

Chapter Summary



Introduction

A nation's economy runs on the knowledge and skills of its people. Skills development is becoming a priority for countries in the Pacific, fueled in part by the surging numbers of youth who have completed formal schooling yet lack the practical skills that are useful in the labor market. Skills formation has also become a priority in countries of the Pacific where job growth and emigration have created skills shortages. In view of its growing importance, the Asian Development Bank (ADB) arranged for a comprehensive study of technical and vocational education and training (TVET) in the Pacific as part of the implementation of its policy on better learning, better future: education and training strategy for the Pacific.

The regional technical assistance analyzes TVET in 13 Pacific island countries (PICs), proposes strategic options for reform, and identifies possible project investments at both country and regional levels. The study, carried out in April 2006–September 2007, was financed by the Japan Special Fund—implemented by ADB—and executed by the Pacific Islands Forum Secretariat (PIFS). This publication synthesizes the findings from various parts of the study, including six in-depth country reports, seven background reports on other PICs, a literature review, and a regional survey of employers and employees.

Chapter 1: Socioeconomic Background: Country Typologies (also Appendix 1)

The diversity of the region and the different stages and prospects for development suggest grouping the countries for purposes of analysis. Three categories are presented: group 1: land-rich, low-income countries—Papua New Guinea (PNG), Solomon Islands, and Vanuatu; group 2: small, vulnerable island states—Kiribati, Republic of the Marshall Islands (RMI), Federated States of Micronesia (FSM), Nauru, and Tuvalu; and group 3: “advanced” island states—Cook Islands, Fiji Islands, Palau, Samoa, and Tonga. The countries in group 1 have low social and economic indexes, but positive agricultural potential. The vulnerable island states, group 2, face severe economic constraints, few economic prospects, and issues of sustainability. Countries in group 3 have relatively good prospects from tourism, remittances from abroad, and emigration.

Chapter 2: Skills Gaps in the Pacific (also Appendix 3)

Most PICs have limited jobs in the formal economy for their expanding populations. Growth of the labor market far exceeds growth in wage jobs. This means most new entrants will have to work in the informal sector. The informal sector in the Pacific is largely limited to the processing and merchandising of primary produce; providing services such as carpentry and mechanical repair, transport, and small-scale vending; and producing and selling handicraft and sewn materials. Skills gaps occur in all these activities. Small-scale

fishing and other primary production provide the main opportunities in the vulnerable island states, and greater agricultural production in the land-rich states.

Ironically, formal sector jobs are limited, but pockets of skills shortages occur throughout the wage economies of the Pacific. Three main factors are responsible: growth in the mining sector (PNG) and tourism (Cook Islands, Fiji Islands, Samoa, Tonga, and Vanuatu) have created a rising demand for skilled labor, especially in hospitality and construction. These countries lack sufficient people with the skills in management/supervision and trades occupations capable of working to international standards; emigration has positive aspects, including remittances to the source country and opening jobs locally. However, emigration exacerbates domestic skills shortages as many with skills leave for better-paying jobs elsewhere; and the supply chain of TVET is insufficient in key fields, and TVET graduates do not often have the level of knowledge and skills required for the job.

Chapter 3: Landscape and Architecture of Technical and Vocational Education and Training in the Pacific

What patterns and structures are in place for skills development in the Pacific? Skills training generally cover only a fraction of students in PICs, but it is provided through a rich variety of sources. TVET consists of three distinct subsystems in the Pacific—school-based (part of the formal education system), including prevocational in secondary schools and postsecondary technical institutions; center-based trade training outside the formal school system; and enterprise-based training (e.g., apprenticeships). Almost all countries in the Pacific region have some skills courses in secondary schools, with Palau and Fiji Islands the most prominent. All countries—except the smallest (Cook Islands, Nauru, and Tuvalu)—have postsecondary technical institutes. Similarly, outside the school system, almost all PICs have stand-alone trade training centers (except the RMI, Nauru, and Tuvalu). Enterprise-based training in the form of apprenticeships is practiced in half the countries. Private training providers are important sources of skills development in most countries in the region. This includes nonprofit institutions, usually church based, that provide extensive training infrastructure; and for-profit training providers (for example, 50 registered for-profit private training providers in the Fiji Islands and over 100 in PNG.) Rural training systems are extensive in group 1 countries. Almost all PICs (11 of 13) have maritime training institutions.

TVET organizational setup and management mirror the diversity of providing training. Ministries of education manage prevocational training in secondary schools and some postsecondary training. Postsecondary technical institutes are either semi-self-governing—Fiji Institute of Technology (FIT), Vanuatu Institute of Technology (VIT), National University of Samoa, Institute of Technology (NUSIOT), and the community

colleges along the northern rim—or under separate ministries (Cook Islands and Tonga). Ministries of labor and commerce also play a key role in skills development in Kiribati, PNG, and Solomon Islands. In addition, three national training councils operate in the region (PNG, RMI, and Vanuatu). This organizational diversity makes coordination important and a challenge.

Another feature of skills development in the Pacific is the growing interest in national qualification frameworks (NQFs). NQFs are being developed or considered in most areas, except the northern tier. Three countries have or will have national qualification bodies (Samoa, Tonga, and Vanuatu), and NQFs are being considered in others (Fiji Islands and PNG).

Financing, as a provision of TVET, comes from multiple sources. Public financing constitutes the majority source through ministry budgets. In many cases, public funding is declining. Private financing through tuition charges and fees is important in about half the countries. Production activities partly finance the costs of some nonprofit training providers. Three levy systems exist, but only one, Fiji Islands, pumps much financing directly into training. Almost all countries depend on external financing for capital expenditures. Five countries, mainly along the northern rim, depend wholly on external financing for all expenditures.

Chapter 4: Analysis of Technical and Vocational Education and Training Systems in the Pacific

What is working well in Pacific skills development and what needs to be improved? The review examines this question according to five criteria.

Economic Relevance. How well do the training systems produce graduates needed in the economy? Mismatches are common in the Pacific region. Most countries report shortages of skills—particularly in certain fields such as construction, tourism, and mining—owing to growth and emigration. However, surplus labor in the informal sector is the main challenge. Economies cannot generate enough wage jobs for the number of new entrants to the labor market. Thus, an increasing number of youth either are unemployed or must work for themselves in the informal sector. Unfortunately, most skills training is geared toward wage employment, not productivity in the informal sector.

An economically relevant system of skills development requires three essential ingredients: information about job trends, close employer involvement in guiding the system, and a training supply chain that is flexible in responding to changes. Pacific TVET systems fall short on these three criteria. With some exceptions, little is known generally about skill demands or about the absorption of trainees into the labor market through tracer studies. The exceptions are labor market surveys in Solomon Islands and Vanuatu, and tracer studies in Palau, Solomon Islands, and Vanuatu. Second, employers need to

be more involved in helping steer TVET policy and supply in the right directions. This occurs in the Training and Productivity Authority of Fiji (TPAF) with good results. The Pacific region does well in making workplace attachments an integral part of training, particularly apprenticeships, which keep trainers and trainees in touch with job requirements and trends. However, as a rule, employers are not consulted sufficiently. Third, Pacific training systems have been challenged to make their programs flexible, up to date, and responsive to changing demands. The Tarawa Technical Institute (TTI) exemplifies how to blend short-term and outreach programs with long-term training but, for the most part, Pacific training is long term (2–3 years) and unchanging in content.

Quality of Skills Training. How effective are Pacific training systems in imparting necessary competencies? Quality training requires three essential elements: definition of standards based on occupational analysis; sufficient inputs in well-organized training content, qualified instructors, appropriate facilities, equipment, and consumable supplies; and measurement of outputs against standards. Several countries (e.g., the Fiji Islands, PNG, Samoa, Tonga, and Vanuatu) are introducing NQFs based on the generation and employer ratification of occupational standards. However, there may be overexpectations and an underappreciation of the work involved. The relationship between national and international standards, as required for migration, is not yet developed. The proposed Australia–Pacific Technical College could help bridge the gap. Several countries have also introduced competency-based training (CBT), which breaks training objectives into modular content as an effective way to impart skills. At the VIT, the application of CBT has increased successful student completion dramatically. Several countries have offered technical teacher training (e.g., the Fiji Islands and PNG), although these tend to focus on pedagogical, rather than technical, skills.

Inadequate financing for equipment repair/replacement and for consumable materials constitutes a region-wide complaint. Inadequate financing compromises the practical parts of the curriculum. In terms of measuring outputs, several countries have established traditions of trade testing such as the Fiji Islands, Kiribati, and PNG, but most do only internal evaluations. For example, technical training institutes do not establish international or regional benchmarks. Nonformal training programs, in particular, lack feedback and evaluation measures.

The review calls attention to salient high-quality training in the region:

- Maritime training exemplifies high-quality training in most countries in the region. The Secretariat of the Pacific Community program ensures that international standards are met in terms of essential inputs (e.g., training content, qualified instructors) and output specifications.

- Postsecondary technical institutions are typically of good quality, e.g., FIT, VIT, NUSIOT, TTI, and Palau Community College, partly because they can concentrate resources

in one location; the FSM is an exception. These are key institutions for quality improvement in teaching at lower levels. The FIT franchise program (Box 3.2) is an outstanding case of such beneficial influence.

- Church agency training is often excellent and provides a standard to which public institutions can aspire, such as Don Bosco and Montfort.
- Examples of high-quality training for the informal sector were found in PNG and Vanuatu, but they suffer generally from inappropriate methodologies, a lack of coordination among service providers, and weak links with local labor markets.

However, prevocational programs in secondary education—vocalizing secondary education—have decidedly mixed results. The program works well in Palau at the high school, but rarely succeeds in countries with multiple secondary schools. The reasons have to do with expense of equipment and facilities, shortage of trained instructors, and low status of practical courses in an otherwise academic environment. Little evidence was found that the labor market outcomes of these programs are cost effective.

Finally, several countries (e.g., the Fiji Islands and PNG) are attempting to apply minimum quality standards to for-profit private trainers, but this has proved difficult to sustain. Sufficient resources have not been forthcoming to cover the costs of accreditation and monitoring.

Equity and Access. How well do Pacific training systems provide equitable access? In general, opportunities for developing technical and vocational skills are available only to a minority of those who enter the labor market, perhaps between 5% and 20% at most. Others are left to fend for themselves in unproductive and low-paying work. Training opportunities also tend to be concentrated in urban areas and available to those who can afford to pay. Nongovernment organizations (NGOs) play a key role in spreading opportunities for skills training in rural areas (including PNG, Solomon Islands, and Vanuatu). For traditional occupations, males tend to dominate skills training in the Pacific. Women typically make up only 20–30% of enrollments (PNG, Solomon Islands, and Vanuatu) and much less in some countries (the Fiji Islands' TPAF, or the Tonga Institute of Science and Technology). Men tend to monopolize technical and trades training, while women are found almost exclusively in home-oriented courses (e.g., sewing, cooking, and housekeeping). However, exceptions exist: VIT increased the share of female enrollment from 37–42% between 2004 and 2006. The church-agency vocational centers in PNG enroll thrice as many female students as do government institutions although they are outnumbered 73 to 56. Females comprise almost half of the vocational center enrollment in the Fiji Islands. Still, the overall pattern remains clear—i.e., the most disadvantaged in terms of access to TVET are women and girls.

Organizational and Management Effectiveness. How effective is the organization and management of Pacific skills development in achieving its objectives? Managing

TVET is arguably the most difficult subsector in the spectrum of the education sector. It must address changing and often unknown labor market demands and heterogeneous target groups, provide varied types of training, and compete for resources against larger subsectors. The study identified strong management systems in various parts of the Pacific, including among leading postsecondary technical institutions, such as FIT, NUSIOT, Palau Community College, and VIT. The existence of three national training councils is an important step forward. These councils provide a venue for the main stakeholders to articulate demands, set priorities, and steer TVET in the direction of user demands and market changes. TVET plans have been prepared in PNG, Solomon Islands, and Vanuatu. New organizations are being set up to address skills development along the southern rim (Cook Islands, Samoa, and Tonga). Moreover, an organization of TVET professionals has been established, the Pacific Association of Technical and Vocational Education and Training (PATVET), which offers a forum for professional exchange and development throughout the region.

Major challenges were also identified for organizational and management improvements. Mandates of various supervisory organizations need to be clarified (the RMI and PNG). Coordination needs to be established among the main providers (i.e., the Fiji Islands, FSM, PNG, and Solomon Islands). Fragmentation and lack of coordination need to be countered among informal sector trainers in the Fiji Islands and Vanuatu. Excessive centralization should be changed in PNG, where the Ministry of Education still controls directly the business and technical colleges. The apex training organizations in the RMI, PNG, and Vanuatu require more resources to carry out their functions properly. PNG, Solomon Islands, and Vanuatu need to prioritize their TVET plans, calculate the costs, and budget them properly. TVET plans are needed in the Fiji Islands, Kiribati, FSM, and Tuvalu. Standards for evaluating management performance need to be introduced throughout the region, and managers must be given opportunities for in-service professional development. Finally, lack of data and research on TVET, an almost universal handicap to progress, must be overcome.

Finance and Internal Efficiency. How do Pacific TVET systems mobilize resources well and use them efficiently for skills development? Examples abound of inefficient use of resources in TVET, including low teaching loads and low trainees per student in some institutions, fragmentation of spending (FSM), and courses that are excessively long for the skills imparted. Inefficiencies occur in part because training budgets are established based on historical levels, not performance. Little use is made of financial transfer mechanisms to improve the input–output ratios in TVET.

Positively, some institutions have accomplished major reductions in the cost per trainee. FIT, for example, raised the average number of students per teacher from 20–30 between 2001 and 2006, an indication of reduced spending per student. In part, this

was out of necessity as the government froze its funding while student enrollments soared. Public expenditure on TVET throughout the region came under pressure because of constraints on public budgets as a whole. Spending on TVET decreased as a share of public spending in many countries, including the Fiji Islands, PNG, and Vanuatu. To compensate, FIT succeeded in increasing the proportion of student financing through tuition fees to half of total expenditures. Similarly, VIT increased the share of tuition fees and other user charges to a third of spending. The Compact of Free Association countries in the northern Pacific—the RMI, FSM, and Palau—in particular, face the challenge of weaning themselves off external financing. Private training providers, if they meet minimum quality criteria, can help enormously in generating needed skills without burdening public expenditures. Across the region, the challenge is to reduce the dependence on public or external financing by mobilizing nongovernment financing for TVET.

Chapter 5: Priorities and Strategic Options

TVET priorities are identified by country groups. The top priority in land-rich, low-income (group 1) countries is training for the informal sector, which means rural agriculture and related occupations. The informal sector is also a priority for the small, vulnerable island countries (group 2), but with special emphasis on delivering services to remote places and outer islands. Financial sustainability is another major challenge for this group, i.e., making TVET systems affordable in some countries (Tuvalu) and reducing dependence on external financing in others such as Kiribati, RMI, and FSM. Where possible, people should be trained to enable them to migrate at higher wages than if they had received no training. The top priorities for the “advanced” island states are expanding training for the wage sector and filling of vacancies generated by emigration. Two areas have shared priorities across all groups—quality improvement and organizational development. Within quality improvement, the principal means is by establishing NQFs. These are specially important in countries that export skilled labor. Throughout the region, organizational development requires establishing or strengthening apex training organizations.

A guide for TVET decision makers is presented in Chapter 5, and is aimed at achieving economic relevance, quality improvement, better access and equity, organizational and management effectiveness, and internal efficiency.

Chapter 6: Conclusions and Recommendations from the Analysis

Chapter 6 presents the main findings of the review, along with an extended set of recommendations. The following five are singled out as the most important:

- The informal sector is the dominant segment of the labor market in most PICs and is where most school-leavers will have to find employment. Training for the informal

sector must be the top priority. This means sufficient new resources should be allocated for informal sector training, training strategies designed, and capacity built to support the rural and informal sectors, in part by boosting the technical expertise and delivery capacity of NGOs.

- Many issues in TVET derive from inappropriate and unclear organizational structures. Getting the structure right is, therefore, the first step to more effective TVET systems. Where possible, TVET systems should be governed by apex organizations such as national training authorities. These apex organizations should be based on partnerships among stakeholders and driven by those who represent demand for skills (i.e., employers). Apex organizations should have the executive authority to link training supply with demand; to coordinate providers; to set priorities, policies, and directions; and to allocate resources.

- Choices about where to invest in skills development should be based on evidence of cost effectiveness. Enterprise-based training should be expanded, e.g., apprenticeships and institutional training needs to be closely linked with the labor market. Investing in “vocalization of secondary education” is not supported by this review, except for the smallest countries with a single secondary school. Vocationalization is expensive, difficult to do well, and usually fails to confer better labor market outcomes for graduates. Instead, resources should be allocated to intensive stand-alone training programs well grounded in the labor market and should target those who are in, or about to enter, the labor market.

- Quality in skills development requires three elements: standards, sufficient inputs, and measurement of outputs against those standards. Developing occupational standards should be pursued through the design of NQFs, if NQFs focus on outputs (competencies) rather than inputs (courses required) and avoid complexity. Minimum standards should be set for public TVET institutions and should be subject to accreditation and periodic quality audits. Second, output indicators should be defined and measured against the standards. Information on the impact of training should be developed, e.g., tracer studies of graduates, and factored into training policies and resource allocations.

- Current incentives in PIC-TVET systems result in inertia. Budgets are given year after year regardless of performance. This review recommends that incentives be changed for those managing skills development. Managers of training institutions should be given authority through devolution, along with accountability for results. Results should be compared against targets and budgets should be allocated according to performance. At the same time, managers should be enabled to develop their capacities through in-service management development programs.

Tackling the reforms outlined above would justify substantially increased public and private investment in skills development.

Chapter 7: Regional Technical and Vocational Education and Training Project Proposals

Five regional projects that respond to the conclusions and recommendations—three for formal TVET, and two for informal sector training—are proposed. The underlying rationale is that priority activities, which are too small and unfeasible on a country level, could be carried out better on a consolidated, regional level. The five proposed regional projects focus on interventions that are likely to widely impact on skills development in the region.

The five proposed regional projects are:

- Strengthening TVET organization and management – This includes developing TVET apex organizations; labor market information and tracer systems; TVET information systems; management expertise, policies, and plans; and quality assurance systems (monitoring, accreditation, and certification). This would be implemented by PATVET through the Secretariat of the Pacific Community (SPC) by means of workshops, study visits, and expert advice.
- Creating a capital development and innovation fund – The fund, designed to help counter chronic underfinancing of TVET, aims at improving TVET quality by stimulating innovations from the grassroots—the training institutions themselves. TVET institutions with worthy projects that meet specified criteria will apply to the fund for financing. Priority will be given to smaller, vulnerable island states and land-rich, low-income countries. PATVET will operate the fund under SPC.
- Expanding service delivery through open and distance learning – This project will enable vulnerable people who cannot otherwise have access to skills formation to acquire marketable skills through unconventional means. Specifically, the project will expand FIT’s franchise and distance-teaching programs beyond the Fiji Islands.
- Strengthening TVET programs in rural areas – NGOs are instrumental in delivering nonformal education in the rural and informal sectors. However, their ability is often weak to identify needs, or to design and deliver effective market-oriented programs. NGO capabilities would be strengthened through the introduction of relevant training methodologies used successfully elsewhere and staff development. The project will disseminate such methodologies through regional training and national pilot projects.
- Developing outreach training in atoll economies—The purpose is to develop cost-effective and sustainable approaches to providing skills training in the outer islands of atoll economies linked directly to local employment and income-generating opportunities. The project will do this through the analysis, design, and testing of alternative delivery mechanisms for short-cycle skills development in four participating countries (i.e., Kiribati, FSM, RMI, and Tuvalu).