTC) that was established by the Fiji Government Act of 1973. The Act was amended by the Fiji National Training Amendment Act of 2002, which renamed FNTC to TPAF.
- 7.2 TPAF operates under the Minister of Labour, Industrial Relations and Productivity with the Permanent Secretary of the Ministry appointed as the Chairperson and the Director General as the Chief Executive.
- 7.3 The managing authority of TPAF is a Board that has a tripartite structure comprising a total of 14 representatives from three major social groups: the Government, Employers and Employees.
- 7.4 TPAF is the national organization for technical and vocation education and training. As such, it provides and arranges appropriate vocational education and training. Moreover, it provides consultancy service to employers and other persons and issues certificates of competency registered within the National Qualifications Framework or qualifications approved by its National Standards and Accreditation Council. It also provides training to persons outside the scope of the levy order on terms and conditions it determines. Furthermore, it manages the levy grant scheme, trade tests and the apprenticeship scheme. TPAF is also responsible for promoting the concept of productivity and this it does through seminars, workshop, national awards, benchmarking, productivity measurement and the like.
- 7.5 Strategically TPAF is assigned to provide in-service TVET programs to those outside the formal school system.

8. Key Findings

- 8.1 Owing to strong pressure for academic credentials, TVET is still regarded as a 'second best option' rather than an important component of the life-long learning process. This has an adverse effect on the overall development of TVET in the two institutions under review as well as in other providers.
- 8.2 The successful implementation of TVET programs is constrained by the lack of readiness of stakeholders, lack of relevance of some of the programs and unavailability of suitable resources. The absence of relevant research-based data, especially on functional labour market, primary industry and TVET graduates, also hinders its successful planning and management.
- 8.3 The Education Ministry maintains very little contact with industries and informal sector as well as FIT, TPAF and other private providers of TVET. It develops its programs in isolation from the labour market. FIT and TPAF, however, have employer and employee representation on their Boards and through their industrial advisory committees receive feedback on the relevance of their programs. The workplace attachment of Education Ministry TVET program is poorly organized and the students do not receive useful on-the-job training.
- 8.4 TVET programs are not successfully implemented owing to the lack of appropriately qualified teachers and leaders. In particular, a large number of teachers have little industry experience in their teaching areas.
- 8.5 The quality of TVET training remains a problem in most rural areas where training facilities are poorly equipped, under-financed and the expertise of teaching staff is inadequate. Similarly, it was found that that the increasing urban poor are also not attended to. FIT and TPAF have not designed programs for them.
- 8.6 The present FIT franchise program in secondary schools is unsatisfactory and need attention especially in regards to the supply of resources and teaching staff.

- 8.7 The curricula of FIT, TPAF and other providers do not cater for job categories in which many young people with diverse social and economic backgrounds may find employment.
- 8.8 Both FIT and TPAF have expended quantitatively but they need to revisit the quality of their courses and programs so that they provide relevant knowledge, skills and competencies for employability.
- 8.9 TPAF has made the first draft of the National Qualifications Framework but it has not been formulised yet. This is necessary because it has the potential to establish standards and processes for quality control in FIT and TPAF as well as register and accredit other providers.
- 8.10 There is lack of an overall administrative and management structure for policy making, coordination, quality assurance and monitoring of TVET programs in Fiji with particular reference to FIT, TPAF, primary and secondary schools and other private providers.
- 8.11 There is very little relationship between FIT and TPAF mainly in areas such as planning, curriculum and pedagogy.
- 8.12 FIT and TPAF were primarily established to provide pre-service and in-service TVET programs respectively. However, there is considerable duplication of courses and programs.
- 8.13 Disparity in gender participation still continues to exist in these institutions. However, the students have the preference to take whatever program they wish to. More female students still opt to take up 'feminine-type' subjects such as hospitality and commerce. Other 'masculine' trade courses are generally taken by male students.
- 8.14 Australia Pacific Technical College (APTC) has launched its programmes with its head office in Fiji. Their programs are stationed at different schools or institutions. It may in the long-term provide healthy competition amongst training providers but it is likely to pave pathways for the emigration of skills and talents to Australia and New Zealand.

9. Recommendations

9.1 That TVET be regarded as is the 'Master Key' because it has the potential to transform the world of work and the economy, alleviate poverty, save the environment and improve the quality of living.

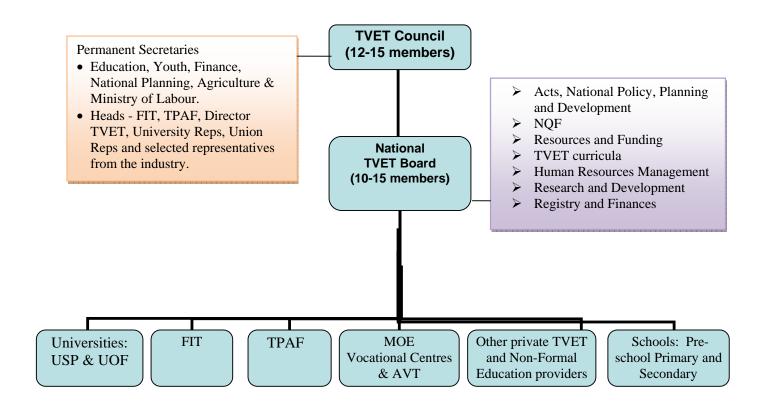
- 9.2 That the Government of Fiji establishes a Higher Education Commission¹ (HEC) that assumes the responsibility of drawing the tertiary education charter, acts and policies for different sections of tertiary education including TVET.
- 9.3 That a national coordinating authority be established under which quality assurance, national qualification framework, standards, certification, accreditation, acts, policy, funding and training are taken care off. All TVET providers are to be sanctioned under this national coordinating organisation.
- 9.4 That if and when the proposed Fiji National University (FNU) is established FIT, TPAF and other TVET providers be located in the College of TVET of the University structure.
- 9.5 This report reinforces that FIT must only concentrate on ²pre-service students and programs and TPAF on ³in-service as stipulated in their respective acts. It is recommended that the two institutions discuss this issue mutually and take the course of action that would avoid duplication of courses, programs and resources. This action would lead to cost-effectiveness and internal efficiency.
- 9.6 That Acts of FIT and TPAF be re-visited and a more precise and concise policies and regulations be developed in consultation with the relevant stakeholders especially the industries.
- 9.7 That TPAF and FIT courses and programs must address the demands for the country's skill training and requirements. They must address the needs for 'wage' as well as 'self' employment.
- 9.8 That within the management structure of the National Coordinating Authority, NQF be established with benchmark for academic and competency-based standard for all TVET courses and programs must be provided.
- 9.9 That FIT and TPAF pay greater attention to the rural, island and informal sectors so that people benefit from TVET initiatives.
- 9.10 That FIT and TPAF organize empowerment programs including workshops for relevant stakeholders to address issues of relevance and readiness. It is also important to prepare female coordinators together with their male counterparts.
- 9.11 That owing to the considerable mismatch between knowledge and skills acquired and those available in the labour market both FIT and TPAF must institute 'research' studies to obtain correct information for future planning process.
- 9.12That TVET institutions as well as Education Ministry pay greater attention to the urban poor especially the children and youths in the squatter settlements. FIT and TPAF must initiate new initiatives in TVET to cater for this large somewhat neglected section of the population.
- 9.13 That the TVET heads and teachers or instructors must both be competent administrators and professionals. There is clearly a need for training in TVET leadership and pedagogy both at pre-appointment and after-appointment levels. Both FIT and TPAF must provide professional development programs for the members of their academic staff.
- 9.14 That funding provision be made by the Government to establish TVET National Coordinating Authority, Quality Learning Centre and the National Qualification Framework.

¹ It is pleasing to note that HEC is now being established.

² Pre-service programs are those education and training programs that students take before they enter the workforce. These could be for job training or preparation for prospective work. Some people may take up employment without any formal training and may get on-the-job training. Based on the quality of on-the-job training, they may or may not be considered as pre-service students.

³ In-service programs are employees who may or may not have initial training and are in service or are employed. They enroll in training or education institutions for job improvement, job enrichment, re-training or up-skilling. In-service training programs may be short-term or long term depending on the employer or employee needs and are usually sponsored.

FIGURE 1: Proposed National TVET Coordinating Authority



Acronyms

ADB Asian Development Bank

AERT Automotive Engineering Road Transport
ASQT Accreditation, Standards, Quality Team

AusAID Australian Agency for International Development

AVT Advanced Vocational Training BCE Building Civil Engineering

CBET Competency Based Education and Training

COM Commerce

EFTS Equivalent Full Time Students
ELE Electronic Engineering

EU European Union

FBEAP Forum Basic Education Action Plan

FCA Fiji College of Agriculture
FCOSS Fiji Council of Social Service
FESP Fiji Education Sector Programme

GDP Gross Domestic Product
FIBOS Fiji Islands Bureau of Statistics
FIT Fiji Institute of Technology
FJC Fiji Junior Certificate
FNU Fiji National University
FSF Fiji School of Forestry

FSFE Fiji Seventh Form Examination
FSLC Fiji School Leaving Certificate
FTC Forestry Training Centre
FTE Full Time Equivalent
GOF Government of Fiji

HEC High Education Commission
HRD Human Resource Development
HTS Hospitality Tourism Studies
IACs Industry Advisory Committees

ICT Information and Communication Technology

IGA Income-generating activity
IGAs Income Generating Activities

IHRDPEP Integrated Human Resource Development Programme for Employment Promotion

ILO International Labour Organization

ITAC Industry-Training Advisory Committee (TPAF)

KPIs Key Performance Indicators
MEC Mechanical Engineering
MoE Ministry of Education

MOFNP Ministry of Finance and National Planning
MSME Micro, small and medium sized enterprises

NCSMED National Centre for Small and Micro Enterprises Development

NFSD Non Formal Skill Development
NGO Non-governmental Organisation
NQF National Qualifications Framework

NSAC National Standards and Accreditation Council

NSS National Service Scheme

NTPC National Training and Productivity Council

SME Small and Medium-Size Enterprise STFE Skills Training for Employment

TORS Terms of Reference

TPAF Training and Productivity Authority of Fiji
TVET Technical-Vocational Education and Training

TVTC Tutu Vocational Training Centre
UCA University College of Agriculture
UCM University College of Medicine

UCTE University College of Teacher Education

UCTV University College of TVET

UNESCO United Nations Educational Scientific and Cultural Organisation

USP University of the South Pacific

Definitions

Advanced Vocational Training Non formal skill certificated training on needs basis at

short duration

Competency Skill

Education Acquiring knowledge about something

Formal training Organized training as part of the formal system of

education and training

Informal sector Non-wage (or non-registered, non-tax paying

enterprises)

Informal training Acquisition of skills through ad hoc means, such as

from parents, elders, or by observing and practicing

on the job

Modern sector Registered enterprises, wage-paying

Non-formal training Organized training outside the education and training

System

Pre-vocational The provision of basic skill oriented subjects as part of

a general secondary curriculum

Private vocational Programmes offered at private vocational institutions

that are registered and recognised but are not

financially supported by MoE

Skills Development The acquisition of the practical competencies,

know-how and attitudes necessary to perform a trade

or occupation in the labour market

Training Preparation for an occupation

Training Provider Those who deliver training

TVET Technical-vocational education and training

TVET Academic Education Trade subjects that are formally taught in forms 1 to 7

and nationally examined but are practically oriented

Vocational Education Skills training for two years after secondary education

either school based or stand alone but are not

nationally examined

Tech Voc The term used in this report referring to TVET

Introductory Chapter

⁴Rethinking Technical Vocational Education and Training: Vocationalising Education

INTRODUCTION

"While education is the key to any development process, TVET is the 'Master Key' that can transform the world of work and the economy, alleviate poverty, save the environment and improve the quality of life" (Luisoni, 2005: 250).

This chapter sets out to provide the conceptual basis of TVET so that the functions of FIT, TPAF and other vocational education providers can be understood from a wider perspective. As Luisoni (2005) mentions above TVET carries the status of a 'master key' of life-long education and training and hence the institutions under study cannot be understood in isolation if their improvement and development are to be sustained. As Delors, et al. (1996) postulate a continuous education process helps develop the 'whole person' enabling people to develop awareness of themselves, their environment and their social role that they can play at their work and in the community. The concept of learning throughout life with all its benefits such as flexibility, diversity and availability at different times, places and layers of education and training is clearly the foundation upon which educational planning and development must be anchored. This is consistent with the UNESCO documents such as EFA, MDGs and DESD.

For more than half a century the search for an appropriate education has preoccupied educational thinking. The role of TVET, especially in relation to delivering quality education, has been the subject of considerable discussion, research and policy reforms. TVET received considerable attention during the deliberations of the Fiji Islands Education Commission 2000. Numerous local, regional and international conferences and workshops have deliberated at length on this topic stressing the valuable and complementary role that TVET can play in providing relevant knowledge, skills and competencies for employability as well as quality living.

This chapter captures the essence of the issues raised in some of these conferences and workshops. In particular, the PRIDE organized regional workshop in the Republic of Palau in 2006 and a symposium in the Marshall Islands (2008) provided valuable contributions in this paper especially regarding the rationale behind technical vocational education and training and the Pacific Island initiatives. The paper suggests ways in which TVET can become an equally important component of the total learning system beginning with the process of vocationalising education. Moreover, quality TVET warrants a holistic and integrated approach to the teaching and learning process in the classroom and in other educational settings.

The thesis of this paper is to 'vocationalise' education at the early stages of the schooling system and then based on individual potential, specialise in vocational courses. While the important terms will be discussed in this paper, it suffices to mention here that vocationalising education and vocational education are not the same. The former is concerned with educating the 'whole person' by providing life-skills including values education and preparation for the world of work, self-employment and ongoing learning. The latter refers to vocational courses or subjects such as catering and Tailoring, Carpentry and Joinery and Light Engineering.

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BACKGROUND OF TVET IN THE SCHOOL SECTOR

TVET is an important aspect of the total learning package of the child as well as the adult learner. This view is consistent with Delors' Report (UNSCO, 1996) that perceives education as providing the all-round development of a child's personality. It identifies a range of learning opportunities that students need to experience in order to be adequately prepared for active participation in all aspects of living. To achieve this, the Delors' Report suggests that the overall education of the learner should be rebuilt around four pillars: 'learning to know', 'learning to do', 'learning to live together' and 'learning to be'. In this regard, TVET in the school sector has a crucial as well as a complementary role to play in preparing an educated citizenry who is more likely to champion "the ideals of peace, freedom, and social justice" (UNESCO, 1996, p.13).

Similarly, the United Nations Decade of Education for Sustainable Development, launched in 2005, the Millennium Development Goals and the Education for All movement express similar sentiments about TVET giving it the status of the 'master key' to social, economic and political development. Quisumbing (in Prospects, Vol. XXXV, No3, September 2005: 300) emphasizes:

Quality TVET needs a teaching/learning approach that does not stop at knowledge and information nor at developing skills and competence, but proceeds to understanding and gaining insights that educates the heart and the emotions and develops the ability to choose freely and to value, to make decisions and to translate knowledge and values into action. Values education is a necessary component of the holistic work education and citizenship education.

Therefore, there is urgency to reconceptualise TVET making it an essential part of the education curriculum not only of the Pacific island nations (PINs) but also globally.

It is underscored, however, that TVET has suffered from being considered as the fall-back position for those for those who did not succeed in academic education streams. This viewpoint has changed considerably now. A major reason for this shift in thinking is the changing character of work and its impact on social and economic development. All sectors of employment are now becoming so technologically-based, diverse and dynamically complex that most unskilled workers find it difficult to obtain gainful employment. Therefore, TVET is now seen as playing a complementary role in 'skilling' primary and secondary school students and 'up-skilling' industry and other workplace employees. TVET can provide both the link with productive work and motivation for life-long education and training. It has the capacity to incorporate pacific knowledge, technologies and life-skills as well as indigenous pedagogy in the learning agendas. In Fiji, for example, TVET was given impetus when the Fiji Islands Education Commission (1969, p.14) found that the school curriculum lacked "relevance in many of its subject areas to the local environment and to local needs". Despite numerous curriculum reforms promoting vocational education and training in Fiji as well as other PINs have not yet succeeded sufficiently in enriching their school curricula with vocational education and the above-mentioned Pacific flavour.

In brief, then, it suffices to mention here that TVET has the potential to contribute to sustainable development, education for all, knowledge society and citizenship. Phillip Hughes explains (in Prospects, vol. XXXV, no3, September 2005: 263):

TVET now involves such a variety of approaches, including both formal and informal education, that it can supplement the formal systems of schools in ways that will increase their effectiveness. TVET addresses needs that are fundamental to human motivation and achievement, in particular the capacity of work productively and creatively.

The Concept of TVET

TVET is a concept that encompasses a diverse array of programmes and activities. It emphasises both education and training, and extends beyond schools, post-school institutions and work place enterprises to community-based non-formal education systems. There is, therefore, a considerable variety of locations in which TVET is pursued.

There is also variety in its target clientele, who not only represent a diverse age range child to adult - but also have different response-capacities and socio-economic and cultural backgrounds. In order to address the diverse needs of these clients, TVET offers a considerable range of programmes across countries as well as within them. The extreme diversity of TVET programmes is reflected in their forms, structures, educational technologies, curricula, pedagogy, management, resourcing and funding.

Another important thread that runs through much of the discussion on this topic relates to its theoretical underpinnings. First, TVET can claim its justification from Dewey's pragmatist philosophy. Dewey emphasises that learning should be directly relevant to the active interests and concerns which pupils have - or will develop in future - in their out-of-school life, in their private lives and in their future roles as workers and citizens. Secondly, support for TVET can also be found in the concept of polytechnic education that was inspired by Marxist principles. This concept seeks to integrate 'theory' (academic studies) and 'practice' (vocational training), stressing the educative dimensions of both study and work. This socialist rhetoric has shaped education systems in many developing countries, such as China, India, Botswana, Tanzania and Zimbabwe. An example of this is 'education with production' in Botswana. The third justification for TVET can be drawn from populist or egalitarian ideas. Here, the argument mainly rests on the need for equality of educational opportunity and it opposes any form of elitism. Other motives, such as economic, political, at both macro, and micro levels (Hoyle, 1986; Sharma, 1999b), have also influenced the establishment of TVET programmes in many developing countries, including the PINs.

Such issues point to the difficulty in defining TVET. It can mean different things to different people depending on the perceptions they hold of education, development and employment. The ambiguous nature of the concept of TVET is further accentuated because it has overlapped with certain other related concepts, such as non-formal education, continuing education, adult education and distance learning at various times and locations. The following UNESCO definition of TVET, however, contributes significantly to our understanding of the term.

A comprehensive term referring to those aspects of the educational process involving, in addition to general education, the study of technologies and related sciences, and the acquisition of practical skills, attitudes and understanding and knowledge related to occupations in various sectors of economic and social life (UNESCO, 2002).

From this, wide perspective three particular orientations emerge. The first is concerned with training for identified jobs. It is closely connected to the 'human capital development' approach that is still popular in some countries. The emphasis here is on preparing human resources for projected employment opportunities. However, jobs do not often materialise, owing to changing circumstances or the limited number of jobs in the modern wage sector. The next orientation focuses on job creation. It is largely concerned with an attempt to prepare human resources for self-owned and self-managed enterprises, especially in the informal sector. This orientation often fails to realise its full potential because the informal sector is unable to provide or generate gainful employment opportunities for the many graduates of TVET programmes. The third orientation, namely on-the-job- training, is concerned with upgrading the level of available skills by means of pre-service and in-service training programmes. Such programmes, however, often encounter problems because the work sector does not keep pace with changes to accommodate the high-level skills acquired.

In response to the rapidly changing nature of the workforce and the skills required to perform effectively within the changing context, schools are now being called upon to provide programmes that support greater understanding of the world of work. Such programmes are to equip students with those skills and abilities that they would need to use in their working lives. Greater school retention beyond the compulsory years of schooling, resulting partly from the lack of employment opportunities for early school-leavers, has added to this imperative. The post-compulsory curriculum, previously designed for a minority of students who aspired higher education, no longer meets the needs of the increasing number of students staying on at school to improve their chances of meaningful and worthwhile employment. In many countries it has been the employers and businesses themselves that have driven the quest for a more relevant curriculum and the development of higher skill levels amongst all school-leavers. The UNESCO Second International Congress on TVET, held in Korea in 1999, called for

A new holistic approach... so that education for the twenty-first century will include all domains of learning incorporating general and vocational education to enable the learner to launch into a lifelong continuum of knowledge, values and attitudes, and competencies and skills (UNESCO, 1999, p4)

TVET programmes are conducted in a variety of institutional locations. The choice of location depends mainly on the goals that the programmes are intended to achieve. There are at least three distinct institutional settings. First, there are school-based TVET programmes. These include initiatives such as the diversification of the whole secondary school system, the vocationalisation of the school curriculum and introduction of TVET streams and schools parallel to the dominant academic model. Secondly, there are post-school TVET institutional programmes. These provide pre-vocational market-oriented training courses to secondary school graduates. Third, there are the workplace-based TVET programmes, epitomised historically in apprenticeship systems and undergoing transformation in the post-industrial era. This type of TVET is found in many countries but is particularly popular in western nations where there is a substantial degree of industrialized economy.

Stemming from the socialist ideology, the diversification of the school system attempts to make structural changes in the school to facilitate the introduction of work-study programmes. The fundamental thinking behind this move is to implement the overall ideological goals through the re-orientation of student attitudes to both education and work.

The vocationalisation of the existing school curriculum involves introducing practical, vocational and technical subjects into the school curriculum. In many countries, vocational education is introduced as a compulsory component of the school curriculum. In the United States, for example, high school graduates pick up as many as 20 per cent of their credits from vocational subjects. Similar programmes exist in Australia (Centre for workplace learning, 1995) and Great Britain. There is also a tradition of quite separate TVET schools running alongside the general secondary school. Such programmes generally cater for early school dropouts who are unable to cope with academic education. Similar programmes were attempted in some countries of PINs, but the magnet of the academic schools has affected these initiatives considerably. For example, the Secondary Schools Community Extension Project (SSCEP) in PNG (Crossley, 1990), the junior secondary schools in Fiji (Tavola, 1991), the community high schools in Tuvalu (Tewei, 1985) and the new secondary schools in the Solomon Islands (Thaman, 1989) with a vocational focus now exist as a poor replica of their of urban secondary counterparts or have been discontinued.

Potential

TVET initiatives in most developing countries stemmed from the realisation that not all children respond favourably to the formal and academic type of education. It is the minority of the secondary school-leavers who find either employment or places in tertiary institutions while the majority struggle to find opportunities for work. The most commonly articulated goals of technical vocational education and training are listed below:

to facilitate economic development by transmitting to local citizens certain values, knowledge and attitudes that are necessary to perform certain skills in the modern sector of the economy,

to provide young people with the skills needed for employment in a wide range of job categories including self-employment and wage employment,

to promote a work ethic and sensitise learners to the importance of practical work skills and the dignity of manual labour,

to promote sustainable development, save the environment and improve the quality of living,

to alleviate unemployment as well as poverty,

to reduce the mass movements of school-leavers from rural to urban areas,

to provide an alternative route to higher academic education for early secondary school-leavers, and

Research on this subject shows that many of these expectations are largely the rhetoric of programme goals but hardly exist in reality.

Challenges in the Implementation of TVET in the School Sector

The status of TVET amongst students, parents, teachers and the wider community is low in comparison to that of academic studies and this affect its uptake and acceptance. Academic education is perceived as paving the pathway to further education for increased career opportunities and for better financial rewards. As Sharma (1999a) points out that the graduates of VETP in Fiji neither earn more, nor are more likely to go into technical areas of the labour market than their counterparts from the formal school system. Therefore, TVET is perceived by the majority of its stakeholders as a 'second class' option and by some as a temporary diversion from the main route to higher education and modern sector employment. Any innovation seen in this light has a remote chance of successful implementation.

Moreover, in terms of a school's capacity to adopt this innovation, the literature shows that many vocationally-oriented schools find it extremely difficult to implement a wide range of complex TVET skills in the classroom. Similarly, several writers suggest that its teachers are inadequately prepared and the cost of managing it is relatively high. As a solution to the problem of unemployment, it is ill directed, under-resourced and fails to take into consideration regional and local variations. TVET reforms have rarely been accompanied by changes in labour laws, improved salary structures, appropriate recruitment and selection criteria, human capital development strategies, and the general social and political frameworks. The low status of TVET is exacerbated by the view held by many, including policy-makers, that its is less important than other innovations in the education system.

The second perceived limitation concerns the relevance of TVET. Relevance here refers to what TVET programs can really offer to its clientele. The idea that TVET is important for its labour market relevance can be discounted, given the contemporary industrial and socio-economic environment, which are rapidly changing and are dynamically complex. In this environment, labour market predictability is difficult. Therefore, undertaking human resource planning forward may not coincide satisfactorily with the changing employment market, leaving many TVET graduates and their employers disappointed.

The third factor that operates against the successful management of TVET programmes concerns their resourcing. The international literature argues that TVET is more expensive than academic education. Relatively, the cost of equipping vocational classrooms and training technical teachers is very high. The lack of resources, underqualified teachers and the poor management of TVET innovations contribute significantly to their failure or partial acceptance. Schools with vocational biases have more complicated timetables and a greater mix of teachers and students. Such factors require high calibre change agents who understand the factors and themes associated with the successful management and implementation of planned educational change (Fullan, 1991). The challenge for the successful implementation of TVET in this context is to develop appropriate societal knowledge, technologies, skills, values and attitudes, and new policy and financial commitments, congruent with, and cognizant of, local, regional and global opportunities and concerns.

TVET: THE FIJI EXPERIENCE

Unlike academic studies, some forms of vocational educational activities were carried out in the Fiji Islands and other PINs long before the introduction of the Western mode of formal education. Several studies have shown some of the ways in which members of the community ensured that their values, skills and attitudes were passed on to the next generation. This type of education, often referred to as traditional, was then considered relevant by the community. Basically, it was concerned with the continuity and maintenance of the community, which involved passing on to young people the knowledge and skills that they had acquired through many generations. Through legends, observation, imitation and practice, the younger members of the community developed the appropriate skills and technologies of the time. The advent of the western mode of education, however, has largely destroyed these traditional forms of technical and vocational education. Although some critics could argue that these traditional forms of technical and vocational education are not suitable for the modern sector economy, there is still a market for items such as handicrafts and many people are making and selling them for their livelihood.

As mentioned earlier, the 1969 Fiji Education Commission, for example, reported that there was little relationship between the educational programmes and the world of work. It recommended the establishment of junior secondary schools with a more vocationally oriented programme of study. The Commission (1969, p. 53) wrote:

If the importance of the new junior secondary curriculum and the growing number of secondary technical pre-vocational courses is to be fully appreciated, the development of some sort of career or vocational guidance is necessary.

The 1969 Commission also felt that principals and career advisers themselves should study vocational education so that they could facilitate it at the school level. These recommendations were accepted and junior secondary schools with a vocational education and training focus were established in key locations throughout Fiji. However, principals and career advisers were not adequately prepared to facilitate vocational education at the school level. It is also important to note that the junior secondary initiative, with its emphasis on vocational education, did not achieve much success against the strong desire for academic education. In fact, the junior secondary schools, located principally in rural centres, existed largely as poor replicas of their urban counterparts. Then, because of the increasing demand to continue beyond the Form 4 level, many of the rural junior secondary schools added Forms 5 and 6. Thus, these schools have not become technical and vocational oriented, as was originally envisaged, and the school system continues to remain largely academic. Historically, TVET programmes at the secondary school level in Fiji have taken at least two approaches. First, technical subjects such as Woodwork, Metal Work and Home Economics have been introduced as optional subjects in the secondary school curriculum. It is expected that, on leaving school, students will have some knowledge of technical and vocational education that can lead them to employment opportunities and improved life-skills. Secondly, school-based TVET were established in about 50 selected secondary schools to provide 'second chance' education to early school-leavers. Fiji's education system, however, is so accustomed to academic education, however, strong parental pressure for academic credential has made TVET programme a 'second class' option rather than a 'second chance' education. This can be explained in part by the difference in salary of blue-collar workers compared to that for white-collar workers. There are considerable possibilities for salary increases and promotions within the civil service. Until wages for blue-collar employees are more attractive, the status of TVET will continue to be below that of academic education.

The fact remains, however, that the inclusion of technical and vocational education courses in the school curriculum is based on a sound rationale. An important feature of this vocationalisation of the school curriculum is that it combines with general education and does not forfeit the possibility of further academic education. However, it does not provide sufficient training for entry into a particular occupation. Instead, it is a form of 'vocational-familiarization' that may assist students in their future career choices. In our rapidly changing economy and employment market, it is difficult to prepare students for a particular job, as on leaving school, the job may not be there. Therefore, it is important to prepare informed-students who can make productive career choices based on the understanding of their interests, skills and abilities and the employment areas to which these apply. Appropriate training can then be provided on the job or through in-service training.

As mentioned earlier, some secondary schools in Fiji also have a TVET programme as a separate stream within the ambit of the secondary school organisation. This programme caters for secondary school lower achievers in secondary schools. To enter the programme, however, they should have completed at least Form 4 of secondary school education and are in the 15 to 20 year age group. In many cases, such students are unable to access further academic studies given the intense competition for the limited places beyond Form 4. In others, they are actively discouraged from continued participation in the general academic programme due to their low achievement. The separate TVET programme provides intensive skills training aimed at educating and training students for paid as well as self-employment. The programme has four courses: Tailoring, Food and Catering; Carpentry and Joinery; Automotive Engineering and Secretarial Studies. In recent years, Agricultural Science has been revived and is offered in some schools. A recent study of the TVET programme indicates that it is perceived largely as a 'second best' mode of education by the majority of students, parents, teachers, educational administrators and employers. The study argued that, consistent with other developing countries, most Fiji citizens prefer academic schooling because it is seen to pave the way for greater career opportunities and higher financial rewards. The TVET programme is seen as a minor innovation in Fiji's education system in comparison to other 'heavyweight' innovations (Sharma, 2000).

The study also revealed that before the programme was established, there was inadequate consideration given to the issues of relevance, clarity and practicality, readiness of the clientele and availability of suitable resources, including personnel. Many schools initially accepted it because it came with material resources and personnel. The TVET programme is virtually an imposed innovation in a 'top-down' process. In fact, political, bureaucratic, and micro-and macro-political perspectives motivated the establishment of the programme at the school level, in particular, and the system-level in general. Thus the present initiative is resource-driven and not education-driven.

Continuity and commitment are identified as being the most critical determinants of successful implementation of any planned educational change. In the case of TVET, the coordinators of the programme said that the leadership of the Ministry of Education officials was not supportive enough and usually paid lip service to TVET. The teachers and students at the workshop level said the same thing about their principals who, in turn, shifted the blame to the course co-ordinators. Consequently, the course co-ordinators, teachers, students and parents were not adequately prepared to accept the innovative ideas of TVET programmes. A shortage of adequately qualified staff and a lack of appropriate functional administrative procedures have also been identified in the TVET section at the Ministry. The effective implementation of TVET programmes was hampered by a lack of sound functional administration procedures, such as record-keeping, allocation of resources and monitoring at both Ministry and school levels. There were also few career

structures and promotional opportunities for teachers within the programme. These conditions led to low self-esteem and self-image among teachers. With such feelings, it is understandable that teachers do not promote the programme with enthusiasm and commitment (Sharma, 1999a). TVET should be taught with a learner-centred focus. However, teacher-centred approaches tended to characterise the teaching and learning process in TVET.

There was also an absence of community participation (students, teachers, parents and employers) in decision-making and the teaching-learning processes of the programme. This 'top-down' decision-making strategy was one of the reasons for the lack of a basic understanding of the programme at school and community levels. Thus, the programme did not get much community support. This situation is not unusual in similar initiatives elsewhere in the developing world. In Fiji, schools look largely to their communities to support them in terms of providing the material resources that their budgetary allocation cannot meet adequately. Participation in school policy-making, curriculum decisions and teaching-learning processes was strictly limited. This lack of participation was one of the major reasons that many members of the school community did not really understand what the TVET programme in their school was all about. Neither were the divisional and district education officers fully committed to TVET, despite being in a position to facilitate greater community awareness and support for it.

Most of the students enrolled in the programme were from working class families. These students were likely to get into a track leading to lower paid jobs. Most students from higher socio-economic groups were in mainstream education and were more likely to enter professions such as medicine, law, accountancy and management in the private and public sectors. The programme, therefore, further reinforced the existing socio-economic inequalities. Therefore, TVET programmes could continue as a 'second best' option in secondary schools.

A further observation is that, with the limited number of places available in TVET programmes, students with relatively high academic qualifications were increasingly being enrolled. Therefore, a large number of early secondary school-leavers were denied the opportunity of a second chance in education. Give their growing exclusion, the programme was not achieving the purpose for which it was created.

FUTURE DIRECTION

Several writers have advocated a 'bottom-up' approach wherein teachers, administrators and the members of the school community are accorded greater opportunity for participation in the decision-making and learning processes. Such an approach has a number of benefits. First, it generates a more relevant teaching and learning programme and addresses the developmental needs of the school community. Second, community involvement in schooling facilitates an improved learning environment for students. Third, community participation in school affairs provides an opportunity for the members of the school community to learn about TVET as well as other school programmes. Finally, given the multicultural context of Fiji, the involvement of community in schooling makes it possible for policy-makers, administrators and teachers to accommodate the interests of various social and economic groups of the population in education policy, programmes and projects.

A second notable suggestion for educational policy-makers concerns the provision of ongoing context-based and centre-based staff development programmes for administrators and teachers. Such staff development programmes would prepare teachers and all those involved to manage major transformations in an educational setting that is characterised by a dynamically complex environment and in the face of a somewhat unknowable future. Further, well-informed teachers and administrators can promote the innovation, its vision, mission, values and goals.

To establish these in Fiji's school-based TVET, it is necessary for those leading it to be convinced at a personal level about the value of TVET. Once convinced, they would invest more effort in bringing their colleagues, students and the members of the school community along with them. In this way, it may be possible that their most vociferous opponents among colleagues and school community become their strongest supporters. Research findings show that Fiji's TVET programmes did not have many committed leaders and teachers

(Sharma, 1989; 1999a). Therefore, there is sufficient evidence to suggest that policy-makers seriously consider introducing ongoing staff development programmes for its administrators and teachers. This suggestion is made on the grounds that the success of any planned educational change rests not so much on the abundance of material and financial resources but more on well-informed and talented human resources.

A third broad suggestion for policy-makers emerges from the TVET innovation itself. It is difficult for such initiatives to realise their full potential when academic education remains the preferred system and promises greater career opportunities and social and economic rewards. Literature suggests that, in many developing countries with a dualistic system of education, where academic and technical and vocational education run parallel to each other, the latter is often rejected. There is a less promising future for Fiji's school-based TVET programme while it operates alongside mainstream schooling. In the light of this argument and the existing literature on TVET from developing countries, three recommendations are made.

The first is to integrate these school-based TVET programs within mainstream schooling. The second is to establish separate Quality TVET Centres for early school-leavers in various rural and urban centres. And finally to rationalize the post-secondary TVET institutes including, in Fiji's case FIT, TPAF and other private providers.

The first recommendation implies that the separate courses currently offered in TVET as well as any other important skill-based courses identified, should be included in the prevocational courses presently offered in Fiji's primary and secondary schools. In accordance with the international literature on TVET, these pre-vocational courses should not be perceived as providing sufficient training for direct entry into any occupation. They should be taken as a broad familiarisation program, introducing and developing a range of skills that may be useful in subsequent training or for making a more informed choice about such training. To facilitate this, it is suggested that all students be required to study technical subjects in the course of their primary and secondary education. These technical subjects should be accorded equal value with all other subjects and be assessed and reported. At the primary school level, such program should be experiential and promote familiarisation with the nature and purpose of work in all its forms, and with the broad range of work skills required to function effectively in the working world. Specialised studies should be introduced at an appropriate level within the secondary school curriculum, once students have had sufficient opportunity to identify their potential and preferred study pathways. In the early years of schooling, the technical areas studied could be derived from those industries located locally and those that can serve as rich resources for learning and practical experience. In rural areas, in particular, the study of agriculture can provide a sound basis for an understanding of how to meet basic subsistence needs and also the importance of agriculture as a source of enterprise and income within the economy.

Although constraints, such as the shortage of teachers, equipment, material resources, and appropriate opportunities for practical work, along with the dilemma of the low status of prevocational courses, will inevitably continue, greater progress will be realistically possible under this new arrangement. A cost-effective strategy that could be considered for adoption in Fiji is a cluster secondary school system. Under this scheme, a number of secondary schools in a neighbourhood could share technical facilities such as workshops, equipment and specialist teachers that could be located at a central institution. This will allow the introduction of a greater variety of pre-vocational courses in the secondary school program. Another strategy could be the offering of TVET programs in blocks of time, such as one-week intensive program rather than one or two weekly programmed-lessons over a term, semester or year. With the development of stronger community relations, it may be possible to negotiate the use of the facilities of business and industry to further support contextual learning. In the tourism and hospitality areas, for example, schools located within tourism areas could negotiate partnership with local hotels and tourism facilities.

In the light of scarcity – time, personnel and resources – it is difficult to introduce a range of specific vocational education courses at the primary or secondary school levels. Therefore, it is suggested that only one TVET course, namely 'Technical Studies', be offered in primary and secondary schools during the compulsory years of schooling. The current prevocational courses such as Agriculture, Woodwork, Home Economics, Metalwork, Automotive Engineering and Technical Drawing are to be incorporated as modules within Technical Studies. The amount of time available for these studies is to be increased progressively over the different levels of schooling.

As shown in Figure 1.2, the following is a possible approach:

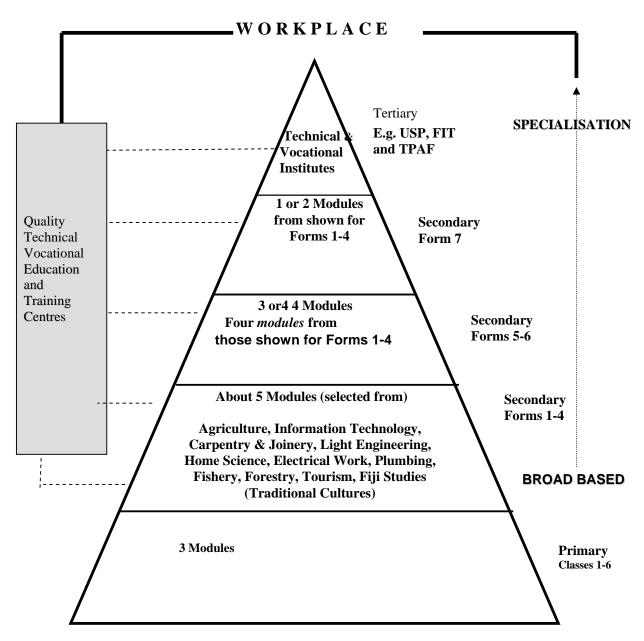
- At the primary school level, three modules Woodcraft, Home Economics and Gardening – form the basis of the Technical Studies course. These modules would support the development of basic life skills and introduce the nature of vocational studies.
- At the secondary school level, modules such as Agriculture, Home Science, Carpentry and Joinery, Light Engineering, Information Technology, Metalwork, Plumbing, Electrical Work, Forestry, Fishery, Tourism and Fiji Studies are to be included in the Technical Studies Course. Students are to select about three to five modules in Forms 1-4, about three to four in Forms 5-6 and one or two in Form 7. These modules would familiarise students with technical and vocational education and skills that they may like to pursue in their future careers. These modules will further develop basic life skills.
- Other mainstream subjects such as English, Accounting, Management, Arts and Craft, Music and Sports are to reinforce vocational skills where possible.
- This proposed model is to be based on a spiral curriculum model.

The second recommendation concerns the early school-leavers. To some extent, this problem can be addressed with some creativity in the proposed quality TVET centres (QTVETC), where the focus should be on the preparation of human resources capable of finding wage employment or generating self-employment enterprises. The QTVETC should be managed in partnership with employers and the members of the local community. It is suggested that QTVETC provide a 'basket of skills' so that those enrolling can select from a variety of available vocations. In addition to the technical and vocational education subjects already offered in schools, it is suggested that the QTVETC take a modular approach as suggested above for the primary and secondary schools. They should also include studies that ensure the continued development of language, arts and numeracy skills, scientific understanding, and health and personal development to ascertain that social, emotional and physical developmental needs of students are addressed. Moreover, the program should facilitate the re-discovery and development of Pacific knowledge and skills as well as indigenous modes of learning.

It is emphasised that the proposed QTVETC should have the capacity to enrol students at whatever their level of primary or secondary school attainment. In this way, they would be able to address the plight of early school-leavers who are currently denied entry into selected TVET Centres, such as the Fiji Institute of Technology, that have minimum qualification requirements. Research evidence and the submissions made to Fiji Islands Education Commission 2000 have identified key vocational areas that need to be developed in the education sector (Sharma, 2000). These included the areas of Information Technology, Fisheries, Marine Studies and Aquaculture, the Visual, Arts and Media, and Sport and Recreation. It is recognised that it is not possible for all schools or vocational centres to offer studies across this broad spectrum of vocational areas.

However, a strategy for their progressive implementation could be the establishment of special interest secondary schools (either self-identified or designated) that focus on studies in one of these areas and take the lead in the development of curriculum and programmes such as sports. Obviously this has implications for resources and personnel, but targeted resourcing for establishment and development could fast-track new programmes.

Figure 1.2: Technical and Vocational Education and Training



Adapted from Sharma (1989) P.124

Post-Secondary TVET

The TVET program at the secondary level and in the proposed QTVETC must also provide the foundation for further education and training in tertiary institutions that are responsible for preparing students for employment. At present, TVET at this level is provided by a number of institutions, such as the Fiji Institute of Technology (FIT), the Training Productivity Authority of Fiji (TPAF), and the Fiji College of Agriculture (FCA). The main concern at this level relates to the scarcity of resources, including financial and quality human resources. One of the concerns in staffing relates to the difficulties of attracting and retaining quality staff, particularly in skilled areas where there are few qualified local personnel, such as in Information Technology, Building, Civil Engineering, Electronics Engineering and Mechanical Engineering. The TVET post-secondary institutions are not sufficiently attractive to lure skilled professionals away from the private sector or to retain bright young graduates. The institutions are also strapped financially. They are mainly funded from two sources: a block grant from Government, which provides two-thirds of the income, and the fees obtained from students. This current revenue is not sufficient to provide attractive remuneration packages neither to staff, or adequate and well-equipped training facilities nor to fund future growth, research and development. Entrepreneurial activities and donations in cash and kind that are received from time to time generate small additional funds but they are not guaranteed income. It is notable that a comparative analysis of the Government funding information in 2000 indicates a contribution per student enrolled at the University of the South Pacific of \$5.712 compared to that at TPAF of \$2.131 (Fiji Institute of Technology, 2000). USP attracts 2.7 times more Government funding than its TVET counterpart. This is clearly an inequitable situation. It is not suggested that USP should receive less funding, rather that TVET should attract at least an equivalent amount, given its importance in supporting human capital development in the country.

There is also a need for institutions, such as the FIT and TPAF, to develop a more collaborative and better working relationship with the other levels of education, especially the secondary level. Secondary school students need career counseling to assist them with the selection of appropriate programs that suit their abilities, interests and aspirations. TVET prepares students for the world of work and, therefore, it is critically important for these institutions to develop partnership with the industrial, commercial, and private sectors as well as with communities and employers. This will ensure relevance and appropriateness of the programs on the one hand and provide a mechanism for supporting and monitoring programs, courses and activities on the other. Better use of information technologies can facilitate the establishment of networks for mutual participatory, collaborative and consultative processes and for sharing experiences, knowledge and materials.

The Australian concept of 'workplace learning for schools' (Centre for workplace learning, 1995) is an interesting one and the lessons learnt from it can be successfully applied the TVET programs in PINs. Workplace learning programmes are a method of delivering vocational education in which substantial learning and assessment occur in the workplace. In this model, learning involves a combination of on-and and off-the-job training and the local employers endorse and accept learning outcomes. The key to the success of this initiative depends largely on the school-employer partnership in which employers take ownership of the decisions taken. Moreover, they contribute financially and in kind to ensure the sustainability of the programme. This approach is now being successfully employed in Palau

Competency-Based Education and Training

Competency-based education and training (CBET) is now used as an important strategy in most technical and vocational education and training programs. It not only promotes the quality of the programs but ensures their sustainability in today's dynamically complex learning and working environment. Consistent with the rationale behind TVET, CBET prime focus is on lifelong learning, holistic and integrated pedagogy, whole-person development, multi-skilling, flexibility and world class workforce. With properly constructed 'bench marks', CBET has the potential to produce intellectual capital that is competent in terms of what the industry or employer needs. Some of these competencies include efficiency, effectiveness and quality performance.

Some countries such as Australia, New Zealand and the United Kingdom have introduced competency approaches in their education and training programs. For example, in Australia, the graduates from its competency-based program have both the ability to

perform in a given context and the capacity to transfer knowledge and skills to new tasks and situations (The Mayer Committee, 1992). In Britain, the National Vocational Qualifications include core skills such as communication, numerics, information technology, interpersonal competence and problem-solving (Hyland, 1994). Similarly Australia's National Training Board endorses a broader view of key competencies and New Zealand identified essential skills (Harris et al., 1995). Owing to the success of the competency based regime, many countries have begun to adapt CBET in their education and training programs. The education and training institutions in Fiji and the Pacific island countries must introduce competency framework in their education and training programs. The Pacific Islands Forum has a regional vocational qualifications framework and it is expected that the Pacific island countries would benefit from it.

Workplace learning for schools

Several studies argue that "training in the private sector - by private employers and in private training institutions - can be most effective and efficient to develop the skills of the workforce" (World Bank, 1991, p.7). The majority of private businesses in Fiji, however, are not large enough to have their own in-house training sections. Nevertheless, they can work in partnership with FIT, TPAF and other governmental and NGOs.

The Australian concept of 'workplace learning for schools' (Centre for workplace learning, 1995) is an interesting one and the lessons learnt from it can be successfully applied in Fiji's TVET programs. Workplace learning programs are a method of delivering vocational education in which substantial learning and assessment occur in the workplace. In this model, learning involves a combination of on-the-job and off-the-job training and the local employers endorse and accept learning outcomes. The key to the success of this initiative depends largely on the school-employer partnership in which employers take the ownership of the decisions taken. Moreover, they contribute financially and in-kind to ensure the sustainability of programs.

CONCLUSION

In this chapter the conceptual basis of TVET was looked at. In doing so, it became clear that the concept of education throughout life, with its focus on flexibility, diversity and availability in different times and at different places, integrated approach to teaching and learning process, whole-person development, multi-skilling and preparation of competent workforce, needs an educational paradigm that re-conceptualizes education and training in a holistic fashion beginning from pre-school to primary and secondary education through to post-secondary and tertiary education. Therefore, it was difficult to examine the functions of FIT, TPAF and other TVET providers in isolation. In this concluding section a holistic education paradigm is recommended. The second issue relates to the introduction of competency-based regime in all our education and training programs. It is reiterated that this regime will prepare graduates who would be able to perform in harmony with the culture and work environment of the workplace. Obviously, there is need for human resource development to cope with the challenging demands of education and training with CBET regime. Thirdly, the education and training providers need to function in an environment of partnership and mutuality. With CBET in place, this relationship would avoid unnecessary duplication of courses and programs, make the country's education and training programs more cost-effective, inculcate the habit of sharing and caring and facilitate the transfer of credit from one institution to the other.

Finally, as the UNESCO's (1996) Report of the International Commission on education for the twenty-first century suggests, there is a need to authentically establish regional and international co-operation in TVET. Consistent with the view expressed in the Report the international co-operation ought to be seen in the context of partnership rather than aid. This view will undoubtedly facilitate the spirit of partnership in action and the development an informed society, especially about the technologies available in and beyond Pacific island countries.

2

TVET Programmes

This chapter briefly summaries the TVET programmes in Fiji. Firstly, it looks at TVET administration under different Government Ministries and organisations. Then, it looks at the various types and locations of TVET. It begins by discussing the secondary school based programs and then it goes on to look briefly at the community and private based. The chapter concludes by talking about different TVET teacher preparation institutions.

2.1 TVET administration

TVET system with its recent structure comes under a number of government ministries. The Ministry of Education looks after the school-based TVET systems both in the formal academic and the post secondary vocational programme either school based or stand alone type. FIT under its semi-autonomous arrangement comes under the Education Ministry. Monfort Boys Town is classified under the private vocational but is currently receiving an annual funding grant from the Ministry of Education.

The Advanced Vocational Training (AVT) looks after the Non-formal sector for short term training. AVT is housed under the Ministry of Education TVET Section but funded by the Ministry of Planning and National Development under the Integrated Human Resources Development Programme (IHRD).

TPAF comes under the Ministry of Labour, Industrial Relations and Employment. Several youth centres around the country like the Nasau Youth Centre in Sigatoka is supported and funded by the Ministry of Youth, Sports and Productivity under their Department of Youth Training Scheme Programme.

Private TVET vocational training institutions like APTECH Computer School, are sectioned under the Ministry of Education for registration and recognition certification but are not closely monitored and sustained by the Ministry. Other private TVET providers with agriculture based-training like Tutu Vocational Centre, are supported and funded by the Ministry of Agriculture. The Fiji College of Agriculture is a government agricultural institution and provides a Diploma in Tropical Agriculture that is accredited by the University of the South Pacific.

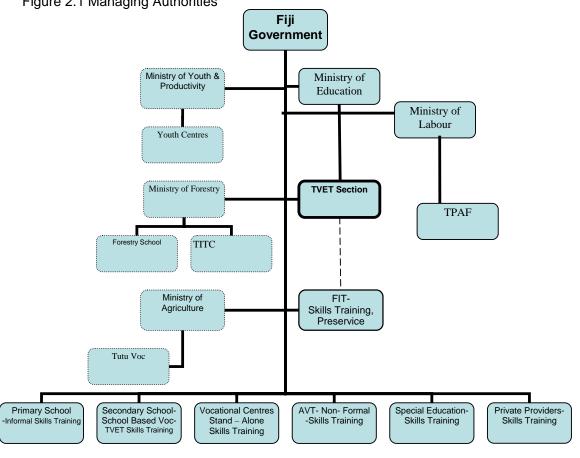
The Ministry of Forestry provides forestry skills training at the Forestry School in Colo-i-Suva and TITC in Nasinu. They also provide short up-skilling training courses for those already working in the forestry/timber industry.

USP's School of Education and the Fiji College of Advanced Education provide TVET teachers training programs at the certificate, diploma and degree levels for those who wish to pursue teaching as a career. These programs provide technology-based knowledge rather than industry-based training. USP is managed and funded by 12 Pacific island countries however the Fiji Government contributes a large portion of the USP Fund. FCAE is the Fiji Government's teacher training institution and is managed by the Ministry of Education.

Other special skill training programs such as nursing and other paramedics are not included in this report

Managing Authorities

Figure 2.1 Managing Authorities



(Source: drawn from the document provided my MOE, 2007)

TVET Characteristics

Technical Vocational Education and Training (TVET) comes under one of the sections of the Ministry of Education with a total of twelve professional staff, four support staff, one Principal Education Officer, a Program Manager and a Director. The section comprises Academic TVET, the vocational TVET and the Advanced Vocational Training with a **Nutrition Department**

The team coordinates technical courses of their specialty and liaises directly with their teachers in the secondary school systems. TVET staffs also carry out teacher appointments and coordinate the writing of the curriculum by having a working committee that actually writes the curriculum and a national advisory curriculum committee that vets and amends curriculum changes. This committee comprises all TVET stakeholders including industry, unions, teachers, principals, technical advisers and tertiary institutions.

MOE and its TVET section has direct links to other tertiary institutions such as FIT, TPAF, FCAE, FCA and other private TVET providers. This is either through franchising arrangement or representation on their council and sub-committee meetings. However, owing to the status of some institutions, MOE does not allow have free access to their routine matters.

Some major TVET issues that need to be addressed include:

- ▶ TPAF come under the Ministry of Labour, Industrial Relations and Employment but provides vocational education and training. TPAF has its own training section however it should concentrate more on in-service rather than pre-service training.
- ▶ FIT under the semi-autonomous arrangement with MOE needs to refocus its vision, mission, values and goals on the education and training or skills needed by the employment sector, including the industries. Its sudden expansion of programs without proper survey and planning has made the institution more skill supply-oriented rather than demand-driven.
- The secondary-school based TVET centres offer franchised courses from FIT and the trade skill tests from TPAF. Owing to merger material resources and under-qualified teachers or instructors the majority of who do not have much industry experience, the franchise courses are of poor quality. Without these courses, however, it would be difficult to establish relative standard of courses provided by various centres or schools.
- ▶ There is an increase in demand for the registration of private vocational institutions or schools.
- ▶ The lack of recognition of the technical and vocational education and skill training at the national level especially in the industrial sector has resulted in low national budgetary allocation and prioritization.
- ▶ TVET Training and funding are not streamlined under the Ministry of Education. Other government ministries are also providing TVET Training with a separate budget allocation.
- ▶ The training institutions are competing against each other for skill training activities, survival and limited resources available.
- ▶ Reflections from various industries show that the graduates, especially from FIT, recruited by them lack practical industry experience and specific related skills (Industry-link Report, 2004).
- Private providers are virtually left on their own with little supervision from MOE after it had registered them to operate the TVET program. Consequently, they often introduce new training packages without prior approval from MOE.
- ▶ The non- formal vocational training sector is becoming increasing important after the endorsement of the Social Justice Act by the Government. However, the section needs a lot financial and technical support as well as qualified instructors or teachers to conduct vocational education and training classes in the remote and rural areas.
- ▶ Enterprise Education, an old education concept, has been revived in the school-based TVET program in order to equip the students with business related life-skills.
- AusAid through the FESP Project is providing technical expertise to help the officials of TVET section of the MOE, and teachers in different pilot schools.
- Currently the industries do not contribute much in the preparation of TVET education and training coordinators. While the concepts of work attachment and apprenticeship are provided for in the respective Acts, they need to be formalized and the Government and the industries must be fully committed to them. An Industry Compact document signed by all parties is necessary to establish a good working relationship between the TVET education providers and the industries.
- Normally schools and teachers make their own arrangements for student work attachment. However, this ad-hoc arrangement does not often favour the students on practical attachment because they are often treated as the labour force rather than as students receiving work-based or industry-based practical experiences of the school-based theoretical work.

TABLE 2.1: TVET PROVIDERS

Level & Type	Entry Requirements (e.g. Gr. 10 completion)	Duration (months, years)	Final examination (internal, external)	Qualification granted
A. Formal TVET Middle level [TVET Academic Strand]	Forms 3 to 6	4 years	FJC & FSLC	FJC & FSLC Certificates
[TVET Academic Strand]	Form 7		FSFE	Certificates
2.Post-secondary 2.1 [Normal Vocational Training]	Form 4 and Form 6 dropouts of the formal system	2 years	Internal	MOE Vocational Certificates
2.2: FIT Franchised	Form 6 completed	2 years	FIT Exams	Trade Certificate
2.3. TPAF- Vocational Training	Form 4 standard	2 years	TPAF Trade Test	Class 3 Certificates
B. Non-formal [Advanced Vocational Training]	School leavers	2 weeks to 1 month training	Practical Assessment method- Competency	AVT Certificate of Completion
C. Private Vocational Providers	Completion of Basic Education preferably at form 6 level	8 weeks to 2 years	Internal exam and franchised exams for franchised centres	Certificates, Diplomas & Degrees

Source: MOE / TVET Annual Plan 2006

2.3 Types TVET Programs

Under several ministries three types of TVET system exist in Fiji:

- Technical Formal Education-pre-vocational courses- Academic, general or formal TVET courses/subjects (Forms 3 to 7) under M0E; Vocational Education and Training; Fiji Secondary School-based Vocational program -Under TVET section of the M0E; School-Based and Stand Alone type, Post Secondary and Pre-service vocational education and training – under FIT; In-service Vocational Education and Training, Apprenticeship etc. – under TPAF.
- 2. Advanced Vocational Training: Non-Formal Training Sector
- 3. Private vocational education providers, for example, APTECH, NZPTC, CQU, etc.

Therefore, not all TVET training providers come under the Ministry of Education. TPAF come under the Ministry of Labour, Industrial Relations and Employment. Other providers come under the Ministry of Agriculture, Fisheries and Forest.

2.3.1 School Based

2.3.1.1 Formal TVET Education-Pre-Vocational Courses

Figure 2.2: Structure Diagram of TVET within MOE

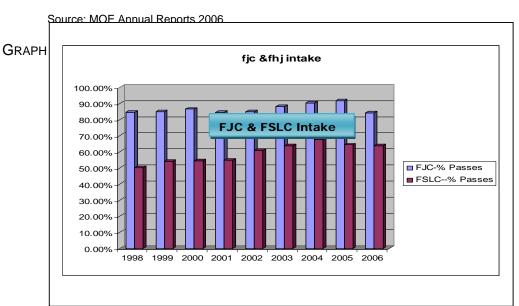


Source: MoE/TVET Annual Report 2006

Technical Formal Education-pre-vocational courses in secondary schools are offered as one of the subjects to students of Forms 3 to 7. One of the pre-vocational subjects is compulsory for Forms 3 and 4 students. In a 40-45 per periods per week timetable, five are allocated for one of these subjects with the theory: practice balance ratio of 60:40 respectively. The subjects presently offered include Agricultural Science, Office Technology and Basic Technology (either Home Economics or Industrial Arts). In Forms 5 and 6 these subjects are optional and students may select one or more of these. Students who are slow learners or are at the risk of dropping out at the Forms 5 and 6 levels are often encouraged to take the vocational strand providing TVET the notion of a 'second class' option. They are provided with intensive semi-job skill training for two years and at the end are awarded vocational attainment certificates by the MOE. Virtually all of the 165 secondary schools provide pre-vocational courses and students appear for National external examinations at the end of Form 4 (Fiji Junior Examination), Form 6 (Fiji School Leaving Certificate) and Form 7 (Fiji Seventh Form Examination) levels.

Table 2.2: Summary Enrolment - Primary, Secondary, Academic & Vocational Centre Levels

Program Type	Gender	2000	2001	2002	2003	2004	2005	2006
Total Secondary	M/F	66,905	65,935	67,212	68,178	68,774	69394	69597
Total Primary	M/F	149,912	142,913	142,106	142,781	143,858	144,135	144,328
Total Vocational	M/F	1,730	2, 220	2,505	2,319	1,974	2,327	2,418
Grand		220547		213825		216610		218349
Total			213069		215281		217861	



Graph 2.1 shows that the performance of students in the two national external examinations has gradually improved over the years. However, the majority of the students do not qualify to enter USP or other overseas universities. Moreover, those selected follow a narrow pathway to attain a degree in the 'white-collar' employment. The question of what happens to the rest of students is a national concern. It is also important to underscore that many graduates from USP and other tertiary institutions still remain as 'educated unemployed' for several years. This trend does not augur well for personal as well as national development. To avoid this scenario, it is suggested that technical and vocational education subjects should be made compulsory at Forms 5, 6 and 7 levels as well. Otherwise graduates or dropouts at different levels in the education system will be at risk of joining the ranks of unemployed.

2.3.1.2 Curriculum

For the last five year the demand for TVET in secondary schools has increased considerably. This is owing to the introduction TVET subjects as compulsory at Form 3 and 4 levels in 2003. Now with the nationwide implementation of the policy a large number of students are taking TVET subjects. From this trend, it is evident that parents and students are beginning to realize the need to acquire trade skill courses at the secondary school level.

Currently, 16 TVET subjects offered in secondary schools. These include Agricultural Science, Computer Education, Office Technology, Home Economics, Clothing & Textile, Food and Nutrition, Apparel & Design, Food & Technology, Technical Drawing, Graphic Arts, Wood Work, Wood Technology, Engineering Technology, Metal Work, Technical Drawing & Design and Introduction to Technology. Perhaps there is a need to rationalize some of these courses and avoid any duplication of subject contents. As suggested in the Fiji Islands Education Commission Report 2000, it is necessary to introduce modular approach using the spiral curriculum mode of development. As the relevant literature articulates, TVET programs are expensive. This is because TVET courses need expensive equipment, facilities, resources and highly trained and experienced teachers or instructors. Thus rationalization of the existing courses is exceedingly necessary in order to avoid duplication, improve the effectiveness of TVET subjects and operate within the limited resources and funding available.

Table 2.3: General Daily School Time Table

Period	Time Duration	Time Range			
1	45minutes	8.30am -9.15am			
2	45minutes	9.15am -10.00am			
3	45minutes	10.00am - 10.45am			
Morning Break – 10 to 15 minutes					
4	45minutes	11.00am – 11.45am			
5	45minutes	11.45am - 12.30pm			
6	45minutes	12.30pm – 1.15pm			
Lunch Break –45 to 60 Minutes					
7	45minutes	2.00pm – 2.45pm			
8	45minutes	2.45pm – 3.30pm			

Source: MOE Annual Reports, 2006

On daily business, the average classroom in Fiji starts their classes at 8.30am and finishes at 3.30 pm. The teachers are expected to begin classes at 8.00am till 4.30pm. With an average of 40-45 minutes periods for most of the secondary and primary schools in Fiji, one can only complete a round of 8 to 9 periods in a day. Most tertiary institutions have one-hour periods. Then an average of 15 minutes is allowed for a morning break with another 60 minutes given for lunch. At the end of the 8th period a student/class should achieve a maximum effective contact in the teaching learning process time of 360 minutes. However,

for schools where students move from one class to another, there will be an allowance of 5 minutes movement time for both the students and teachers. Again, there are unexpected disturbances within the schools itinerary like, visitors visiting the schools, school bazaar, other fundraising activities, teachers/students coming late to classes after morning tea and lunch, school assemblies, form meetings, house meetings, etc. For a total of 360 minutes, the following minutes is subtracted to account for the disturbances: 15minutes for break, 60munites for lunch, and 35minutes for the total 5 minutes movement allowance for the 8 periods daily, 20 minutes is approximated for other related school disturbances. This gives the total wastage time of 130 minutes or 36.1% within a day and for the five working days it accumulates to a total of 650 minutes or approximately 10.83 hours wastage in one week. Therefore, on the annual wastage ratings, 10.83 hours multiply by the total effective days of 211 gives a total of 2,285.13 wastage hours.

In brief then, there is lot time wastage in the current school system and there must be some ways to alleviate the situation in order to boost the production output of each individual for the good of the schools and the nation at large. (Source: MOE School Report).

2.3.1.3 Vocational Education and Training

Technical and Vocational Education Training is a two-year program that is offered in technical and vocational centres. These are either stand-alone centres (three) or are attached to secondary schools and currently there are 59 secondary school-based centres. Post Form 4 students are normally enrolled in this program and take two two-year TVET courses that prepare them for wage or self-employment. The courses include Agriculture, Office Technology, Carpentry and Joinery; Automotive Engineering and Catering & Tailoring. The usual theory practical ratio in these courses is 25:75 respectively. At the end of the two year program graduates must pass internally set practical and theoretical examinations set by teachers at the centres in order to receive a Fiji TVET Certificate in their field of specialization.

The Franchise Arrangement

Thirty eight TVET centres also have "franchise" arrangements with FIT for trade certificate courses and with TPAF for Class 3 trade test qualification. It should be noted that TPAF has no franchise arrangement with vocational schools. TPAF only allows those vocational students who have attended 2 years full time vocational study in a particular trade at such schools or vocational centres to sit for the Class III Trade Test Exam.

The following programs are offered through the FIT franchised scheme:

- Trade Certificate in Agro Engineering
- 2. Trade Certificate in Commercial Baking
- 3. Trade Certificate in Cookery
- Certificate in House Keeping
- Trade Certificate in Food service
- 6. Trade Certificate in Welding Fabrication
- 7. Trade Certificate in Carpentry & Joinery or Class 3 Trade Certificate
- 8. Trade Certificate in Automotive Engineering
- 9. Certificate in Applied Wood Technology (Forestry Product for Value Adding)

Most teachers teaching TVET subjects obtain their certificate or diploma teacher training qualification from the Fiji School of Advanced Education. Some TVET teachers also receive their International Diploma in Tertiary Teaching from FIT. Some also acquire degree qualifications in vocational education and training from USP or other overseas universities. However, most teachers or instructors in these centres do not have industry experience as well as trade certificates or diplomas from FIT or other similar tertiary institutions. These qualifications are necessary to facilitate TVET courses or subjects effectively.

Table 2.4: Total number of Vocational Centres in [%] doing vocational courses

Courses	Schools (%)
1. Agriculture	16
2. Automotive Engineering	44
3. Carpentry & Joinery	49

4. Catering	45
5. Tailoring	41
6. Beauty & Therapy	8
7. Welding & Fabrication	5
8. Office Technology	26

[Source: MOE /TVET Vocational, 2006]

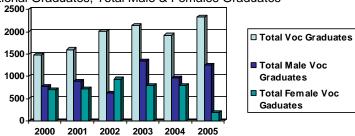
Table 2.5: Vocational Students Enrolment 1999 –2005 from the 65 centres

Prog Type	Gender	2000	2001	2002	20003	2004	2005	2006	2007
TVET	Males	1,186	1,467	1,705	1,536	1,374	1389	1672	1858
Voc	Females	544	753	790	783	600	766	746	973
Sub Total		1,730	2, 220	2,505	2,319	1,974	2355	2418	2831

[Source: MOE /TVET Vocational, 2006]

There is a gradual increase of student enrolment in the TVET program since 2000. Graph 2.2 shows this trend. The graph also shows there is still gender discrimination in student enrolment. This is because the male students there have greater options to choose from than their female counterparts. For example, the traditional attitude that Carpentry and Joinery is for boys and Catering and Tailoring for girls still seems to exist. However, there is some shift in this mode of thinking and boys, for example have begun to take Catering and Tailoring and girls subjects such as agriculture and Light Engineering. While the enrolment gap between boys and girls may continue to prevail, it is imperative to advocate the notion that TVET courses are designed for all students of both the genders.

Graph 2.2: Total Vocational Graduates, Total Male & Females Graduates



Source: Vocational, TVET section, 2007]

Table 2.6: MOE Budget Allocation for TVET - 2000 to 2006

Years	MOE Budget [\$]million	% of MOE Budget spent on TVET
2000	179,694,300	0.71%
2001	178,232,500	0.67%
2002	217,361,100	0.70%
2003	221,478,600	0.62%
2004	239,983,600	0.70%
2005	266,000,000	0.65%
2006	301,185,600	0.56%

[Source: MOE Annual Report, 2006, pp 23,]

Table 2.6 shows that the budget allocation for TVET is insignificance when compared with that of the other sectors of education. This shows the lack of the Government commitment on technical and vocational education. Sharma (2000) describes Fiji's TVET as a 'lightweight' innovation. On the other hand formal academic education continues to be the 'heavyweight' innovation and attracts the large portion of the education budget. This is perhaps the main reason why TVET is still regarded as the 'second class' option by the majority of the stakeholder community. There is, therefore, an urgent need to reconsider the issues of funding and commitment if the desire to promote TVET is authentic in nature.

2.3.2 Private Vocational Training Institutions

2.3.2.1 Monfort Boys Town

Monfort Boys Town (MBT) usually take the under privileged students and provides them job skills for the world of work. It is a boarding institution where students are expected to carry out the board-school type responsibilities displaying values such as share and caring, honesty, tolerance, multi-skills, responsibility, industry, domestic duties and good behaviour. The main purpose of MBT is to enrol secondary school dropouts, economically poor or disadvantaged youths help them to regain self-esteem, find a means of livelihood and contribute to nation building. It is managed by the Catholic order of 'Monfort Brothers' of St Gabriel, with financial support from the Government of Fiji under the Minister of Education.

MBT is very well organized and has very good facilities such as classrooms and workshops and is well equipped and resourced. This is largely owing to the funding it receives as grant and aid and the income derived from the enterprise work done by the students. MBT produces graduates of high quality technical and vocational skills and they are either easily absorbed in the workforce or begin their own self-owned and management enterprise.

Supported by the Government, this privately owned and managed vocational education and training institute is a model to emulate. Annually, it enrols 134 students from disadvantaged backgrounds and puts them through a two-three year training program in fitting and machining, cabinetmaking and upholstery, building construction, carpentry and plumbing, electrical and automobile maintenance and panel beating. It has 100 percent completion rate and all the graduates are absorbed in the workforce. The Government finances about 40 percent of the costs of MBT management. MBT raises the rest through private contributions and the sale of products such as furniture and services. The annual expenditure per trainee is about FJD 71.00.

2.3.2.2 Private providers

According to MOE records, 51 registered vocation education private centres were operating in Fiji by 2006. Twenty eight new centres were registered from 2000 to 2005. The influx of private training vocational education providers for the last five years shows the need to offer other skill training services that are not available in the formal training institutions such as FIT and TPAF. Thus the private institutes or schools were established to provide skilled-based courses that are in demand in the country. Computer Education courses heads the list with a total of 39 centres managed by 20 different registered owners across the country [MOE/R&D Stats Department].

Apparently, another ten centres are on the waiting list for approval with an approximately twenty more centres operating with unregistered approval. In order to be registered and recognized by MOE the schools have to follow through an application process, which takes a timeline between 1 to 3 months. The approval to be registered can take a while if the entire necessary documents are not available by the applicants. Whilst the fee is affordable based on convenience, parents may access their superannuation fund to secure school fees for their children. Schools with approval status have the special provision for accessing this fund from the Fiji National Provident Fund for school fees

Table 2.7: Classification of Private Vocational Schools

School Type	Description	Approx Roll	Registration	Total
			Date	Number
Computer Schools- Steven Computer, South Pacific Education Centre, etc	Small- Computer skills	10-15	5 – 2002 3-2003 5-2004 2-2005	20
NIIT, APTECH, NZPTTC	Medium	16-25	5-2002 3-2003 5-2004	18

Total Computer Schools				41
2. Korean Language School	Language skills	5-12	2004	1
3.SecreterialStudues Institute	Tying & Business skills	10-15	2001	2
4. Care Giver Service School	Care giving skills	10-16	2002	1
Pilot Schools- Pacific Flying School & Advanced Aviation Training	Piloting skills	15-25	1996	2
6. Hair Dressing, Health & Beauty Therapy School- Style Gallery Institute	Beauty Therapy skills	18-26	2000	1
7. Message & Therapy School	Message & therapy skills	13-19	2003	1
8. Hospitality School	Hospitality industry service skill	22-26	2003	1
9. University- CQU; USQ	General education & degree /masters programmes	180-350++	2002-2003	2
Total Registered Centres				51

Source: MOE/R&D Stats Department, 2006

It is mandatory that all providers of technical and vocational education and training obtain approval and registration from the Ministry of Education. The process involves the following main steps:

- (1) Application for Establishment: before its establishment the training institution submits documentation about the proposed training, the resources to be provided and the fee structure.
- (2) A Private Vocational Processing Committee within the MOE reviews this application and either recommended for establishment, corrective steps identified, or the application is rejected with specified reasons. The processing of the application takes one month.
- (3) After approval for establishment the school management sets up its infrastructure, advertises for qualified teachers, applies for a license to operate a business, obtains approval for occupancy from the local authority, applies for an Occupational Health and Safety Certificate from the Ministry of Labour and, if it involves an overseas investor, applies to the Fiji Trade and Investment Bureau.
- (4) Application for Recognition: When all facilities are in place the training institution then applies to the MOE for "recognition." This requires complete data on the teacher qualifications, operating license, occupancy and OHS certificate and a site inspection report by the Development Section, TVET.
- (5) The Private Vocation Processing Committee approves, asks for improvements or denies the application.
- (6) Once recognition status is granted, training commences, and the MOE conducts inspection visits to ensure the institution is being run according to plan. It also receives annual reports and graduation reports from the institution. The MOE, in sum, ensures that minimum safety and training standards are met (e.g. adequate space, equipment and qualified instructors), but do not regulate the fees charged.

2.3.3 Non Formal TVET

2.3.3.1 Advanced Vocational Training (AVT)

AVT is the sub programme of the Integrated Human Resources Development for Employment Promotion (IHRDPEP) of the Ministry of National planning. The overall project goal for AVT is to provide co-ordinate planning, training, provision of adequate level of start up capital, advisory, capital implementation, monitoring and evaluation services to the rural, maritime and semi-urban unemployed population on Fiji. Advanced Vocational Training is provided in the form of short courses - a few days to maximum two weeks - for school leavers. MOE provides community-based facilitators for organizing and delivering need-based and income-generating training programs especially in the rural areas.

The main objectives of the AVT project are:

- ▶ To develop a rural, maritime and semi urban vocational and training system.
- Develop a business and income generation register (BIGR) based on individual and community profile instruments, consumer demand survey and market opportunities surveys.
- To co-ordinate vocational skills and business skills training based on the abovementioned instruments.
- Develop a register of module trainers (RMT), develop and implement at least 10 new income generation modules base on the above registers.
- To allocate start-up capital to individuals and communities for commercially viable human and natural resources utilisation projects.
- Provide skills training based on market analysis and baseline data.
- ▶ Conduct research and studies on appropriate structure, systems, strategies, programmes and models.
- Pilot and replicate training and business models nationally.
- Draft modules for 10 new skills.
- Draft National Vocational Training Policy and Action Plan.

According to the AVT Annual Report 2005, AVT has achieved the following after about three years of operation (August 2000- June 2003):

- 4,500 unemployed people were trained in income generation business skills.
- 2. 500 people have registered their businesses.
- 3. 50 people are employed as home supervisors.
- 4. 20 people are involved in home stay business.
- 5. The other trained people are involved in income generation activities. [AVT Annual Report, pp 16, 2005]

Similarly, 2007 AVT/MOE Report shows that in 2006 1432 people were trained in automotive engineering, cuisine and bakery, tailoring, handicraft, organic farming, animal husbandry, plant propagation and floriculture. Moreover, 100 jobs were created, 13 canteens were set up and 21 piggeries were established.

According to MOE, the 65 technical and vocational education schools and the 128 technical schools will be the strategic centres for community-based training and training-driven production. Furthermore, these centres would enrol part of the 14,000 school leavers annually. The Government's vision as articulated in the document on "Opportunity for Growth" defines education and training as: "Primary strategy to diversify the country's economy, achieve sustained economic growth and strengthen competitiveness. Through education and training government hopes to reverse a labour market situation characterized by low employment growth, high labour costs and an acute shortage of skilled and professional workers due to mismatched and labour emigration "[Feasibility Study on Fiji's Vocational Training Centres- CITEC Consultancy Ltd, 1996).

The Integrated Human Resources Development for Employment Promotion (IHRDEP) document co-signed by the Fiji Government and UNDP in 1999 states "Furthermore Advanced Vocational Training is expected to help create alternatives in terms of opening avenues for self-employment, livelihood and income generation to cushion the impact of unemployment and underemployment." Both documents provide the legitimate platform for visionary, revolutionary and robust school-based vocational education and communitybased advanced vocational training programmes. When implement the proposal has great potential to reverse current high unemployment amongst school leavers, women and rural dwellers, nil growth in industries and manufacturing sectors, mismatch in skills and labour market requirements: to economic growth in industries and manufacturing sectors, full employment and diversified sustainable economy. Table 2.8 shows the five year budget for AVT. In the light of the technical and vocational education provided by AVT and the role it places in addressing the unemployment problem especially in rural areas, the annual budget seems rather small. Its initiative in providing multi-skills for self-employment and generating wage employment for others is commendable. The Government must invest more funds in such needy programs. There is scope for the induction of more industrybased skills in this program.

Table 2.8: AVT Five Year Budget (2005-2009)

Year	Capital Cost(\$)	Operational Cost	Non-Operational Cost	Total Per Year
2005	5,920,000	\$1,787,600	\$968,000	\$8,675,600
2006	-	\$1,787,600	\$968,000	\$2,755,600
2007	-	\$1,787,600	\$968,000	\$2,755,600
2008	-	\$1,787,600	\$968,000	\$2,755,600
2009	-	\$1,787,600	\$968,000	\$2,755,600

Source AVT annual report, pp 13, 2005

2.3.3.2 Ministry of Youth, Sports and Productivity: Department of Youth Training Scheme:

The National Youth Services provides skills training to rural and urban youths who are unemployed especially for those who do not succeeded in the formal education system. The training courses offered include Personal Development, Discipline Training, Basic Agriculture Training, and Carpentry Skills Training. There are six training centres under the National Youth Scheme programme and these include National Youth Centre in Sigatoka, Yavitu Training centre in Kadavu, Naleba, Korolevu and Naqere Training Centres in Vanualevu, Valelevu Training Centre in Suva.

Table 2.9: Youth Employment Option Programme Statistics

Service Provided	2002	2003	2004	2005	Total
New client	825	1173	756	555	3309
Registration					
Revisits/Referrals	253	4396	84	214	4947
Work Attachment	157	48	66	28	299
Number Employed	258	158	104	73	593

Source: MOY Annual Report, 2006

Other courses offered through the National Youth training Centre (NTYC) include TPAF Class 3 Carpenter General and Basic Agriculture Skills for men and multi skills training courses for women include Backyard Agriculture, Screen Printing, Sewing, weaving, handicraft and Cooking.

Table 2.10: Graduates of NYTC (2002-2005)

		Year	No of Trainees	No. Graduated	Cost of running programme per
--	--	------	----------------	---------------	-------------------------------

			student
2002	29	29	\$1,428.00
2003	55	53	\$369.95
2004	60	50	\$615.90
2005	75	52	\$573.33

Source: MOY annual report 2006

National Youth Service Scheme (NYSS)

Perhaps the most newest and innovative project for the youth scheme is the establishment of the NYSS. This government funded scheme was established at the beginning of 2008 to look into indentifying skills and training needs before preparing young people into their related skills that are channelled into employment opportunities for industries both locally and overseas. This project has the support of various government institutions including the ministry of education, ministry of labour and other industries. After registration, youths undergo vigorous two weeks 'skill for life' training before they are regrouped for trade skill training into a trade course of their choice for four weeks. They are then required to undergo an industry work attachment for another three weeks before they are ready for permanent work placement. The scheme also is also committed in assisting the graduates to find work. The initial target was 2000 youths for 2008 but after the first round of registration the figure stood at approximately 5,000 young people.

2.3.3.4 Tutu Vocational Training Centre:

Tutu Vocational Training Centre (TVTC) started in 1972 with an agriculture based course but was diversified into other vocational related programs in the early eighties. The centre is located 300 kilometers from Suva, on the Fiji's garden island of Taveuni, east of Fiji's second largest island Vanualevu. The island is well known for its rich soil and vegetation. Tutu vocational training centre was initially established to prepare young school leavers from Cakaudrove province with new innovative training methods that would motivate them to become self-employed farmers in their own village land as well as semi-skilled village tradesmen. The following are the objectives of the Tutu Vocational Training Centre:

- ▶ To increase agricultural knowledge and skills required to intensify both subsistence and commercial production.
- ▶ To provide basic carpentry skills needed to maintain tools for furniture making and house construction.
- ▶ To provide basic mechanical skills needed to maintain small-engines equipment, vehicle and simple machinery.
- ▶ To provide other agriculture related courses like Poultry, Fish, Pig farming to supplement their prior knowledge on agriculture.
- ▶ To prepare the students with enterprising and business skills to operate, maintain and sustain small businesses in their locality.
- ▶ To provide young adults with proper moral family training in family care courses.

The criteria for selection to be given a place at Tutu include:

- Must be aged 17 years and over;
- Must be a resident in one of the villages in the Cakaudrove province;
- Must produce written evidence from the provincial office of village land being available for their future farm development and demonstrate their willingness to use such land by planting 500 yaqona [kava] plants or equivalent before entering the course.
- Final selection will be done after short listing the names and visit to the applicant's farm followed by a three weeks familiarisation programme at the centre

The TVCT three-year program covers all aspects of agriculture and agriculture-support-courses. This program is based on school-work model in which students a six month on-campus practical training and a six month home-based training annually for three years. Each participant is given at least 0.8 hectare of land in Tutu during the course in which they plant yaqona, short-term root crops and vegetables. However, the number of plants planted is not as much as that planted in their home projects. Their weekly itinerary is closely

supervised by the instructors most of whom are volunteers and the members of the Society of Mary of the Roman Catholic Church. During their home based periods, trainees are expected to allocate their time as they do at the centre with weekly work schedules. This itinerary is closely checked and monitored by the parents, village headmen, and agricultural officers of the Ministry of Agriculture. The instructors from the centre monitor the home project regularly providing technical as well as moral support. The centre staff even provides further follow-up moral support and technical assistance to the graduates for several years and gradually the supervisory roles is passed on to the extension officers of Ministry of Agriculture located in the Cakaudrove province. Because of the success of this non-formal vocational training at Tutu some features need mentioning:

- The intake is restricted to an age group and to the provincial boundaries, and there is close supervision and monitoring.
- ▶ There is very good support of the parents, villagers and officials of the Ministry of Agriculture located in the province
- ▶ The instructor and centre staff members are of good quality and work together in the spirit of dedication. TVCT is a non-government organisation, however, there is a continuity of service that is rarely seen in other rural education and training programs.

It is pleasing to note that most graduates of TVCT are usefully occupied. A survey conducted in the villages showed that 90 percent of former trainees are now farming successfully in their villages under a semi-commercial type enterprise. While many initially sought paid employment in urban areas, Tutu preparation or training does not encourage them to do so. Therefore, most graduates return to villages rather and begin self-owned and self-managed agricultural enterprises. Tutu is financially supported by the Ministry of Agriculture.

2.3.4 TVET Tertiary Institutions

2.3.4.1. Fiji College of Agriculture (FCA)

The Fiji College of Agriculture is the only college in Fiji that offers agriculture—based courses at diploma level that adequately prepares the students for agriculture and agriculture-related employment such as agriculture science teachers, research officers, government administrators and commercial farmers. The diploma program is for three years and successful students graduate with a Diploma in Tropical Agriculture. This program has an articulation arrangement with USP that provides the diploma holders an opportunity to complete their agriculture degree program at the University's Alafua campus in Western Samoa. Some of the courses of the degree can be completed through the University's distance and flexible mode of delivery. Owing to the limited facilities available, FCA has limited student intake each year.

Table 2.8 shows information on FCA enrolment on gender as well as the graduate in the period 2002-2005. In this period110 graduates found employment in the government sector, 19 at the private sector and three have migrated overseas.

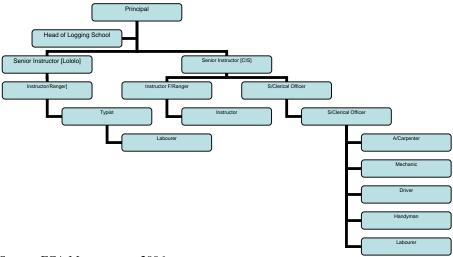
Table 2	44. ECA	Enrolment	2002 2005
I anie 2	, 11. H(.Δ	- nroiment	2002-2005

Year	2002 2003 2004						2005		
	M	F	M	F	M	F	M	F	
Year 1	17	17	22	26	26	22	25	22	
Total	34		48		48		47		
Year 2	13	13 14		16	20	22	24	20	
Total	27	27		33		42		44	
Year 3	24	24 19		14	17	16	17	18	
Gender Total	51	51 50		50 56		60	66	60	
Total		43	25		33		35		
Grand Total	1	104		106		23	126		
Enrolment									
Total Number of	43	43		25		33			
Graduates									
Gender	Male	Female	Male	Female	Male	Female	Male	Female	

Source: FCA Management, 2006

2.3.4.2 Fiji Forestry School

Figure 2.3: Forestry Training Centre Organisation Chart



Source: FCA Management, 2006

The main aim of the forestry training centre (FTC) is to develop and implement a human resource development program with particular focus on the current and future human resource training needs of the nation's forestry sector. The centre also ensures that proper development takes place in timber industry through appropriate forestry technician and specific logging industry training programs. FTC also provides landowners awareness Training program so that an effective forest management framework encompassing other related forest activities is established and sustained. Furthermore, one of the roles of FTC is to provide appropriate training to the forest industry and resource owners, monitor field performance through skills tests, evaluate and conduct refresher courses for serving forestry the stakeholders.

FTC offers the following competency-based certificates to participants who successfully fulfilled the program requirements. The courses of the program are Basic, Intermediate and Advanced Harvest Tree Manual, Cross Cutting, Bulldozer, Loader Operations 2 and 3 and Skidder. From the reports submitted, it was noted that 751 participants received competency-based certificates for the different forestry courses in 2001, 282 in 2003 and 156 in 2005. Fifteen participants graduated in Forestry Technicians program in 2002.

2.3.5 Teacher Preparation Institutions

2.3.5.1 Fiji College of Advanced Education

The Fiji College of Advanced Education (FCAE) provides teacher education and training programs to student-teachers who would teacher the junior secondary forms, that is, Forms 1-4. This is a two-year program and successful students are awarded the diploma in education. The disciplines that FCAE provides include Education, Language & Literacy, Commercial Studies, Home Economics, Mathematics & Computing Science, Science, Social Science, Agriculture Science, Industrial Arts and PEMAC. Both Industrial Arts and Agriculture Science are one-year courses and successful students obtain a Diploma in Education.

2.3.5.2 The University of the South Pacific

The Technology and Community Education Division of the School of Education (SOE) of the University of the South Pacific provides teacher education and training programs in technology, food and textile and vocational education. These are for secondary school teachers and community coordinators in Pacific island countries including Fiji. The program comprises four sections, namely, Food & Textiles (FT), Technology Education (TE), Community Education and Technology Education at College of Foundation Studies. The students enrolled in the three year Bachelor of Education degree program with Technology or Food and Textile major are required to take twenty one degree courses comprising 8 TE or FT courses, 9 education courses and the rest are service or electives.

Currently the majority of the students doing these programs are on in-service. In other words, they have been teaching for a number of years after completing a diploma in education from a recognized secondary teacher education institution. Some of the trade certificate or diploma courses that students have completed from FIT are also cross credited. In future, it is likely that a formal pathway relationship will be established with FIT enabling more cross credits from its certificate and diploma programs. The pre-service students are also given the opportunity to take TE or FT majors in their BA/BSc GCEd program of study. However, because of the theoretical nature of the courses with little industry experience, the courses are inclined to a more academic type aiming at achieving the technical degree in teaching. Currently the courses and programs are reviewed so that 'school-workplace' model with greater emphasis on technical and vocation education and training can be introduced in appropriate areas. It is expected that a better pathway arrangements will be established with the providers of technical and vocational education and training in the USP region. The University of the South Pacific through its Faculty of Science and Technology provides two different Bachelor of Technology programs - one in Electrical & Electronics and the other in Mechanical & Manufacturing. It is expected that some pathway arrangements will be done so that the diploma holders in the abovementioned programs would be able to complete their degree programs

Chapter

3

FIT AND TPAF

This chapter briefly looks at the initiation and the development of FIT

and TPAF outlining their functions, courses and programs, resources and facilities.

3.1 Fiji Institute of Technology (FIT)

The Fiji Institute of Technology has developed considerably from its inception in 1964 with its initial name, the Derrick Technical Institute. It coincided with the Government's strategy to cater for the Technical and Vocational human resource needs of the country. The name Derrick Technical Institute was changed to FIT in 1980 and it continued exist under the Ministry of Education administration.

However, in 1992 a Parliament decree allowed FIT to begin the process leading to autonomous governance. It finally gained its semi-autonomous status in January 1996. A Director was appointed as a CEO of FIT. Furthermore, a 12 member Council was established to govern FIT. Of these 80 percent are representatives of private sectors. The Chairperson of the Council is also from the private sector. Prior to this 90 percent of the Council members were from the public sector, especially the Permanent Secretaries of various Government Ministries. Figure 3.1 shows its organisational structure.

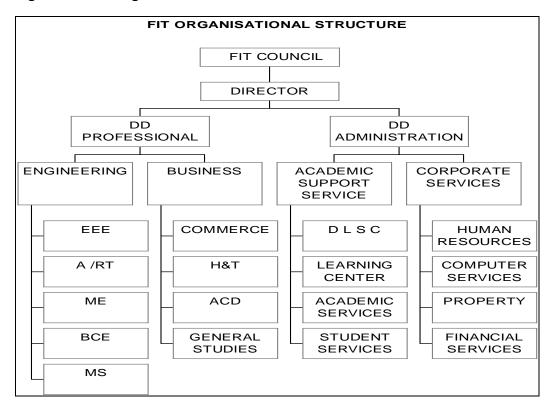
Most of its programs then were provided for by offshore providers like the City and Guilds of London Institute in UK and articulated trade programmes from New South Wales, Australia. With sponsorship backing from private companies such as FSC, Emperor Gold Mine, PWD, Carpenters (Fiji) Ltd, Marlow's Ltd, apprenticeship scheme became one of the driving forces behind the existence of FIT.

FIT then used to offer a two year diploma program that comprised a three-week block onthe-job training mainly in engineering courses. Business Studies, Typing and Shorthand were the other programs offered by FIT.

To ensure that acceptable local and international standard is met in term of quality, relevance and standard the Director chairs the academic Board of the Institute and administers a general academic statute. The members of the Academic Board include the Director as well as various school heads.

Approximately 67 percent of the cost of running and operating FIT comes from the Ministry of Education while the remaining 33 percent being met by student fees (Source: FIT Corporate Plan: 2003- 2006, pp 1).

Figure 3.1: The organisational structure of FIT



A/RT = Automotive and road transport; ACD = arts, culture and design;

BCE = building and civil engineering; DLSC = distance learning studies centre

EEE = electronic & electrical engineering; H&T = hotel and tourism; ME = mechanical engineering; and MS = maritime studies.

Source: FIT Management, 2006

FIT Today

FIT has now expanded greatly to meet the demands of the industry and the labour markets. In its Cooperate Plan 2003–2007, there are seven strategic goals that govern the current and future directions of FIT. These include:

- 1. Manage and control the number of Equivalent Full Time Students (EFTS) in skillsdemand areas as identified by the Government and the market place.
- Diversify the training programs offered by FIT to address the need of the formal and non-formal sector of employment and consequently create employment and entrepreneurship opportunities.
- 3. Establish and strengthen strategic alliances with local schools and offshore colleges and universities in the development of trade courses and the consolidation of the advance diploma and undergraduate degree level programme with a view to pursue post graduate level programs if and when the opportunity present itself.
- 4. Further promote and develop the field of fine arts, sculpture, performing arts, culture, music, sports science and agriculture engineering.
- 5. Upgrade the school of maritime studies to meet the maritime sector.
- 6. Assist and enhance the technical capabilities of all the schools and department at FIT.
- 7. Improve the internal efficiency and effectiveness of FIT.

To address these goals, FIT has redesigned its organizational structure (Director, 2008). In the new organizational structure, three new faculties have been established and these

include: (a) the Faculty of Commerce, Hospitality and Tourism; (b) the Faculty of Humanities, Communication and creative Arts; and (c) the Faculty of Applied Science, Engineering and Maritime Studies. Each Faculty has several Schools and Departments. According to the Director of FIT (submission dated 18 March 2008), a few more faculties, schools and departments will be created in future. He writes, "The FIT has carried out sufficient reforms to enable it itself to become the referred to national institution, thereby absorbing the other state owned tertiary institutions within its structure". The Director goes on to mention the following to support his restructuring plan:

- "The teacher training institutions can neatly fall within the Department of Education of the Faculty of Humanities, Communication and Creative Arts. This will prevent the expenses and bureaucracy involved in setting up a College as the draft report proposes".
- 2. "The structure provides for the flexibility of adding more faculties to incorporate additional educational needs. For example, Fiji College of Agriculture can come under the Faculty of Agriculture and Forestry which can be established within the organisational structure of FIT, thereby again significantly reducing the expenses involved in setting up a College of Agriculture and Forestry on its own under a new University. The same can go for the nursing school and FSM, both of which can come neatly under a new Faculty of Medicine and Pubic Health".

The future plans of the FIT include establishment of a school for aviation maintenance, hospitality centre in Nadi and a new campus in Suva. Six secondary schools have also started franchising the hospitality and tourism programs and FIT expects to offer the programs in a few other secondary schools.

Table 3.1: Levels of Qualifications

Certificate & Trade Certificates	Awarded after 1 year of full time study, or equivalent and appropriate work experience, with entry requiring completion of 11 years of formal education.
Diploma	Requiring 4 semester of study, or equivalent and appropriate work experience with entry requiring completion of 12 years of formal education.
Advanced diploma	Requiring two semesters after a pass at the diploma level.
Degree- Bachelor of Applied Sciences (Environment)	Requiring six semesters with passes in Certificate in Laboratory Technology and a Diploma in Environmental Science

Source: FIT Corporate Plan 2003-2006

Currently about 58 percent of the students are studying at the certificate, about 40 percent at the diploma and about two percent at the degree levels. FIT's enrolment has doubled from about 3800 equivalent full-time students in 1999 to over 7600 in 2005. The enrolment trend is shown in Table 3.1.

Graduates of FIT have high rate of employability over the years at technician and clerical levels of occupations both in the formal and informal sectors. A large number of FIT students are part-time students implying that study and work simultaneously. FIT needs to collate the labour market outcome of its graduates so that more need-based courses can be provided.

Table 3.2: Enrolment in FIT by Field, 2002-2007

School/Year	2002	2003	2004	2005
Automotive Engineering and Road Transport	573	445	481	489
Civil Engineering	521	349	541	684
Commerce	2800	1907	2361	3501
Art Culture and Design	330	525	551	413
Electrical and Electronics Engineering	593	496	746	757
General Studies	570	583	466	525
Hospitality and Tourism	235	239	297	385
Mechanical Engineering	587	372	523	624
Maritime Studies	212	196	178	244
Total	6421	5112	6144	7623

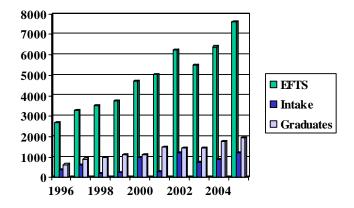
Source: FIT Management, 2007

Table 3.3: EFTS for 1996 - 2007

YEAR	1996	1997	1998	1999	'2000	'2001	'2002	'2003	'2004	2005
EFTS	2700	3300	3500	3746	4731	5032	6241	5500	6393	7623
Intake	400	600	200	246	985	301	1209	-741	893	1230
Graduates	643	917	973	1137	1137	1484	1437	1459	1783	1938

Source: FIT Management, 2007

Graph 3.1: EFTS, Intake and Graduating Students 1996-2005



Source: Annual Report & FIT Management, 2007

Records on the numbers of graduates who found employment were not available. According to FIT management, however, approximately 75-80 percent found employment after graduation. It is important to keep such records so that the planning and program development can be based on demand supply information.

By late 1990s FIT received two thirds of its financial support from Government and the rest was met from student fees. Now the proportions are reversed and this is partly because the Government has reduced its contribution. To cope with this financial shortcoming, FIT had to increase student fees and introduce evening classes thus increasing the student enrolment figures. Entrepreneurial activities such as provision of IT training and short courses for industry were also introduced.

Table 3.4: Salaried &Student Cost:

Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Ops	4,413,200	4,487,800	6,840,900	7,440,900	7,440,900	7,440,900	7,440,900	7,440,900	8,000,000	8,000,000	8,000,000
Caps	1,300,000	1,410,000	1,410,000	1,350,000	0	0	0	0	600000	0	2,000,000
Salary	4,614,832	5,800,957	7,510,306	7,270,470	8,726,067	9,841,506	9,533,188	10,035,325	11,587,277	14,315,220	16,252,417
EFTS	2700	3,300	3,500	3,746	4,731	5032	6241	5500	6393	7922	8100
Cost/student	1635	1360	1955	1986	1573	1479	1192	1353	1251	1010	988
student/staff						20.5	24.0	21.4	23.9	29.7	30.2
Staff Population											
Acad. Staff						246	260	257	268	267	268
Non Acad						139	160	154	159	172	170
Auxillary						124	93	94	107	98	95
						509	513	505	534	537	533

Source: FIT Management, 2007

Degree Programs: FIT has just introduced a Bachelor of Education program in TVET in articulation with the University of Newcastle, Australia. Most of the students of this program are the members of FIT staff. Some technical teachers are also enrolled in this program. This year FIT has introduced other degree programs. The University of the South Pacific is also offering a similar program of study and it is expected that FIT will encourage its staff to take USP program that is more relevant to the needs of the Pacific island nations. It is reiterated that articulation arrangement between FIT and USP, could assist in avoiding unnecessary duplication of programs and courses and thus making a better use of limited resources available.

Franchise Program: Perhaps, two most innovative aspects of the FIT program is the "franchising" it offers to secondary schools and the mobile training unit for Electrical and Electronic Engineering delivered at doorsteps. The purpose of this program is to allow secondary school students who have completed their secondary education to take some vocational courses through this scheme and then their education at FIT or other similar tertiary institutions. In fact, it is a "bridging program" with instruction provided off the FIT campus. It allows students to pursue training for a trade certificate with set quality standards in their locality without attending the FIT campus. Thirty-eight franchise centres exist at present in three subject areas: auto mechanics; hospitality and tourism; and carpentry and joinery. If a school is interested in establishing a FIT franchise centre, FIT sends out inspectors who evaluate the premises, equipment and qualifications of the instructors. They identify any shortcomings, which must be rectified before an agreement is signed.

The agreement between the FIT and the franchising school is bounded by the franchising policy that both parties have to sign before the commencement of the program. In the current arrangement the MoE is not a party to the agreement.

Students at the franchise centres become registered students of FIT. They pay \$FJD150 as fee per course and this is equivalent to a 12 week residential course at the FIT. This is a one or two years course at the franchise centre. The current fee is almost double of what the students paid in 2005. Despite this, the cost to a franchise student is comparatively less than that of a FIT residential student who pays the tuition fee of FJD 350-400. The boarding fee is not included in this. In return, FIT provides the curriculum or the syllabus and sets and administers the final nationwide examination.

At present students can take as many as three stages of the five-stage preparation program for a trade certificate from their centres or schools. FIT awards successful students a "result slip" at the end of each stage. The students must take the stages beyond those provided at the franchise centre at FIT. FIT monitors results by centre and if overall student marks deteriorate it can remove recognition until the centre improves.

Besides the curriculum and the management of examinations, FIT does not provide any further assistance especially in regard to teachers training and up-skilling for its program, and providing or upgrading technical equipment and tools for workshops. As mentioned, the only provisions made by FIT are in the form of the course materials and examination papers. The franchise initiative is a useful concept but it is unsatisfactorily organized. The franchise centres need support if the quality of this vocational initiative is to be maintained.

The Learning Centre: Through its learning centre, FIT is now offering technical and vocational education and training courses and programs via distance and flexible mode of delivery. The University of the South Pacific has very well established DFL system and reaches its 12 regional countries. However, it provides academic courses and is now beginning to areas of science and technology where practical work is necessary. Such facilities are available at its campuses in its regional countries.

Distance and flexible mode of teaching and learning in technical subjects is a recent innovation. FIT has started offering a diploma in business studies and courses in engineering mathematics and applied sciences via this mode of delivery. It has also begun to provide practical training in three fields: carpentry and joinery, plant maintenance and plumbing. As experienced by USP, delivering practical-oriented course via DFL is difficult. This initiative requires workshop for practice as well as site-based tutors. The franchise centres can assist in this direction. Moreover, partnership relations with USP, FIT can promote its DFL courses more effectively. FIT has developed DFL learning packages including DVDs and CDs. These are supplemented with face-to-face tutors from three FIT satellite centres.

The FIT DFL program started in 2004 with 30 students that increased to 100 in 2005 and 200 in 2006. It expects to have 5000 DFL students by 2009. The pass rate in DFL courses is around 60 percent.

As mentioned earlier, DFL programs are not without problems. Some of these include difficulties in communication, lack of design specialists to convert standard coursework to distance formats and inadequate student support system. However, FIT is convinced that that there exists a strong market for DFL programs in and beyond Fiji especially in the Pacific island nations such as the Solomon Islands, Marshall Islands, Vanuatu, Tonga and Tuvalu.

3.2 Training and Productivity Authority of Fiji

Background

The Training and Productive Authority of Fiji Act was initially established by the Fiji National Training Act of 1973 and institute was first named as the National Training Centre. This Act was amended in 2002 changing its title to the Training and Productivity Authority of Fiji Act. Accordingly, the institute began to be called the Training and Productivity Authority of Fiji (TPAF). The main focuses of this Act are:

- Establishing system that meet the industry training needs.
- Becoming the National Productivity Organisation for Fiji
- Managing the levy grant scheme
- Providing Training for the Industries
- Managing Trade Test and Apprenticeship Scheme.

According to the Training and Productivity Act of 2002, TPAF, shall be "the apex organization for technical and vocational training in the Fiji Islands" (para. 5, d, 2). Its function is to provide training closely related to industrial and enterprise needs for those outside the school system, and to promote improved productivity within enterprises. As per provisions of the Act the key performance areas include the following:

Industry Driven Training

 Training programmes in TPAF are developed in consultation with relevant stakeholders to meet specific needs of industries and an ability to forecast future opportunities

2. Productivity

TPAF believes that training functions as a catalyst for productivity improvement. This is done through its training programs, the national quality framework (NQF) and the productivity and human resources development scheme. There are many factors which impact on productivity. However, the focus here is on those factors that are provided in the Act.

3. Standards

 TPAF focuses on raising standards in all its responsibilities to assist Fiji to progress forward effectively

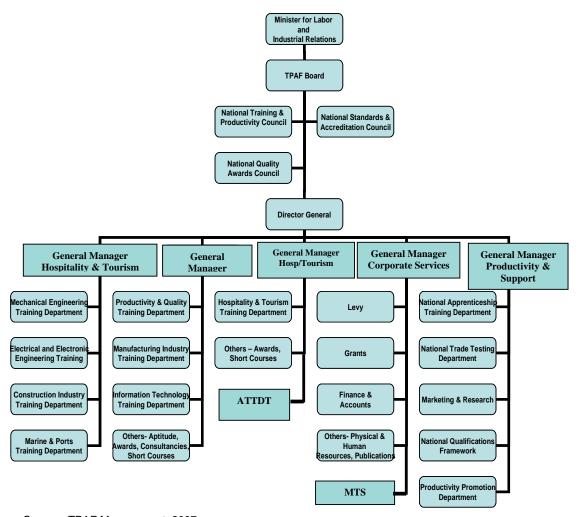
4. Training Incentives

 TPAF continues to focus on providing incentives that encourage employers to provide systematic training for their employees

Organisation

An overall Board consisting of 14 members, including four from government and five each from employees and employers governs TPAF. The Chairman is the Permanent Secretary for the Ministry of Labour, Industrial Relations and Employment. A Director General manages TPAF assisted by five general managers and 191 staff. The organization chart appears below.

Figure 3.2: TPAF Organisational Chart



Source: TPAF Management, 2007

The Fiji National Training (Amendment Act) also makes provision for the appointment of three councils with distinct roles. Each Council consists of eight members - two each from the Government, employers, employees and the training providers. In reality the Councils are tripartite in nature, that is, two members each from employers, employee and the Government are represented. These include the National Training and Productivity Council (NTPC), the National Standards and Accreditation Council (NSAC) and the National Quality Awards Council (NQAC). The functions of NTPC functions are to

The functions of NTPC functions are to

- provide and/or arrange appropriate vocational education and training in connection with employment;
- advise and disseminate information on training;
- provide training to persons outside the scope of the levy order; and
- provide consultancy services; issue certificates of competency registered with National Qualification Frameworks or other qualifications approved by the NSAC.

The responsibilities of NSAC are to

- develop the NQF that complies with international standards;
- develop, apply and carry out regular review of vocational competency standards relating to qualifications specified in the NQF;
- arrange for the accreditation and registration of training providers and trainers;
- administer and conduct national examinations and tests for trades and other vocational skills pertaining to qualifications specified in the NQF;
- manage national apprenticeship and traineeship programs; and
- Coordinate accessible and flexible qualification systems, the standards of which are recognized internationally.

The NQAC role is to

- develop framework for the purpose of achieving sustainable organisation excellence;
- develop and apply systems of national awards for the purpose of recognizing sustainable organizational excellence;
- develop and promote national productivity awareness campaign on annual basis;
- establish productivity measurement, bench marking and research services; and
- organize national conventions, seminars, workshops for the purpose of promoting organisational quality and productivity.

Nine training departments are distributed among three managers: five under the Manager, Technical Training; three under another manager and one under the third. The General Manager Corporate Services handles levies and grants, human resources, properties and MIS. The General Manager Productivity and Standards handles apprenticeship training, national trade testing, marketing, research and information, national qualifications framework, productivity promotion and Fiji Business Excellence Awards.

Linkages with employers

TPAF is linked with the employers through advisory committees that are guided by sector focused groups comprising employer representatives and staff members who visit the respective industries regularly. Training programs are not introduced without the prior approval of these focus groups. Virtually all scheduled training programs are vetted by the ITACs. Moreover, TPAF holds sector focus groups meetings to discuss training programs

with relevant stakeholders. These focus groups are held in various centres, and each focus group focuses on a particular sector such as automotive training and computer training. In fact, TPAF takes its linkages with employers seriously.

Table 3.5: TPAF Enrolment & Training

Training Department	2002			
	Non Award Courses	# Of Participants	Award Courses	# Of Participants
Total	945	15,258	15	1595

Training Department	2003			
	Non Award Courses	# Of Participants	Award Courses	# Of Participants
Total	970	14,153	23	1992

Training Department	2004			
	Non Award # Of Courses Participar		Of Award # Of articipants Courses Part	
Total	1150	16,997		

Training Department	2005			
	Non Award # Of Award # Of			# Of
	Courses	Participants	Courses	Participants
Total	1507	20,297	36	1977

Training Department	2006			
	Non Award Courses	# Of Participants	Award Courses	# Of Participants
Total	1617	25664		2134

Training Department	2007			
	Non Award	# Of	Award	# Of
	Courses	Participants	Courses	Participants
Total	1410	25342		1077

Source: TPAF Management, 2007

Training Department

PQTD - Productivity & Quality Training

EEETD - Electrical Electronics Engineering Industry Training

MPITD - Marine Ports Industry Training

HTITD - Hospitality & Tourism Industry Training

CITD - Construction Industry Training

MEITD - Mechanical Engineering Industry Training

MITD - Manufacturing Industry Training

ITTD - Information Technology Training Department

ATTDTD - Aviation, Tourism, Travel and Diving Training Department

Table 3.6: TPAF Graduation Summary

Graduation Numbers

Field	2001	2002	2003	2004	2005	2006
TOTAL	1010	666	57	713	634	551

Source: TPAF Management, 2007

Most graduates of TPAF are in-service students or apprentices. TPAF also has some preservice students and the graduates from this program are employable both in the formal and informal employment sectors. They normally enter the workforce at assistant technician level.

TPAF Budget & Finance

The Training and Productivity Authority of Fiji is being financed through:

- (a) Levy
- (b) Revenue generated through its activities: (shown below)

Table 3.7: Revenue generated through its activities

Revenue Source	2002	2003	2004	2005
Levy	8,198,674.30	10,369,087.91	10,026,405.60	10,078,838.41
Course Fees	4,970,888.64	5,002,080.12	7,847,872.41	6,996,861.61
EXP. Budget	12,871,000.00	13,698,000.00	15,370,000.00	16,976,000.00
Rev. Budget	13,963,000.00	14,717,000.00	16,159,000.00	17,082,000.00
% Levy/Rev.	61.19%	60.08%	61.53%	58.77%
Budget				

Source: TPAF Management, 2007

Revenue

The bulk of TPAF's revenue comes from a one percent levy paid by the employers on their gross payroll. In addition, TPAF also raises revenue from training fees, consultancy services and trade testing. [Refer to Table 3.6 & Graph for Finance.]

Levy-Grant System

TPAF levies a one percent fee on the gross salaries of all employees in registered firms in Fiji, regardless of size of the enterprise. Both the private and public sector employer involvement was guaranteed in the form of a Levy Order issued in September 1973 and effective in 1974. The public service is included, but certain categories of workers are excluded, e.g. teachers, nurses, military.

The purpose of the levy is to stimulate training within the enterprises. TPAF collects the levy itself by requiring employers to submit documentation and payment semi-annually, and by contacting delinquent employers through four Levy Enforcement Officers. At present about 5200 employers pay the levy and an estimated 2305 do not. The proceeds amounted to FJD 10,369,087.60 in 2003 and FJD 10,078,838.41 in 2005. In theory, employers can recoup up to 90 percent of the amount they pay into the levy each year. Apparently, most industries do not reclaim the minimum amount or at least conduct inhouse training for its staff by TPAF.

Note that the top 50 organisations account for 52 % of all levies; a lot of small organisations will pay very small amounts of levy. TPAF does collect statistics on the number of people trained and they have the record of this information

Methods used for grants:

Two methods are generally used for the grant system:

METHOD A

For larger employers TPAF approves the training plan and this is based on a detailed set of criteria that show percentages of reimbursement for various categories. Under this method the employer can conduct its own training programs and can be reimbursed for part of the training costs including training abroad.

Method B is the ad-hoc reimbursement for training programs approved in advance, either within the enterprise or off-site. Normally TPAF keeps a list of approved programs but does not publish them. Blanket approvals are not normally given to training providers. Reimbursement is made according to a schedule of reimbursement based on the wages of the trainees and the length of training programs.

Some employers have expressed concern about the limited chances of getting reimbursement. TPAF Council need to take this matter seriously and explore ways of helping the employers financially in their training endeavours. In 2005, 5200 enterprises contributed the levy, but only 240 received any kind of reimbursement for training programs although1800-2000 individual claims were made. Under Method A, 50 employers got about 60-68 percent of the levies back. Surprisingly, TPAF does not collect statistics on the number of people trained annually through by the two methods of the grant system.

In addition, on Training Providers TPAF have not advertised the grant claimable courses as these are provided by public Training Providers who apply for "grant claimable" status. TPAF inform them in the approval letter not to use TPAF in their advertisement but only the term grant claimable status. The list of Grant Claimable Providers and programs is now available on the TPAF website.

Training Activities

TPAF provides training programs to unemployed school leavers as well as employees who attend late afternoon and evening classes. Therefore, it can be concluded that it provides both pre-service and in-service training programs. These training programs training consist of an average of 70 percent practical and 30 percent theory.

In total TPAF has nine Industry Training Departments. The Technical Training Division has four departments: electrical engineering; mechanical engineering; construction industry; and marine and port training.

In addition to these, TPAF has hospitality and tourism training, productivity and quality training, and textile, clothing and footwear industrial training. In brief, TPAF serves 19,000 trainees annually in six centres, one third of who attend evening sessions.

In addition, TPAF has hospitality and tourism training, productivity and quality training and manufacturing industry. Reportedly TPAF serves 19,000 trainees annually in six centres, one third of who are evening trainees.

Apprenticeship Training

Trade apprenticeship is a systematic program of on-the-job practical and related theoretical training designed to produce a fully skilled tradesman or technician. At present 66 employers participate, employing 580 apprentices in four to five year training programs in 23 trades. About 120 apprentices complete apprenticeships annually. Cumulatively, over 531 apprentices have completed their training since the program was introduced in 2001. The employer enters into a contract with the apprentice and TPAF with a six-month probationary period to allow the employer and apprentice to decide whether to continue.

The employer pays minimum wages set by the Wages Council and finances off-the-job training at FIT. Coursework is either eight weeks of block release of 18 weeks for semester, depending on the trades. TPAF also conducts in-house training programs which are tailor-made to suit a particular organization's training needs.

The number of apprentices is increasing and the target for 2006 is 650. However, many employers do not re-enlist in the apprenticeship scheme. They prefer FIT graduates who already have obtained trade certifications. They find this approach more cost effective.

TPAF inspectors visit the job sites three times a year to assess the performance of apprentices. They also examine the duties assigned to them and the ratio of skills workers to apprentices and the record books. Successful apprentices receive a certificate of apprenticeship. Employers receive some reimbursement for supervising trainees.

Under the Apprenticeship scheme TPAF have been pursuing a program to convert the current apprenticeship training system from a time based system to one that is competency based. The project is well on its way and standards have been produced for eight trades. Training of assessors has already taken place. Another round of assessor training has taken place in February 2008. The standards so far converted to CBT will be registered on the upcoming National Qualifications Framework."

Trade Testing

The National Trade Testing Scheme provides an avenue for workers without formal qualifications to acquire recognition of their skills and knowledge acquired on the job in 23 trades.

TPAF Trade Testing Certification

The students can apply for and be assessed for a Level Three Trade test in their skill area. TPAF Trade Tests are practically orientated skills tests.

TPAF qualifications are in three levels.

Level Three: Junior Trades Person.Level Two: Qualified Trades person.

Level One: A supervisor within the skill areas.

- Level Three Certification requires a candidate to have a two year practical experience or a Vocational Certificate with proof of Industrial attachments within the area of expertise.
- Level Two certification requires a level three certificate and a four-year industrial experience. Or FIT stage 5 pass and two years industrial experience.
- Level One certification requires a level two certificate and a six-year industrial experience.

Level One Certification requires a level two certificate and a six-year industrial experience. These trade tests are recognised as an appropriate training required in the industries. These qualifications have international recognition as well. The tests are 70 percent practical and 30 percent theoretical in nature. The theory tests at level three can also be taken orally by the TPAF assessors providing non-academic candidates opportunities to take them as well.

Table 3.8; Total Number of Candidates Tested

Year	1999	2000	2001	2002	2003	2004	2005	
# of Candidates	1,416	1,770	1,953	1,945	1,710	1,692	1,786	

Source: TPAF Management, 2007

Table 3.9: Class 1 Candidates Test Results

Year	1999	2000	2001	2002	2003	2004	2005
# of Candidates	148	205	198	122	135	81	84

Source: TPAF Management, 2007

The demand for trade testing has been substantial, however fluctuating, for the last five years. The fluctuation in the demand for these tests can be attributed to the increase in test fees in 1998. Currently, the fees for the three tests are \$60, \$90 and \$115, respectively. The fees only cover about half the costs of trade testing. The balance is financed through training levy provided by the industries. The demand for Class 1 Level Test declined in 2004-05 and the reason for this is attributed to the emigration of skilled workforce owing to the political disturbances beginning in1987.

Table 3.10: TPAF Number Tested by the Five Most Popular Occupations at each Class

Level	Occupation	2003	2004	2005
Class III	Motor Mechanic	306	259	311
	Carpenter General	163	173	61
	Plumber General	50	47	60
	Cabinet Maker	39		58
	Welding	37		71
Pass Rate	·	66%	75%	67%
Class II	Motor Mechanic	93	85	131
	Plumber General	30	28	25
	Panel Beating	30		
	Carpenter General	16		27
	Fitter Machinist	16	24	
Pass Rate		58%	66%	50%
Class I	Motor Mechanic	21	11	23
	Panel Beating	10	3	
	Lithographic Offset Machinist	6		
	Carpenter General	5		4
	Plumber General	4		
Pass Rate		41%	65%	40%

Source: TPAF Management, 2007

TPAF has also given license to 29 secondary-school based TVET centres to prepare their students for Class 3 trade test. The permission is only given to the TVET centres that have met the required entry qualification and minimum facilities and equipment standard.

TPAF has skills standards for each trade and these are reviewed every five years. To maintain competency the skills are benchmarked against qualifications in New Zealand and Australia.

Many industries recognise TPAF qualifications as an independent measure of practical skills for their industry. The trade tests are assessed by TPAF Trade Test Examiner who is independent of the testing centre and of the teaching institutions, which conducted the training at an approved site.

National Qualifications Framework

One of the most important tasks assigned to TPAF is the establishment of a national qualifications framework for technical and vocational skills. TPAF held a seminar on this subject in 2004, at which the NZ/NQA and the Australian Qualifications Authority made presentations to tailor-made the local NQF. The outcome of the meeting was a set of decisions to go forward with development of a national qualifications framework in Fiji after approval from all stakeholders, including the Ministry of Education.

Based on the New Zealand system a draft NQF was prepared. It would be initially implemented in five trade areas including construction and hospitality/tourism. A consulting firm from New Zealand has been contracted to help in this process.

A study on skills gap in Fiji by Asian Development Bank (ADB Report, 2006) reveals that TPAF is an excellent organisation for TVET in so far as the development of NQF and its implementation is concerned. It went to suggest that it was a model for the whole Pacific island nations. A SWOT analysis for TPAF indicated the following:

Strengths (S)

- The Act provides the legal basis for its activities.
- ▶ The levy scheme provides an assured source of funding.
- ▶ TPAF has established close industry-based and backed-training relationship with industries and their personnel.
- It provides flexibility in different modes of training and is able to make quick turnaround in offering programs.
- The location of TPAF main centres promotes access.
- ▶ TPAF is becoming a strong, recognised brand in technical and middle management training.

The weaknesses (W) include

- Inability to provide training for all industrial sectors;
- Lack of targeted marketing of courses and of TPAF generally;
- Lack of physical resources such as workshops;
- Need to strengthen the customer service culture;
- Dependence on levy;
- ▶ Weak research and development 99 percent of the training is reactive rather than based on labour market forecasting; and
- Greater staff turnover in PQTD, ITTD and PPD.

Some of the opportunities (O) identified include

- ▶ The need for skilled workers in critical industries such as tourism, construction and ICT;
- The pressing need to develop the managerial cadre in Fiji;
- Expand apprenticeship training into tourism and other sectors; and
- Possibilities to generate revenue through extension services.

Threats (T)

- Increase in competition in training industry offering similar programs, e.g. FIT short courses:
- Slowing of economic growth (sugar industry, garments);
- Perception among some in industry that they do not get value for money paid into levy
 risk of withdrawal of levy; and
- High migration of skilled workers and professionals

Presentation and Discussion of the Findings

Introduction

This chapter presents and discusses the findings that emerged from the data collected in this review. It is reiterated that the data collected was directed by the Terms of Reference provided the Interim Minister of Education, Science and Technology listed below. The other sections presented in the chapter include discussion on Acts, major responsibilities and the areas of duplications. It concludes with discussion of important implications for policy and practice.

Terms of reference

- To compare the FIT Act, TPAF Act and the Education Act with the view to identifying areas of duplications in terms of responsibilities. It would be relevant to the understanding of the Taskforce for FIT and TPAF to provide an interpretation of their roles and core responsibilities according to their Acts and what links they have with the other institutions such as USP and MoE.
- 2. Make recommendations to the review of the three Acts to clearly demarcate responsibilities of the three institutions in terms of training activities. FIT and TPAF may need to identify areas they are currently working with that lie outside of their Act.
- Consider the robustness of the Acts in terms of meeting the country's demands for skill training and requirements.
- Define and assess the target audience for each institution.
- Ensure that the two institutions have greater accountability to the responsible Minister for meeting their core functions within the resources provided by government.
- 6. Review the current structure of accountability with the two institutions coming under two different Ministers and Ministries.
- 7. Review the training programmes of FIT and TPAF and identify areas of duplications in training.
- 8. Make recommendations on how to streamline the training activities in the two institutions to better show their core functions in terms of meeting the skilled manpower of the industries and determine future of excess programmes.
- 9. Look at major pathways, in connection with the National Qualifications Framework, for learning in the area of TVET between the schools, FIT, TPAF and the USP.
- 1.0 Assess the fees structure of FIT and TPAF and make recommendations on how learning can be more affordable to the public.
- Make any other recommendations to the Minister for Education for improving effectiveness and efficiency of FIT and TPAF and issues for future research and considerations.

The review of the functions of FIT and TPAF and the other providers of TVET has been a major concern of policy makers and policy-users as well as other stakeholders for a number of years. Perceiving the importance of such a review, the Board of TPAF wrote to then Minister for Labour, the Hon. Kenneth Zinck in 2004 requesting him to begin discussion on the issue with the Minister for Education.

On the same lines TPAF wrote a letter to FIT attaching a discussion paper. The paper was discussed in the FIT Council meeting. Subsequently the matter was discussed at both the FIT Council and the TPAF Board meetings. In light of the significance of the issue, the TPAF Board suggested that the matter be discussed at the ministerial level. After 2005, however, the Ministerial responsibility of TPAF changed from the Ministry of Labour, Industrial Relations and Productivity to the Ministry of Labour, Industrial Relations and Employment.

There was not any review of the functions of these two institutions and those of the other providers of TVET until the appointment of the Interim Minister of Education, Mr. Netani Sukanivalu in December 2006. Mandated by the Cabinet of the Fiji Government, he appointed a task force on 10 May 2007 to conduct a review of the core functions and the roles of FIT and TPAF. It was to be chaired by Associate Professor Akhila Nand Sharma, the then Head of the USP's School of Education. Mr. Eci Naisele, an Acting Senior Education Officer was seconded by the Ministry of Education as the secretary of the review exercise.

Presentation of Findings

The findings of the review exercise are presented in three tables. Table 4.1 compares the FIT, TPAF and Education Acts. The second table shows the major responsibilities in each Act and the third identifies the areas of duplication of courses and programs in these two institutions. In the third table, some justifications for duplication are provided. In particular, TPAF explains why it provides pre-service courses and programs that according to the Acts ought to be provided by FIT. TPAF argues that it has to offer such courses and programs because FIT is not able to cope with the increasing demands of the industries and the other employing agencies alone.

The findings presented in Tables 4.1, 4.2 and 4.3 are discussed in the second section of this chapter. However, it is important to mention here that FIT and TPAF operate under the specific Government Acts drawn for them. Each institute has a Board that sees that it is managed accordingly. In order to keep as up-to-date as possible, the draft FIT Bill of 2006 is used as its primary legislation. Subsequently, another paper entitled 'Vocational Education and Training – The Way Forward' was approved by the Interim Government Cabinet in August 2007 enabling the establishment of twenty quality TVET centres in various parts of Fiji.

The TPAF Act was initially set up as the Fiji National Training Act of 1973. It was amended by the Fiji National Training Amendment Act of 2002 that renamed it as the Training and Productivity Authority of Fiji Act. The major foci of this Act are to manage trade tests and apprenticeship scheme; provide training for industries; managing the levy grant scheme; be the National Productivity Organisation for Fiji; and establish systems that meet industry training needs.

As shown earlier (see page 61), the functions of TPAF was examined employing the SWOT analysis instrument. It was found that the strengths of, and the opportunities presented by, the functions of TPAF outweigh the limitations and threats that exist.

1.0 Comparison of Acts

Table 4.1: Comparison of FIT, TPAF and Education Acts

Important component of the Act	FIT	TPAF	EDUCATION
1. Controlling Authority	5 1 (e): Shall ensure that the Institute is managed in accordance with the statement of objectives and such other policies for technical and vocational education and training as the Board with the approval of the Minister may determine.	Section 9 Sub Section 2. The Authority shall be the national organization for technical and vocational training in the Fiji Islands	10 (1): The basic curricula in all registered and recognized schools shall be as laid down from time to time by the Permanent Secretary (PS). 16 1 (a): Any person desirous of establishing a school shall first apply in the prescribed manner and when approving such application the PS may impose such conditions as he thinks fit. 25 (d): Imposing conditions subject to which schools may be registered or recognized 25 (h): Imposing conditions subject to which certificates and licenses to teach may be issued, specifying the qualification required for certificated and licensed teachers and prohibiting a teacher holding any such certificate or license from teaching in any particular class, standard or form in any school or classification or type of school.
2. National Qualifications and Curricula	5 1 (j) Shall, either alone or jointly with another organization confer upon a person who has successfully completed a program or other qualifications as may be prescribed.	Section 9 – 1 (I): Develop the national qualifications framework and make provisions for the registration of such training courses or training providers of facilities or qualifications of such category as it shall direct, and make provision for the approval of such qualifications, courses, providers and facilities.	10 (1): The basic curricula in all registered and recognized schools shall be as laid down from time to time by the PS. 16 1 (a): Any person desirous of establishing a school shall first apply in the prescribed manner and when approving such application the PS may impose such conditions as he thinks fit. 25 (d): Imposing conditions subject to which schools may be registered or recognized 25 (h): Imposing conditions subject to which certificates and licenses to teach may be issued, specifying the qualification required for certificated and licensed teachers.
3. Confer certificates	5 1 (j) Shall, either alone or jointly with another organization confer upon a person who has	9 1 (m) to issue or cause to be issued to an apprentice on the satisfactory completion of his contract of apprenticeship, or to any person other than an apprentice on the	25 (e): Prescribe conditions of certificates of registration or recognition.

	successfully completed a	satisfactory completion of any course of	
	program or other		
	qualification as may be		
	prescribed. Minister may	as it shall decide,	
	make regulations, etc.		
	20 (1): The Minister may,		
	on the recommendation of		
	the Board, make		
	regulations in respect of:		
	(a) the administration of		
	the Institute; and (b) the		
	conferring of diplomas,		
	certificates and other		
	academic awards.		
3 Training	5 (m) shall provide facilities	9 (a) to provide, arrange for or regulate the	Again in Section 5 (f) may initiate and engage in
	and develop programs in		entrepreneurial activities with a view to the Institute
	respect of higher education		becoming more and more self-funding.
	generally, including	otherwise, to assist such persons or classes of	becoming more and more sen-runding.
	programs intended to lead	persons in connection with employment;	
	to qualification in specified	9 (g) on request, with the approval of the	
	professions and	Minister, to provide training in respect	
	occupations;	of persons outside the scope of a levy order	
	5 (f) may initiate and	on terms to be fixed by the Authority.	
	engage in entrepreneurial		
	activities with a view to the		
	Institute becoming more		
	and more self-funding;		

Table 4.2: Major Responsibilities in FIT and TPAF Acts

FIT Responsibilities	TPAF Responsibilities
(a) to facilitate the functioning of the Institute as an autonomous body; (b) to establish an administrative framework which is conducive to effective and efficient governance and, ultimately, financial independence of the Institute; and (c) to position the Institute strategically, to anticipate, plan for and meet the demands for education and training in a global economy driven by the changes in technology.	To provide, arrange for or regulate the appropriate training, of persons or classes of persons, whether by way of apprenticeship or otherwise, to assist such persons or classes of persons in connection with employment; TPAF provides training through NTPC departments. TPAF regulates apprenticeship training through NSAC. TPAF assists persons under apprenticeship to transfer contracts when being terminated due to close of business, Employer's inability to train etc. (a) To co-operate in, approve, or advise on any such arrangement made by any other person, including the Crown; In terms of Method A employers, TPAF co-operates and approves training plans, programs etc. and also makes arrangements for providing them with their training needs. For Method B employers, TPAF advises on their enquiries.
FIT is the major Academic training institution and is providing the qualifications. Some of the programs articulate into diplomas and degrees with arrangement with overseas providers. Board shall oversee this issue. The Structure of the FIT will be ultimately approved by the Board. The FIT Board has the functions defined. Almost all courses offered by FIT articulate into their own qualifications in	 (b) After consultation with such persons as it may consider desirable, to arrange for employment of such persons or classes of persons who are under training or who have completed appropriate training Apprenticeship arrangements are being undertaken. Attachments for on job training of students by various training departments being done through requests (c) To enter into any contract necessary to carry out its functions under this Act; Contracts with PINZ, TAFE, USC, SAI Global etc. to carry out training functions & consultancy functions are in place.

the form of either Trade certificates, Diplomas and higher diplomas. Some courses are recognized by NZ and Australian universities and students can attend them for the final one or two years for completion

- Section 5. (1) The Board shall have the general management and control of the Institute and for that purpose:
- (a) shall exercise a general supervision over the affairs of the Institute;
- (b) Shall have the custody, control and disposition of all property, funds, fees and investments of the Institute;
- (c) Shall strive to ensure that the Institute attains the highest standards of excellence in education, training and research;
- (d) Shall, from time to time, in respect of the Institute, prepare, for the approval of the Minister, a statement of objectives, including a corporate plan, and proposed funding for such objectives and plan;

- (d) To acquire, enjoy or otherwise dispose of or deal with any real and personal property for any purpose necessary to carry out its functions under this Act; Properties being purchased as well as equipment. Where purchase not possible and demands are there we provide services through hired facilities.
- (e) To advise on, and to disseminate information about training; information on training and training needs provided to interested stakeholders after surveys, industry visits, focus group meetings etc.
- (f) On request, with the approval of the Minister, to provide training in respect of persons outside the scope of a levy order on terms to be fixed by the Authority; Training offered to Department of Prisons, Military and Education and the general public.
- (g) To provide a consultancy service to employers and other persons; Consultancy services provided in 5S, QCs, ISO-QMS, GP, Benchmarking and FBEA. Productivity Measurement will be undertaken shortly.
- (h) To investigate and make recommendations, to such persons as it shall consider appropriate, relating to any matters connected with this Act;
- (i) To make grants or loans to persons providing such courses or other training facilities the Authority may approve; Advice given but no loans or grants given for the development of training facilities.
- (j) To assist and contribute towards the cost of training, and the promotion of training, of any person or class of persons; Assistance given by provision of grants, tool and travel allowances of apprentices and which is not based on the amount of levy paid by employers.
- (k) Develop the national qualifications framework and make provision for the registration of such training courses or training providers or facilities or qualifications of such category it shall direct, and make provision for the approval of such qualifications, courses, providers and facilities; Project Officers employed to oversee and facilitate the development of the NQF initially for vocational trades which are under apprenticeship. Government will need

- (e) Shall ensure that the Institute is managed in accordance with the statement of objectives and such other policies for technical and vocational education and training as the Board, with the approval of the Minister, may determine; (f) may initiate and engage in entrepreneurial activities with a view to the Institute becoming more and more self-funding; (g) may engage in such joint venture activities as will enable the Institute to improve its provision of facilities, including the provision of halls of residence, to students; (h) Shall, for the purposes of responsible, effective and efficient use of resources, ensure that systems are established for the coordination of activities of the Institute and for accountability; (i) shall, subject to the by-laws, conduct examinations; (j) Shall, either alone or jointly with another institution, confer upon a person who has successfully completed a program referred to in paragraph (m), such academic or other qualification as may be prescribed; (k) Shall, subject to the bylaws, if any, make such appointments of instructional staff and other employees on such terms and conditions as it may determine;
- (I) may award and administer bursaries

to decide as to where and which entity to place the NQF under.

- (I) To issue or cause to be issued to an apprentice on the satisfactory completion of his contract of apprenticeship, or to any person other than an apprentice on the satisfactory completion of any course of training, a certificate in such form and manner as it shall decide; Certificates issued for Trade Tests, apprenticeship, short and long training courses like the certificate of completion, certificate of attainment, and also joint certificates issued for workshops and seminars especially when programs run by APO or other partners.
- (m) To make loans to servants of the Authority for such purposes (other than housing) as it may approve; (Inserted by Act 25 of 1976, s. 2.)
 - TPAF staff advance facility is in place for computer or white goods or car loans and salary advance for pressing needs through approval of the DG
- (n) Generally do all such acts and things as are necessary or incidental to the discharge of its functions under this Act.

Board approves policies and corporate and business plans which are implemented. Most items in CP are addressed by the various departments which becomes their performance goals and KPIs are drawn from them.

1. The Authority shall be the national organisation for technical and vocational training in the Fiji Islands.

Because of the overlap of responsibilities between TVET Department of the Education and TPAF, this is yet to be realized.

2. The Authority shall be the National Productivity Organisation for the Fiji Islands and shall act

and scholarships whether tenable at the Institute or elsewhere on such terms and conditions as it may determine;

- (m) Shall provide facilities and develop programs in respect of higher education generally, including programs intended to lead to qualifications in specified professions and occupations;
- (n) May accept gifts and donations whether of property or otherwise and whether subject to any special trust or not for the purposes of the Institute;
- (o) shall provide pecuniary benefits for the employees of the Institute on their retirement, resignation, discharge or other termination of service or in the event of their sickness or injury, and for their dependents, and for that purpose shall effect policies of insurance, establish pension and provident funds or make such other provision as may be necessary to secure for such employees and their dependents any or all of the pecuniary benefits to which the provisions of this paragraph relate; and
- (p) Shall, subject to the provisions of this Act, do such other things as appear to the Board necessary or expedient for

and perform functions to promote the concept of productivity as a viable economic strategy.

TPAF conducts seminars, workshops and training courses in productivity related fields as well as promotes productivity throughout the nation. 5S, QC, Benchmarking, Productivity Measurement, GP Model companies, FBEA, ISO 9000 consultancy etc. are in place.

9B The functions of the National Training and Productivity Council are:

(a) To provide and arrange appropriate vocational education and training in connection with employment;

The PQTD, MEITD, EEETD, CITD, HTITD, MMITD provide a range of courses to cover every field of training for industries.

- (b) To advise and disseminate information on training;
 - Information on training is provided to all stakeholders via training news, web, newspapers and radio. Specific advice given to employers whenever requested.
- (c) To provide training to persons outside the scope of the levy order on terms and conditions determined by the Authority;

Training provided to Prison department, rehabilitation for prisoners, and school teachers for EIE programs.

- (d) To provide consultancy service to employers and other persons;
 - Consultancy services provided upon request from employers. Areas include ISO-QMS, 5S, QC, Benchmarking, Productivity Measurement, GP etc.
- (e) to issue certificates of competency registered within the National Qualifications

furthering the interests of the Institute.

Franchising programs to other secondary schools is also being undertaken.

Grants from the Fiji government and also from overseas aid agencies have been given to FIT.

(The FIT functions as seen are not very comprehensive and it is understood that the FIT is an institution that will only address academic training of industry as well as white collar personnel. It should intake students directly from secondary schools and from industry who may have already gained previously some form of qualification and or experience)

- (2) The Board may, after consultation with the Minister, but not otherwise:
 - (a) Create such departments within the Institute as the Board considers expedient;
 - (b) Determine fees to be paid in respect of programs and courses or otherwise; and
 - (c) Enter into agreements or arrangements on behalf of the Institute with other institutions

framework or other qualifications, Certificates of attainment, completion are currently being issued. Once NQF will be in place, the certificates will be issued based on accreditation.

Approved by the National Standards and Accreditation Council. 9D. The functions of the National Quality Awards Council are:

(a) To develop framework for the purposes of achieving sustainable organizational excellence:

FBEA framework in place since 1999 and organizations are utilizing this. EiE framework also in place.

(b) to develop and apply systems of national awards for the purposes of recognizing sustainable organizational excellence;

As per the Productivity Charter, 4 levels of recognition are under the FBEA with the President's Award being classified as world class. Government also began implementing the framework from 2006 as the Service Excellence awards.

(c) To develop and promote national productivity awareness on an annual basis;

Productivity Awareness campaign is held every year and activities of promotion are undertaken by the Productivity Promotion department to cover organizations, schools and the public.

(d) To establish productivity measurement, benchmarking and research facilities;

Currently being undertaken with Technical Expert assistance through APO funding from

of further education for the provision of instruction or the granting of degrees, diplomas, certificates and other academic awards.

- 3.0 FIT's role and functions under its act is very clear and its association with USP and the MOE is cordial and very cooperative for the purpose of training, education and research
- 4.0 FIT is doing exactly what is required under its Act. Section 5 (g) spells this out clear without limitation, either laterally or vertically.
- 5.0 FIT's audiences is not limited and including the apprentices from TPAF. It is simply a question of viability (self costed and profitable). It is accessible to all people both locally and abroad. But priority is to the local needs
- 6.0 FIT is guided by its Council's Functions under Section 5 (c), (c) (a), (g), of FIT act
- 7.0 FIT is accountable (in all aspects) to the Minister of Education as specified in the 1992 decree including the 1998

experts from NPC Malaysia as well as Australia.

(e) To organise national conventions, seminars workshops for the purpose of promoting organisational quality and productivity.

National convention on QC held annually, seminars and workshops being held as part of productivity promotion. TPAF also hosts international workshops for the government as part of its obligation for APO member countries.

9F The functions of the National Standards and Accreditation Council are-

- (a) To develop a National Qualifications Framework that complies with international standards; PINZ has been contracted to provide consultancy to establish the NQF
- (b) To develop, apply and carry out regular review of vocational competency standards relating to qualifications specified in the National Qualifications Framework; CBT and setting of standards for 3 trades completed and 5 more currently about to be completed. NQF Procedures and QA requirements being finalized through consultation with stakeholders.
- (c) To arrange for the accreditation and Registration of training providers and trainers and to approve regular review of such accreditation and registration; While the Grants section provides some accreditation currently, this will be part of NQF requirement in the future and which is being addressed by the consultants.
- (d) To administer and conduct national examinations and tests for trades and other vocational skills pertaining to qualifications specified in the National Qualifications

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- 8.0 FIT, USP and any other tertiary institutions to be responsible for setting up independent accrediting body for technician and degree level programmes
- 9.0 FIT act, clearly outlined that FIT is tasked to meet the country's demands for skill training and requirements under the functions of the Council, Section 5 (f) of the act

- Framework; National Trade tests have been conducted as per annual plans. Special tests are given to candidates who demand for recognition of their skills. These will be captured in the NQF in the future
- (e) To manage national apprenticeship and traineeship programs where such training programs apply; National Apprenticeship scheme is well managed and draft traineeship agreement is in place. This will be implemented from this year. With the establishment of the NQF, the issue of flexible and accessible qualification system for vocational training will be taken care of.
- (f) To generally coordinate accessible and flexible qualification systems, the standards of which are recognised internationally, to meet the national needs.

Table 4.3: Areas of Duplication of Programs of FIT, TPAF and Other Providers

Programmes	FIT	TPAF	Other Providers
Hospitality and Tourism Training	Certificate in Front Office (18 Weeks)	TPAF Equivalent TAFE NSW Statement of Attainment (SoA) in Hospitality Operations (Front Office & Reception Services) – (8 Weeks)	USP Equivalent- Nil
	Certificate in Housekeeping (18 Weeks)	TPAF Equivalent- Certificate of Attainment (CoA) in House keeping Services – Modules 1,2, 3 (12 Weeks)	USP-Nil
	FIT: Certificate in Dining Room Services (18 Weeks)	TPAF Equivalent- TAFE NSW Statement of Attainment (SoA) in Hospitality Operations (Food & Beverage) – (12 Weeks)	USP-Nil
	FIT- Certificate in Baking and Patisserie (36 Weeks)	TPAF Equivalent-Certificate of Attainment in Baking and Patisserie (36 Weeks)	USP-Nil
	FIT- Trade Certificate in Food & Beverage (3 Years – including 1½ years attachments)	TPAF Equivalent- Certificate of Attainment in Food & Beverage (36 Weeks)	USP-Nil
	FIT- Trade Certificate in Commercial Cookery (3 Years – including 1½ years attachment	TPAF Equivalent- TAFE NSW Certificate III in Hospitality (Commercial Cookery) – (24 Weeks) TAFE NSW Certificate IV in Hospitality Supervision (Cookery) – (20 Weeks) Certificate of Attainment in Commercial Cookery (36 Weeks);	USP-Nil

FIT- Certificate in Hospitality Operations 1 & 2 (11/2 Years – including 1/2 year attachment)	TPAF Equivalent- TAFE NSW Certificate III in Hospitality Operations (General)	USP-Nil
FIT Equivalent- Nil	TPAF- TAFE NSW Certificate IV in Hospitality Supervision (General or Cookery) – (18 Weeks)	USP -Nil
FIT- Diploma in Hotel Management 1 & 2 (1½ Years – including ½ year attachment)	TPAF Equivalent- TAFE NSW Advanced Diploma in Hospitality Management (20 Weeks)	USP-Nil
FIT Equivalent-Nil	TPAF- TAFE NSW Certificate III in Tourism Operations(Tour Wholesaling)– (18Weeks)	USP- Undergraduate Certificate in Tourism (1 Year);
FIT Equivalent-Nil	TPAF- TAFE NSW Certificate IV in Tourism Operations (General) – (18 Weeks)	USP- Undergraduate Certificate in Tourism (1 Year);
FIT Equivalent-Nil;	TPAF TAFE NSW Advanced Diploma in Tourism Management (18 Weeks)	USP- Undergraduate Diploma in Tourism (2 Years)
FIT-Nil	TPAF –Nil	USP-Undergraduate Bachelor Degree in Tourism Management (3 Years)

	FIT-Nil	TPAF –Nil	USP-Postgraduate Certificate in Tourism (20 Weeks)
	FIT-Nil	TPAF -Nil	USP - Postgraduate Diploma in Tourism (1 Year)
	FIT-Nil	TPAF -Nil	USP- Degree (Tourism) – (1 to 2 Years)
2. Electronics Technician Training Program	FIT- Electronics Technician Training Program Electrical Wireman's Stage 1, 2 & 3	TPAF Equivalent- TV and VCR Servicing) Certificate in Industrial Electronic Servicing; Certificate in Electrical Serviceman's Course; Certificate in Industrial Electronic Servicing	USP- Nil
Information Technology Training	Equivalent or near equivalent fit course-Diploma in business (applied computing). This course is mostly focusing on business aspects of it. the practical or technical aspect of it is missing'	TPAF- diploma of IT networking (TAFENSW franchise)	USP- Nil
	Equivalent or near equivalent FIT course- FIT offers short courses through Learn key (e-learning)	TPAF- short courses/ professional training	USP- Nil

Manufacturing Training	FIT-Nil	TPAF- Certificate in Specialized Machining (\$1,150)	USP -Nil
	FIT-Nil	TPAF- Certificate in Clothing Production – Home Economics & Vocational Teachers Program) (\$1,010)	USP- Certificate in Apparel & Textiles & B Ed (major)-secondary 5 Textiles modules.
	FIT-Nil	TPAF- Certificate in Contemporary Fashion	USP- Certificate in Apparel & Textiles & B Ed (major)-secondary 5 Textiles modules.
	FIT-Nil	TPAF- Certificate in Sewing Machine Mechanics; Advanced Diploma in Manufacturing Technology	USP-Nil
	FIT-OFFERRED	TPAF Short Courses- Fabric Screen Printing;	USP- Offered however together with other material technologies e.g. Leathercraft, pottery, sign writing, photography, art metal, plastics, Tie & Dye and Driftwood designs. This is a very general 100 level module as part of the Technology discipline Very specific and not mixed/ part of the content of a single module. Fabric textiles (what is it & the care of the item included) is part of the content

	FIT-Nil	TPAF- Leather-craft	USP-Nil
	FIT-Nil	TPAF- Pattern Making/ Grading	USP- Offered as Flat Pattern Designing (manual) and Advanced Pattern
			Designing (CAD- Accumark & PDS 2000). This included pattern Grading and a foundation for creative design development in Apparel Manufacturing.
PQTD - Productivity & Quality Training/ Commerce & Accounting Courses	FIT Equivalence- Certificate in Business (Accounting)	Certificate III in Financial Services (Accounting)- 1 Semester of 18 Weeks	USP Equivalence- Certificate in Business (Accounting)
	FIT Equivalence-None	TPAF- Certificate IV in Financial Services (Accounting-1 Semester of 18 Weeks	USP Equivalence- Diploma in Business (Accounting)
	FIT Equivalence- Diploma in Business (Accounting) - 4 Semesters	TPAF- 3 Diploma of Accounting-1 Semester of 18 Weeks	USP Equivalence- Diploma in Business (Accounting)

FIT Equivalence-None	TPAF- 4 Advanced Diploma of Accounting-1 Semester of 18 Weeks	USP Equivalence- Diploma in Business Accounting
FIT Equivalence-None	TPAF- Advanced Diploma of Quality Management-3 Semesters of 18 weeks	USP Equivalence- Certificate in Management studies
FIT Equivalence-None	TPAF- Certificate IV in Business Marketing- 1 Semester of 18 Weeks	USP Equivalence- Diploma in Business Marketing
FIT Equivalence-None	TPAF- Diploma of Business Marketing-2 Semester of 18 Weeks	USP Equivalence- Diploma in Business Marketing
FIT Equivalence-None	TPAF- Advanced Diploma of Business Marketing- 1Semester of 18 Weeks	USP Equivalence- Diploma in Business Marketing
FIT Equivalence-None	Industrial Engineering.	USP Equivalence-None

Discussion of the Findings

Introduction

This section discusses the three tables presented above. In doing so, it addresses the TOR of the review. As already stated, most informants to the review exercise have the familiar catchphrase for TVET. It is still perceived as the 'second best' option for students who do not succeed in the academic streams. This is undoubtedly true, but cannot really be changed until the wage gap between white-collar and blue-collar is reduced, a vigorous TVET education program is mounted and the commitment level of policy makers and other stakeholders is lifted.

This finds support in the 2000 Education Commission Report (Sharma 2000) that notes

Fiji's education system is so accustomed to academic education that strong parental pressure for academic credentials has made the TVET program a second-class option rather than a 'second chance' education. This can be explained in part by the difference in salary of blue collar workers compared to that for white collar workers. Until wages for blue collar workers are more attractive, the status of TVET will continue to be below that of an academic education.

Therefore, the Ministry of Education ought to review its education system and the respective Education Acts making vocational education an equally important component of the total learning system. Currently, vocational education only receives less than one percent of the total education budget. In order to improve vocational education, the Government and the other stakeholder commitment is vital.

To-date the Government has been mostly engaging foreign consultants and researchers to advise it on educational reforms and development. There is not any shortage of local consultants. Therefore, the Government must now employ local persons to advise on matters such as indigenous pedagogy and local knowledge systems.

Particular emphasis must be given on developing a more holistic education comprising formal, technical and vocational and citizenship education. Most informants to the review team stressed the important of educating people about the importance of technical and vocational education. According to them, not much success can be obtained in this direction unless all the stakeholders are ready to accept it and are fully committed to it. "We need to conduct a lot of advocacy for parents. NGO's can be used to advocate TVET to parents and students. There is need to empower women in our society so that they can act as change agents of TVET at all levels of the community" (Field Notes, Ministry of Health, 2007).

FIT, TPAF and Education Acts: As already mentioned, the FIT and TPAF Acts are Government legislations. These institutions as well as other providers of TVET and schools are established and governed by the Education Act. However, the FIT and TPAF Acts were developed separately and this has led to misunderstanding and duplication of activities and responsibilities. Initially, FIT was established to cater for post-secondary pre-service courses and programs and TPAF for in-service.

However, there is sufficient evidence to show that the relationship and coordination amongst the various providers of technical and vocational education is minimal, especially between FIT and TPAF. Hence, there is duplication of facilities, courses and programs resulting into unnecessary wastage of limited resources available for TVET. It is reinforced that FIT must concentrate on pre-service programs and TPAF on in-service and this can be facilitated well if there is only one overall national education and training organization for policy, coordination, quality assurance and monitoring. A College of TVET can fulfil this need by providing an overall leadership and management structure. It is reiterated that if and when the proposed Fiji National University is established, TVET could be one of its Colleges. It is stressed, however, that Fiji is not able to afford another university at the moment and the technical, vocational education and training needs at the degree and postgraduate levels can be met by the existing universities. What is really needed is the establishment of partnership relations among the tertiary institutions facilitating pathway

arrangements for cross-crediting courses and programs and transfer of students from one institution to another.

The proposed structural framework is essential to improve coordination amongst various modes of education such as academic, technical and vocational, and distance and flexible learning. It would also provide cost-effectiveness and internal efficiency measures, ensure quality, equity `and access, ensuring organizational and management effectiveness. This coordination can be established satisfactorily by the Education Act. In fact, there is no need for separate Acts for FIT and TPAF. These institutions should be established under the Education Act and managed by respective policies and regulations.

Besides its function under the old FNTC Act (1985) and the current TPAF's National Training and Productivity Council, TPAF has acquired two other roles on productivity under the National Quality Award Council and National Qualification and Standards under the National Standards and Accreditation Council. Its links to MOE and USP are through functions of the three councils on training, productivity and qualification standards framework. TPAF is the Asian Productivity Organisation on productivity in Fiji, for example, for Fiji Business Excellence Award, TPAF is the driving force. Vodafone won the national gold award for its excellent performance. Vodafone and Sheraton Fiji went further to win the international awards.

As mentioned earlier, FIT has developed out of proportion and perhaps may not be very clear about its responsibilities as given in the Act. Its relationship with MOE and USP is not cordial. There is need to construct clear pathways among these organizations. The Education Act must perform an umbrella function and oversee vocational education and training in all providers and at all levels – kindergarten, primary, secondary and post-secondary. Therefore, in demarcating responsibilities, FIT must concentrate on pre-service post-secondary TVET and TPAF on in-service training as well as productivity and qualification standards framework. The Education Act must oversee all modes of teaching and learning and the related processes.

It is important to stress that the contemporary demand for skills development is such that a doubling of the output of FIT would not meet the demand. Therefore, there is a need for more coordination between the two institutions. FIT, therefore, must concentrate on certificate and diploma level technical and vocational education and training in order to cope with the increasing skill demands of industries as well as the primary industry sector of the economy with particular emphasis on agriculture and related activities. As already mentioned there is no need for a separate Act for TPAF because its functions are not limited to training provision only. They include incentives for training, apprenticeship, trade testing, NQF and productivity promotion.

Robustness of the Acts in meeting the country's skill demands

Numerous submissions to the review team show that both FIT and TPAF are not satisfactorily following their core functions as provided for in their Acts and have been performing activities beyond their boundaries of operations. For example, TPAF provides pre-service programs in hospitality arguing that FIT was not able to meet the workforce demands of tourist industry alone. Moreover, these institutions have begun offering degree and post-degree studies programs. It is reiterated that they ought to concentrate on certificate and diploma level qualifications in technical and vocational education and training to meet the country's skill demands for the industrial sector including primary industries. To rationalize this there is a need for only one overall national training authority for policy, coordination, quality assurance and monitoring.

The findings also show that both FIT and TPAF mainly concentrate on developing industrial and professional skills and not on simple life-skills needed by those who do not qualify to enrol in these institutions. Therefore, a vast majority of rural and urban poor are either under-employed or join the ranks of unemployed. Perhaps, the proposed quality TVET centres would address this problem to some extent, however, the respective Education Act and the policies and regulations of FIT and TPAF ought to reflect this clearly.

Gender participation

According to the submissions from Ministry of Health, women are under-represented in technical vocational education and training programs. The Ministry argued that women can play a significant role in promoting TVET especially life-skills for self-employment at home and community levels. Moreover, through TVET, women can also facilitate values-based education that include a culture of peace, citizenship and environmentally sound sustainable development. The current FIT, TPAF and Education Acts do not cater for these potentials of TVET. As stressed elsewhere in the report, TVET has the potential to provide values education that is greatly needed to address Fiji's present social, economic and political turbulence.

The proportion of girls in technical vocational education and training courses ranges from 20-40 percent of total enrolments at the institution level. However, almost all women in these institutions are enrolled in traditional home-oriented training courses such as sewing, cooking, food technology, housekeeping and the like. Girls tend to be either under-enrolled in TVET courses or pigeonholed into traditional female occupations especially home economics and office technology. In terms of equity, boys continue to be over represented in the enrolment statistics in those years for which data are available. The only exception is in vocational centres in tourist areas where hospitality-related courses are in demand there is a high representation of female students. In rural areas, however, low levels of female enrolment prevail and one of the main reasons for this is the lack of hostel facilities for girls.

TPAF does not even keep statistics on its trainees by sex, and reportedly almost all are males. As shown in Chapter 3, about 36 percent of FIT students are female and are mainly in commerce (about 63 percent of the total), general studies (about 58 percent) and hotel and tourism (about 72 percent).

At FIT the students have the preference to take whatever programme they wish. As such, more female students still opt to take up feminine type subjects like hospitality and commerce. Other masculine trade courses have more male students. A small number of female students have now begun to do courses such as construction, electrical, plumbing and welding fabrication (FIT Management, 2007).

TPAF have no strict rules in gender enrolment and students are welcomed in whatever courses they want to pursue. However, perception of education and TVET in Fiji is such that construction is for boys and catering and tailoring are for girls (TPAF Management, 2007).

Mismatch between skill supply and demand

The inputs to the review suggest that there is mismatch of skills from supply and demand. For example, a number of graduates from FIT and other TVET providers with carpentry and joinery or plumbing certificates seek clerical jobs at civil service. It is suggested that FIT and other private TVET providers must provide simple courses in project planning and management so that the graduate are able to get involved in basic wage employment or self-employment. In this regard, it is suggested that the secondary schools should realign their programs with FIT so that there is a clear pathway that the students can follow.

Most submissions to the review indicate that vocational education must begin from primary schools. For example, the pathway that exists from the Champagnant Technical School to the Monfort Boys Town is a very good model for Fiji's education system to adopt. It is pointed out that the graduates from the latter are competent trades-persons and are usefully engaged in wage or self-employment. Similar pathways from primary through secondary to FIT and TPAF would be a progressive way forward in skilling and up-skilling the country's workforce.

It is further suggested that the Fiji Government through legislation must financially support local TVET providers rather than foreign institutes that concentrate on foreign skills training. The review reveals that through FNPF funding some foreign-owned and managed TVET providers attracted a lot of 'best' qualified students who upon graduation immigrate to the providers' home country.

Australia Pacific Technical College (APTC) has launched its programs with its head office in Suva for the South Pacific. Their programs are stationed at different schools and

institutions. For example, Construction is based at TPAF and Automotive Engineering at ASCO Motors. In the long run, it may provide some healthy competition amongst training providers thus lifting the quality of skills training in the country. However, the retention of skilled human resources within the country is more important than competition. It is suggested that the Government must support TVET in local committee-managed schools because they are better equipped and managed than the Government managed schools.

Both FIT and TPAF are offering tertiary level courses in collaboration with offshore universities. The TPAF Act states that TPAF may enter into contract with other tertiary institutions to carry out its functions. In a meeting with USP for instance, TPAF has stressed that it would be prepared to franchise USP programs using the modalities that would enable it to take programs to the workplace especially for those who are already employed. This move to offshore universities is argued on the grounds that the local universities do not provide such programs and courses. There is a need, therefore, to establish better working relations among the tertiary institutions thus avoiding duplication of resources. This report suggests the setting up of higher education commission that could set clear guidelines for the establishment of institutes for tertiary education.

Mismatch between theory and practice

The courses at FIT have more theory than practical work compared to TPAF short industry focus programs. It is believed that the FIT programs have been shortened at the expense of the quality. The courses at FIT must be industry-driven and focus on competency ratings. For example, LTA accepts FIT students on work attachment and some even are taken on permanent employment on graduation. However, LTA felt that the course structure of FIT and the delivery mode of automotive engineering need to improve to cater for road transport. LTA would like to have students with both theory skills and knowledge and not merely a diploma with theoretical examination passes.

There is a mismatch of supply and demand resulting in oversupply of graduates for irrelevant trades which are the not in demand. FIT doesn't meet the industry needs, for example, Electronic Fuel Injection engine needs to be introduced in the courses with the Standard four- strokes/carburetion-type engines. Most of its engines are still imperial-type. There are too many 'dummy-type practical' work done during training at FIT where students are there for the purpose of completing the practical hours required to fulfil the practical component of the course. Students are given short tests at LTA but apparently they do not know most of the answers to the practical questions. This is a reflection of guided-study to memorise the answers, pass examinations and to qualify for credentials. In this regards, TPAF provides specific training for up-skilling employees from the industrial sector.

In the early years of its inception, FIT used to have 14 weeks for the trade certificate program. For the same program now it has reduced the duration of the program to eight weeks thus producing more graduates but on the expense of the quality of training especially on its on-the-job training component. Therefore, firms such as ASCO motors and Carpenters motors have to provide further in-house training in order to bring their tradepersons to the required international level. It was pointed out by the industries, in particular, that both FIT and TPAF need to improve the quality of their facilities and equipment.

It is pleasing to learn, however, that TPAF has moved away from training on "dead" engines and now provides training on "running" engines. A process control laboratory has been developed in order to provide actual conditions as prevalent in a factory environment. Given the increasing need for industrial automation, training development of mechatronics, it is now establishing a mechatronics training laboratory and has been doing extensive training in Programmable Logic Controls and automation systems. This is an impressive step forward because TPAF was set up to focus on the industrial sector that includes agricultural mechanization.

Franchise program and Mobile Training Unit

Two most innovative aspects of the FIT programs are its franchise program for secondary schools and the mobile training unit for electrical and electronic engineering. The concept of franchising trade training is sound in terms of moving trade training down from tertiary to secondary level where a large number of secondary school leavers could receive a 'second chance' education. However, the FIT plays very little role in quality assurance of the training

in the franchise courses apart from initial screening of the institutions, provision of a standard curriculum and the administration of the final examination. It provides very little teaching materials and equipment, if any, to the secondary schools that are taking the program and hardly provides any professional development programs for instructors or teachers.

On a positive note, the FIT franchise program has given students the opportunity for 'second chance' education otherwise they would have dropped out of the secondary school education. The program has raised the status of the vocational programs in secondary schools.

Franchise program fees have been recently raised to \$180 per stage from the initial \$80.00. Schools complained that although the fee has increased the service has remained the same. TPAF provides the Class 3 Trade Test for a trade certificate qualification to vocational students that have completed the two years vocational training at \$65.00 per stage. The schools expressed similar sentiments for TPAF.

The proposed 20 quality centres

The proposed 20 quality vocational centres in various parts of Fiji are a progressive move and will address some of the concerns of the FIT franchise program. However, before establishing these centres it is important to improve infrastructure, staffing qualification and industry experience, readiness of the stakeholders and the availability of resources, equipment and facilities. The notion of quality assurance is an essential process in any organisation. In the FIT corporate plan there are provisions for offshore program assessment. To what extent this aspect of the Act is followed was not clear.

Apprenticeship

According to the TPAF Act, one of the important aspects of its work is apprenticeship. Apprenticeship scheme has been reintroduced recently by the Government after a lapse of almost ten years. This process is very important exercise to improve the quality of trade skills of the workers. The major complain in this regard is the mismatch between the theory work that is provided by FIT and the practical work that is obtained from TPAF. Therefore, FIT and TPAF must work closely to improve the quality of revived apprenticeship scheme. However, most industries do not have apprenticeship scheme. To improve the quality of trade skills in our industries and other sectors of the economy it is important to pay greater emphasis to apprenticeship and it must be operated in partnership including FIT, TPAF, industries and the Government. Competency Based Training (CBT) operating within the national qualification framework must be stressed at all levels in TVET programs. According to ASCO Motors, "What the students need is financial management training. Sometimes TPAF Training is somewhat irrelevant and some of its instructors do not have relevant industry experience but use the internet to get information on the topics required"(Interview Input, ASCO Motor Traders, 2007). Nabua Garment School is operated by TPAF as an inservice training program. Such in-service training specifically for the formal sector is equally important.

In summary, it is stressed that both the institutes are attempting to do their best. However, they are not robust enough in producing suitably qualified human resources required for the industries and other sectors of the economy. In particular, they have made very little effort in preparing skilled workforce for our primary industry especially the agricultural sector. This is largely owing to their uncontrolled growth, unnecessary duplication of responsibilities, poor linkage with the industries and poor coordination amongst the different providers of TVFT

TPAF, however, has opted to use their trainers as the examiners for skills test. According to the Director General of TPAF all the technical trainers are former apprentices and have worked at least eight years in industry (Interview Input, 2007). TPAF programs are designed such that 70 percent of the course is workshop based. This is a progressive step forward and it is anticipated that similar initiative will be taken by all TVET providers.

TVET Management

The MOE administers TVET in secondary schools and vocational centres. Private education providers do not have any proper monitoring system by the MOE to keep track of the standard of their programs. FIT and TPAF have their individual legislative Acts that make them semi-autonomous under different Government ministries: the MOE and the Ministry of Labour, Industrious Relation and Employment respectively. They are managed by their respective Boards that operate within the confines of their Acts.

FIT and MOE are coordinated through their vertical linkages, that is, secondary school graduates move up to tertiary studies through franchise arrangement. However, TPAF seems to operate largely on its own without much relationship with school-based training programs. It is reiterated that there is need for one overall controlling authority for policy, coordination, monitoring and quality assurance.

At present there is not any national policy for all TVET providers to follow. They feature only marginally in national development plans. The absence of this national policy makes it difficult for the providers of TVET to develop coherently.

According to TPAF, its strategy plan has direction on social values. Mission, vision and values are decided by the Board with particular emphasis on 'servant-leadership' or 'customer-orientation'. TPAF conducts regular training surveys based on the needs of the industrial sector. Based on the feedback, it discusses its annual plan, marketing strategy and budgeting with the Fiji Employers Federation and the Fiji Chamber of Commerce before making decisions. It gathers all the necessary information at the beginning of the year and conduct SWOT analysis as well. TPAF argues that its management and decision-making processes are the product of a wide participation.

National Qualification Framework (NQF)

Consistent with the TPAF Act, it has prepared a draft NQF. However, TPAF has been criticized for being the 'player' as well as the 'referee' and has vested interest in NQF because it is seen as the financier, provider and assessor of training. Submissions to the review exercise show that the responsibility of NQF ought to be given to an independent or neutral organisation under the Education Act. It must be staffed by suitably qualified and experienced persons.

The review team endorses the view that NQF in TVET is a progressive way forward for relative skills development and productivity. It would provide the appropriate 'benchmark' for all skills training to all TVET providers and would facilitate mobility of students from one provider to another without losing any credits obtained. It is suggested that NQF must be the product of wide consultation process comprising TVET partners such as the industries, Government, schools, tertiary institutions, other training providers and other members of the stakeholder community.

Reconcile supply and demand of skills

There is hardly any mechanism or system in place to channel resources for training in trade of greatest demand. The construction industry, for example, had acute shortage of appropriately skilled trade-persons in the construction industry in 2002 and requests were made to the TVET providers to fulfil this need. However, skills training did not take place until 2005/2006 at a time when construction activity had slowed down considerably. There is need to create a 'training market-type organization' that prioritize training areas and look for funding. The training providers then could bid for such the training projects and those that could provide quality training be awarded funding for the project.

Research-based data

In order to convince policy-makers and aid donors, there is a need for a reliable data bank. There is shortage of reliable qualitative data on the management and implementation process of TVET in Fiji. Important data about the functions and the scale of the operations of the TVET system are in short supply. There is hardly any research-based data on important areas of TVET such as its teaching-learning process, emigration of skilled workers, where-about of the graduates, facilities and equipment, skills supply and demand, demand areas for vocational education, recruitment, selection and professional development of staff, assessment and evaluation process and the duplication of courses, programs and resources. Moreover, action research should be an ongoing part of the TVET

management and implementation processes. This will facilitate ongoing improvement of the TVET processes. Furthermore, reliable research-based data on trends and issues are essential for monitoring progress and developing policies and priorities.

Multi-skilling

Experience and 'multi-skilling' are key factors in meeting the skills demands. Emigration removes a significant proportion of workers who have acquired a reasonable level of expertise. This results in a small pool of people who might progress to management positions. Not all are suitable and therefore the need to bring expatriates becomes necessary. Expatriates also have the advantage of a wider base of experience. For example, a chef in a Fiji resort may only draw on his/her experiences in a small number of resorts in Fiji. An Australian chef could bring in a wealth of international experience. It is therefore essential for FIT and TPAF and other providers to provide multi-skills to our students. In particular, emphasis must be placed on life-skills as already mentioned elsewhere in this report.

Curriculum relevance

The curriculum should be developed in consultation with the industries, the Governments and other stakeholders so that it meets the needs of society as well as various sectors of the economy. Such a curriculum would also enable students to take up education pathways that would increase their employable opportunities. In many cases there is a mismatch between curriculum content and the needs of employers. The present curriculum of FIT and vocational secondary school-based centres tends to be rather theoretical and not competency-based. Curriculum is a 'living entity' and therefore its development ought to be a continuous process. For example, the FIT franchise program on office technology includes shorthand, a skill that is no longer in demand in most businesses. The curriculum also needs to be diversified to relate better to the vast natural resources Fiji is blessed with. In addition, enterprise education should be integrated into all the subjects of the school curriculum.

There is little evidence that suggests long term training programs that provide better employable opportunities. A number of employers stated that they primarily want people who had basic skills and knowledge and they can provide the necessary on-the-job training.

Quality as inputs

The submissions also show that the main concern in TVET programs and courses is quality that includes standards, instructors and equipment.

Standards: It was discovered that 'benchmarks' are not set for most programs and therefore it is difficult to judge their 'quality'. Certainly requirements for skills testing exist, but these do not appear to be adhered to vigorously. A pass is possible even when available equipment and tools are rudimentary. Industry skill standards which specify the capability required to perform in a given job provide 'benchmarks' against which qualifications can be granted but these are not followed strictly.

Where assessment is valid and reliable, industry can feel confident that possession of a qualification means a particular level of performance. Industry standards, however, do not yet exist in Fiji. Nonetheless, two key observations are that many vocational centres lack essential equipment and the instructors lack the necessary technical expertise. Employers generally do not value the qualifications but largely rely on their own judgement about the employee's performance.

Consequently, qualifications are not equated with a set level of performance requiring employers to make their own assessment. Current systems such as franchising by FIT and skill tests by TPAF assist but do not guarantee quality. Both approaches judge quality from examination results making the teaching learning process exam-oriented. An overall authority to manage TVET and NQF, discussed earlier, would address the 'quality' issues considerably.

According to TPAF, however, the drop in pass percentages of higher level exams is to be expected because they become more difficult to pass. It is also important to note that trade tests are designed for those who have not had the opportunity to undertake formal training. Many candidates come straight from the field without any training to sit the examinations.

Thus output quality of TPAF training cannot be measured in terms of overall trade test passes. It is therefore important that the candidates receive formal training before they sit the trade tests. This would facilitate the integration of theory and practice necessary for conceptualizing relevant issues and problems.

Instructors: TVET is taught in MOE-affiliated institutions by teachers with formal education credentials. Most of these instructors lack work experience in industries which is not a requirement for teaching jobs in secondary schools. Substantial numbers of vocational teachers are unqualified in the areas in which they are teaching, including about 42 percent in office technology, 44 percent in automotive engineering and 59 percent in carpentry and joinery (Field Notes, 2007)

Moreover, these teachers have very little opportunity for regular up-skilling and industrial attachment. In contrast, apprenticeship completion is a basic requirement for TPAF instructors. A trade certificate from FIT is required for instructors in the vocational centres, but FIT leaves practical training to work attachments which does not guarantee skills acquisition. Employers mentioned that trade certificates from FIT does not guarantee practical skills. At FIT only a minority of teachers have industrial experience in their own fields. Teaching staff have little opportunity for regular up-skilling and industrial attachments. FIT has used its own graduates to teach at the institution without intervening work experience (Field Notes, 2007).

Equipment: Many secondary school TVET institutions are poorly equipped. The vast majority of fixed equipment in secondary school workshops, such as in carpentry, is not in working order. The staff complained that they had long since requested for necessary spare parts from the MOE, but none were forthcoming (Field Notes, 2007). It is difficult to understand how the trainees can pass FIT or TPAF tests without the required practical skills which, in turn, depend on operable equipment. There is a need to set up a review team to inspect the equipment, resources and facilities in all TVET centres and recommend the resources that are required and the courses and programs can be offered. Student, facilities, equipment and staff ratios are also important information before programs can be introduced. The 'clustering concepts' suggested earlier is valuable in this regard.

Quality as outputs

Very little information is available on the standards achieved by graduates at the end of their training, particularly in secondary schools and FIT. TPAF statistics show that the success rate in Level 3 exams ranged from 66-75 percent but decreased thereafter to 50-66 percent for Level 2 and 40-65 percent for Level 1.

The public sector appears to be under-financing TVET. Allocations are insufficient to provide an even distribution of minimum basic equipment in secondary schools. Both the FIT and TPAF find it difficult to keep their equipment up-to-date with developments in the industry. The Government subsidies for FIT have decreased substantially while enrolments have increased. As a result, the average number of students per instructor has reached 30 which is rather large for skills training courses.

The three main TVET institutions - MOE, TPAF and FIT - mobilise substantial amounts of private resources. A half the income of FIT comes from student fees. TPAF does not receive government subsidy. It finances its programs through the training levy and trainee fees. The committee-managed secondary schools enjoy substantial support from parents and the school community.

Main justifications for duplication of courses and programs

This section concentrates mainly on Table 3. It provides the justifications for the duplication of courses and programs. The most prevalent programs that are duplicated in the two institutions lie in the field of tourism and hospitality. It is clear from the submissions that both institutions are working hard to meet the labour force requirement and demand from the hotel and tourism industry. Despite this duplication, both institutions are not able to meet the industry needs.

Since most of the training duplication falls in TPAF, the following justifications were given by TPAF for taking pre-service courses. It is recalled that under its Act, TPAF is to offer inservice and not pre-service courses and programs.

A. Name of Programme: Hospitality and Tourism

 FIT course - Certificate in Front Office (18 Weeks); TPAF Equivalent TAFE NSW-Statement of Attainment (SOA) in Hospitality Operations (Front Office & Reception Services) – (8 Weeks)

According to TPAF officials, this qualification provides an up-skilling option for its primary market, the in-service hospitality front office and reception and reservation workers. This SOA not only allows the in-service trainees to up-skill in their field of work but also obtain qualifications in the remaining units of competency as laid down in the TAFE NSW Certificate II or III Hospitality Operations programs.

This qualification is offered through different modes of delivery depending on the needs of respective industries. It may be offered in-house, or on-the-job at the TPAF Training Centre. TPAF has also introduced distance and home-study modes of delivery and these provide workers from outer islands and remote locations the opportunity to learn more about their respective trades. Through these modes, however, the theoretical components of the courses are mainly taught. Therefore, ways should be found to cater for the practical side of the courses.

It also caters for the pre-service markets that are in need of some basic training in order to gain employment. These are also people who aspire to work at the front desk and/or reservation section and wish to gain some basic training in a shorter period of time as compared to the FIT options.

The programme is also suitable for those workers who do not meet the minimum qualifications requirements (MQR) of FIT and USP. Such persons include unemployed persons who had most probably exited from high school early, have started a family or perhaps cannot gain entry to a job owing to the lack of knowledge and skills. Additionally, some of these people wish to continue with their studies by enrolling in TPAF programs. This is consistent with the rationale of TVET that emphasizes learning as a lifelong learning process.

This program will provide current front office and reception operational level staff the opportunity to further develop their skills and knowledge and progress to supervisory or higher level positions within the hierarchy. Moreover, supervisory modules are integrated to facilitate a more holistic and relevant assessment. Moreover, the program allows workers to learn at their own pace. According to TPAF, his duplication is necessary to meet the industry needs.

2. FIT- Certificate in Housekeeping (18 Weeks); TPAF Equivalent- Certificate of Attainment (COA) in House Keeping Services – Modules 1,2, 3 (12 Weeks)

This TPAF qualification provides an up-skilling option for hospitality and housekeeping workers. It is offered through different modes of delivery depending on the needs of employers and employees. The program may be offered either in-house or on-the-job at the TPAF Training Centres. The COA also caters for the pre-service students who need basic training for employability. These are also people aspiring to work in the 'accommodation sector'. They wish to gain some form of basic training in a shorter period of time as compared to the FIT option. The program itself is delivered in phases whereby learners are expected to complete a module at a time. They are given a certain time span to complete some relevant housekeeping practical hours at their own workplaces prior to the commencement of the next module in the same program.

This program is suitable for workers or trainees who do not meet the MQR of FIT and USP. Such persons include unemployed persons who had exited from high school early and are not able to obtain employment owing to lack of knowledge and skills in this area. Both the employers and the employees need this program. FIT cannot fulfil the demand alone and hence its duplication becomes necessary.

3. FIT: Certificate in Dining Room Services (18 Weeks); TPAF Equivalent- TAFE NSW Statement of Attainment (SOA) in Hospitality Operations (Food & Beverage) – (12 Weeks)

This qualification provides an up-skilling option for in-service hospitality and food and beverage workers. It not only allows the in-service trainees to up-skill in this field but also allows a pathway to complete the qualification by doing the remaining units of competency in the TAFE NSW Certificate II or III in Hospitality Operations. This qualification is offered through different modes of delivery depending on the needs of industry. It is offered inhouse and on-the-job at the TPAF Training Centre. TPAF has also introduced distance and home-study components and these allow workers from outer islands and remote locations the opportunity to continue learning at their own pace. The program is rather theoretical and lacks the practical component.

This program also caters for the pre-service students who need of basic training in order to obtain employment. These are also people aspiring to work in a dining room and bar environment. They wish to gain some basic training in a short period of time as compared to the FIT option. It is also suitable for those employees who do not meet the MQR of FIT and USP.

This qualification provides an up-skilling option for its primary market, the in-service hospitality and food and beverage workers. This SOA not only allows the in-service trainees to up-skill in this field of work but also a pathway to complete the remaining units of competency in the TAFE NSW Certificate II or III in Hospitality Operations. In addition, this qualification is offered through different modes of delivery depending on the needs of industry and the students. It may be offered in-house or on-the-job at the TPAF Training Centre.

4. FIT- Certificate in Baking and Patisserie (36 Weeks) that is TPAF Equivalent-Certificate of Attainment in Baking and Patisserie (36 Weeks)

This local qualification provides an up-skilling option for its primary market, the in-service hospitality pastry workers. Moreover, this qualification is offered through different modes of delivery depending on the needs of industry and the students. It may be offered in-house or on-the-job at the TPAF Training Centre. It is also offered employing both these modes of delivery. The COA also caters for the pre-service markets that are in need of some basic training in order to obtain employment. These are also people aspiring to work in the baking and pastry sections. The students wish to gain some form of basic training in a short period of time as compared to the FIT option. The program is delivered in phases and the learners are expected to complete a module at a time.

5. FIT- Trade Certificate in Food and Beverage (3 Years – including 1½ years attachments); and is TPAF Equivalent of Certificate of Attainment in Food and Beverage (36 Weeks)

This qualification provides an up-skilling option for its primary market, the in-service restaurant and bar workers. It is offered through different modes of delivery depending on the needs of industry and the students. It may be offered in-house or on-the-job at the TPAF Training Centre. It is also offered employing both these modes of delivery. The CoA also caters for the pre-service markets that are in need of some basic training in order to obtain employment. These are also people aspiring to work in the food and beverage section. They wish to gain some form of basic training in a short period of time as compared to the FIT option. The program is delivered in phases whereby learners are expected complete a module at a time.

The program is suitable for workers or trainees who do not meet the MQR of FIT and USP. Such persons include unemployed persons who exited from high school early or cannot get employment owing to a lack of knowledge and skills in this area.

6. FIT - Trade Certificate in Commercial Cookery (3 Years – including 1½ years work attachment) and is TPAF Equivalent- TAFE NSW Certificate III in Hospitality (Commercial Cookery) – (24 Weeks) TAFE NSW Certificate IV in Hospitality Supervision (Cookery) – (20 Weeks) Certificate of Attainment in Commercial Cookery (36 Weeks);

According to TPAF, this qualification provides an up-skilling option for its primary market and the in-service hospitality - food and kitchen workers. This qualification is offered through different modes of delivery depending on the needs of industry and the time available to students. It may be offered in-house or on-the-job at the TPAF Training Centre. It is also offered employing both these modes of delivery.

The COA also caters for the pre-service students that are in need of some basic training in order to get employment. These people also aspire to work in the food and kitchen section and wish to gain some form of basic training in a short period of time as compared to the FIT option. The program is delivered in phases and learners are expected complete a module at a time. It is also suitable for those workers who do not meet the MQR of FIT and USP. Such persons include unemployed persons who had probably exited from high school early or cannot enter the job market owing to the lack of knowledge and skills in this area.

Owing to the very high demand for cooks and chefs, this program supplements the Trade Certificate in Cookery from FIT that cannot meet the demands the industry or those lost through emigration.

7. FIT- Certificate in Hospitality Operations 1 & 2 (1½ Years – including ½ year attachment) and is TPAF Equivalent- TAFE NSW Certificate III in Hospitality Operations (General)

TPAF offers a supplementary multi-skilling program in hospitality to meet skill shortages in this area at the operational level. This is referred to Tables 21 and 22 of the Fiji Tourism Development Plan to the year 2016. This program comprises 80 percent practical and 20 percent theory components. Students enrolled in this program are introduced to most commonly used systems like Micros Fidelio (larger properties) and Room Master (smaller properties). Moreover, students have access to internet and a library which allows them to carry on with individual learning and research access. The TPAF Centre at Namaka, Nadi also has the necessary practical work areas to facilitate this type of learning. It has a training restaurant, kitchen, hotel room, laundry, storeroom, reception desk, computer labs with internet access and hotel training programs.

8. FIT- Diploma in Hotel Management 1 & 2 (1½ Years – including ½ year work attachment) and is TAPF Equivalent- TAFE NSW Advanced Diploma in Hospitality Management (20 Weeks)

To meet the demands set out in the Fiji Tourism Development Plan to the year 2016, TPAF offers a supplementary multi-skilling program in hotel management to meet with industry's skill shortages in area of supervisory and middle managers.

This internationally recognised qualification provides a pathway for higher studies including degree programs. There is already an existing arrangement with all Australian universities with a Cross Credit option of one to two years for students who have completed the Advanced Diploma program. This program is especially designed to cater for in-service students requiring managerial training and is a pathway to supervisory or operational level work in the industry.

9. TPAF- TAFE NSW Certificate III in Tourism Operations (Tour Wholesaling)–(18 Weeks) and is USP Equivalent-Undergraduate Certificate in Tourism (1 Year)

To meet the demands set out in the Fiji Tourism Development Plan to the year 2016, TPAF offers a supplementary program in a multi-skilling in tourist operation especially tour wholesaling to meet with the industry's demand. This program introduces learners to tour wholesaling and general tourism business practices including retail or wholesale travel agency, tour operation, consultancy and the like. The program facilitates a hands-on approach to learning as well as workplace practice. It is not a course as offered by USP and enrols students who do not necessary qualify to take USP courses.

TPAF- TAFE NSW Certificate IV in Tourism Operations (General) – (18 Weeks) and is USP Equivalent - Undergraduate Certificate in Tourism (1 Year);

To meet the demands set out in the Fiji Tourism Development Plan to the year 2016, TPAF offers a supplementary program in a multi-skilling major field of tourist operations to meet the respective industry needs. This program enrols students without any proper qualification in the area of tourism. It also develops on the prior lessons that learners of general tourism business practices such as retail or wholesale travel agency and tour operation have. It allows learners a hands-on approach to learning as well as workplace practice at the supervisory level. It is not a course as offered by USP and enrols students who do not necessary qualify to take USP courses.

11. TPAF NSW Advanced Diploma in Tourism Management (18 Weeks) and is USP Equivalent - Undergraduate Diploma in Tourism (2 Years)

To meet the demands set out in the Fiji Tourism Development Plan to the year 2016, TPAF offers a supplementary program in a multi-skilling in the major field of tourist management. This program develops on the prior lessons that learners of general tourism business practices such as retail or wholesale travel agency and tour operations. It allows learners a hands-on approach to learning as well as workplace practice at the supervisory level. The program is not a requirement for the completion of general courses like those at USP's department of tourism. This program comprises 80 percent practical and 20 percent theory components. Students enrolled in this program are introduced to most commonly used systems like Micros Fidelio (larger properties) and Room Master (smaller properties). Moreover, students have access to internet and a library which allows them to carry on with individual learning and research access. The TPAF Centre at Namaka, Nadi also has the necessary practical work areas to facilitate this type of learning. It has a training restaurant, kitchen, hotel room, laundry, storeroom, reception desk, computer labs with internet access and hotel training programs.

In this program there is a specific focus on middle management level modules especially in the areas of management and accounting for tourism businesses, and the learners also get the opportunity to learn how to develop and implement a tourism business plan. A combination of knowledge and skills in operational modules and supervisory modules are integrated to allow a more holistic and relevant assessment.

TAFE NSW updates the syllabus documents of its franchised courses to TPAF every semester to ensure currency of content. Locally qualified and experienced industry persons deliver these programs to the learners contextualizing concepts such as tour consultancies to address the local needs.

This internationally recognised qualification provides a pathway for higher studies including degree programs. There is already an existing arrangement with Australian universities with a cross credit option of one to two years for students to complete the Advanced Diploma in Tourism Management, which is the pinnacle of this TAFE NSW pathway.

B. Name of Program: Electrical and Electronics

 FIT- Electronics Technician Training Program - Electrical Wireman's Stage 1, 2 & 3 and is TPAF Equivalent - TV and VCR Servicing, Certificate in Industrial Electronic Servicing, Certificate in Electrical Serviceman's Course and Certificate in Industrial Electronic Servicing.

According to TPAF, these programs have been designed in consultation with industry and practical sessions are industry-based. For these courses FIT enrols most of its students from the workplace or the industry and not many are graduates from secondary schools. TPAF that is tasked to train the workforce enrols students from the industry as well as those secondary school leavers do not wish to study at FIT. The demand for the TPAF programs is greater than that of FIT. As mentioned earlier, electrical and electronics courses are duplicated both at pre-service and in-service levels.

C. Name of Programme: Information Technology Training

1. TPAF- Diploma in IT networking (TAFE NSW franchise) and is equivalent or near equivalent FIT - Diploma in Business (applied computing)

The Diploma in IT networking offered by TPAF is equivalent to the Diploma in Business of FIT. Both these courses are offered to pre-service and in-service students and mostly focus on business aspects of IT. The program offered by TPAF specializes in networking and was developed in Australia in consultation with the industry. It is based on technology which is current such as wireless technology. The graduates of the program are absorbed in the workforce easily. Moreover, this qualification is recognized internationally. Therefore, TPAF provides opportunity to students to get this overseas qualification locally at a cheaper cost.

D. Name of Programme: Manufacturing Type Training

1. TPAF- Certificate in Clothing Production – for Home Economics and Vocational Education Teachers and is USP Equivalent to Certificate in Apparel and Textiles

The certificate in clothing production offered by TPAF is an in-service program for teachers in the relevant subject area. It is offered on the request of the Ministry of Education to upskilling home economics vocational education teachers. The course is conducted at TPAF Training Centres in Nabua and Salala Place, Lautoka during the school term `holidays until it is completed. The duration of the course is 200 hours offered and can be completed in two years. It is suitable for teachers who do not have experience in the TCF industry. The five modules taken in this course is covered in the USP certificate and degree programs, however, the Ministry of Education has requested for this up-skilling course because it is not happy with the work of these qualified teachers in schools. There is duplication here and it can be avoided by mutual discussion amongst the partners (USP, TPAF and MOE) involved.

2. TPAF- Certificate in Contemporary Fashion that is USP Equivalent - Certificate and Degree in Apparel and Textiles

The certificate in contemporary fashion is offered by TPAF to mature students who have more confidence in obtaining training. It is offered at TPAF Nabua and Salala Place and Namaka Primary School venues as evening and weekend classes. This program is provided to up-skill workers who need to learn and improve fashion designing, pattern making and pattern grading and caters pre-service and in-service students. The CAD component is also offered at TPAF. The program covers three of the five design and textiles modules offered by USP.

3. TPAF- Pattern Making/Grading that is USP Equivalent - Offered as Flat Pattern Design (manual) and Advanced Pattern Design

Both USP and TPAF offer programs relating to designing with emphasis on CAD - Accumark and PDS 2000. These programs included pattern grading and a foundation for creative design development in apparel manufacturing. Pattern making and design development are addressed separately so that each area is thoroughly covered either manually or in computer aided design system. Both these institutions use gerber pattern design systems. TPAF agues that it need to offer pattern making and grading (Manually & CAD) because it has the expertise and the experience compared to USP. TPAF and USP must rationalize these programs to avoid unnecessary duplication. It is also important to note that these institutions offer these programs both at pre-service and in-service levels.

E. Name of Programme: Commerce, Accounting and Finance

 Certificate III in Financial Services (Accounting)- 1 Semester of 18 Weeks and is FIT Equivalence- Certificate in Business (Accounting). (TPAF- three Diploma of Accounting- 1 Semester of 18 Weeks; FIT Equivalence- Diploma in Business (Accounting) - 4 Semesters. TPAF- Advanced Diploma of Accounting - 1 Semester of 18 Weeks)

According to TPAF, students in the Accounting courses are industry-based implying that all students are in employment. The classes are scheduled in the evenings and weekends to cater for this group of students. TPAF stresses that no other institution in Fiji provides structured face to face classes at this magnitude for the working students. The TAFE Certificate III and IV are pathways to the Diploma and Advanced Diploma of Accounting courses. The Certificate III and IV are also specialized programs that target the clerical level staff. Upon completion, students can get into the clerical level employment as well progress to the diploma level. The contents are purely in the Australian context i.e. the Australian Taxation and Corporations Laws are part of the course. Completion of the Advanced Diploma of Accounting allows students to become provisional members of FIA and NIA (Australia). The completion of the course also allows students accreditation into numerous Australian universities where exemptions of one to one and half years in the Accounting Degree program can be achieved. The qualification is designed to reflect the role of employees working in accounting. The program is franchise to TAFE NSW. USP and FIT also offer similar courses. The former offers both at pre-service and in-service levels. In the case of FIT and TPAF this is not clear. There is a need for these institutions (USP, FIT and TPAF) to rationalize their programs, avoid publication and establish pathway relations facilitating cross credit arrangements.

Conclusion

In brief, it is reiterated that there is a need for a well-coordinated authority to manage all the TVET programs including those at FIT, TPAF and USP. Vocational education in agriculture is exceedingly important and must be perceived as a core subject in all TVET institutions. The proposed restructuring of TVET program (see Figure 1) would provide an overall administration and management structure for policy-making, coordination, quality assurance and monitoring of technical and vocational education in the country with particular reference to FIT, TPAF, primary and secondary schools, and other private providers including USP and UOF. The proposed restructuring would also give the Government of Fiji the opportunity to revisit the Education Act and the policies and regulations that govern primary. secondary and tertiary institutions. There is need for this rationalization to improve coordination amongst various modes of education such as academic, technical and vocational, non-formal and informal education, and distance and flexible learning. This initiative would provide cost-effectiveness and internal efficiency, ensure quality, equity and access, promote organizational and management effectiveness and an education system that is the key player in the national socio-economic and political development. It would also place technical and vocational education in a broader perspective making it an important component of the total learning system.

The Way Forward for TVET in Fiji: Recommendation for Policy and Practice

Introduction

This chapter discusses briefly the important findings of the review exercise and then goes on to recommend ways in which technical and vocational education may be taken forward successfully. As already mentioned, particular reference is made to the functions of FIT and TPAF. This review, as mentioned earlier, was commissioned by the Minister of Education with a set of well articulated terms of reference.

It is recalled that the research methodology adopted in this review took a phenomenological perspective meaning that we attempted to understand TVET and the functions of FIT, TPAF and other providers from the viewpoints of the research respondents and the documents that were made available. In this perspective, a more 'dialogic' strategy was taken to collect data. In this way, we were able to collect information that represents the views of a diverse section of the relevant stakeholder community. It was possible to draw policy-makers, policy-users, employers, private sector, students and self-employed persons into TVET policy development and management. The two institutions, namely, FIT and TPAF provided valuable submissions based on the 'terms of reference' and their appropriate documents. This information was useful in formulating the recommendations that are provided in the second section of this chapter.

The University of the South Pacific (USP) and the University of Fiji (UOF) also provided valuable information especially as regards to the establishment of the proposed Fiji National University (FNU). The review findings clearly indicate that the establishment of the third university is not a priority consideration in the present economic and political climate of the country. The discussion on proposed FNU, however, enabled us to locate TVET especially FIT and TPAF in a 'bigger picture' emphasizing the potential it has for the overall social, economic and political development. Recommendations to this regard are presented in the following sections of this chapter.

It is reiterated that technical vocational education and training in Fiji has suffered from the perception of it being a 'second class option' for those who are 'pushed outs' from more academic education streams. In recent decades, however, this perception has been challenged. This is mainly because of the changing character of work and its impact on social and economic development. The world of work is now becoming more technologically-based and diverse thus reducing employment opportunities of unskilled workers. Therefore, the 'spotlight' now is on technical and vocational education that is the key player in 'life-skilling' and 'semi- skilling' primary and secondary school students and 'up-skilling' and 'multi-skilling' industry and other workplace employees.

As already mentioned, technical and vocational education can provide both the link with productive work and motivation for life-long learning and training. If organized well, it can contribute to sustainable development, education for all, knowledge society and citizenship. This is reinforced by UNESCO (in Prospects, vol. XXXV, no3, September 2005: 270) in the following words:

Often considered as a second-class education compared to the mainstream academic branch, TVET is increasingly seen as the master key to poverty alleviation and social cohesion and a chance for countries to jump on the bandwagon of development and globalization.

As regards to the potential technical and vocational education has in development, it is stressed that unless the rationale and benefits of TVET are clearly understood and placed in the 'centre-point' of education policy and practice. Not much success in this front can be achieved with the present 'half-hearted' commitment on the part of the National Government and other stakeholders. In particular, TVET funding provision must be improved and regular 'empowerment programs' must be conducted for all stakeholders, especially the policy-makers and policy-users. Such programs are necessary because 'productivity' is 'people oriented' and depends on effective human resources and reward systems put in place together by a quadrant forum, comprising representatives from the respective sections of the government, employers, trade unions and training institutions.

Discussion of the key Findings

- 1. Fiji's education system is highly academic-oriented. Strong parental pressure for academic credentials, therefore, has made the TVET program a 'second-class' option rather than an important component of the life-long learning process. This can be explained in part by the difference in salary of 'blue collar' workers when compared to that of 'white collar' employees. Until wages for blue collar workers are more attractive, the status of TVET will continue to be seen below that of academic education.
- 2. The findings of the review exercise, however, show that TVET is now receiving some attention as an important partner in the overall educational, social and economical development. At the personal and institutional levels, nevertheless, there is much to be desired. It was revealed from the findings that the Ministry of Education maintains very little contact with the industries and the informal sector, such as farmers, and develops its programs in isolation from the labour market. On the other hand, FIT and TPAF have employer representation on their Boards and through their industrial advisory committees they receive feedback on the relevance of their programs. Through this close relationship, TPAF checks its productivity enhancement. This close relationship also facilitates student workplace attachment which is an integral part of FIT, TPAF and MOE programs. A study by Sharma (2000) records that the workplace attachment of the TVET program of the MOE is poorly organized and the students do not receive any useful on-the-job training. In the case of FIT and TAPF, this seems satisfactorily facilitated. There is, nonetheless, need for more information on the monitoring of the on-the-job training.
- 3. One of the key functions of TVET initiative is to increase productivity in all sectors of the economy. To achieve this, it is necessary to prepare well-skilled, motivated and ethically sound people. The workplaces should create a healthy organisational culture and climate for workers to release their potential, adopt 'work smart philosophy' and develop themes such as capacity building, initiative-taking, evolutionary planning and vision-building.
- 4. Both these institutions have not paid much attention to the rural, island and informal sectors. This report suggests the establishment of TVET centres in various areas of the country enabling all the sectors of the economy and people to benefit from technical and vocational initiatives. It is pleasing to note that the Government has already established quality TVET centres at RKS and Naiwaicoba. However, this initiative should be revisited and a more demand and context-based courses be offered. This can be made possible by wider consultation with the local stakeholder communities and institutions. Furthermore, FIT and TPAF should be involved at the policy, planning, implementation, assessment phases and supervision phases of these centres.
- 5. Clearly the lack of relevance of some of the TVET courses and programs, readiness of stakeholders, unavailability of appropriate resources and reliable research-based data are the major obstacles in the successful management and implementation of technical and vocational programs. It is strongly recommended that these 4Rs (relevance, resources, readiness and research) need to be addressed at FIT, TPAF and other TVET providers. And this can be done effectively by empowerment programs including workshops for stakeholders such as program coordinators, students and their parents. It is also important to prepare female coordinators together with their male counterparts. These programs would boost the work ethics of the employees, employers and the policy makers.
- 6. It was found that there is lack of functional labour market information. Thus it is difficult to provide input to the training on the nature of skill shortages in the economy. Such information is also not available for the primary industry such as farming, fishery, lumber, mining and building industries. Moreover, up-to-date information on where about of the FIT and TPAF graduates is not readily available. It is important for the two institutions to conduct 'tracer studies' so that future needs of the skilled labour force, with sound work ethics, can be prepared. Both FIT and TPAF should create functional research units in their institutions with appropriately qualified personnel.

- The study found that the technical and vocational programs are constrained by lack of both human and material resources. The ADB study (2007: 65) found that at FIT only a minority of teachers have industrial experience in their teaching areas. Moreover, the teachers have little opportunity for regular up grading of their skills through industrial attachments. The study goes on to record that FIT had employed its own graduates to teach at the institution without intervening work experience. It was learnt that technical and vocational resources such as suitable equipment are thinly distributed to about 60 secondary school-based TVET centres. Using the 'clustering' principle', it is suggested that the resources be collected and supplied to the proposed 20 technical and vocational centres. Similar sentiments are expressed for technical and vocational teachers and managers. The secondary schools should concentrate on the vocational courses of the school curriculum so that they can prepare more informed job seekers with good work ethics including themes, such as 'work smart', quality work cycles and people driven productivity. These prevocational market oriented courses would enable primary and secondary school students to discover their potential and then develop it as their learning process unfolds. It is recommended that pre-service and in-service programs in these centres be managed both by FIT and TPAF respectively.
- 8. The Acts of FIT and TPAF indicate that the main aim of their programs is to provide knowledge and skills to students so that they are productive in their jobs, either in wage employment or self employment. The mismatch between knowledge and skills acquired and those available in the labour market means wastage of resources besides leaving the graduates underutilized. This mismatch yields unemployment and other related social evils. The unemployment owing to the mismatch is not felt much owing to the emigration of a significant portion of skilled workforce. However, research studies are necessary so that correct information is fed into the planning process of the future needs of these institutions. This need can be met by these institutions themselves.
- 9. According to ADB study (2007: 73) the quality of technical vocational education and training "remains a problem in most rural areas where training facilities are poorly equipped, under-financed and the expertise of teaching staff is inadequate". As mentioned earlier, the rationalization of the technical vocational education and training centres would ease these problems considerably.
- 10. It is also obvious from the substantial data collected that technical and vocation education programs and the functions of FIT and TPAF in particular cannot be improved in isolation. They need to be located in the "bigger picture" of education. It is recommended that attempts must be made to bring TVET as an important component of the total learning system and any form of 'dualism' or 'streaming' in education must be stopped. The Fiji Island Education Commission Report 2000 developed this idea for primary and secondary education. This report suggests that TVET must begin at class one level, as a life-skill training package. And as students move up the education ladder they begin to discover their potential, specialize in the skill of their interest and make it their vocation be it 'self' or 'wage' employment. It is, therefore, recommended that we revisit our education system destroying any form of 'dualism' or 'streaming' and discrimination that exist between academic and vocational education. Education should be geared to provide intellectual development, vocational preparation and citizenship training. These purposes of education operate in unison and not as separate entities. It is also stressed that technical vocational education and training has the potential to provide 'values education', work ethics, capacity building, person making and the like that are under-subscribed in our education system. On the role of TVET in values education, Quisumbing (2005: 300) emphasizes:

Quality TVET needs a teaching/learning approach that does not stop at knowledge and information nor at developing skills and competence, but proceeds to understanding and gaining insights that educates the heart and the emotions and develops the ability to choose freely and to value, to make decisions and to translate knowledge and values into action. Values

education is a necessary component of the holistic work education and citizenship education".

- 11. To a large extent, the present initiatives in technical and vocational education concentrate on industrial-type employment and training for wage employment leaving a vast section of the community unattended especially those in the primary sector such as farming, fisheries and the like. It is suggested that FIT, TPAF and other providers extend the horizon of their curricula a little further than just providing knowledge and skills for employability in industrial type employment. Further, it is recommended that they establish pathway-relations with primary and secondary schools and their communities and assist them in their technical and vocational education. The present FIT franchise program in secondary schools is unsatisfactory and need attention especially as regards to the supply of resources and teaching support. They must also provide professional staff development and retraining programs to the school-based staff.
- 12. FIT, TPAF, MOE and other TVET providers must also meet the challenges posed by the social, political and economic changes and the demands of global relativity. Some important social changes are the increasing urban population and the diminishing rural population and the substantial emigration of skilled labour including educational professions. According to 2007 census 51 percent of the population now lives in urban areas. The TVET providers as well as MOE pay little attention to the urban poor especially the children and youths in the squatter settlements. FIT and TPAF must initiate new initiatives in technical and vocational education to cater for this large somewhat neglected section of the population.
- 13. The necessity to be competitive in the local and export markets, FIT and TPAF as well as other providers especially the proposed technical and vocational centres must expand and diversify their curricula. Their courses and programs must fully exploit the potential presented by the service industry and this warrants more flexibility and broader-based learning and skill preparation. These are fundamental requirements of technical vocational education and training if it is to contribute effectively to national development and the challenges of the global world. Therefore, greater emphasis must be paid to TVET throughout the education systems especially in the primary and secondary schooling and the community at the grass-root level. TVET must become a priority in schools and their communities together with its academic counterparts. The World Bank survey (2006: xii) identifies several job categories where many young people of diverse social and economic backgrounds may finds employment and these include farmer, teacher, housekeeper/home-duties, shopkeeper/market vendor. carpenter, fisherman/fisherwoman, security officer, nurse, mechanic, chainsaw operator and timber miller. Similar categories are suggested for our primary and secondary schools in the Fiji Islands Education Commission Report 2000 (see Chapter 9). It is suggested that the proposed TVET centres include these employment categories in their curricula based on the local needs.
- 14. It is stressed that curricula must be well oriented and up-to-date. As ADB survey (2007) employers complain that the present curricula of FIT and the secondary school-based TVET program are fairly theoretical and not practical. Thus, it is difficult to say the extent to which planned competencies are achieved. For example, office technology part of curriculum in the franchise program includes shorthand, a skill that is hardly in demand in most business firms. The curriculum updating is needed.
- 15. Furthermore, the most important criterion for successful implementation of TVET is quality. The main purpose of their programs is to provide relevant knowledge, skills and competencies for employability. Quality is a function of inputs, processes and outputs (ADB survey, 2007: 57). According to this survey quality is determined by:
 - ▶ Existence of employer-ratified standards:
 - Clear and attainable objectives;
 - Adequately prepared students on entry;
 - Trained instructors;

- Appropriate training content with definition of associated learning outcomes;
- Availability of tools, equipment and supplies;
- ▶ Assessment of performance against training objectives and standards using both formative and summative techniques; and
- Strong management of the training process.
- 16. It was pleasing to note that TPAF has prepared the first draft of TVET national qualification framework (NQF). It is stressed that NQF has the potential to establish standards and processes for quality control in FIT, and TPAF as well as register and accredit other TVET providers. As articulated by ADB survey (2000) NQF
 - Motivates students to continue their education and training by establishing specific, clear steps to upgrade their qualifications;
 - Leads to cost-effective training by focusing on outcomes;
 - Provides level playing field for tech-voc providers to complete for limited public funds:
 - ▶ Stresses on the competencies acquired and not where the qualifications have been received;
 - ▶ Can also promote equity by recognizing prior learning and skills acquisition from any recognized tech-voc provider; and
 - ▶ Can also promote job mobility and hence increase labour market efficiency.

It is increasingly important, therefore, to formalise NQF for all TVET providers by making such a provision in the respective Acts.

- 17. Leadership has been another area of concern in most TVET providers especially in secondary schools. The heads and teachers or instructors of TVET institutions must both be competent administrators and professionals. There is clearly a need for training in TVET leadership both at pre-appointment and after-appointment levels. It is important for those involved in TVET to build and share a common sense of vision and expectations. The quality of teacher/instructors is a key to providing quality TVET courses and programs. As mentioned earlier, this has been a concern. It is important therefore to improve teacher/ instructor performance and this to some extent can be done by strengthening programs for pre-service and in-service training. Furthermore, there is a need to identify and monitor key performance areas as part of teacher evaluation. It is also important to introduce merit-based selection and compensation.
- 18. FIT and TPAF have their individual legislative Acts that make them semiautonomous and were placed under different ministries: the MOE and MOL respectively. The MOE manages TVET directly in secondary schools and vocational centres. The private providers do not have any proper monitoring procedures and the MOE has very little control on them especially in regards to their curricula and their implementation processes. They are, however, registered under the relevant Education Act. Through its franchise program, FIT assists TVET in secondary schools and enrols secondary school graduates in its pre-service courses. It was found, however, that there is very little coordination between MOE and FIT. On the other hand, TPAF largely operates on its own without much relationship with secondary school-based TVET and it does not receive much support from MOE especially in to regards to facilities and management. There is little if any direct relationship between FIT and TPAF mainly in areas of planning, curriculum and pedagogy. Thus there is duplication of facilities, courses and programs such as hospitality, commerce, electrical and information technology. It is suggested that there must be an overall national training authority for policy, coordination, quality assurance and monitoring. As mentioned above, NQF would assist in solving this problem considerably.
- 19. It is reiterated that the proposed establishment [if and when] of the Fiji National University (FNU) would provide an overall administration and management structure for policy-making, coordination, quality assurance and monitoring of TVET in the country with particular reference to FIT, TPAF, primary and secondary schools and other private providers. There is also a need for the Government to revisit the Education Act and the policies and regulations that govern primary, secondary and

tertiary institutions including FIT and TPAF. The rationalization of these institutions is necessary to improve coordination amongst various modes of education such as academic, technical and vocational, and distance and flexible learning. It would provide means for cost-effectiveness and internal efficiency, ensure quality, equity access and promote management effectiveness and an education system that is the key player in the national socio-economic and political development. It would also place TVET in a broader perspective making it an important component of the total learning system. If and when the proposed is established it should comprise four colleges, namely, teacher education, agriculture, medicine, and TVET.

RECOMMENDATIONS FOR POLICY AND PRACTICE

- 1.0. That TVET be regarded as the 'master key' of social, economic and political development because it has the potential to transform the world of work and the economy, alleviate poverty, save the environment, promote sustainable development and improve the quality of living.
 - 1.1 To promote this philosophy, the relevant sections of the Government and the key stakeholders such as TVET providers need to develop appropriate education and empowerment programs for policy makers, schools, parents and other members of the school community. This readiness phase warrants full commitment as well as resource-support.
 - 1.2 While maintaining control over all the phases of education and training process, the above mentioned advocates must establish the organizational climate and culture in which the TVET learning process can develop with the respect and vitality it deserves in the overall social, economic and political development. TVET must gradually become the norm of the school system.
- 2.0 That a functional TVET structure be established and FIT, TPAF and other providers be located in it. In other words, there must be an overall national TVET organizing authority for policy, planning, management, implementation, assessment and supervision. Figure 1 shows the suggested structure that comprises TVET Council, National TVET Board and the key TVET providers. The membership composition and functions of the Council and Board are also shown however these are to be further developed by the policy makers in partnership with the key stakeholders. In particular, the National Authority should also be responsible for activities such as quality assurance, national qualification framework, accreditation, funding and staff development. The proposed budget for restructuring of TVET is provided in (Appendix 9.0).
- 3.0 That a ⁵Higher Education Commission be established that assumes the responsibility of drawing the tertiary education charter, acts and policies for different sections of education including TVET. The Commission must review the existing Education Act and present a more precise and concise tertiary education charter, act, policy and regulations for more holistic and comprehensive education system. The Commission should work in collaboration with the proposed National TVET Council so that a more cohesive TVET program can be established beginning from pre-school through to tertiary education.
- 4.0 That if and when the proposed Fiji National University is established, FIT, TPAF and other providers be located in the College of TVET of the University. As mentioned earlier, TVET will then be managed by the University and will receive the respect it deserves.
- 5.0 That both FIT and TPAF discontinue their degree and post graduate programs and these be taken from the University of the South Pacific and the University of Fiji. When the Fiji National University is established then it could take these programs as well. FIT and TPAF should continue to provide certificate and diploma programs

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⁵ It is pleasing to note that a Higher Education Commission has already been established recently.

and arrangements should be made with USP and UOF for cross-crediting these towards degree programs. It is also important to establish better collaborative relationship among USP, UOF, FIT and TPAF. This would facilitate mobility of students from one institution to another within the cross credit provisions of each institution.

- 6.0 That the Government of Fiji provides subsidies to TVET institutions, however, they should also generates additional funds through student fees, consultancy, research, services and levies.
- 7.0 That FIT must concentrate on pre-service TVET courses and programs and TPAF in-service as stipulated in their respective Acts.
 - 7.1 That for cost-effectiveness and internal efficiency unnecessary duplication of courses and programs be avoided. For example, pre-service hospitality, commerce, electrical and information technology are offered by both institutions. These must be identified under pre-service and in-service and then offered by the respective institutions.
 - 7.2 That TPAF must concentrate on short term courses, workshops and seminars focusing on specific job skills needed by the various sections of the economy. These education and training sessions ought to focus on job training, job improvement with particular reference to emerging innovations and technologies, on-the-job training and job creation stressing on themes such capacity building, constructivism, sustainability, work ethics and research.
- 8.0 That the Acts of FIT and TPAF be revisited and a more precise and concise policies and regulations be developed in consultation with the relevant stakeholders especially the industry. These must be consistent with the Education Act so that there is a 'fine line' of linkage among the different components of the total learning system of an individual, that is, from pre-school, primary and secondary through to tertiary education and employment.
- 9.0 That TPAF and FIT courses and programs must address the demands of the country's skill training requirements however they must also be proactive to enable employees to cope with the changing work environment. They must address the needs for 'wage' as well as 'self' employment. It is important to stress that the target audiences of TVET programs range from children to adults and workers from the primary, secondary to tertiary sectors of the economy.
- 10.0 That the present FIT franchise program in secondary schools be upgraded especially in regards to the supply of resources and teaching support. It must also provide professional staff development and retraining programs to the school-based and centre-based staff.
- 11.0 That TVET centres be established in selected urban and rural areas and on islands
 - 11.1 .That the courses in these centres are to be coordinated collaboratively by FIT and TPAF performing their respective pre-service and in-service functions
 - 11.2 .That these centres be responsible for TVET programs in primary and secondary schools in their respective areas.
 - 11.3 That these centres must include the following work categories in their curriculum farmer, teacher, housekeeper/domestic duties, shopkeeper/market vendor, carpenter, fishermen/fisherwomen, security officer, nurse, mechanic, chainsaw operator and timber miller.
- 12.0 That the National TVET Board appoints an independent committee to establish and manage the National Qualification Framework (NQF) that has bench-marks for academic standards and quality for all TVET courses and programs. However, the respective institutions are to set their own assessment and evaluation procedures within the guidelines provided in the NQF. It is also recommended that in the initial stages NQF be housed, financed and managed by TPAF. The proposed budget for

- the establishment, implementation and institutionalisation of NQF is provided in Appendix 9.0.
- 13.0 That FIT and TPAF pay greater attention to the rural, island and informal sectors so that people benefit from TVET initiatives.
- 14.0 That FIT and TPAF organise empowerment programs including workshops for relevant stakeholders to address issues of relevance and readiness. It is also important to prepare female coordinators together with their male counterparts.
- 15.0 That owing to the considerable mismatch between knowledge and skills acquired and those available in the labour market both FIT and TPAF must institute research studies to obtain correct information for future planning process. There is a need for on-going research in these institutions.
- 16.0 That the education system be revisited and any form dualism or streaming and discrimination that exist between academic and vocational education and training be eliminated.
- 17.0 That TVET institutions as well as MOE pay greater attention to the urban poor especially the children and youths in the squatter settlements. FIT and TPAF must initiate new initiatives in TVET to cater for these somewhat neglected section of the population.
- 18.0 That TVET program heads and teachers or instructors must both be competent administrators and professionals. There is clearly a need for training in TVET leadership both at pre-appointment and after-appointment levels. Both FIT and TPAF must provide programs for pre-service and in-service training for the members of their staff. Furthermore, there is a need to identify and monitor key performance areas as part of teacher evaluation. It is also important to introduce merit-based selection and compensation.
- 19.0 That a genuine relationship be established amongst FIT, TPAF and other TVET providers mainly in areas of planning, curriculum and pedagogy. With team play, they would be able to avoid unnecessary duplication of facilities, courses and programs and provide a more realistic vocational education and training to the diverse TVET clients. It is expected that the proposed National Coordinating Authority would facilitate this relationship.

Concluding remarks

Fiji's technical vocational education and training programs are still trapped in an educational, social and economical framework of inequality. This is consistent with the majority of technical and vocational education initiatives in other developing countries. It is stressed that as long as academic education credentials predominate as the most important prerequisite for the job market, TVET has little chance of making any significant impression on educational development. Given the present economic and political benefits and privileges accrued through academic qualifications, TVET may continue to exist as the 'second best option' rather than a significant portion of the life-long learning process. This view impedes the successful implementation of TVET programs including those at FIT and TPAF.

In the recent years, however, this perception has been contested. This is mainly because our education system is not comprehensive enough to provide students with opportunities to obtain the competencies for life-skills, semi-job skills and multi-job skills as well as work ethics needed in the dynamically complex and technologically-based vocations. Many of these competencies are important to promote sustainable development, life-long learning and training, education for all, knowledge society and citizenship. Therefore, TVET must become an equally important component of our pre-school, primary, secondary and tertiary education as the Fiji Islands Education Commission 2000 suggests. Such preparation from an early stage would undoubtedly improve the overall functioning of FIT, TPAF and other TVET providers.

There is sufficient evidence to show that the relationship and collaboration amongst the various providers of TVET is minimal. Hence, there is duplication of facilities, equipment, resources, courses and programs resulting into unnecessary waste of limited resources available. It is reinforced that FIT should concentrate mainly on pre-service programs and TPAF on in-service and this can be facilitated well if there is only one overall national coordinating authority for policy, coordination, quality assurance and monitoring. It was felt that the proposed National Coordinating Authority would be able to fulfil this need by providing an overall leadership and management structure. Such structural framework is essential to improve coordination amongst various modes of education such as academic, technical and vocational, and distance and flexible learning. It will also provide cost-effectiveness and internal efficiency, ensure quality, equity and access and promote management effectiveness.

Whatever policy and practice changes are adopted for TVET, the following comments seem pertinent because TVET institutions, like others, cannot be operated in isolation:

Recognising that the vast majority of the worldwide labour force, including knowledge workers, require technical and vocational skills throughout life, we affirm that skills development leading to age-appropriate TVET should be integral to education at all levels, and can no longer be regarded as optional or marginal. It is especially important to integrate skills development in Education for All (EFA) programmes and to satisfy TVET demand created by learners completing basis education (UNEVOC, in Prospects vol. 3, September, 2005: 266).

References

Asian Development Bank (n.d.) *Key indicators of developing Asian and Pacific countries* (n.d.) retrieved from http://www.adb.org/statistics/regional tables on 21/09/2006,

Asian Development Bank. (2006) Country Strategy and Program Update Fiji Islands (2006–2008),

Asian Development Bank. (2006) Skills Gap In the Pacific, Fiji Islands Case Studies (2006–2008), Prepared by: Paul Brady, Alex Gorham, Richard Johanson and Eci Naisele, Suva, FIJI

Australian Agency for International Development (2006). *Pacific 2020. Challenges and opportunities for growth.* Canberra, Australia: AusAID

Centre for Workplace Learning, 1995. *Workplace learning for schools: how to do it.* Centre for Workplace Learning, Sydney.

Crossley, M. 1989. Concern for community-based education: the SSCEP experience and the development of the curriculum development office, a presented in the community-based education seminar, Port Moresby In-Service College, Waigani, 3-7 July 1989.

Crossley, M. and Vulliamy, G., 1986. The policy of SSCEP: context and development. *ERU Report*, University of Papua New Guinea, Waigani.

Crossley, M., 1990. Collaborative research, ethnography and comparative and international education in the South Pacific, *International Journal of Educational Development*, 10 (1), pp. 37-46.

Deb, A. (2001) Asian Cases on Supply Chain Management for SMEs: Fiji Country Paper, Asian Productivity Organization, Tokyo

Fiji Council of Social Services (2004) Annual Report

Fiji Economic Review, (2006) Reserve Bank of Fiji, Suva

Fiji Education Commission, 1969. Education for modern Fiji: Report of the 1969 Education Commission. Fiji Government, Suva.

Fiji Institute of Technology 2006) *Statement of revenue and expenditure for the month of December 2005*. Unpublished (accessed 14th August 2006)

Fiji Institute of Technology, 2000, July. A comparative analysis of the Government funding information. Unpublished raw data.

Fiji Islands Bureau of Statistics (2006), *Key Statistics June 2006*, Suva, Fiji: Bureau of Statistics

Fiji Islands Education Commission/Panel, 2000. Learning together: directions for education in the Fiji Islands: Report of the Fiji Islands Education Commission/Panel. Fiji Government, Suva.

Foster, P. J., 1987. Technical/vocational education in the less developed countries, *International Journal of Educational Development* (7), pp. 137-39.

Fullan, M., 1991. New meaning of educational change. Cassell, London.

Government of Fiji (2002) *Ministry of Education Annual Report 2004. Parliamentary Paper no. 95 of 2005.* (2005). Suva, Fiji: Ministry of Education

Government of Fiji. (2002) Strategic Development Plan: 2003 – 2005, Parliamentary Paper 72, Suva

Hoyle, E., 1986). The politics of school management (London, Hodder and Stoughton).

International Labor Organization. (1998) Integrated Human Resource Development Programme for Employment Promotion, Executive Summary, Suva

International Labour Organization. (2005) Integrated Human Resource Development Programme for Employment Promotion, Progress Report, Suva

International Labour organization (2005) Report of a Workshop on Skills for Productivity and Economic Empowerment in the Pacific, Nadi,

Lauglo, J. & Lillis, K. (Ed.), 1988. *Vocationalising education: an international perspectives*. Pergamon Press, Oxford.

Ministry of Education (2005) Advanced Vocational Training (AVT), Annual Progress Report, Suva

Ministry of Education annual report 2004 (2005) by Ministry of Education. Suva, Fiji: MOE,

Ministry of Finance and National Planning (2005). *Economic and fiscal update. Supplement to the 2006 budget address.* Suva, Fiji: MOFNP

Ministry of Finance and National Planning (2006). *Strategic Development Plan 2007-2011 Draft*. Suva, Fiji, MOFNP

Ministry of Youth, Employment Opportunities and Sports, (2004) Annual Report

Mohanty, M (2005) *Globalisation, New Labour Migration and Development in Fiji Islands.* Paper presented at State, Society and Governance in Melanesia Project Conference on Globalisation, Governance and the Pacific Islands, October 25-27, 2005 ANU, Canberra.

Naisele, E. (2006). Regional study on skills development in the Pacific-Fiji study. Report in progress;

National Planning Office (2004), *Strategic development plan 2003-2005*. *Mid-term review*. Suva, Fiji :National Planning Office

National Planning Office (2006), *Fiji computerised human resource information system* retrieved 9/08/2006 on www.fijichris.gov.fj

Prasad N. and S. Raj (2006) The Potential of Small-Scale Informal Sector Businesses in Small Developing Countries: Fiji's Kava Industry. Malta

Reserve Bank of Fiji (2006). Quarterly Review March 2006. Suva: Reserve Bank

Sharma, A., 1989. *Multicraft in Fijian secondary schools: an evaluative study of a nonformal education programme*, Unpublished master's thesis. Australia, University of New England.

Sharma, A., 1999a. Vocational education and training in Fiji: management at the secondary

school level. Anamika Publishers, New Delhi.

Sharma, A., 1999b, October. Micro-politics in the management of schools: A Fiji experience. *Journal of Educational Planning and Administration*, X111 (4), pp. 431-442.

Sharma, A., 2000. Technical and vocational education and training. In Fiji Islands Education Commission/ Panel, 2000. *Learning together: directions for education in the Fiji Islands: Report of the Fiji Islands Education Commission/Panel*, pp. 132-148. Fiji Government, Suva.

Tavola, H., 1991. *Secondary education in Fiji: A key to the future*. The Institute of Education, The University of the South Pacific, Suva.

Tewei, T. B., 1985. *The community high school project in Kiribati: an examination of its rise and fall*, M. Phil. Unpublished dissertation, University of Birmingham.

Thaman, K., 1989 (Ed.). New secondary schools in Solomon Islands, *ED255: Introduction to Curriculum Development-Readings*. Extensions Services, the University of the South Pacific, Suva.

TPAF (2006). Budget for automotive programs. Unpublished data.

UNESCO, 1996. Learning the treasure within: Report to UNESCO of the International Commission on Education for the twenty-first century. UNESCO Publishers, France.

UNESCO, 1999. Technical and vocational education and training: a vision for twenty-first century. UNESCO, (Paris.

Veramo, J. The Contribution of Non Formal Education to Vocational Development, Dept. Of Education and Psychology, University of the South Pacific, Suva 2000

Waqabaca, J.K. (2004) Non-Farm Employment Opportunities in Rural Areas in Asia: Fiji Country Paper, Asian Productivity Organization, Tokyo

Warner, M. (2000) Conflict Management in Community-based Natural Resource Projects: Experiences from Fiji and Papua New Guinea, Overseas Development Institute, London

Watson, K., 1994. Technical and vocational education in developing countries: western paradigms and comparative methodology. *Comparative Education*, 30 (2), pp. 85-97.

Wenger, E. (1998). Communities of practice. Cambridge: Cambridge University Press

World Bank, 1991. Vocational education and training: A World Bank Policy Paper. World Bank, Washington.

- Centre for Workplace Learning, 1995. *Workplace learning for schools: how to do it.* Centre for Workplace Learning, Sydney.
- Crossley, M., 1990. Collaborative research, ethnography and comparative and international education in the South Pacific, *International Journal of Educational Development*, 10 (1), pp. 37-46.
- Fiji Education Commission, 1969. *Education for modern Fiji: Report of the 1969 Education Commission*. Fiji Government, Suva.
 - Fiji Institute of Technology, 2000, July. A comparative analysis of the Government funding information. Unpublished raw data.
- Fiji Islands Education Commission/ Panel, 2000. Learning together: directions for education in the Fiji Islands: Report of the Fiji Islands Education Commission/Panel. Fiji

Government, Suva.

- Fullan, M., 1991. *New meaning of educational change*. Cassell, London.
- Hoyle, E., 1986). *The politics of school management* (London, Hodder and Stoughton).
- Lauglo, J. & Lillis, K. (Ed.), 1988. *Vocationalising education: an international perspectives*. Pergamon Press, Oxford.

OTHER REFERENCES

- Sharma, A. & Naisele, E. (2008). **TVET: The Master Key: The Review of the Functions of the Functions of FIT, TPAF and other TVET Providers.** Suva: Ministry of Education.
- Sharma, A., 1989. *Multicraft in Fijian secondary schools: an evaluative study of a nonformal education programme*, Unpublished master's thesis. Australia, University of New England.
- Sharma, A., 1999a. *Vocational education and training in Fiji: management at the secondary school level.* Anamika Publishers, New Delhi.
- Sharma, A., 1999b, October. Micro-politics in the management of schools: A Fiji experience. *Journal of Educational Planning and Administration*, X111 (4), pp. 431-442.
- Sharma, A., 2000. Technical and vocational education and training. In Fiji Islands Education Commission/ Panel, 2000. *Learning together: directions for education in the Fiji Islands: Report of the Fiji Islands Education Commission/Panel*, pp. 132-148. Fiji Government, Suva.
- Tavola, H., 1991. *Secondary education in Fiji: A key to the future*. The Institute of Education, The University of the South Pacific, Suva.
- Tewei, T. B., 1985. *The community high school project in Kiribati: an examination of its rise and fall*, M. Phil. Unpublished dissertation, University of Birmingham.
- Thaman, K., 1989 (Ed.). New secondary schools in Solomon Islands, *ED255: Introduction to Curriculum Development-Readings*. Extensions Services, the University of the South Pacific, Suva.
- UNESCO, 1999. Technical and vocational education and training: a vision for twenty-first century. UNESCO, (Paris).
- UNESCO, 2005. *Prospects Orientating TVET for Sustainable Development.* Vol. VXXXV, No. 3, September 2005.
- UNESCO, 1996. Learning the treasure within: Report to UNESCO of the International Commission on Education for the twenty-first century. UNESCO Publishers, France.
- World Bank, 1991. Vocational education and training: A World Bank Policy Paper. World Bank, Washington.

APPENDIX 1.0 LIST OF PERSONS MET AND PLACES VISITED

Fiji Institute of Technology

Ganesh Prasad, Director FIT, Josua Mataika, Deputy Director FIT& Heads of schools

Fiji Islands Bureau of Statistics

Epeli Waqavonovono, Chief Statistician (Household Surveys)

Fiji Chamber of Commerce

Willie Kwansing, General Secretary

Fiji Education Sector Program (AusAID)

Donald de Klerk, Vocational Adviser

Fiji Employers' Association

Annie Wade; Hideaway Resort

Fiji Hotel Association

Dixon Seeto, President

Fiji Motor Traders Association

Mr Ian Mac Lean & Sanjeet Kumar (Asco Motors)

Fiji Manufactures Association

Mark Halabe

Fletcher Construction

Peter Watts, Manager, Fiji

Ministry of Education TVET Section

Josefa Natau - Director
Salote Dugu - PAO
Soko Nakabuniceva - SEO
Tomasi Naborisi - SEO
Ro Alumeci Tuisawau - SEO
Repeka Uluilakeba - SEO
Orisi Seruitanoa - SEO

Training and Productivity Authority of Fiji

Jone Usamate, Director TPAF Board & Senior Management Staff

University of the South Pacific

Staff of Technology Department

Industries Visited

Asco Motors- Suva Fea- Labasa FSC- Labasa PWD- Labasa Telecom- Labasa Grand Eastern Hotel- Labasa

Source: Review team data base, 2007

Appendix 2.0 Schools Visited:

School/Institution	Contact	Position	Date of Visit
Rishikul Sanatan College	Mr Mahen Pal Mr Pradeep Mr Dakai Malakai Cakau	Principal HOD	11/10/07
Sila Central High School	Eta Toga Tagicakibau	Principal	11/10/07
RKS	Baikeitoga & Ledua Qatia Brown Timothy Pratap Semesa Biudole Manasa Taraki	HODs teachers	11/10/07
Principals Labasa Secondary School	Labasa College, Naleba College, All Saints Secondary, Holy Family Sec, Labasa Arya College, Labasa Muslim College, Gurunanak Secondary School, Valebasoga Secondary,	Principals	7/10/07
Ratu Navula Secondary School	Labasa Sangan College Sera Saladuadua Jovilisi, Bhadur, Josua Qalo	A/Principal teachers	8/10/07 10/11/07
Nawaicoba Vocational Centre	Satish Kumar Pradeep Shalendra Prasad Dr Satendra Nadan	Principal Teacher	10/11/07
University of Fiji	Filipe Bole Dr Kumar	Lecturers	10/11/07

Source: Review team data base, 2007

Appendix 3.0 Correspondence:



Educating the Child Holistically for a Peaceful and Prosperous Fiji



Marela House, 19 Thurston Street, Suva Fiji Islands Ph: (679) 3314477 Fax: (679) 3303511 Private Mail Bag, Government Building			
Our Reference:	Your Reference:	Date:	

The Fiji Institute of Technology (FIT) and the Training and Productivity Authority of Fiji (TPAF) are the two main institutions tasked with training the skilled manpower as required by industries in Fiji. The FIT originally was managed by the Ministry of Education but has become autonomous with its own Act. TPAF similarly operates under its own Act.

REVIEW OF FIT AND TPAF FUNCTIONS

The shortage of skilled manpower experienced by industries lately in Fiji has led to questions being raised of the roles of FIT and TPAF. Both Institutions have grown and expanded in terms of programmes, which has also raised the fees charged on students and questions are being raised on how they are meeting their core functions.

Due to the above, the Minister for Education as the custodian of education in the country has directed that there be a review of the two institutions. The review is to compare the programmes they are offering and see if there are overlaps and duplications. Their Acts need also be studied to ensure that they have distinct responsibilities assigned to them through their legislations. The most important intended outcome of the review is to ensure that the two institutions are meeting their core functions and ensuring that they continue to produce the required skilled manpower on the nation that matches the needs of industries. In conjunction with this work, there is also a need for a scoping study to look at in totality the links from schools, FIT, TPAF and USP.

In view of the above, a questionnaire is hereby attached seeking your viewpoint on the above topic.

Your input will be treated confidential and will be used only for the purpose of FIT/TPAF review.

Thank you for your time and contributions

Yours sincerely,

E.Naisele

For Permanent Secretary for Education

<u>Ps</u>: There will be combined meeting at USP Labasa Campus on Friday 21st September, from 9.00am to 11am to further discuss this issue. Your presence is highly appreciated.

Source: Review team data base, 2007

(TPAF Reflections-with Annie Wade; Hideaway Resort 7th November, 2007 @3.00pm

- Too much duplication of the same Programme- in the basics- house keeping, front office, cooks,
- FIT –to do more of a higher level
- TPAF concentrate on basic skill level
- USP to do degree in Hotel Management
 - Need a business management degree
 - USP is not practically doing what the hotel industry wants in tourism and hospitality
- TPAF course is too expensive to do the in-house training
- To hard to get TPAF instructors to conduct in house training
- TAPF very proactive in coming to industries and enquiring what do they need for up skilling
- E need to encourage trades from lower level
- Concentrate on lower semi skilled trades
- We need get back the Apprenticeship scheme
- We have lost a lot Cooks and most have moved overseas especially Canada
- Activities and entertainment is essentially important but there is no formal training for the workers
- FIT and TPAF trainees are very much the same when they come in for industries attachment but they conduct up-skilling in house training to raise the standard of skill level of the workers
- We encourage our staff to progress towards higher and middle level management
- Activities and Entertainment department programmes like Child Care, First care, History of Fiji, Basic Maintenance of Equipment, Marine Studies-boat Masters, snorkelling guide, sea safety, Horticulture, Dancing, music & traditional music, - We do not need degree holder in these areas but they need some kind of certification

Source: Review team data base, 2007

FIT/TPAF REVIEW

General Questions- ASCO MOTORS

Mr Ian Mac Lean & Sanjeet Kumar (Fiji Motor Traders Association)

What do Industries expect form FIT and TPAF

- a. Trades skills have a reputations problems everywhere in the world; In particular, skill Trades and management training
 - i. Classified as a blue collar profession and therefore not a very popular choice for job seekers
- b. Quality of output from FIT- apprenticeship very good but need be more practical approach
- c. ASCO supplement in house-training. Have an international standard training room
- d. Carpenter have similar arrangement on further in-house training after FIT/TPAF
- e. ASCO Create world class tradesmen in the world. That is after FIT and more in-house training ad overseas attachment
- f. FIT/TPAF are OK but their equipment are 5 years behind

- g. Apprentices are done at TPAF and theory at FIT. Apprentice just recently been reintroduced by government. Very important exercise to perfecting trade skills
- h. Happy with what they are teaching at FIT but to have more emphasis on practical and attachment.
- i. Most industries have no apprentices
- j. CBT to replace apprenticeship in years to come
 - i. It takes years to train an apprenticeship
 - ii. CBT will fast track with competent test with less than 5 years to complete training
- k. ASCO do take on vocational students on attachment only
- I. Sometime ASCO have to repeat training on in -house
- m. Need Financial Management Training etc
- n. Sometimes TPAF Training are irrelevant and some of its instructors do not have relevant industry experience but use the internet to get information on the topics required

View on Agriculture Sector

- Agriculture sector needs review and maybe a restructure. It is not doing what it is suppose to be doing
- Fiji with its huge land resources has very little return from the land produce for economic return
- o Agriculture Experience-
 - Agriculture workers at Lakena (Nausori) and Navua: Most of the machines/tractors are in pieces;
 - Where there are machine conducted or not is another question
 - there are workers pretending to be working but there is nothing really to do since the are no machines etc, in good working condition
 - These workers are paid by government but sitting idle having grog all day long.
- Suggestions-FIT/TPAF to set a review team to inspect their equipment and maybe program delivery and make recommendation based on the industry demand
- Number of equipment- less in one class ratio. FIT have unequal distribution in ratio of equipment in the lab and students using the equipment/machine. It is a one to many arrangement where TPAF has good ratio distribution with less number of students using the machine (One to one basis)
- TPAF –They should be plan of action on how should they manage the grant scheme better for the purpose of industry and skilling the people of Fiji
- o TPAF: To have Recognised Wed Based Training
- There is opportunity for better management training
- Satisfied with productivity at technician level
- ASCO sent its workers overseas for further international training

(FIT Reflections-with Acting Director) 17th September, 2007 @10.am

- FIT Act
 - a. to answer questions on TOR for FIT
- What would you see as the main purpose of FIT?- Social, economic, political
 - a. 1992 ACT- basic requirement for TVET training to post secondary school studentsforms 5,6,7 –
 - b. Pre-service but also in-service –PRIMARY PURPOSE:
 - c. Social Applications- Train them so that they can fit in society
 - d. Co-corporate plan was set based on the primary purpose
 - e. Fees are approves by parliament- Diploma, Certificates & trade Certificate programs
 - f. Are you offering Academic course? like accounting
 - i. Business Studies
 - g. Any Duplications taking place between FIT and TPAF? How can they be avoided
 - i. Yes, TPAF trained specialist but not FIT. That's why
 - h. What is FIT link to USP?
 - i. There is an Agreement /MOU between FIT and USP
 - ii. To use resources better
 - i. Is there any chance that FIT and TPAF under one institution?
 - i. Use to be merge at one time, but that is no longer now. They are operating under different Acts
 - j. Your views of FIT turning into University?
 - i. It's a good plan for long term benefit
 - k. What have you to say about Franchise programmes in Secondary Schools:
 - i. Started in 1980s with the idea of taking the courses into the remote/rural locations, society
 - ii. Began offering franchise into the door step of the student, as long as the centres are meeting the FIT requirement and standard
 - iii. Concentrated initially in the larger Suva area
 - I. What kind of support do you give to franchised centres?
 - i. Syllabus and exam papers only
 - Teachers in secondary schools are not fully qualified to teach FIT franchised programmes
 - m. The relationship between FIT and the iob/labour market?
 - i. Industry advisory committee- Industry sit in curriculum committee for recommendations and input
 - ii. FIT cannot satisfy every industry need

General Questions- Ministry of Health

- 1. What would you like TPAF and FIT to do?
 - They are looking at higher level education and not the lower level. Lower level for the vocational schools
 - High unemployment in the country is a big issue
 - Need to know basic skills to treat a person like personal greetings and welcome, generally good attitude etc
 - FIT /TPAF to target semi skilled profession rather than a higher level skills
 - Mismatch of skills from supply and demand-For example Ministry of Health been receiving FIT graduates applying to do office jobs with trade certificate in Plumbing.
 - FIT to conduct project planning, simple management, simple financing to acquire basic jobs
 - Mrs Matavewa (as a parent) FIT –Schools realigning into FIT. Trade school must remain
 - FIT must go back to do the core skills trade courses like maritime studies
 - She is a firm believer in TVET
 - Vocational to begin at class 5 and not at form 3 level
 - Example- a child from champagnant, to Monfort Boys Town with virtually not skills at all came out of Monfort as a competent skilled trademan
 - We need a lot of advocacy for parents; NGO's can be used to advocate TVET to parents and students
 - Empower the women to advocate TVET at lower level
 - "If we have more trade centres like champanant school then Fiji will have no socio economic problems"- Mrs Matavewa
 - TPAF to give back to the employer what is due for them
 - TPAF- need based training- CBT
 - Vocational schools must continue to exist because of trade skills needed for the industries
 - Health basic skills
 - i. Relationship
 - ii. Health promotion for primary Health care
 - iii. How to deal environment. People to be taught to make a compost, rather burning rubbish
 - iv. Wash hands before eating

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Sharma:

- School to prepare a platform where student can discover their potential
- vocational education is expensive
- Don't need a PHD in plumbing
- Sila's story of solving a problems of students roaming the streets of Nausori after the intake for RKS, ACS, QVS

General Questions- Ministry of National Planning

1. Joe Sania- Director

- 2. Introduction
 - a. Review of FIT/TPAF Act
 - b. Whether TPAF/FIT are doing what they initially tasks to do
 - c. Vocational Education is expensive
 - d. How relevant is Vocational Education to the industries
 - e. Education Commission Report- There is a mismatch form supply and Demand
 - f. Broad Based education was suggested from Primary, Secondary to Tertiary
 - g. Education in 3 phases- Intellectual development; vocational and Citizenship or Value education
 - h. TPAF and FIT should be charted what they are suppose to do

i.

- 3. Reflections from National Planning
 - a. human resource development for the country
 - b. Siwatibau Report- Right Policy in Training the right area needed from the industry
 - c. Unemployment is a challenge to government
 - d. 14,000 from 6 level- 4,000 into form 7
 - e. 300 places at USP
 - f. 8,000 just floating about
 - g. FIT is to prepare trade people; They have shifted in their agenda
 - h. TPAF is to look at initial role in training apprenticeship
 - i. FIT-
- i. fea FIT courses is irrelevant
- ii. Introduce course without proper resources

iii.

- j. Huge migration of skills into overseas market as from November to October approx. 800
- k. How the employers will react if there is a merge for FIT and TPAF
- I. have to address duplication then thee is need to merge
- m. The only for merging the 2 centres is whether they will continue to provide the same service in training as what they are doing now
- n. Someone to regulate the types of skill training for the country

General Questions -RKS

- Introduction
 - o RKS will be a mini FIT as in the current proposal
 - Need standard facilities ad equipment/special rooms etc to enable recognition
 - o RKS being a government school should have all necessary equipment/infrastructure

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- 1. What would you like TPAF and FIT to do?
 - Want FIT to support in Finance to purchase timber
 - School fee is still high and students are finding hard to cope wit the fees
 - Teaching material given is not in full pack
 - Practical materials
 - There is no refresher course for the teachers for both FIT and TPAF
 - No support for the agriculture programme at RKS
 - Mini centre to upgrade the teaching status of all teachers to tertiary level

Course priority

- Agriculture
- 600 acres land idle
- Need to prioritise on agriculture since they have all the necessary ingredients
- Need to have Catering and cooks, plumbing,
- Need to have Marine Studies and Fisheries

:

University of Technology

- FIT pre-service and TPAF is in-service
- Fiji too small to have 3 universities

Education Commission Report

- Dualism will kill vocational
- Both Academic and Vocational should not be allowed to operate together
- We have made vocational education academic which unfortunately will not serve the full purpose of Vocational

.

NQF

- Standardising the certification and accreditation of all training providers
- This will set the bench mark for the new standardising system in Fiji

Demarcation of status on vocational and Academic

- Very much alive at RKS
- Students are set back to do vocational due the unattractiveness of the programme in school

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FIT to give commission for teaching their lesson

Standard and quality is a question on the production line at RKS

TPAF: running short courses ½ weeks (fresh graduates) and give them certificate and then to the work place. They are for in-service training

General Questions- Rishikul Sanatan College

What does FIT provide for you?

Franchise subjects AE/CJ

Issues

- o high fees of \$150.00 is a concern
- o FIT only provides, question paper, examination paper
- Franchise- foundation to move on
- Alternative:
- They must have platform to move on to the next level and FIT trade certificate is a goog start off benchmark
- Vocational is expensive than formal education
- School at lower level to be able to help the students to discover teir potential
- Modular approach for the school
 - o Programme to be Short term basis with spiral approach
 - The taje some vocational courses when they rech form 5,6 7

Concern

- Ministry of not giving any accreditation for the students doing vocational programme
- Terms of Reference have highlighted the main issues between FIT and TPAF
- Greater emphasis on wage employment with little emphasis on self employment
- Problem in Fiji-Agriculture
 - Land Tenure
 - Bulk of the student want an accreditation that will take to level they are employable opportunities
 - Very little opportunity for self employment in the Suva Corridor
 - o Money id important what the means ot reach there is not really available
 - Labour specification is common around the world
 - o Pathway in academic or TVET is not
 - Fiji's economic environment is not a free economy to generate employment opportunity
 - o Having Multiple programmes in schools; panel beating, electrical wiring, plumbing,
 - Programme to be intensive in schools
 - Curriculum needs review and rewrite do that it is more focussed to a particular skill TPAF
 - o Higher all Rishikul facilities

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- FIT does not closely monitor thir franchise prgramme
- Deg

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(TPAF Reflections-with Director General) 11th September, 2007 @10.am

TPAF

- Strategy Plan
 - a. One area is values- social values
 - b. Mission, vision & Values are decided by the Board
 - c. Purely industry focus- Customer focus, team work
 - d. Customer- is mostly important
- 1. What do think of the labour market? Strength and weakness
 - a. Try to keep the link as strong as possible
 - b. Have Industry development committee for trades
 - c. Feedback on their development
 - d. Have training surveys- What the industry needs? What do they have?
 - e. Join effort with Fiji Employers Federation, Fiji chamber of Commerce
 - f. Feedback- retreat to discuss plans, related marketing, budget
 - 1. beginning of the year get all information
 - 2. Conduct swot Analysis
- What the role of the government in TPAF?
 - We are an instrument of the government policy
- Board membership
 - National Interest is at stake
- What if you are given the opportunity to instil change at TPAF? What would you propose?
 - For People who know the role of TPAF & TVET and notion of Skill need for the country's development
 - o To be familiar with the productivity exercise, etc
- How would you like the attitude of Private sectors towards TPAF?
 - o If their input are more focus
- How about the Pre-service- Secondary, Primary education? What your view?
 - They need to have the basics, have Alternative Pathways & not an academic only as an option in the school system
- What is TPAF view in Gender issues?
 - No strict rules; all are welcome in whatever courses they want to pursue
 - Perception of education and TVET in Fiji is such that: eg, constructions for boys and catering/Tailoring for girls
- Standards
 - o TPAF is ISO-900 Certified
 - o TPAF have Quality Circles, Internal Quality Teams for in house certification
 - o Structured for purpose
- Outcome based- Indigenous education
 - o How does a skill match?
 - o Measurement is done by the eyes?-these are indigenous approach

(TPAF Reflections-with Senior Staff & Director General) 31st October, 2007 @10.am

<u>TPAF</u>

Overview

- Appreciation for the report detail submitted
- Two issues
 - TPAF FIT Review of Act and core functions
 - University of Science Technology
 - Whether Fiii is ready for another University
 - Other case from other Pacific Island in Samoa, Tonga, Solomon
- Strategy Plan
 - a. One area is values- social values
 - b. Mission, vision & Values are decided by the Board
 - c. Purely industry focus- Customer focus, team work
 - d. Customer- is mostly important
- 1. What do think of the labour market? Strength and weakness
 - a. Try to keep the link as strong as possible
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 - c. Feedback on their development
 - d. Have training surveys- What the industry needs? What do they have?
 - e. Join effort with Fiji Employers Federation, Fiji chamber of Commerce
 - f. Feedback- retreat to discuss plans, related marketing, budget
 - 1. beginning of the year get all information
 - 2. Conduct swot Analysis
- What the role of the government in TPAF?
 - We are an instrument of the government policy
- Board membership
 - National Interest is at stake
- What if you are given the opportunity to instil change at TPAF? What would you propose?
 - For People who know the role of TPAF & TVET and notion of Skill need for the country's development
 - o To be familiar with the productivity exercise, etc
- How would you like the attitude of Private sectors towards TPAF?
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- Standards
 - TPAF is ISO-900 Certified
 - TPAF have Quality Circles, Internal Quality Teams for in house certification
 - Structured for purpose

FIT/TPAF REVIEW (University of Fiji) 7th November, 2007 @10.am

Present: Dr Satendra Nadan, Mr Filipe Bole, Dr Kumar

Welcome - Mr Filipe Bole on behalf of the University

Introduction- Akhila Sharma

- Taskforce 16 people too cumbersome
- The team is doing the research on behalf of the taskforce and submit the report to the taskforce and Minister later on
- Have conducted a number study on industries including FIT and TPAF
- Have travel mainly in Suva and Labasa
- Franchise is not working well in franchise schools because there are no resources
- Why not having mechanising agriculture in vocational schools???

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- What are the acts and core functions
- Whare are the duplications
- The proposed plan for the upgrading of FIT to University of Science and Technology

Issues

What do you think of FIT and TPAF

TPAF

- TPAF has lost its way
- o Should do what have to do and a lot commercial activity
- Ask the business sector where they are getting their money(levy) worth

FIT

- o Has to keep up within the technology. Most equipment are out dated
- Graduated are not competent in the work force. To review delivery and training
- o It May be a good idea to amalgamate the two institutions
- o Is there a manpower plan, skills plan in Fiji? Where and when do they need to train?
- Is it hard to mix two levels of programmes in one location-like a technical centre and a university?
- Duplications of courses /programmes are definitely taking place between most schools and need to be closely monitored- FIT/TOAF/USP/FAM/FSN/ ETC. Need to pull all resources together. There is huge wastage of resources for a small country like Fiji
- The opportunity of school committee is great because it has the opportunity for expansion
- Whenever government comes in there is always an issues of not properly supervise and monitors
- What is the success of education in Fiji- Primary schools, Secondary? It's the church and private schools that have quality facilities and back-up systems
- Modern economy- Huge demand of taxation. The only way to earn money is through tax.
- We need to get in the private sector in all enterprises
- FNPF provide a lot of money for private support- These are Members money
- Making high schools into technical high schools like in Australia. It's a way of pulling resources together

FIT/TPAF REVIEW General Questions- ASCO MOTORS USP Technology Department

Dr Alfred Liligeto; Mrs Naisilisili, Ms Sarai, Mrs Tarabe, Mr Sagaitu

Ministers plan for FIT

- To upgrade FIT into a University of Science and Technology in a near future
- Plus establishing and upgrading of 20 vocational centres as Mini FIT offering certificate and Trade certificate Skill qualification. This is planned to done in 6 phases
- Technical trade Diploma and Degree to offered only at FIT

What kind of University do we need in Fiji?

- The proposal for the merge of FIT and TPAF to be controlled under one management and probably one leadership
- Whether it is feasible and affordable to have another University for a small country like Fiii?
- Already we have USP and University of Fiji. Is a good move to have another university?
- USP is not offering technical degrees like a full engineering degree Electrical, mechanical, Civil
- USP is only offering Technology degree for higher management level/profession and teachers profession- BTech and Bed Tech
- USP offers technology degree similar to other universities but other university may have the programme under a different name like University of New Castle offering TVET degree at FIT
- FIT offer semi skill programme for the industries
- Can USP offer the similar degree without having to go to FIT for TVET degree?
- Is it possible to have a common course from Home Economic and Technology that will attract the students and parents?
- Is it possible to have a press release for the public to be aware of all the programs that USP is offering?
- FIT BED TVET is for tertiary target group whereas the USP Bed targets the secondary clients

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- School a system we determine the curriculum where as in Vocational- Anthology (Student Centre)and Pedagogy (Teacher Centred/ Teaching Model)
- Have good advertisement to showcasing the courses offered at USP Technology Department
- FIT focus is more towards tertiary trend whereas USP on secondary and management profession
- Choices of where really to go for a degree is up to the students and parents if the are on private. Government sponsored students may not have the choice to choose which university they prefer to go to
- They can do courses that are not offered at USP. For example do civil engineering at USP whereas Mechanical and Electrical can be done at FIT
- What are the chances of Cross Credit some units from the IDTT and other programme from FIT.USP does not Cross credit from FCAE
- See What is the opportunity of Cross credit some units from FCAE technology department

General Questions - Willie Kwansing : Remington- Fiji Island Chamber of Commerce

FIT:

- FIT and TPAF are like two circles with overlapping activities
- A lot of activities are in places for both institutions
- Fit is teachers driven; TPAF is learner driven
- FIT is pre-service while TPAF is in-service

TPAF

- Primarily for levy payers who are contributing 1% levy to TPAF
- Remington workers would go for up-skilling and training to TPAF than FIT. It is because of the levy scheme that they have to utilise. TPAF have the infrastructure, manpower and technical expertise to up skill people from industries
- Why TPAF would teach dip in accounting? And so is FIT? There is a common role with different functions to play but both schools are full showing the demand from industries.. But the Quality of production/graduates is at stake. TPAF would have a small number of students but quality is there whereas FIT has big numbers but the quality is another question. This where the country needs NQF to rule the national standard of delivery and production
- There is a competition between the two schools in terms of training provision and courses offered
- USP again is another provider which is more academic
- TPAF has Levy grant Scheme of 1% from industries as a requirement in the TPAF act for all registered industries except the teachers/military and nurses
- TPAF will compensate the company for training the worker
 - o For example a skill training for 5 days may cost \$500.00 in fees plus levy
 - o Industry can claim up 90% of the amount
 - o TPAF will pay the refund in cheque order
 - Training provision is in two methods; either the workers can go to TPAF or TPAF comes to the industry on in-house training basis
 - TPAF Provides a regulated training

1. NQF:

- a. Criticized for being the player, referee
- b. But it is the way forwards for skills development and productivity in Fiii
- c. NQF is very critical and will provide the benchmark for all training providers
- d. Need wider Consultation process between all parties- industries, government, schools, training providers, stakeholders etc
- e. NQF: Key stakeholder are the industries
- f. Proposal for NQF to come under MOE which is a neutral body in the system

a.

- If the levy system is take away what incentive are there to sent the workers to TAPF for industry related training
- After training, they are skilled and competent in fork force but the industry tend loose them for other industries for higher salary
- Japanese model: If you don't train your workers they become monotonous and incompetent. To retain workers in the same company they do job rotation in house on the different production lines etc to keep work lively. They end up multi-skilled
- Industry should be involved in education and training
- Education system should work as a team for all stake holders

Possible merger of FIT and TPAF Source: Review team data base, 2007

Appendix 5.0 Report on Fiji Business Excellence Award

Table 5.1 Fiji Business Excellence Awards- TPAF

FIJI BUSINESS EXCELLENCE AWARDS PRO	OCESS 2004	2005	2006	2007
APPLICANT INFORMATION SEMINAR SUVA LAUTOKA	\$1,270.00 \$1,365.50	\$1,820.00 \$1,497.00	\$2,940.00 \$722.50	\$514.00 \$890.00
EVALUATORS' TRAINING	\$39,113.74	\$20,072.36	\$13,291.50	\$20,870.90
EVALUATION & SITE VISIT	\$41,318.00	\$23,417.50	\$37,510.50	\$58,655.00
FBEA NIGHT	\$67,583.53	\$51,483.34	\$70,653.65	
TOTAL EXPENSES	\$150,650.77	\$98,290.20	\$125,118.1 5	
REVENUE TICKET SALES APPLICANT INFORMATION SEMINAR FEES SPONSORSHIP	\$13,020.00 \$2,040.00	\$15,240.00 \$2,880.00	\$25, 950.00 \$5,520.00 \$5,000.00	\$2,080.00
TOTAL REVENUE	\$15,060.00	\$18,120.00	\$36,470.00	
TOTAL AMOUNT SPENT ON FBEA	\$135,590.77	\$80,170.02	\$88,648.15	

Source: Report on Fiji Business Excellence Award Survey, 2007

REPORT ON 2007 FBEA SURVEY

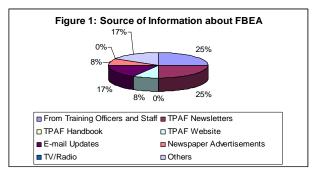
1.0 PURPOSE OF SURVEY

This survey was conducted with the aim of gauging the impact of the FBEA on the participating organizations.

2.0 FINDINGS

Source of Information on FBEA Awards

Figure 1 below represents how the responding organizations came to know about FBEA. It depicts that most of the organizations came to know about FBEA either through TPAF Staff, newsletters or e-mails sent by TPAF staff.



Value of Feedback Reports to the Organizations

In this section the participating organizations were asked to give their opinions on evaluator's feedback reports that were given back to the organizations after the evaluation had taken place. The table below provides a summary of the responses received.

Table 5.2: Feedback Reports

Value of Evaluator's Feedback report to Organization	% of responding organizations making the point
Largely useless and demoralizing to the staff	8
Assessors were not qualified to address the technical aspects	8
Provided a guideline to producing more constructive & meaningful report	18
Helped identify opportunities to capitalize on.	34
Helped in understanding the framework better. Assisted in identifying success indicators, monitoring its approach and deployment and evidence reporting to support the results achieved.	8
Provided valuable insights into areas where improvements could be made to improve performance of organization and their employees.	8
Recommendations were useful and incorporated into annual operating plans.	8
Allowed us to use an internationally accepted framework to gauge the standard & effectiveness of quality management systems and policies	8

Source: TPAF Management 2007

Recognition at FBEA Night

67% of the responding organizations to the survey were recognized at the FBEA Night and received awards for their achievements whilst 33% did not get recognized at the awards night.

Organizational Changes Undertaken for Successful Adoption and Implementation of FBEA Framework

In order to successfully adopt and implement the FBEA Framework most organizations had to undergo some notable changes. The following changes were highlighted by the responding organizations:

- Benchmarking to measure and match industry standards.
- The recommendations in the evaluators' reports were adopted as strategies for improvement.
- Organizations had to create cross functional FBEA committees/teams to look after FBEA issues.
- Organizations had to conduct FBEA Framework awareness program for staff and management.
- Organization standard operating procedures had to be reviewed and changes were incorporated based on the feedback reports.
- Training programs had to undertaken to equip staff to handle the changes.
- Internal Quality Circles were reinforced.

Changes Employees had to undertake

Given certain organizational aspects had to be changed in order to align the organization to the FBEA framework, it is logical that employees would have had to undergo some changes. Some of the noted changes that employees had to go through were:

- Employees had to adhere to strategies that introduced through the recommendations in the feedback report.
- Employees had to go on training to prepare them for organizational changes.
- Employees had to identify with and share common goals.
- Employees were empowered to better serve customers.
- Employees had to undergo reshuffling in functional teams and realignment of individual roles and responsibilities.
- Employees had to commit to team building and exercise better time management at work
 a positive mind set.

Views on Impact of Changes to the Organization

Respondents had the following views on how the implemented changes have affected the organization:

- All work is standardized and productivity levels have improved.
- Able to compare performance levels with industry standards.
- Great learning experienced towards continual improvement.
- Organizations were able to identify potential areas for development and improvement.
- Changes have led to improved efficiency and effectiveness.
- Employees are now more focused.
- Organization has become more innovative.

Changes in Organizational Operational Processes under FBEA Framework

The participating organizations had to undertake certain changes in the processes to align themselves to the FBEA Framework. Some of the process changes identified were:

- Operational processes had to be changed to support and enhance the change culture in the organization.
- Organization structures had to be changed from hierarchical to a flat one to enable easier communication channels and streamline processes and procedures.
- Open door policy was implemented without the threat of victimization.
- Process had to be reviewed and smarter and more efficient ways of doing things had to be introduced.
- All processes reflected market research and succession planning that the organization had undertaken.

Impact of the FBEA Framework on Organizations Standing in Society

Responding organizations believed that the adoption of the FBEA Framework had an impact on how the society viewed their organization. Some of the noted changes were:

- Positive support and encouragement from customers locally and abroad.
- Lifted organization profile with the corporate society.
- Customers are noticing positive effects of the changes through better customer services.
- Made organizations more comparable with other excellent businesses in the country.
- Services are more appreciated by people.
- Product quality being acknowledged.
- Organization viewed as dynamic and attracts better candidates for employment.

Important Lessons from the FBEA Process

Some of the important lessons that organizations have learnt through their involvement with the FBFA include:

- Success comes from within the organization and not from achievement of results.
- Having a dynamic working environment will produce quality products and services.
- Excellent processes and procedures are vital to being a dynamic organization.
- FBEA leads to improved organizational learning, employee participation and focus on organizational mission and vision.

Suggestions to improve FBEA

Responding organizations made the following recommendations that could lead to improvement in the FBEA:

- More frequent organization visits.
- Provide training on FBEA.
- More awareness of FBEA.
- Make feedback from organizations compulsory.
- Very experienced evaluators should evaluate for 'prize' and 'presidents level'.
- Team leaders should ensure that their team members do not breach code of ethics during visits.
- Team leaders should make themselves available during feedback.

3.0 CONCLUSION

From the feedback received it can be concluded that FBEA, in general, has had many positive impacts on the organizations that have adopted it. The positive effects have been noticed by the organizations, their customers as well as the society the organizations are based in. The workings of the framework, however, at this stage have not been perfected and can be further improved through the suggestions provided by the respondents.

Source: TPAF Management, 2007

APPENDIX 6.0: INDUSTRY INSTITUTION-A CASE STUDY

1. Fiji Electricity Authority

The Fiji Electricity Authority (FEA) was established under the Electricity Act 1966 and is solely responsible for generating, transmitting and retailing electricity in Fiji.

Its vision is "Energizing our people and our Nation" with a Mission Statement "We will provide clean and affordable energy solutions to Fiji and the Pacific. We aim to provide all energy through renewable resources by 2011".

FEA sets high priority on its Core Values of *Customer Focus, Teamwork, Honesty, Transparency, the Courage to do what is right for FEA, Individual Accountability and Innovation.*

FEA generates electricity in the two main islands of Viti Levu and Vanua Levu, and in the smaller island of Ovalau.

In Viti Levu, over 60% of the electricity is generated at the Wailoa hydro-electric power station (water supplied by the Monasavu dam) in a normal year. The rest of the demand is met from diesel engine / generator sets installed at various locations and from independent power producers.

In Vanua Levu, FEA has a mini hydro power station at Wainiqeu and two main diesel power stations at Labasa and Savusavu. Low voltage networks distribute power to each associated community. The Labasa and Wainiqeu/Savusavu systems are not interconnected.

On the island of Ovalau, the sole supply is from the Levuka diesel power station and the associated low voltage network.

The production of electrical energy in the financial year ended 31 December 2003 was 628 GWh. The demand for electrical energy is growing at over five percent (5%) per annum. This energy was produced from a total installed generating capacity of about 140 MW, 80 MW of which is hydro power from the Wailoa power station. The maximum demand was 106 MW in 2003. FEA has 143 km of 132kV and 285 km of 33kV transmission lines as well as 6,200 km of 11kV and low voltage distribution lines.

THE FUNCTIONS WITHIN FEA

Fiji Electricity Authority has nine (9) Divisions/Strategic Business Units which comprises of: Chief Executive Officer & Corporate Affairs Office, Finance, Supply Chain, Human Resources, Network, Generation, Major Projects, Marketing and Regulatory

As at May 2006, there were 553 full time staff employed with the Authority.

FEA CAPITAL INVESTMENT IN 2006-2010:

In order to make Fiji's energy sources totally renewable by 2011; FEA will be implementing a \$300 million capital expenditure program to build more hydro schemes, wind farms, and other alternative forms of energy. This is to meet future energy demand and slowly get away from generating energy from diesel power stations. FEA has been hit badly with the rising fuel prices during the past three (3) years.

FEA'S RESTRUCTURE

FEA is one of the government's statutory bodies that underwent a major restructure in 2001 that led to outsourcing of non and core activities leading to a reduction of workforce from 1050 in 2001 to 553 in May 2006.

These structural and cultural reforms which commenced in 2001 have reduced FEA's controllable operating costs by more than \$15 million and organisation structure levels reduced from nine(9) levels to five (5) from the CEO to the lowest ranked staff in FEA.

The years 2005 -2006 onwards have been years of consolidation and embedding of changes in FEA.

During these changes, the three (3) Unions had been consulted on the FEA structural changes and relationships have moved from adversarial to more of respect and complimentary during the challenging times of structural reforms.

FEA'S CURRENT AND FUTURE BUSINESS CHALLENGES

FEA's current and future challenges include the following:

Be a Customer Focused, Lean & Adaptive organization, but

- not compromising security and reliability of the Power System and Information & Communication Technology (ICT)
- maximize productivity and achieve target return to the shareholder

Provide Excellent and Reliable Service to all its Customers

Focus on Renewable Energy sources for future power generation

Ensure safety of the Public, Employees and Environment at all times

Operate as a fully Commercial Entity

Move forward with leading-edge technology and human resources development.

Be responsible for the independent regulatory function as per the requirements of the Electricity

Act

Further increases in productivity are planned for the next 3 years; however, a greater emphasis has also been placed on increasing the security and reliability of supplying current and future electricity demands in the short, medium and longer time frames, thus protecting Fiji's future, today.

FEA CORE SKILLS IDENTIFIED

FEA core skills include Electricians, Technicians, Cable Jointers, Inspectors, Linesmen, Liveline and Electrical/Mechanical/Civil Engineers

FEA's labour market statistics & Most Demanding Labour Skills Required:

THE CURRENT SITUATION

Whilst there are a lot of qualified people in the market, FEA is unable to attract the right people for its requirements since the core skills required demand specialised FEA training at FIT or overseas.

FEA can attain readily from the market non-core skills like Finance, Marketing, HR and Telecom positions. This is because of the abundance of these skills in both the employment and the unemployment market.

However, as for the Core skills, FEA finds it difficult to attract them in the local market particularly because they are speciality technical skills which could be developed within FEA, overseas and in to some extent from FIT.

FEA over the years have been struggling to get good candidates for the Engineers and for the Linesmen & Liveline training, FEA invests about \$ 15,000 - \$25,000 per person, which is a combination of local and overseas training.

THE WAR FOR TALENT GLOBALLY IMPACTING FEA'S CORE SKILLS

In the last three (3) years, FEA have noted that a lot of its employees have migrated to New Zealand and Australia to fill roles left by their citizens who have left for better job offers and excellent packages in Europe, UK and USA. They have been advised that the main reason for taking FEA staff is because Fiji employees speak and write good English, are very well trained, experienced and are motivated to work.

In a nutshell, FEA has to some extent been training people from its core functions for the NZ & Australian markets. These FEA employees who join overseas companies start at NZ/Australia salaries at 2 ½ times to 3 times what they normally get at FEA.

It is an accepted fact that FEA will continually lose its people overseas going forward. To understand how FEA has been losing its people, the Table 1 below states the core skills migration trends only for 2005 and for the first 6 months of 2006.

TABLE 6.1 – MIGRATION/RESIGNATIONS OF CORE SKILLS:

Core Skills Resignation/Migration Overseas

Note: The table below only summarises the core skills

and includes non-core skills numbers

	200		
Position	5	2006 YTD	Total
Electricians	2	4	6
Engineers	2	1	3
Technicians	6	3	9
Linesmen	2	3	5
Cable Jointers	1	1	2
Liveline	4	4	8
Team Leader, Liveline	1	2	3
Inspectors	2	1	3
	20	19	39

2005 Staff Turnover Rate: YTD 2006 Staff Turnover

20/

7%

Rate: 2% Source: fea Management 2006

Table 6.2: core skills that will be recruited within the Authority in 2006-2008 periods

Core Skills Recruitment Plans 2006-2008

	Position	No. Required	06	07	08
1	Trainee Electrical Mechanics	38	28	10	0
2	Engineers	18	10	9	0
3	Apprentices Technicians	19	10	9	0
4	Linemen/Liveline	0	0	0	0
	Total of Core Positions to be recruited	75	48	28	0

Source: fea management 2006

MOST DEMANDING LABOUR SKILLS REQUIRED:

The most demanding skills required as confirmed in the above table for the next 3 years are:

Electrical Engineers - Overseas qualified

Mechanical Engineers - Overseas qualified

Civil Engineers - Overseas qualified

Trainee Electrical Mechanics – Min. Diploma qualified at FIT

Liveline - NZ/Australia trained

This is also critical, as FEA will be embarking on a \$300 million capital investment building renewable sources of energy and its supporting infrastructure in the next 3-5 years.

FEA has to have the right people technical and people competencies to be able to manage and drive these projects to meet the current and future energy demands of the people of Fiji.

COMMENT ON LOCAL TRAINING PROVIDERS TO MEET OUR CORE SKILLS REQUIREMENTS:

FIT is the only local institution that is partly meeting FEA's local core training needs and their programs lead towards the Trade Certificate, Diploma and Advanced Diploma program.

Whilst the University of the South Pacific offers a Bachelor of Technology program, it does not meet FEA's Engineering requirements, as this program is more general rather than Electrical specific.

During the second half of 2006, FIT will be offering year 4 & year 5 of the Bachelor of Engineering program from the University of Southern Queensland. Whist this will help in the training of Engineers for the Fiji and FEA market, FEA hopes that FIT will get in qualified and experienced Lecturers to teach these engineering programmes locally

For the non-Engineering core skills, intensive Training is conducted internally by FEA Training Officers for these employees to be not only competent but also authorised to operate FEA assets. In addition, Liveline training is paid for by FEA to send 10-15 people annually to either NZ or Australia costing FEA between \$15k-\$25k per person.

In summary, the local institutions do not fully meet FEA's requirements and demands.

OFFSHORE MARKET:

FEA has in the past recruited overseas engineers and Managers in specialist roles to fill roles that cannot be filled from within the Fiji market.

This is an expensive option for FEA. However, if the need arises this option will be pursued.

To address this problem, FEA has in the past organised 3-6 months overseas attachments for graduating students in order to expose them to international work standards and professionalism in overseas utilities.

FEA has also put in succession plans to train locals to replace these expatriate managers when they complete their term.

Challenges in terms of our Core Skills:

The challenges for FEA as a business in terms of meeting its core skills are:

Increase migration of core skills, that is, 20 in 2005 and possibly 30 by the end of 2006 (19 have migrated so far in the first 6 months of this year) to countries like Australia and New Zealand

The difficulty to attract overseas trained Mechanical, Civil especially the Electrical Engineers in the Fiji market

Expensive Training costs to train live line who are qualified Electrical Power Linemen and to be accredited to carry out installation and maintenance works on "live" electrical power lines.

The lack of local institutions to meet all our Training needs in terms of core skills Increase recruitment to meet migration and future demands

FUTURE DEVELOPMENT PLANS:

FEA has for the past 2 years selected its own people with Advanced Diploma to complete the Bachelor of Engineering program with Auckland University of Technology for another 2 years fully funded by the Authority. Two will graduate at the end of 2006 and another 2 at the end of 2007. In addition, another employee will graduate with her Masters in Electrical Engineering at the end of 2006.

FEA will also pursue sending FEA staff from the core skills for overseas Utility companies in NZ, Australia and Singapore to gain exposure and learn from the best. This incentive is at FEA's cost.

The Authority will also continue its recruitment of Apprentices to fill vacuum left by migrating Linesmen & Technicians. FEA will continue to train more Electrical Power Linemen and also live linemen overseas to fill the demand and the gaps left by migrating employees.

Recommendations:

For FEA to be able to address this core skills shortage, we recommend the following:

More government and overseas donor scholarships to be offered for degree in Engineering majoring in Electrical, Mechanical and Civil in recognised overseas institutions

Government either through FAB or PSC to allocate 2 Engineering overseas scholarships to FEA on an annual basis

Government to organise government t to government attachments with the view of some of our people in core skills to be attached in overseas companies paid for by overseas governments

FIT degree program in Electrical Engineering to meet overseas university standards and for FIT/USQ to put in their resource to getting proper qualified professors/lecturers

Conclusion: FEA has been and will continue to face some core skills shortage in the future.

APPENDIX 7.0: KEY ECONOMIC DATA

Table 7.1: Key Economic Data

Gross Domestic Product at Current and Constant (1995) Prices

Current Prices				Constant (1995) Pric	es
Year	(FJD Million)	Change (%)	Growth Rate / Head of Population (%)	(FJD Million)	Change (%)	Growth Rate Per Head of Population (%)
1995	2,373	3.5%	2.3%	2,373	0%	0%
1996	2,578	8.7%	7.7%	2,487	4.8%	3.9%
1997	2,587	0.3%	-1.3%	2,433	-2.2%	-3.8%
1998	2,815	8.8%	7.6%	2,465	1.3%	0.2%
1999	3,280	16.5%	15.2%	2,682	8.8%	7.6%
2000	3,151	-3.9%	-4.4%	2,646	-1.4%	-1.9%
2001	3,302	4.8%	4.0%	2,691	1.7%	1.0%
2002	3,475	5.3%	4.5%	2,770	2.9%	2.2%
2003	3,680	5.9%	4.5%	2,803	1.2%	-0.1%
2004	4,001	8.7%	8.1%	2,961	5.6%	5.0%

Source: Key Statistics June 2006 (p.11), Fiji Islands Bureau of Statistics, 2006. Suva

Table 7.2 Merchandise Imports and Exports

Value of Merchandise Imports and Exports (F\$ Billion): Table 2

Year	Total Imports	Total Exports	Balance of Trade
2000	1.822	1.254	-0.568
2001	2.017	1.218	-0.799
2002	1.970	1.232	-0.738
2003	2.285	1.266	-1.019
2004	2.501	1.200	-1.301
2005	2.723	1.187	-1.536
2006	0.914	0.319	-
(4 months only)			

Source: Key Statistics June 2006 (p.11), Fiji Islands Bureau of Statistics, 2006. Suva.

APPENDIX 8.0: STATISTICS

Table 8.1: TVET Education Providers

TVET Education Providers & Courses offered	Years	Total Cours	es Offered
Number of Secondary Schools offering TVET & vocational subjects	1970-1980	TVET Academic Centres	TVET Vocational centres
Home EconomicsIndustrial ArtsAgriculture Science		88	16
 Computer Education Office Technology Automotive Engineering Catering & Tailoring Carpentry & Joinery 	1981-1990	136	36

	 Vocational Agriculture 		1991- 2006	148	62 with 11 centres pending approval
1.	Number of Trade Courses Automobile Engineering R Building & Civil Engineerin Commerce	Road Transport	1970-1980	64	ļ
 Commerce Electrical & Electronics Genera Studies- Hospitality & Tourism Maritime 		1981-1990	88	3	
	Mechanical EngineeringPrinting & Graphics DesigFranchised		1991- 2006	5 115	
Number of Trade courses of FNTC/TPAF PQTD - Productivity & Quality Training EEETD - Electrical Electronics Engineering		1970-1980	16	0	
	Industry Training MPITD- Marine Ports Industry Training HTITD- Hospitality & Tourism Industry Training CITD- Construction Industry Training MEITD- Mechanical Engineering Industry Training MITD- Manufacturing Industry Training ITTD- Information Technology Training Department	ism Industry Training try Training	1981-1990	44	5
		1991- 2006	97	0	
4.	Private Vocational Prov	/iders [Formal]	1970-1980	7	
AP	TECH, NZPTC, CQU, COMPUT	ECH, Monfort, etc	1981-1990	20)
			1991- 2006	49)
_	Non-Formal Vocational Ed		1970-1980	23	
	T, MOY- Vocational Programme nools- Tutu Vocational, YPD, etc		1981-1990	39	
SCI	ioois- rutu vocationai, YPD, etc		1991- 2006	86	5

SOURCE: ADB SKILLS STUDY REPORT 2007

TABLE 8.2: TPAF ENROLMENT & TRAINING

Training Department	2002					
	Non Award Courses	# Of Participants	Award Courses	# Of Participants		
PQTD- Productivity & Quality Training	97	3333	9	1306		
EEETD - Electrical Electronics Engineering Industry Training	42	924				
MPITD- Marine Ports Industry Training	37	388				
HTITD- HOSPITALITY & TOURISM INDUSTRY TRAINING	189	2744	4	169		
CITD- Construction Industry Training	51	770				
MEITD- Mechanical Engineering Industry Training	90	2371				
MITD- Manufacturing Industry Training	167	1933	2	120		
ITTD-Information Technology Training	272	2755				
Total	945	15,258	15	1595		

Training Department 2003

	Non Award	# Of	Award	# Of
	Courses	Participants	Courses	Participants
PQTD- Productivity & Quality	167	3146	8	1555
Training				
EEETD - Electrical Electronics	79	1197		
Engineering Industry Training				
MPITD- Marine Ports Industry	34	410		
Training				
	171	2720	9	262
HTITD- HOSPITALITY & TOURISM				
INDUSTRY TRAINING				
CITD- Construction Industry Training	63	967		
MEITD- Mechanical Engineering	156	2894		
Industry Training				
MITD- Manufacturing Industry	183	1560	4	38
Training				
ITTD-Information Technology Training	117	1259	2	137
Total	970	14,153	23	1992

Training Department	2004					
	Non Award Courses	# Of Participants	Award Courses	# Of Participants		
PQTD- Productivity & Quality Training	160	4532				
EEETD - Electrical Electronics Engineering Industry Training	118	1925				
MPITD- Marine Ports Industry Training	56	734				
HTITD- HOSPITALITY & TOURISM INDUSTRY TRAINING	188	2862				
CITD- Construction Industry Training	54	893				
MEITD- Mechanical Engineering Industry Training	149	2824				
MITD- Manufacturing Industry Training	188	1493				
ITTD-Information Technology Training	239	1764				
Total	1150	16,997				

Source: TPAF Management, 2007

Training Department		200	05	
	Non Award Courses	# Of Participants	Award Courses	# Of Participants
PQTD- Productivity & Quality Training	210	4072	8	1390
EEETD - Electrical Electronics Engineering Industry Training	171	2784		
MPITD- Marine Ports Industry Training	56	686		
HTITD- HOSPITALITY & TOURISM INDUSTRY TRAINING	137	2352	7	125
CITD- Construction Industry Training	106	1622		
MEITD- Mechanical Engineering Industry Training	255	4604		
MITD- Manufacturing Industry Training	369	2599	17	350
ITTD-Information Technology	196	1530	4	112

Training				
Total	1507	20,297	36	1977

Source: TPAF Management, 2007

Table 8.3: TPAF Graduation Summary 2001-2005

TPAF GRADUATION SUMMARY

Graduation Numbers

	Graduation Numbers				
Field	2004	2003	2002	2001	2005
Aircraft Maintenance					1
Automotive Electrical	1	3	2	6	3
Automotive Engineering					5
Automotive Mechanic	11	14	10	8	8
Boiler Making			1	3	3
Certificate IV in Assessment & Workplace Training					17
Cook			2	1	
Electrical Fitter/Mechanic	7	4	11	16	21
Electronics			8	10	16
Fitting & Machining	7	16	14	21	10
Heavy Commercial Vehicle Mechanic	1	4	1	3	3
Heavy Mobile Plant Mechanic	2	2	2	8	
Industrial Engineering					5
Marine Engineering			3	2	
Mechanical Engineering					10
Navigation & Seamanship			1	1	
Panel Beating	1	8	2	1	5
Plant Engineering					1
Plumbing	1		1	5	4
Printing			1	1	-
Refrigeration and Airconditioning		3	2	3	4
Saw Doctor	1	Ŭ		1	1
Telecommunications Engineering	-				5
Welding & Fabricating	1	2	7	5	9
Electrical Engineering	1	1	'	3	20
TPAF & WESTERN SYDNEY INSTITUTE OF TAFE					
TAFE Statement in Information Technology (Hospitality)	20				
Statement of Attainment in Tourism (Marketing Management)					5
Certificate II in Hospitality (Operations)	85		115		50
Certificate II in Hospitality (Kitchen Operations)	12				17
Certificate III in Hospitality (Accomodation Services)					2
Certificate III in Hospitality (Food & Beverage)					1
Certificate III in Hospitality (Operations)	45		32		10
Certificate III in Hospitality (Commercial Cookery)	28				10
Certificate IV in Business Marketing					9
Certificate IV in Hospitality Supervision (Commercial Cookery)	3				12
Certificate IV in Hospitality Supervision	18				17
Certificate IV in Technical Support					42
Diploma in Business Marketing					6
Advanced Diploma in Hospitality Management					18
Diploma in Hospitality Management	17				29
Diploma in Systems Administration					34
TPAF & University of Sunshine Coast.					
Graduate Certificate in Management	3		19	9	15
Graduate Certificate in Human Resource Management	2				
Graduate Diploma in Management	5		8	4	8
Masters of Management	1		3	т.	7
Masters of Managerifett		l	J		ı ,

TPAF & WESTERN SYDNEY INSTITUTE OF TAFE					
Certificate II in Information Technology			1		
Certificate III in Information Technology			1	46	
Certificate IV in Information Technology (Technical Support)	87		12		
Diploma of Information Technology (Systems Administration)	31		22		
Advanced Diploma of Quality Management	57				76
Certificate II in Accounting				111	
Certificate III in Financial Services (Accounts Clerical)	54		1		39
Certificate IV in Financial Services (Accounting)	29		2	54	16
Diploma of Accounting	54		21		27
Advanced Diploma of Accounting	18		16	22	9
Certificate III in Quality Management for Business Excellence			42	222	
Certificate IV in Quality Management for Business Excellence			47	106	
Diploma in Quality Management for Business Excellence			129	84	
Diploma in Quality Management for Business Excellence			124	51	
TAFE Certificate in Business Services				73	
TPAF & NATIONAL SAFETY COUNCIL OF AUSTRALIA					
Diploma in Occupational Health & Safety	24		3		
Certificate III in Occupational Health & Safety	13			11	19
Certificate IV in Occupational Health & Safety	25				5
TPAF & ROYAL MELBOURNE INSTITUTE OF TECHNOLOGY					
Certificate III in Clothing Production	1			61	
Certificate IV in Clothing Production	28			33	
Diploma in Clothing Industry	19			26	
TPAF & SOUTHERN CROSS UNIVERSITY					
Graduate Certificate in Management				2	
TOTAL	713	57	666	1010	634

Source: TPAF Management, 2007

Table 8.4 MoE/TVET Teacher Qualification Analysis for 2005

Subject Area.	Total No. of Teachers	Degree Trained.	Degree Untrained	Diploma Trained	Diploma untrained	Trade Certificate trained	Trade Certificate Untrained
Agriculture Science	230	52	13	147	5	5	5
Computer Education	104	36	26	40	2	-	-
Home Economics	226	73	3	120	-	23	-
Industrial Arts.	343	72	18	218	4	23	8
Office Technology	60	NA	NA	34	24	2	2
Automotive Engineering	46	2	NA	11	13	14	6
Carpentry and Joinery	51	NA	NA	18	30	3	NA

Catering and Tailoring	48	5	NA	14	6	2	21
Tanoming							

Source: TVET Section-MoE 2006

TABLE 8.5: NUMBER OF SCHOOLS OFFERING TVET SUBJECTS

Level	No. of schools
	%
Form 1	16
Form 2	16
Form 3	94
Form 4	94
Form 5	87
Form 6	85
Form 7	75
Grand total	94

Source TVET Section, MoE 2006

Table 8.6 Classes versus TVET Students % Intake

School Level	Number of students %
Form 1	8.3
Form 2	10
Form 3	34.5
Form 4	32
Form 5	21
Form 6	16
Form 7	10.17

Source: MOE Annual Report, 2006

Table 8.7: Vocational students Graduates 2000-2005

Prog	20	<u>00</u>	200	<u>1</u>	200	<u>)2</u>	20	03	20	04	200	<u>)5</u>
	М	F	М	F	М	F	М	F	М	F	М	F
Agriculture	86	19	74	11	55	5	52	10	126	21	107	14
sub total	10)5	85		60)	6	2	14	47	12	1
Automotive engineering	326	34	402	23	505	30	772	28	428	40	672	38
sub total	36	60	425	5	53	5	80	00	46	68	71	0
Carpentry and joinery	350	2	410	-	505	-	480	2	372	-	413	-
sub total	35	52	410)	50	5	48	33	37	72	41	3
Catering and tailoring	15	460	2	489	11	749	41	658	43	515	54	902
sub total	47	' 5	491		76	0	69	9	55	58	95	6
Office technology	1	188	-	190	2	153	2	103	-	215	-	127
sub total	18	89	190)		155		105		215	12	7
total male & female	778	703	888	713	628	937	1347	801	969	791	1246	181
GRAND TOTAL		1481		1601		2015		2149		1922	232	27

Source: MOE Annual Report 2006

TABLE~8.8:~LABOUR~FORCE~ENTRANTS~AND~EMPLOYMENT~ABSORPTION~(BOTH~SEXES)-~2002-2007

		Avg. Annual, 20	002-2007	Total
	Components	No.	Pct.%	2002 – 2007
Labour Force Entrants	School leavers entering labour force (including from Post Secondary Institutions)	14,500	81.9	72,500
	Belated entrants into the labour force (almost exclusively women)	600	3.4	3,000
	Laid-off workers seeking re- employment Never attended school	2,400	13.6	12,000
	Total	200	1.1	1,000
	Total	17,700	100.0	88,500
Formal Sector Employment	Replacements for emigrating (formal sector) employed persons. Replacements for employed persons	[2,070]	[11.7]	[10,350]
Opportunities	leaving formal sector due to normal attrition (2.5%xavg. 116,000 employed in year 2000)	2,900	[16.4]	[14,500]
	New formal sector employment (2.6% per annum)	[4,000]	[22.6]	[20,000]
	Total formal sector	0.070	50.5	44.050
Informal Sector and cash-crop or mixed cash crop/subsistence agriculture	Replacements for employed persons leaving informal (non-farming) employment and cash-crop agriculture due to normal attrition (1.7%x120,000)	8,970 [2,040]	50.7 [11.5]	44,850 [10,200]
	Targeted expansion in employment opportunities to absorb balance of labour force entrants if nos. unemployed and those in subsistence agriculture employment are not to expand. (5.8% per annum)	[6,690]	[37.8]	[33,450]
	Total informal sector and agriculture	8,730	49.3	43,650
Total Employment Opportunities		17,700	100.0	88,500

Source: BUREAU OF STATISTICS, 2007

Table 8.9: POVERTY- LEVELS IN FIJI

	National	Urban	Rural	Fijian	Indian
Relative Poverty Line	32.7	29.0	35.0	31.3	34.5
Basic living costs poverty line	25.5	27.6	24.3	27.7	31.0
Food Poverty Line	9.9	7.9	11.1	10.4	9.2
Subjective Poverty Line	12.5	-	-	-	-

Source: BUREAU OF STATISTICS, 2007

PROPORTION OF THE POPULATION LIVING BELOW THE OFFICIAL POVERTY-LEVEL

1980s Fiji described as a society with deep inequalities but little absolute poverty

1997 Fiji Poverty Report reached similar conclusions

1997 showed 25% of household lived in poverty

Poverty pervaded all communities Fijian, Indian and others

Main difference Fijian predominated in the middle income group

Indians in the lowest and highest income groups

RURAL COMMUNITIES DEFINE POVERTY AS:

Poor housing made from traditional materials

Inability to afford school fees

Lack of farming and fishing equipment

In debt all the time

Perceived exclusion from government economic and financial opportunities. Nature of rural/urban unemployment rates, lack of education/training social/economic factors etc Half Fiji's population are urbanized

Urban migration is at 2.6% per annum

Fijians at 4% has the highest urban migration rate

8,000 only of the 14-18,000 school leavers annually over find employment

Decline in rural population due to limited income generating opportunities, need for better access to medical, and education faculties

Unemployment rate at 5.8% in 1996 of the total labour force.

2000 and redundancies and static manufacturing and formal sector have resulted in much higher unemployment rate in 2005

Access to skills training is lacking for rural schools

Vocational and trade skills training offered very limited particularly in rural areas

Vocation and TVET skills provision is expensive for rural poor

Mismatch in labour market/resource needs and current education/training curriculum content

Main causes of existing poverty i.e. rural/urban unemployment rates, lack of education/training social/economic factors etc

Source: Ministry of Labour and BUREAU OF STATISTICS, 2006

MAIN CAUSES:

Landlessness particularly for Indians and Melanesians and Fijians who have migrated to urban areas

Migration from rural to urban

Lack of access to basic services and infrastructure

Lack of business opportunities and markets

National income inequality and uneven distribution of Fiji's economic activities

Source: Ministry of Labour and BUREAU OF STATISTICS, 2006

Table 8.10: Overall Distribution of Household Income 1990-81

10% group	Share of total income (%)	Average Weekly household income (F\$)	Cumulative share of total income (%)
1. (poorest)	1.8	33.71	1.8
2.	3.3	63.73	5.1
3.	4.4	85.67	9.5
4.	5.5	105.45	15.0
5.	6.4	127.02	21.4
6.	7.7	152.22	29
7.	9.2	183.85	38.3
8	11.8	233.51	49.9
9	15.1	316.01	65.0
10. richest)	35.0	750.20	100.0

Source: Ministry of Labour and BUREAU OF STATISTICS, 2007

Special training and skills development programmes for the urban/rural poor

96 Vocational centres provide skills training,

Government Ministries e.g. Women, Youth,

Integrated Human Resources for employment Promotion is an integrated approach involving government departments, Fiji Employers Federation, Fiji Employees Union, Chamber of Commerce and NGOs

Use of FNPF to access skills training at FIT, TPAF, Private Vocational providers and USP

Source: Ministry of Labour and BUREAU OF STATISTICS, 2007

TABLE 4.11: YOUTH EMPLOYMENT & PRODUCTIVITY

Economic activity	Total	Male	Female
Total	279,381	139,524	139,857
Economically active	164,308	105,953	58,355
Not Economically Active	115,071	33,569	81,501

Source: Ministry of Labour and BUREAU OF STATISTICS, 2007

CURRENT ANNUAL LABOUR MARKET SITUATION

- ▶ Approximately 18,000 enter the labour market
- ▶ 4,000 new job opportunities
- ▶ 7,000 job replacement [5,000 Formal Sector & 2,000 Informal Sector]
- ▶ 7,000 join the informal sector

Source: Ministry of Labour and BOS 2007

Table 8.12: Age/Sex Distribution of Unemployment, Fiji 1996

AGE		Males		Females			
GROUP	Eco Active	Unemployed	Pct	Eco Act	Unemploy	Pct.	
15 - 19	16,503	2,448	14.8	7,935	1,854	23.4	
20 - 24	27,668	2,532	9.2	14,745	1,934	13.1	
25 - 29	28,629	1, 381	4.8	13,833	1,000	7.2	
30 - 34	28,987	925	3.	13,824	765	5.5	
			2				
35 +	98,265	2,316	2.4	47,381	2,110	4.5	
Total	200,252	9,602	4.8	97,718	7,663	7.8	
Source: As c	ompiled from	FIBS 1996 Census	Tables, Table 3.3	3			

Table 8.13: Rates of Unemployment by Sex and Education Level Completed For Age Group 15- 24

Level of Education		Males		Females			
	Eco-		Pct	Eco-	Unempld.	Pct	
	Active	Unemployed		Act			
Primary	11,455	401	3.5	3,512	185	5.3	
Secondary	30,427	4,168	13.7	17,429	3,138	18.0	
Post- Secondary	2,169	402	18.5	1,632	460	28.2	
Unrecognised	120	9	7.5	107	5	4.7	
Total	44,171	4,980	11.3	22,680	3,788	16.7	
SOURCE: As compile	ed from 1996	census, provisio	nal results.Tables	OCC-5F a	and OCC 5M	7	

Table 8.14: Students Enrolment in FIT 1996-2005

Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total Roll	2700	3300	3500	3746	4600	5033	6421	5112	6144	7623

Source: FIT Annual Report, 2006

Table 8.15- Census of Population Fiji Island 1901-1996

Ethnic Group	1901	1911	1921	1936	1946	1956	1966	1976	1986	1996
	31 Mar	2 Apr	24 Apr	26 Apr	2 Oct	26 Sep	12 Sep	13 Sep	31 Aug	25 Aug
Total	120,124	139,541	157,266	198,379	259,638	345,737	476,727	588,068	715,375	775,077
Chinese	-	305	910	1,751	2,874	4,155	5,149	4,652	4,784	4,939
European	2,459	3,707	3,878	4,028	4,594	6,402	6,590	4,929	4,196	3,103
Fijian	94,397	87,096	84,475	97,651	118,070	148,134	202,176	259,932	329,305	393,575
Indian	17,105	40,286	60,634	85,002	120,414	169,403	240,960	292,896	348,704	338,818
Part European	1,516	2,401	2,781	4,574	6,142	7,810	9,687	10,276	10,297	11,685
Rotuman	2,230	2,176	2,235	2,816	3,313	4,422	5,797	7,291	8,652	9,727
Other Pacific Islanders	1,950	2,758	1,564	2,353	3,717	5,320	6,095	6,822	8,627	10,463
All Others	467	812	789	204	514	91	273	1,270	810	2,767

Source: Ministry of Labour and BUREAU OF STATISTICS, 2007

Table 8.16: Crime Offences per 100,000 Population per Police Station 2004 by Division

Station	Southern	Western	Northern	Eastern	Grand Total
Estimated Population	332,803	356,399	79,172	112,174	880,548
2004 Crime Reports	6,824	5,659	2,157	1,934	16,574
Crime Reports per 100,000 Population	2,050	1,588	2,724	1,724	1,882
Percentage per 100,000 Population	2.1%	1.6%	2.7%	1.7%	1.9%

Source: Fiji Police Dept 2006

Table 8.17: Child Victims, Fiji 2004

Year	Child Sexual	Abuse by Ag	ge Distribution		Child Se	xual Abuse by	Racial Distribution
1 Cai	Below 13 yrs	14-16 years	Total	Fijian	Indian	Others	Total
Rape	16	15	31	16	15	0	31
Attempted Rape	3	3	6	4	1	1	6
DOGU 13 yrs	9	19	28	22	6	0	28
DOGU 13-16 yrs	11	26	37	29	8	0	37
Unnatural Offences	10	1	11	9	2	0	11
Indecent Exposure	8	10	18	12	6	0	18
Incest	0	3	3	1	2	0	3
Indecent Assault	43	17	60	51	5	4	60
Total	100	94	194	144	45	5	194

Source: Fiji Police Dept 2006

Table 8.18: Fijis Employment Statistics

Paid employment by occupational categories by sex, 1999

Occupational Categories	Male	Female
Legislators, Senior Officials and Managers	3,497	714
Professionals	7,591	7,988
Technicians and Associates	6,606	2,734
Clerks	6,790	8,117
Service Workers and Shop and Market Sales Workers	9,730	4,945
Skilled Agricultural and Fishery Workers	890	23
Craft and Related Workers	10,914	1,589
Plant and Machinery Operators and Assemblers	9,942	8,065
Elementary Occupations	13,623	4,212
Armed Forces	3,131	32

Source: Ministry of Labour and BUREAU OF STATISTICS, 2007

Table 8.19: Government Finance

Central Government Finance - Expenditure (Current) [FJD million]

	2000	2001	2002	2003e	2004e	2005e
General public services	158.1	138.0	150.3	183.8	173.3	191.2
Defence	68.2	74.7	67.6	50.8	48.4	58.2
Education	151.9	162.5	179.6	170.2	181.4	191.5
Health	82.3	89.8	99.9	92.1	96.2	109.9
Social Security and Welfare Services	2.4	3.0	2.3	2.6	2.0	2.8
Housing & communities ammenities	5.5	6.1	8.0	8.0	8.7	8.5
Other Community and Social Services	0.5	0.6	0.9	0.8	0.9	1.0
Economic Services	91.7	114.7	125.1	119.8	125.8	131.0

Source: Ministry of Labour and BUREAU OF STATISTICS, 2007

Table 8.20: Government Finance - Summary Table

CENTRAL GOVERNMENT FINANCE SUMMARY [FJD000]

Year	2000	2001	2002	2003	2004	2005
Current Revenue	894,055	895,987	949,388	1,079,128	1,167,709	1,218,33 2
Current Expenditure	935,580	989,299	1,047,404	1,083,372	1,180,380	1,231,55 6
Surplus/Deficit	-41,525	-93,312	-98,016	-4,244	-12,421	-13,224

Source: Ministry of Labour and BUREAU OF STATISTICS, 2007

TABLE 8.21: CURRENT REVENUE ANALYSIS BY SOURCE [FJD000]

Year	2000	2001	2002	2003	2004	2005
Total Current Revenue Current	894,055	895,987	949,388	1,079,128	1,167,709	1,218,332
Customs Duties and Port Dues	226,332	456,760	521,140	662,864	700,542	723,586
Income Tax and Estate and Gift Duties	487,517	284,387	275,427	286,336	334,608	352,498
Fees, Royalties Sales and Reimbursement	64,621	65,443	53,083	46,193	49,533	58,146
All Other Income n.e.c.	115,585	89,397	99,738	83,735	83,026	84,102

Source: Ministry of Labour and BUREAU OF STATISTICS, 2007

Table 8.22: Key Population Flow Statistics

	POPULATION					
31st Dec 2005 (prov est)						
Fijians:	463,432					
Indians:	316,093					
Others:	66,560					
TOTAL:	846,085					
CONSUMER PE	RICE INDEX (Annual Average Inflation Rate)					
2000	1.1					
2001	4.3					
2002	0.8					
2003	4.2					
2004	2.8					
2005	2.4					

Source: Fiji Islands Bureau of Statistics 2006

VISITOR STATISTICS					
Visitor Arrivals					
2003 430,800					
Qtr 1	105,055				
Qtr 2	120,686				
Qtr 3	148,507				

Source: Fiji Islands Bureau of Statistics 2006

	OVERSEAS TRADE [FJD000]							
	Total Imports							
2004	2,501,639							
2005	2,722,787							
2006 Qtr 1	682,711							
	Total Exports							
2004	1,200,497							
2005	1,187,786							
2006 Qtr 1	248,284							

Source: Fiji Islands Bureau of Statistics 2006

Table 8.23: Population and Demography population at year end

Race	Population Census 1996	1997	1998	1999	2000	2001	2002	2003[p]	2004[p]	2005[p]
Fijian	393,575	403,714	411,386	419,444	426,243	433,491	441,511	448,521	455,947	463,432
Indian	338,818	338,540	337,350	334,672	332,303	327,253	326,296	322,238	318,883	316,093
Others	42,684	46,664	48,907	52,096	51,875	54,269	57,671	60,584	63,487	66,560
Total	775,077	778,918	797,643	806,212	810,421	815,013	825,478	831,343	838,317	846,085

Note: Data from 2003 are provisional estimate

Source: Ministry of Labour and BUREAU OF STATISTICS, 2007

Table 8.24: Minimum Wage Rates

Classification	Hourly rate	Per annum
		(based on 40 hour week)
General tradesman	1.92	3,993
Tradesman Class 11	1.99	4,139
Tradesman Class 1	2.09	4,347
Craftsman	2.17	4,513

Source: Wages Council Act 1997

Notes: General tradesman may not necessarily be qualified. The other categories listed above are for workers who hold trade certificates.

Table 8.25: Wage and Salary Earners in Each Occupational Area by Sex (2000)

Occupational Area	Total	%	Men	% of Occupation	Women	% of Occupation
Legislators, Senior Officials and Managers	4,211	4%	3,497	83%	714	17%
Professionals	15,579	14%	7,591	49%	7,988	51%
Technicians and Associate Professionals	9,340	8%	6,606	71%	2,734	29%
Clerks	14,907	13%	6,790		8,117	
Service Workers and Shop and Market Sales Workers	14,675	13%	9,730	66%	4,945	34%
Skilled Agricultural and Fishery Workers	913	1%	890	98%	23	2%
Craft and related workers	12,503	11%	10,914	87%	1,589	13%
Plant and Machinery Operators and Assemblers	18,007	16%	9,942	55%	8,065	45%
Elementary Occupations	17,835	16%	13,623	76%	4,212	24%
Armed Forces	3,163	3%	3,131	99%	32	1%
TOTAL	111,133	100%	72,714	65%	38,419	35%

Source: Key Statistics June 2006 (p.76), Fiji Islands Bureau of Statistics, 2006. Suva.

Table 8.26: Starting Salaries for Civil Servants

Starting salary
18,723
19,564
13,084
14,266
10,436
15,884
8,582
6,192
6,192

Source: PSC Circular No. 32/99, 2005

TABLE 8.27: POPULATION GROWTH RATE

Year	Total Population	Growth Rate	Fijian Population	Growth Rate	Indian Population	Growth Rate
1996	777,114	0.63	393,575	0.60	338,818	-0.04
1997	788,918	1.52	403,714	2.58	338,540	-0.08
1998	797,643	1.07	419,444	1.96	334,672	-0.35
1999	806,212	1.07	419,444	1.96	334,672	-0.79
2000	810,421	0.52	426,243	1.62	332,303	-0.71
2001	815,013	0.57	433,491	1.70	327,253	-1.52
2002[p]	825,478	1.28	441,511	1.85	326,296	-0.29
2003[p]	831,343	0.71	448,521	1.59	322,238	-1.24
2004[p]	838,317	0.84	455,947	1.66	318,883	-1.04
2005[p]	846,085	0.93	463,342	1.62	316,093	-0.87

Source: Fiji Islands Bureau of Statistics 2006

TABLE 8.28: DEMOGRAPHIC INDICATORS FROM PREVIOUS POPULATION CENSUSES

Indicators		1986		
indicators	Urban Rural		Total	Total
Total population, Males	180,119	213,812	393,931	362,568
Total population, Females	179,376	201,770	381,146	352,807
	Male	Female	Total	Total
Median Age	21	22	21	21
Sex Ratio			103	103
Population Density for Land Area			42	39
Crude Birth Rate (CBR)			25	-
Crude Death Rate (CDR)			26	-
Dependency Ratio			62.5	70.4

Source: Fiji Islands Bureau of Statistics 2006

Table 8.29: Summary of Visitor Arrivals and Departures

Year	Arrivals	Departures
1999	409,955	404,510
2000	294,070	294,286
2001	348,014	342,067
2002	397,859	395,118
2003	430,800	424,058

Source: Embarkation and Disembarkation Cards - Department of Immigration. Note:* Includes visitors whose departure cards were not processed.

Table 8.30: Visitor Arrivals by Country of Residence

Year	Australia	New Zealand	USA	Canada	UK	Cont Europe	Japan	Taiwa n	Malaysi a	S Korea	Rest of Asia	Pac Islands	Others	Total
1999	118,272	72,156	62,131	13,552	40,316	28,371	37,930	784	319	1,489	6,694	26,090	1,851	409,955
2000	76,883	49,470	52,534	10,532	29,215	22,506	19,674	610	277	3,386	5,863	21,534	1,586	294,070
2001	98,213	66,472	57,711	10,752	30,508	20,917	20,411	776	304	8,413	8,263	23,608	1,936	348,014
2002	123,606	68,293	58,815	9,802	43,393	21,654	26,382	922	316	6,992	11,128	24,051	2,505	397,859
2003	141,873	75,016	58,323	10,990	49,794	21,847	23,464	870	268	8,380	10,283	28,167	1,525	430,800

Source: Embarkation and Disembarkation Cards - Department of Immigration 2005

Table 8.31: Hotel Occupancy -Room and bed night occupancy rates

Period	Room Night Occupancy	Bed Night Occupancy
2000	48.7	36.3
2001	46.5	37.3
2002	55.6	43.7
2003	55.9	44.9
2004	61.3	51.7
2005	64.4	54.6

Source: Fiji Islands Bureau of Statistics 2006

Table 8.32: Labour Supply and Demand in Fiji 2002-2007

	Labour Supply and Demand	Category	Average Annual 2002-2007	
	Demand		2002	2002-2007
		School leavers	14,500	72,500
		Belated entrants	600	3,000
SUPPLY	New Entrants	Laid-off workers	2,400	12,000
		Never attended school	200	1,000
		Total Supply	17,700	88,500
		Replacements for emigrants	2,070	11,350
DEMAND	Employment Opportunities (formal	Replacements for attrition	2,900	14,500
	sector)	New Jobs Created (@2.6% GDP per annum)	4,000	20,000
		Total Demand	8,970	44.950
	Employment			
	Requirements (informal sector)	Total Required	8,730	43,650

Source: Fiji Ministry of Education & ADB Study skills report, 2006

Table 8.33: DOMESTIC EXPORTS

8.3 VALUE OF DOMESTIC EXPORTS [FJD000]

Period/HS											
Codes	I	II	III	IV	V	VI Chemical	VII	VIII	IX Wood,	X	XI Textiles
	Live	Vegetable	Animal or Vegetabl	Prepared Foodstuffs	Mineral Product	S	Plastic, Rubber	Raw Hides, Skins,	Cork	Wood Pulp,	&
	Animals:	Products	е	,	S	and	&	Leather	& Articles Thereof	Paper & Paperboard	Textile
	Animal		Oils &	Beverages,		Allied	Articles	Articles	&	,	Articles
	Products		Fats	Spirits &		Products	Thereof	Thereof and Travel	Plaiting	& Articles	
				Tobacco				Goods	Material	Thereof	
	01 -05	06 -14	15	16 - 24	25 - 27	28 - 38	39 - 40	41 - 43	44 - 46	47 - 49	50 - 63
Yearly											
2000	89332	35964	4933	292338	6076	6853	1839	6149	43441	14344	353138
2000 2001	89332 96799	35964 34320	4933 3218	292338 305920	6076 7877	6853 6978	1839 2188	6149 1775	43441 39579	14344 15959	353138 322104
2001	96799	34320	3218	305920	7877	6978	2188	1775	39579	15959	322104
2001 2002	96799 79419	34320 31045	3218 6787	305920 316683	7877 8244	6978 8344	2188 5100	1775 2101	39579 38909	15959 15238	322104 231262
2001 2002 2003	96799 79419 84747	34320 31045 35941	3218 6787 5892	305920 316683 319519	7877 8244 3456	6978 8344 11216	2188 5100 2320	1775 2101 1456	39579 38909 30848	15959 15238 18693	322104 231262 249749

Source: Fiji Islands Bureau of Statistics 2006

Table 8.34: EXPORTS

8.10 RETAINED IMPORTS CLASSIFIED BY BROAD ECONOMIC CATEGORIES (BEC)

[FJD000]

		Percentage Change												
	Economic Category	2000	2001	2002	2003	2004	2005[p]	2006[p]	2001	2002	2003	2004	2005	2006
1*	Food and Bever	rage												
	11* Primary 111*	Ü												
	Mainly for industry 112*	55191	56099	65830	66636	74213	76258	91284	1.645196	17.34612	1.224366	11.37073	2.755582	19.70416
	Mainly for household	41182	46039	45676	53422	57387	55711	63219	11.79399	-0.78846	16.95858	7.422036	-2.92052	13.47669
	consumption 12* Processed 121*	41162	46039	43076	53422	5/36/	55711	03219	11.79399	-0.70040	10.95050	7.422036	-2.92052	13.47669
	Mainly for industry 122*	21688	25117	26605	32246	31767	30063	32673	15.81059	5.924274	21.20278	-1.48546	-5.36406	8.681768
	Mainly for household	407540	100105	470700	400005	005550	000700	000775	75 07400	5.40000	0.404700	0.00000	0.550000	4 00040
0.*	consumption	107543	188495	178726	193265	205558	206709	202775	75.27408	-5.18263	8.134799	6.360696	0.559939	-1.90316
2*	Industrial Supp		-											
	21* Primary 22*	12648	10390	10981	15588	10025	13581	20331	-17.8526	5.688162	41.95428	-35.6877	35.47132	49.70179
	Processed	446589	420487	410867	474635	588833	567792	598315	-5.84475	-2.28782	15.52035	24.06017	-3.57334	5.375736
3*	Fuels and Lubri													
	31* Primary 32* Processed	1594	1983	1823	1323	1422	723	53	24.40402	-8.06858	-27.4273	7.482993	-49.1561	-92.6694
	321* Motor spirit 322*	14651	40859	29841	35819	46495	49257	70062	178.882	-26.9659	20.03284	29.80541	5.940424	42.23765
	Other	217255	244039	216210	235127	364191	455681	18503	12.32837	-11.4035	8.749364	54.89119	25.12143	-95.9395
4*	Capital Goods (41* Capital goods (except transport	Except Tran	sport Equip	oment) and p	oarts and Ad	cessories	thereof							
	equipmet) 42* Parts and	161309	170326	156271	186455	214747	261890	298894	5.589893	-8.25182	19.31516	15.17363	21.95281	14.1296
	accessories	87640	100975	97450	103723	128435	130879	142481	15.21565	-3.49096	6.437147	23.825	1.902908	8.864677
5*	Transport Equip 51* Passenger	oment and P	arts and Ac	cessories th	nereof									
	motor cars 52* Other	27398	29425	43998	49396	54607	53233	53569	7.39835	49.52591	12.26874	10.54944	-2.51616	0.631187
	521*	31416	39121	57421	214647	81685	65583	103753	24.52572	46.77795	273.8127	-61.9445	-19.7123	58.20106

	Industrial													
	522* Non-industrial 53* Parts and	4756	16735	6021	6798	16619	9360	13161	251.8713	-64.0215	12.90483	144.469	-43.6789	40.60897
	accessories	50126	47029	48017	75837	73467	82451	79093	-6.17843	2.100831	57.93781	-3.12512	12.22862	-4.07272
6*	Consumer Goo	ds Not Else	where Spec	ified										
	61* Durable 62* Semi-	52829	59440	62797	71425	79725	90483	86956	12.51396	5.647712	13.73951	11.62058	13.49389	-3.89797
	durable 63* Non-	103473	80708	79474	90234	74465	107309	106456	-22.0009	-1.52897	13.53902	-17.4757	44.10663	-0.7949
	durable	98429	89082	93660	97974	119028	112110	116651	-9.49619	5.139085	4.606022	21.48937	-5.81208	4.050486
	Goods Not Elsewhere													
7*	Specified [r] TOTAL RETAINED	127691	115281	77640	82780	24152	8746	654391	-98.6553	3309.091	6.620299	-70.8239	-63.7877	7382.175
	IMPORTS	1663408	1786430	1711908	1973830	2246821	2377819	2752620	8.449206	-2.0594	15.3	13.83052	5.830371	15.76239

Source: Fiji Islands Bureau of Statistics 2006

Projections	Description	Detail	Dudust Fathersts	D
Projections	Description	Description	Budget Estimate	Remarks
1.National Qualification Framework Organisation(NQF)	To house the following division/personnel			
	1.Quality (NQF)	Staff Salary *1	30,000.00	
	2.Standards	Staff Salary *1	30,000.00	
	3. Qualifications (NQF)	Staff Salary *1	30,000.00	These are indicative
	4. Accreditation	Staff Salary *1	30,000.00	estimates. All are essential for
	5. Acts/ National Policy	Staff Salary *1	30,000.00	the implementation of NQF.
	6. Funding	Staff Salary *1	30,000.00	TVET providers including FIT, TPAF, private trainers, MOE, MOY etc
	Structure/ Buildings/ Equipment	Infrastructure	200,000.00	
	Managers	1	60,000.00	
	Executive Officer	1	15,000.00	
	Driver/ Messenger	1	8,000.00	
Sub Total	Vehicle	1	30,000.00 493,000.00	
2. Reorganisation/ Restructure of FIT, TPAF and other	0			
providers	Curriculum			
	Staffing			
	Facilities,			
	Administration cost			
	Infrastructure			
	Industry Attachment			
	Insurance Cover			Restructure cost kept to
	franchise/Articulation cost		600,000.00	a minimum

Source: Consultation with Ministry of Finance, Budget Division

Estimate

Grand Total 1,586,000.00

- Possible Approaches to meet the Project Cost
 1. Training providers to share the cost based on the proved productivity and restructure.
 2. Government & Ministry of Finance to allocate operation budget for the project
 3. Donors like ILO, CPSC, ADB to assist

Possible Alternative suggestions for the NQF Establishment

1. TPAF to start up the NQF based at their Narere Centre for the next 2 years

Photos Gallery





Discussion and Meeting with Principals at Labasa Secondary Schools





Meeting with Teachers at Ratu Navula Secondary School





Discussion with Ratu Navula Teaches





After discussions at the University of Fiji